# Product Type

A type of product to be bought by system operators on a flexibility market. This resource is a read-only enumeration.

## Context

The list of product types is defined by national terms and conditions with reference to table of equivalences.

The following is a list of product types, with their corresponding product categories and example/specific products. NODES/EuroFlex currently has three congestion products: LongFlex, ShortFlex and MaxUsage. [Statnett has a set of products](https://www.statnett.no/for-aktorer-i-kraftbransjen/systemansvaret/kraftmarkedet/reservemarkeder/kort-om-de-ulike-reservene/), and we also used a nice overview from [Energinet](https://energinet.dk/el/systemydelser/introduktion-til-systemydelser/oversigt-over-systemydelser/) as input.

!!! note “The is list is not final nor exhaustive”

The list of product types is defined for discussion and will probably be  
adjusted/extended.

| Business ID | Name | Service | Products |
| --- | --- | --- | --- |
| manual\_congestion | Manual Congestion | congestion management | LongFlex, ShortFlex |
| automatic\_congestion | Automatic Congestion | congestion management | MaxUsage |
| automatic\_voltage | Automatic Voltage | voltage control |  |
| manual\_voltage | Manual Voltage | voltage control |  |
| automatic\_fast\_frequency | Fast Frequency | balancing | FFR Profil, FFR Flex |
| automatic\_frequency\_containment | Frequency Containment | balancing | FCR-N, FCR-D |
| automatic\_frequency\_restoration | Automatic Frequency Restoration | balancing | aFRR CM |
| manual\_frequency\_restoration | Manual Frequency Restoration | balancing | mFRR EAM, mFRR CM |
| manual\_frequency\_restoration\_disruption | Frequency Disruption | balancing | mFRR-D |

## Relevant links

* [API Documentation](https://flex-test.elhub.no/api/v0/#/operations/list_product_type)
* [Download docx](../download/product_type.docx)

## Fields

| Name | Description | Format | Reference |
| --- | --- | --- | --- |
| id | Unique surrogate identifier. | bigintRead only |  |
| business\_id | The code for this product type. | textRead only |  |
| name | The name of the product type. | textMax length: 64Read only |  |
| service | The service offered by the product type. | textRead only |  |
| products | Examples of products belonging to this product type. | textRead only |  |

## Validation Rules

No validation rules.

## Notifications

No notifications.

## Authorization

### Resource Level Authorization

Below is the [RLA](../technical/auth.md#resource-level-authorization-rla) for the resource. The default policy is **deny**.

#### Anonymous

No policies.

#### Entity

No policies.

#### Common

| Policy key | Policy | Status |
| --- | --- | --- |
| PT-COM001 | Read all product types. | DONE |

#### Balance Responsible Party

No policies.

#### End User

No policies.

#### Energy Supplier

No policies.

#### Flexibility Information System Operator

No policies.

#### Market Operator

No policies.

#### System Operator

No policies.

#### Service Provider

No policies.

#### Third Party

No policies.

### Field Level Authorization

For party type abbreviations, check [the auth docs](../technical/auth.md#party)

| FIELD | ANON | BRP | ES | EU | FISO | MO | SO | SP | TP |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| id |  | R | R | R | R | R | R | R | R |
| business\_id |  | R | R | R | R | R | R | R | R |
| name |  | R | R | R | R | R | R | R | R |
| service |  | R | R | R | R | R | R | R | R |
| products |  | R | R | R | R | R | R | R | R |