

DH Sandbox API documentation for aggregator

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1 Documentation version history

The table below provides information on document version history:

Version	Date	Description
1.0.0	2024-12-20	Initial document version.
1.0.1	2025-01-17	Added new JSON response attribute 'usedPowerPlantTotalPower' in the following method: • GET /gateway/independent-aggregator/order/{orderId}/report-obj-acr
1.0.2	2025-05-26	• In method POST /gateway/independent-aggregator/access-right/list (response data 1-4): ◦ Adjusted (extended) the expiration date of the access right. ◦ Added a note for the daysLeft attribute. • In method POST /gateway/independent-aggregator/access-right (request example 1-3) ◦ updated note for the "accessRightValidTo" attribute. • In method POST/gateway/independent-aggregator/order/list (request example 1): ◦ Added submittedDateTo value. • Added notes for the "dateFrom" and "dateTo" attributes in methods: ◦ POST/gateway/independent-aggregator/order/data-hr-15min-obj-lvl-acr, example 1 ◦ POST/gateway/independent-aggregator/order/data-sum-obj-lvl-acr, example 1-2

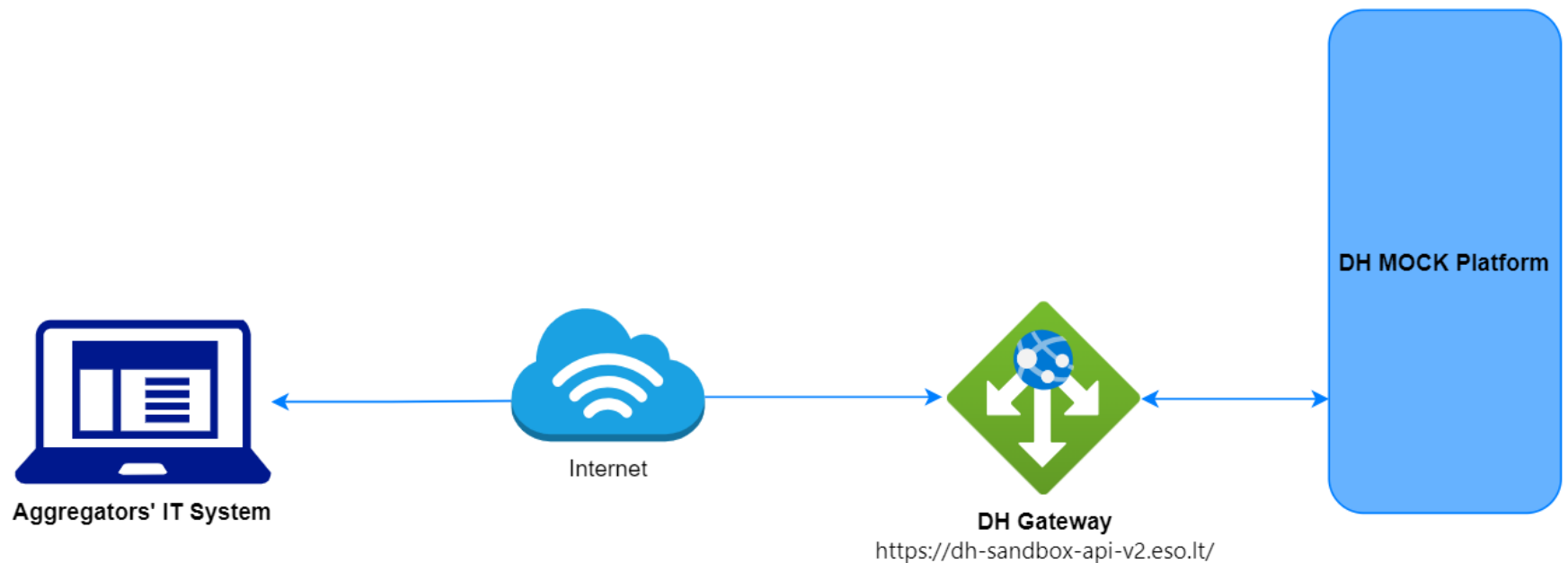
Note: Changes in the table marked in white are already deployed, while those marked in green will be deployed soon.

2 Preface

The Common Data Exchange Platform (hereinafter referred as DH Platform) Gateway is a component enabling independent aggregator to directly access DH Platform from within their IT systems and thus helps perform their activities more efficiently.

DH Gateway provides open standards-based interfaces allowing independent aggregators themselves (or with outside assistance) integrate their IT systems with DH Platform.

This document provides technical information on DH Gateway interfaces which is needed to integrate independent aggregators' information systems with DH Platform.



