# Controllable Unit Service Provider

The relation that links a controllable unit to a service provider. It represents a contract in the real world. A controllable unit shall be assigned to a maximum of one service provider per activation period.

## Relevant links

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

## Fields

| Name | Description | Format | Reference |
| --- | --- | --- | --- |
| id | Unique surrogate key. | bigintRead only |  |
| controllable\_unit\_id | Reference to the controllable unit this relation links to a service provider. | bigintRequiredNon-updatable | [controllable\_unit.id](controllable_unit.md#field-id) |
| service\_provider\_id | Reference to the party (service provider) this relation links to a controllable unit. | bigintRequiredNon-updatable | [party.id](party.md#field-id) |
| end\_user\_id | Technical ID of the end user behind the accounting point. | bigintRequiredNon-updatable | [party.id](party.md#field-id) |
| contract\_reference | The service providers internal reference to the contract with the end user. Typically an internal identifier to a stored document or consent record. | textRequiredMax length: 128The content of this field will not be checked by the system, but is intended to make sure that the service has a digitally stored proof of their contract with the end user on the controllable unit. |  |
| valid\_from | The date from which the relation between the controllable unit and the service provider is valid. Midnight aligned on Norwegian timezone. | timestamp with time zone |  |
| valid\_to | The date until which the relation between the controllable unit and the service provider is valid. Midnight aligned on Norwegian timezone. | 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 |
| --- | --- | --- |
| CUSP-VAL001 | Valid time is frozen after 2 weeks for SP. | DONE |
| CUSP-VAL002 | New contracts added by SP must be created 2-4 weeks ahead of their start unless the CU has no current contract. | DONE |

## Notifications

| Action | Recipient | Comment |
| --- | --- | --- |
| create, update, delete | SP |  |
| create, update, delete | Connecting SO |  |
| create, update, delete | End user(s) in charge of the AP during the CU-SP contract |  |

## 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

No policies.

#### Balance Responsible Party

No policies.

#### End User

| Policy key | Policy | Status |
| --- | --- | --- |
| CUSP-EU001 | Read CUSP that overlap with the period where they own the AP. | DONE |
| CUSP-EU002 | Read CUSP history records that overlap with the period where they owned the AP. | DONE |

#### Energy Supplier

No policies.

#### Flexibility Information System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| CUSP-FISO001 | Read, create, update and delete all CUSP. | DONE |
| CUSP-FISO002 | Read history on CUSP that they can read. | DONE |

#### Market Operator

No policies.

#### System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| CUSP-SO001 | Read CUSP on CU they can read. | DONE |
| CUSP-SO002 | Read history on CUSP that they can read. | DONE |

#### Service Provider

| Policy key | Policy | Status |
| --- | --- | --- |
| CUSP-SP001 | Create, read, update and delete CUSP where they are SP. | DONE |
| CUSP-SP002 | Read history on CUSP that they can read. | 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 |
| controllable\_unit\_id |  | R | R | R | RC | R | R | RC | R |
| service\_provider\_id |  | R | R | R | RC | R | R | RC | R |
| end\_user\_id |  | R | R | R | RC | R | R | RC | R |
| contract\_reference |  | R | R | R | RCU | R | R | RCU | R |
| valid\_from |  | R | R | R | RCU | R | R | RCU | R |
| valid\_to |  | R | R | R | RCU | R | R | RCU | R |
| recorded\_at |  | R | R | R | R | R | R | R | R |
| recorded\_by |  | R | R | R | R | R | R | R | R |