# Technical Resource

This resource holds technical details about units and resources that the controllable unit consists of. The purpose of this resource is to register information that can help procuring system operators performing product pre-qualification and simplify that evaluation if controllable units are identical. A controllable unit can contain several technical resources.

## Relevant links

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

## Fields

| Name | Description | Format | Reference |
| --- | --- | --- | --- |
| id | Unique surrogate identifier. | bigintRead only |  |
| name | Name of the technical resource. Maximum 128 characters. | textRequired |  |
| controllable\_unit\_id | Reference to the controllable unit that this technical resource belongs to. | bigintRequiredNon-updatable | [controllable\_unit.id](controllable_unit.md#field-id) |
| details | Free text details about the technical resource. | textMax length: 1024 |  |
| 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

No validation rules.

## Notifications

| Action | Recipient | Comment |
| --- | --- | --- |
| create, update, delete | Active SP on CU |  |
| create, update, delete | Connecting SO on CU | If CU status is not new |

## Authorization

### Resource Level Authorization

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

#### Entity

No policies.

#### Anonymous

No policies.

#### Common

No policies.

#### Balance Responsible Party

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-BRP001 | Read TR data when they are BRP on the AP. Only for the contract period. | DONE |
| TR-BRP002 | Read TR history when they are BRP on the AP. Only for the contract period. | DONE |

#### End User

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-EU001 | Read TR data when they are EU on the AP. Only for when they are EU on the AP. | DONE |
| TR-EU002 | Read TR history when they are EU on the AP. Only for when they are EU on the AP. | DONE |

#### Energy Supplier

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-ES001 | Read TR data when they are ES on the AP. Only for the contract period. | DONE |
| TR-ES002 | Read TR history when they are ES on the AP. Only for the contract period. | DONE |

#### Flexibility Information System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-FISO001 | Read, create, update and delete all TR. | DONE |
| TR-FISO002 | Read all TR history. | DONE |

#### Market Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-MO001 | Read TR data on CU that are connected to their market. Only for the period CU is active in the market. | TODO |
| TR-MO002 | Read TR history on CU that are connected to their market. Only history on the period the CU is active in the market. | TODO |

#### System Operator

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-SO001 | Read TR belonging to CU that the SO can see. | DONE |
| TR-SO002 | Read history on TR that they can read. | DONE |

#### Service Provider

| Policy key | Policy | Status |
| --- | --- | --- |
| TR-SP001 | Create, update and delete TR on CU where they are current SP. | DONE |
| TR-SP002 | Read TR data for the period they are SP on the CU. | DONE |
| TR-SP003 | Read TR history for the period they are SP on the CU. | 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 |
| name |  | R | R | R | RCU | R | R | RCU | R |
| controllable\_unit\_id |  | R | R | R | RC | R | R | RC | R |
| details |  | 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 |