3 Environments

There are two DataHub Gateway environments the independent aggregator might access:

- “Sandbox” environment
- Production environment

Environment	Swagger Link	WEB Interface
Sandbox	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html	-

4 Digital certificates

In both the testing and production environments of the DH Gateway component, the identity of the independent aggregator is established using a TOKEN, which the independent aggregator's information system must provide each time the DH Gateway network service is called.

To get started:

1. The DSO responsible person sends the JWT key (JSON Web Token) to be used with each request to the DH API.
2. To make requests to the DH Gateway API - the TOKEN submission in the case of curl takes place.

5 DataHub Gateway API documentation

This document section describes the technical DH API documentation for aggregators, which provides descriptions of API methods, request and response JSON data model structure, data validation rules, error handling, and other related information.

5.1 Object controller

5.1.1 POST /gateway/independent-aggregator/object/all/active/list

Resource description	
Definition	The method is designed to obtain a list of objects before assigning rights to the objects.
Detailed description of method in API documentation for aggregators	POST /gateway/independent-aggregator/object/all/active/list
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre>{ "meterNumber": "11111112", "objectDataConsentSign": true, "objectNumber": null, "personCode": null }</pre>	<pre>[{ "personName": "UAB testinė įmonė", "personSurname": null, "personCode": "202310232", "objectNumber": "20231023", "objectAddress": "Žiburio g. 120, Anykščiai", "powerPlantObjectType": null, "automationLevel": "FULL", }]</pre>

```
"metersAmount": 2,
"autoMetersAmount": 2,
"smartMeterInstallationDate": null,
"meters": [
  {
    "meterNumber": "11111111",
    "meterAutomated": true,
    "automationSystem": null
  },
  {
    "meterNumber": "11111112",
    "meterAutomated": true,
    "automationSystem": null
  }
],
"contractType": "SKMS",
"voltage": 0.40000,
"usedPowerPlants": [],
"objectPowers": [
  {
    "powerType": "LOG",
    "power": 100.00000,
    "powerValidFrom": "2016-12-19",
    "powerValidTo": null
  },
  {
    "powerType": "LGG",
    "power": 0.00000,
    "powerValidFrom": "2016-12-19",
    "powerValidTo": null
  }
],
"objectStates": [
  {
    "stateType": "VBS",
    "state": "V",
    "stateValidFrom": "2007-07-31",
    "stateValidTo": null
  }
]
```

	<pre> }, { "stateType": "ETB", "state": "T", "stateValidFrom": "2007-07-31", "stateValidTo": null }] }] </pre>
Possible request 2	Possible response data 2
<pre> { "meterNumber": null, "objectDataConsentSign": true, "objectNumber": null, "personCode": "288883188" } </pre>	<pre> [{ "personName": "Jmonės pavadinimas 204", "personSurname": null, "personCode": "288883188", "objectNumber": "20231019", "objectAddress": "Klaipėdos g. 10, Klaipėda", "powerPlantObjectType": null, "automationLevel": "FULL", "metersAmount": 3, "autoMetersAmount": 3, "smartMeterInstallationDate": null, "meters": [{ "meterNumber": "66666", "meterAutomated": true, "automationSystem": null }, { "meterNumber": "33333", "meterAutomated": true, "automationSystem": null }, { "meterNumber": "44444", </pre>


```
        "meterAutomated": true,
        "automationSystem": null
    }
],
"contractType": "SKMS",
"voltage": 0.40000,
"usedPowerPlants": [
    {
        "powerPlantObjectNumber": "20241020",
        "powerPlantType": "S",
        "generatingObjectType": "N",
        "generatingPower": 80
    }
],
"objectPowers": [
    {
        "powerType": "LOG",
        "power": 80.00000,
        "powerValidFrom": "2023-06-22",
        "powerValidTo": null
    }
],
"objectStates": [
    {
        "stateType": "ETB",
        "state": "T",
        "stateValidFrom": "2005-12-01",
        "stateValidTo": null
    },
    {
        "stateType": "VBS",
        "state": "V",
        "stateValidFrom": "2005-12-01",
        "stateValidTo": null
    }
]
},
{
```

```
"personName": "Jmonės pavadinimas 204",
"personSurname": null,
"personCode": "288883188",
"objectNumber": "20231020",
"objectAddress": "Vilniaus g. 15, Vilnius",
"powerPlantObjectType": "S",
"automationLevel": "FULL",
"metersAmount": 1,
"autoMetersAmount": 1,
"smartMeterInstallationDate": null,
"meters": [
  {
    "meterNumber": "88888888",
    "meterAutomated": true,
    "automationSystem": null
  }
],
"contractType": "SKMS",
"voltage": 0.40000,
"usedPowerPlants": [
  {
    "powerPlantObjectNumber": "20241020",
    "powerPlantType": "S",
    "generatingObjectType": "G",
    "generatingPower": 40
  }
],
"objectPowers": [
  {
    "powerType": "LOG",
    "power": 40.00000,
    "powerValidFrom": "2023-06-22",
    "powerValidTo": null
  }
],
"objectStates": [
  {
    "stateType": "VBS",
```

