# Service Provider Product Application

The relation that links a service provider to a system operator, for the SP to apply for delivering the SO some of the types of product they want to buy on a flexibility market. The SP can apply for one or more product types, several times, for a given SO.

## Status transitions

The following diagram shows the status transition we envision for an application/qualification *resource*. We think of the “application” as a resource in the system, that can be created and updated. The status of the application is updated as the process and lifecycle of the application progresses.

[Full Size](../diagrams/service_provider_product_application_status.png) | [Graphviz description](../diagrams/service_provider_product_application_status.plantuml) | [How to read the diagram](./index.md#status-and-transitions)

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| --- |
| Service provider product application status transitions |

Service provider product application status transitions

## Relevant links

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

## Fields

| Name | Description | Format | Reference |
| --- | --- | --- | --- |
| id | Unique surrogate identifier. | bigintRead only |  |
| service\_provider\_id | Reference to the service provider. | bigintRequiredNon-updatable | [party.id](party.md#field-id) |
| system\_operator\_id | Reference to the system operator. | bigintRequiredNon-updatable | [party.id](party.md#field-id) |
| product\_type\_ids | References to the product types. | RequiredArray | [product\_type.id](product_type.md#field-id) |
| status | The status of the application. | textOne of: requested, in\_progress, communication\_test, not\_qualified, qualifiedDefault: requested |  |
| notes | Free text notes on the current product application status. | textMax length: 512 |  |
| last\_qualified | When the product application was last validated. | timestamp with time zone |  |
| recorded\_at | When the resource was recorded (created or updated) in the system. | timestamp with time zoneRead only |  |
| recorded\_by | The identity that recorded the resource. | bigintRead only |  |

## Validation Rules

| Validation rule key | Validation rule | Status |
| --- | --- | --- |
| SPPA-VAL001 | Inserted product\_type\_ids must be active product types asked by the SO. | DONE |

## Notifications

| Action | Recipient | Comment |
| --- | --- | --- |
| create, update, delete | SO |  |
| create, update, delete | SP |  |

## 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.

#### Common

| Policy key | Policy | Status |
| --- | --- | --- |
| SPPA-COM001 | Read history on SPPA that they can read. | DONE |

#### Balance Responsible Party

No policies.

#### End User

No policies.

#### Energy Supplier

No policies.

#### Flexibility Information System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| SPPA-FISO001 | Read and update all SPPA. | DONE |

#### Market Operator

No policies.

#### System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| SPPA-SO001 | Read all SPPA. | DONE |
| SPPA-SO002 | Update SPPA targeting them. | DONE |

#### Service Provider

| Policy key | Policy | Status |
| --- | --- | --- |
| SPPA-SP001 | Read and create SPPA concerning themselves. | DONE |
| SPPA-SP002 | Update their SPPA when status is requested. | DONE |

#### 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 |
| service\_provider\_id |  | R | R | R | R | R | R | RC | R |
| system\_operator\_id |  | R | R | R | R | R | R | RC | R |
| product\_type\_ids |  | R | R | R | RU | R | R | RCU | R |
| status |  | R | R | R | RU | R | RU | R | R |
| notes |  | R | R | R | RU | R | RU | R | R |
| last\_qualified |  | R | R | R | RU | R | RU | R | R |
| recorded\_at |  | R | R | R | R | R | R | R | R |
| recorded\_by |  | R | R | R | R | R | R | R | R |