	<pre> "state": "V", "stateValidFrom": "2011-01-19", "stateValidTo": null }, { "stateType": "ETB", "state": "T", "stateValidFrom": "2011-01-19", "stateValidTo": null }] }] </pre>
Possible request 3	Possible response data 3
<pre> { "meterNumber": null, "objectDataConsentSign": true, "objectNumber": "20231018", "personCode": null } </pre>	<pre> [{ "personName": "Vardenis7", "personSurname": "Pavardenis7", "personCode": "*****111", "objectNumber": "20231018", "objectAddress": "Laukų g. 46, Vilnius", "powerPlantObjectType": "S", "automationLevel": "FULL", "metersAmount": 1, "autoMetersAmount": 1, "smartMeterInstallationDate": "2022-10-18", "meters": [{ "meterNumber": "SAG1133400088222", "meterAutomated": true, "automationSystem": "MDM" }], "contractType": "SBTS", "voltage": 0.40000, "usedPowerPlants": [</pre>

```
{
  "powerPlantObjectNumber": "20231018",
  "powerPlantType": "S",
  "generatingObjectType": "G",
  "generatingPower": 9.72
}
],
"objectPowers": [
  {
    "powerType": "LOG",
    "power": 14.00000,
    "powerValidFrom": "2022-10-14",
    "powerValidTo": null
  },
  {
    "powerType": "LGG",
    "power": 9.72000,
    "powerValidFrom": "2022-10-14",
    "powerValidTo": null
  }
],
"objectStates": [
  {
    "stateType": "ETB",
    "state": "T",
    "stateValidFrom": "2022-04-13",
    "stateValidTo": null
  },
  {
    "stateType": "VBS",
    "state": "V",
    "stateValidFrom": "2022-04-12",
    "stateValidTo": null
  }
]
}
```

5.2 Access right controller

5.2.1 POST /gateway/independent-aggregator/access-right/list

Resource description	
Definition	The method to obtain information and a list of granted rights.
Detailed description of method in API documentation for aggregators	POST /gateway/independent-aggregator/access-right/list
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre>{ "accessRightId": null, "accessRightValidFrom": null, "accessRightValidTo": null, "contractType": null, "generatingObjectType": null, "objectAddressSearch": null, "powerPlantObjectType": null, "objectNumber": null, "personCode": "555551185", "powerPlantType": null }</pre>	<pre>[{ "accessRightId": 100020, "accessRightValidFrom": "2023-10-13T08:03:44", "accessRightValidTo": "2127-12-31T23:59:59", "daysLeft": [The number of days remaining until the access right expires], "objectNumber": "20231015", "generatingObjectType": null, "objectAddress": "Tulpių g. 102, Kaunas", "powerPlantObjectType": null, "usedPowerPlants": [], "automationLevel": "FULL", "contractType": "SKMS", "personName": "[monės pavadinimas 203", "personSurname": null, }]</pre>

	<pre> "personCode": "555551185", "accessRightPhoneNo": "+37061144777", "accessRightEmailAddress": "test2@testinis2.lt", "accessRightNote": null }, { "accessRightId": 100021, "accessRightValidFrom": "2023-10-13T08:10:57", "accessRightValidTo": "2127-12-31T23:59:59", "daysLeft": [The number of days remaining until the access right expires], "objectNumber": "20231014", "generatingObjectType": null, "objectAddress": "Čepukų g. 109, Klaipėda", "powerPlantObjectType": null, "usedPowerPlants": [], "automationLevel": "NONE", "contractType": "SKMS", "personName": "Įmonės pavadinimas 203", "personSurname": null, "personCode": "555551185", "accessRightPhoneNo": "+37061144779", "accessRightEmailAddress": "test1@testinis1.lt", "accessRightNote": null }] </pre>
Possible request 2	Possible response 2
<pre> { "accessRightId": 100022, "accessRightValidFrom": null, "accessRightValidTo": null, "contractType": null, "generatingObjectType": null, "objectAddressSearch": null, </pre>	<pre> [{ "accessRightId": 100022, "accessRightValidFrom": "2023-10-13T07:54:34", "accessRightValidTo": "2127-12-01T23:59:59", "daysLeft": [The number of days remaining until the access right expires], "objectNumber": "20231013", </pre>

<pre> "powerPlantObjectType": null, "objectNumber": "20231013", "personCode": null, "powerPlantType": null } </pre>	<pre> "generatingObjectType": null, "objectAddress": "Vokiečių g. 112,Vilnius", "powerPlantObjectType": null, "usedPowerPlants": [], "automationLevel": "FULL", "contractType": "SBTS", "personName": "Vardenis4", "personSurname": "Pavardenis4", "personCode": "*****212", "accessRightPhoneNo": "+37061144778", "accessRightEmailAddress": "test@testinis.lt", "accessRightNote": null }] </pre>
Possible request 3	Possible response 3
<pre> { "accessRightId": null, "accessRightValidFrom": "2023-09-01T00:00:00", "accessRightValidTo": null, "contractType": "SBTS", "generatingObjectType": "G", "objectAddressSearch": null, "powerPlantObjectType": null, "objectNumber": null, "personCode": null, "powerPlantType": null } </pre>	<pre> [{ "accessRightId": 100023, "accessRightValidFrom": "2023-09-06T06:10:45", "accessRightValidTo": "2128-01-01T23:59:59", "daysLeft": [The number of days remaining until the access right expires], "objectNumber": "20231016", "generatingObjectType": "G", "objectAddress": "Žiemgalių g. 230, Panevėžys", "powerPlantObjectType": "S", "usedPowerPlants": [{ "powerPlantObjectNumber": "20231016", "powerPlantType": "S", "generatingPower": 4 }], "automationLevel": "FULL", "contractType": "SBTS", "personName": "Vardenis5", </pre>

	<pre> "personSurname": "Pavardenis5", "personCode": "*****555", "accessRightPhoneNo": null, "accessRightEmailAddress": null, "accessRightNote": null }, { "accessRightId": 100024, "accessRightValidFrom": "2023-10-13T08:40:19", "accessRightValidTo": "2128-11-01T23:59:59", "daysLeft": [The number of days remaining until the access right expires], "objectNumber": "20231017", "generatingObjectType": "G", "objectAddress": "Sidabro g. 109, Vilnius", "powerPlantObjectType": "S", "usedPowerPlants": [{ "powerPlantObjectNumber": "20231017", "powerPlantType": "S", "generatingPower": 6 }], "automationLevel": "FULL", "contractType": "SBTS", "personName": "Vardenis6", "personSurname": "Pavardenis6", "personCode": "*****556", "accessRightPhoneNo": "+37061144188", "accessRightEmailAddress": "test3@testinis3.lt", "accessRightNote": null }] </pre>
Possible request 4	Possible response data 4
<pre> { "accessRightId": null, "accessRightValidFrom": null, </pre>	<pre> [{ "accessRightId": 100025, </pre>


```
"accessRightValidTo": null,
"contractType": "SKMS",
"generatingObjectType": null,
"objectAddressSearch": null,
"powerPlantObjectType": null,
"objectNumber": null,
"personCode": "333333333",
"powerPlantType": "S"
}
```

```
"accessRightValidFrom": "2023-10-24T13:54:09",
"accessRightValidTo": "2128-12-01T23:59:59",
"daysLeft": [The number of days remaining until the access right expires],
"objectNumber": "20231026",
"generatingObjectType": "G",
"objectAddress": "Raistelių g. 14, Kybartai",
"powerPlantObjectType": "S",
"usedPowerPlants": [
  {
    "powerPlantObjectNumber": "20231026",
    "powerPlantType": "S",
    "generatingPower": 49.775
  }
],
"automationLevel": "FULL",
"contractType": "SKMS",
"personName": "UAB įmonė 2024",
"personSurname": null,
"personCode": "333333333",
"accessRightPhoneNo": "+37064444444",
"accessRightEmailAddress": "test4@test.lt",
"accessRightNote": "test4"
},
{
  "accessRightId": 100026,
  "accessRightValidFrom": "2023-10-24T13:54:10",
  "accessRightValidTo": "2128-12-01T23:59:59",
  "daysLeft": [The number of days remaining until the access right expires],
  "objectNumber": "20231027",
  "generatingObjectType": "N",
  "objectAddress": "Malūnų g. 14, Kybartai",
  "powerPlantObjectType": null,
  "usedPowerPlants": [
    {
      "powerPlantObjectNumber": "20231031",
      "powerPlantType": "S",
      "generatingPower": 49.775
    }
  ]
}
```

	<pre>], "automationLevel": "FULL", "contractType": "SKMS", "personName": "UAB jmoné 2024", "personSurname": null, "personCode": "333333333", "accessRightPhoneNo": "+37065555555", "accessRightEmailAddress": "test4@test.lt", "accessRightNote": "test4" }] </pre>
--	---

5.2.2 POST /gateway/independent-aggregator/access-right

Resource description	
Definition	The independent aggregator can grant rights by himself to access clients' historical data if has client agreement. Once the rights have been granted, the aggregator can download the customer's historical data for a certain period of time and, on that basis, offer the customer a contract.
Detailed description of method in API documentation for aggregators	POST /gateway/independent-aggregator/access-right
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre> { "accessRightInformation": [{ "accessRightEmailAddress": "test@testinis.lt", </pre>	<pre> [{ "accessRightId": [a new Id is generated] }] </pre>

<pre> "accessRightNote": null, "accessRightPhoneNo": "+37061144778", "accessRightValidTo": "[Any future date]", "objectNumber": "20231013" }], "consentSign": true, "personBirthDate": null, "personCode": "21212121212", "personName": "Vardenis4", "personSurname": "Pavardenis4" } </pre>	<pre>] </pre>
Possible request 2	Possible request data 2
<pre> { "accessRightInformation": [{ "accessRightEmailAddress": "test5@test.lt", "accessRightNote": "test5", "accessRightPhoneNo": "+37061254854", "accessRightValidTo": "[Any future date] ", "objectNumber": "20231028" }], "consentSign": true, "personBirthDate": null, "personCode": "6666666666", "personName": "[monés pavadinimas 206", "personSurname": null } </pre>	<pre> [{ "accessRightId": [a new Id is generated] }] </pre>
Possible request 3	Possible response data 3
<pre> { "accessRightInformation": [</pre>	<pre> [{ </pre>

<pre>{ "accessRightEmailAddress": "test1@testinis1.lt", "accessRightNote": null, "accessRightPhoneNo": "+37061144779", "accessRightValidTo": "[Any future date]", "objectNumber": "20231014" }, { "accessRightEmailAddress": "test2@testinis2.lt", "accessRightNote": null, "accessRightPhoneNo": "+37061144777", "accessRightValidTo": "2023-12-31", "objectNumber": "20231015" }], "consentSign": true, "personBirthDate": null, "personCode": "555551185", "personName": "[monės pavadinimas 203", "personSurname": null }</pre>	<pre>"accessRightId": [a new Id is generated] }, { "accessRightId": [a new Id is generated] }]</pre>
--	---

5.2.3 POST /gateway/independent-aggregator/access-right/{accessRightId}/cancel

Resource description	
Definition	The independent aggregator may remove the rights granted to him.
Detailed description of method in API documentation for aggregators	POST /gateway/independent-aggregator/access-right/{accessRightId}/cancel

Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html
--------------------	---

Possible request 1	Possible response data 1
URL parameters: accessRightId - 100021	If the request is successful, an HTTP 200 Created message is returned.

5.3 Order controller

5.3.1 POST/gateway/independent-aggregator/order/list

Resource description	
Definition	Method will return list of the orders.
Detailed description of method in API documentation for aggregators	POST/gateway/independent-aggregator/order/list
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre>{ "dateFrom": null,</pre>	<pre>[{</pre>

```
"dateTo": null,
"latestStatuses": [
  "IV"
],
"orderId": null,
"orderParametersSearch": null,
"orderTypes": null,
"submittedDateFrom": null,
"submittedDateTo": "2023-10-25T10:10:14.160Z"
}
```

```
"orderId": 100044,
"orderType": "data-hr-15min-obj-lvl-acr",
"submittedDate": "2023-10-24T15:32:48.329",
"dateFrom": "2023-10-01",
"dateTo": "2023-10-01",
"orderParameters": "{\"consumptionCategories\":[\"P+\", \"P-\", \"\", \"objectNumbers\":[\"20231028\"], \"interval\": \"HOURLY\"}, \"latestStatus\": \"IV\", \"statusDate\": \"2023-10-24T15:32:50.578\", \"expireDate\": \"2123-10-25T15:32:50.578\"\",
},
{
  "orderId": 100045,
  "orderType": "data-sum-obj-lvl-acr",
  "submittedDate": "2023-10-24T11:34:54.95",
  "dateFrom": "2023-01-01",
  "dateTo": "2023-10-24",
  "orderParameters": "{\"objectNumbers\":[\"20231016\"]\", \"latestStatus\": \"IV\", \"statusDate\": \"2023-10-24T11:34:55.511\", \"expireDate\": \"2123-10-25T11:34:55.511\"\",
},
{
  "orderId": 100046,
  "orderType": "data-sum-obj-lvl-acr",
  "submittedDate": "2023-10-24T11:54:44.97",
  "dateFrom": "2023-01-01",
  "dateTo": "2023-10-24",
  "orderParameters": "{\"objectNumbers\":[\"20231014\", \"20231015\"]\", \"latestStatus\": \"IV\", \"statusDate\": \"2023-10-24T11:54:45.428\", \"expireDate\": \"2123-10-25T11:54:45.428\"\",
},
{
  "orderId": 100047,
  "orderType": "report-obj-acr",
  "submittedDate": "2023-10-23T21:14:47.426",
  "dateFrom": "2023-10-23",
```

	<pre> "dateTo": "2023-10-23", "orderParameters": "{\"objectNumbers\\\": [\"20231013\\\"]}\", "latestStatus": "IV", "statusDate": "2023-10-23T21:14:47.708", "expireDate": "2123-10-25T21:14:47.708" }, { "orderId": 100048, "orderType": "report-obj-acr", "submittedDate": "2023-10-24T13:54:27.019", "dateFrom": "2023-10-24", "dateTo": "2023-10-24", "orderParameters": "{\"objectNumbers\\\": [\"20231026\\\", \"20231027\\\"]}\", "latestStatus": "IV", "statusDate": "2023-10-24T13:54:27.443", "expireDate": "2123-10-25T13:54:27.443" }] </pre>
Possible request 2	Possible response data 2
<pre> { "dateFrom": null, "dateTo": null, "latestStatuses": null, "orderId": null, "orderParametersSearch": null, "orderTypes": ["report-obj-acr"], "submittedDateFrom": null, "submittedDateTo": null } </pre>	<pre> [{ "orderId": 100047, "orderType": "report-obj-acr", "submittedDate": "2023-10-23T21:14:47.426", "dateFrom": "2023-10-23", "dateTo": "2023-10-23", "orderParameters": "{\"objectNumbers\\\": [\"20231013\\\"]}\", "latestStatus": "IV", "statusDate": "2023-10-23T21:14:47.708", "expireDate": "2123-10-25T21:14:47.708" }, { "orderId": 100048, "orderType": "report-obj-acr", "submittedDate": "2023-10-24T13:54:27.019", "dateFrom": "2023-10-24", </pre>

	<pre> "dateTo": "2023-10-24", "orderParameters": "{\"objectNumbers\": [\"20231026\\\", \"20231027\\\"]}\", "latestStatus": "IV", "statusDate": "2023-10-24T13:54:27.443", "expireDate": "2123-10-25T13:54:27.443" }] </pre>
--	--

5.3.2 POST/gateway/independent-aggregator/order/data-hr-15min-obj-lvl-acr

Resource description	
Definition	The method is designed for ordering data for automated quantities at the object level according to the rights granted.
Detailed description of method in API documentation for aggregators	POST/gateway/independent-aggregator/order/data-hr-15min-obj-lvl-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre> { "consumptionCategories": ["P+", "P-"], "dateFrom": "[Any past date not older than 36 months]", "dateTo": "[The value must not exceed 12 months from the dateFrom date]", </pre>	<pre> { "orderId": [a new Id is generated] } </pre>


```
"interval": "HOUR",
"objectNumbers": [
  "20231028"
]
}
```

5.3.3 GET /gateway/independent-aggregator/order/{orderId}/data-hr-15min-obj-lvl-acr

Resource description	
Definition	The method for receive the order report "Automated quantities at the object level according to the granted rights".
Detailed description of method in API documentation for aggregators	GET /gateway/independent-aggregator/order/{orderId}/data-hr-15min-obj-lvl-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
URL parameters: orderId - 100044	[{ "personCode": "666666666", "personName": "Jmonės pavadinimas 206", "personSurname": null, "objectNumber": "20231028", "consumptionCategories": [{ "consumptionCategory": "P+", "consumptions": [{ "consumptionTime": "2023-10-01T00:00:00+02:00",

```
"amount": 9.752,
"valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T01:00:00+02:00",
  "amount": 9.528,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T02:00:00+02:00",
  "amount": 9.368,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T03:00:00+02:00",
  "amount": 8.904,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T04:00:00+02:00",
  "amount": 9.304,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T05:00:00+02:00",
  "amount": 7.72,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T06:00:00+02:00",
  "amount": 5.688,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T07:00:00+02:00",
  "amount": 5.688,
  "valueType": "VAL"
},
}
```

```
{
  "consumptionTime": "2023-10-01T08:00:00+02:00",
  "amount": 5.512,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T09:00:00+02:00",
  "amount": 5.584,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T10:00:00+02:00",
  "amount": 5.312,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T11:00:00+02:00",
  "amount": 4.728,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T12:00:00+02:00",
  "amount": 5.536,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T13:00:00+02:00",
  "amount": 21.264,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T14:00:00+02:00",
  "amount": 22.424,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T15:00:00+02:00",
  "amount": 18.52,
```



```
        "consumptionTime": "2023-10-01T23:00:00+02:00",
        "amount": 5.936,
        "valueType": "VAL"
    }
]
},
{
    "consumptionCategory": "P-",
    "consumptions": [
        {
            "consumptionTime": "2023-10-01T00:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        },
        {
            "consumptionTime": "2023-10-01T01:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        },
        {
            "consumptionTime": "2023-10-01T02:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        },
        {
            "consumptionTime": "2023-10-01T03:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        },
        {
            "consumptionTime": "2023-10-01T04:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        },
        {
            "consumptionTime": "2023-10-01T05:00:00+02:00",
            "amount": 0.0,
            "valueType": "VAL"
        }
    ]
}
```

```
},
{
  "consumptionTime": "2023-10-01T06:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T07:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T08:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T09:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T10:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T11:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T12:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T13:00:00+02:00",
```

```
"amount": 0.0,  
"valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T14:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T15:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T16:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T17:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T18:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T19:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},  
{  
  "consumptionTime": "2023-10-01T20:00:00+02:00",  
  "amount": 0.0,  
  "valueType": "VAL"  
},
```

```

{
  "consumptionTime": "2023-10-01T21:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T22:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
},
{
  "consumptionTime": "2023-10-01T23:00:00+02:00",
  "amount": 0.0,
  "valueType": "VAL"
}
]
}
]

```

5.3.4 POST/gateway/independent-aggregator/order/data-sum-obj-lvl-acr

Resource description	
Definition	The method is for order a report of total quantities according to the granted rights.
Detailed description of method in API documentation for aggregators	POST/gateway/independent-aggregator/order/data-sum-obj-lvl-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre>{ "dateFrom": "[The first day of a month, not older than 36 months]", "dateTo": "[The last day of a month or current date]", "objectNumbers": ["20231016"] }</pre>	<pre>{ "orderId": [a new Id is generated] }</pre>
Possible request 2	Possible response data 2
<pre>{ "dateFrom": "[The first day of a month, not older than 36 months]", "dateTo": "[The last day of a month or current date]", "objectNumbers": ["20231014", "20231015"] }</pre>	<pre>{ "orderId": [a new Id is generated] }</pre>

5.3.5 GET /gateway/independent-aggregator/order/{orderId}/data-sum-obj-lvl-acr

Resource description	
Definition	The method for receive the order report "Aggregate quantities according to the granted rights".
Detailed description of method in API documentation for aggregators	GET /gateway/independent-aggregator/order/{orderId}/data-sum-obj-lvl-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
URL parameters: orderId - 100045	<pre>[{ "personCode": "55555555555", "personName": " Vardenis5", "personSurname": "Pavardenis5", "objectNumber": "20231016", "products": [{ "productCode": "V NKSTO", "productName": "El. en. persiuntimas vienos laiko zonos tarifu", "productType": "VK", "unit": "kWh", "consumptionCategories": [{ "category": "P+", "consumptions": [{ "billingPeriod": "2023-01-01", "consumptionAmount": 1440.000000, "productConsumptionType": "SPR" }] }] }], }, { "productCode": "VNKS", "productName": "El. energijos sukaupias kiekis laikotarpio pabaigai", "productType": "VK", "unit": "kWh", "consumptionCategories": [{ "category": "P-", "consumptions": [</pre>

```
        {
          "billingPeriod": "2023-01-01",
          "consumptionAmount": 2555.000000,
          "productConsumptionType": "STA"
        }
      ]
    },
    {
      "productCode": "VNKGEN",
      "productName": "El. energijos pateiktas kiekis",
      "productType": "VK",
      "unit": "kWh",
      "consumptionCategories": [
        {
          "category": "P-",
          "consumptions": [
            {
              "billingPeriod": "2023-01-01",
              "consumptionAmount": 4.000000,
              "productConsumptionType": "STA"
            }
          ]
        }
      ]
    }
  ],
  {
    "productCode": "VNKAP",
    "productName": "El. energijos atgautas kiekis vienos laiko zonos tarifu (pagal nustatytą procentą)",
    "productType": "VK",
    "unit": "kWh",
    "consumptionCategories": [
      {
        "category": "P-",
        "consumptions": [
          {
```

```
        "billingPeriod": "2023-01-01",
        "consumptionAmount": 1440.000000,
        "productConsumptionType": "STA"
    }
]
},
{
    "productCode": "VnkSTO",
    "productName": "El. en. persiuntimas vienos laiko zonos tarifu",
    "productType": "VK",
    "unit": "kWh",
    "consumptionCategories": [
        {
            "category": "P+",
            "consumptions": [
                {
                    "billingPeriod": "2023-02-01",
                    "consumptionAmount": 1165.000000,
                    "productConsumptionType": "SPR"
                }
            ]
        }
    ]
},
{
    "productCode": "VNKS",
    "productName": "El. energijos sukaupias kiekis laikotarpio pabaigai",
    "productType": "VK",
    "unit": "kWh",
    "consumptionCategories": [
        {
            "category": "P-",
            "consumptions": [
                {
                    "billingPeriod": "2023-02-01",
                    "consumptionAmount": 1577.000000,
```

```
        "productConsumptionType": "SPA"
      }
    ]
  },
  {
    "productCode": "VNKGEN",
    "productName": "El. energijos pateiktas kiekis",
    "productType": "VK",
    "unit": "kWh",
    "consumptionCategories": [
      {
        "category": "P-",
        "consumptions": [
          {
            "billingPeriod": "2023-02-01",
            "consumptionAmount": 213.000000,
            "productConsumptionType": "STA"
          }
        ]
      }
    ]
  },
  {
    "productCode": "VNKAP",
    "productName": "El. energijos atgautas kiekis vienos laiko zonos tarifu (pagal nustatytą procentą)",
    "productType": "VK",
    "unit": "kWh",
    "consumptionCategories": [
      {
        "category": "P-",
        "consumptions": [
          {
            "billingPeriod": "2023-02-01",
            "consumptionAmount": 0.000000,
            "productConsumptionType": "STA"
          }
        ]
      }
    ]
  }
]
```

	<pre> }] }] }</pre>
Possible request 2	Possible response data 2
URL parameters: • orderId - 100046	<pre>[{ "personCode": "555551185", "personName": "Jonas pavadinimas 203", "personSurname": null, "objectNumber": "20231014", "products": [{ "productCode": "Vnksto", "productName": "El. en. persiuntimas vienos laiko zonos tarifu", "productType": "VK", "unit": "kWh", "consumptionCategories": [{ "category": "P+", "consumptions": [{ "billingPeriod": "2023-01-01", "consumptionAmount": 59.000000, "productConsumptionType": "SPR" }] }] }] }, { "productCode": "Vnksto",</pre>

```
"productName": "El. en. persiuntimas vienos laiko zonos tarifu",
"productType": "VK",
"unit": "kWh",
"consumptionCategories": [
  {
    "category": "P+",
    "consumptions": [
      {
        "billingPeriod": "2023-02-01",
        "consumptionAmount": 51.000000,
        "productConsumptionType": "SPR"
      }
    ]
  }
]
},
{
  "personCode": "555551185",
  "personName": "Jmonès pavadinimas 203",
  "personSurname": null,
  "objectNumber": "20231015",
  "products": [
    {
      "productCode": "Vnksto",
      "productName": "El. en. persiuntimas vienos laiko zonos tarifu",
      "productType": "VK",
      "unit": "kWh",
      "consumptionCategories": [
        {
          "category": "P+",
          "consumptions": [
            {
              "billingPeriod": "2023-01-01",
              "consumptionAmount": 92.000000,
              "productConsumptionType": "SPR"
            }
          ]
        }
      ]
    }
  ]
}
```

	<pre>] }] }, { "productCode": "VНКSTO", "productName": "El. en. persiuntimas vienos laiko zonos tarifu", "productType": "VK", "unit": "kWh", "consumptionCategories": [{ "category": "P+", "consumptions": [{ "billingPeriod": "2023-02-01", "consumptionAmount": 112.000000, "productConsumptionType": "SPR" }] }] }] </pre>
--	--

5.3.6 POST /gateway/independent-aggregator/order/report-obj-acr

Resource description	
Definition	The method is for order a report of objects according to the granted rights.

Detailed description of method in API documentation for aggregators	POST /gateway/independent-aggregator/order/report-obj-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
<pre>{ "objectNumbers": ["20231013"] }</pre>	<pre>{ "orderId": [a new Id is generated] }</pre>
Possible request 2	Possible response data 2
<pre>{ "objectNumbers": ["20231026", "20231027"] }</pre>	<pre>{ "orderId": [a new Id is generated] }</pre>

5.3.7 GET /gateway/independent-aggregator/order/{orderId}/report-obj-acr

Resource description	
Definition	The method for receive the order report "Report of objects by granted rights".

Detailed description of method in API documentation for aggregators	GET /gateway/independent-aggregator/order/{orderId}/report-obj-acr
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
URL parameters: • orderId - 100047	<pre>[{ "personCode": "21212121212", "personName": "Vardenis4", "personSurname": "Pavardenis4", "objectNumber": "20231013", "objectAddress": "Vokiečių g. 112, Vilnius", "contractType": "SBTS", "permissiblePowerConsumption": 10, "permissiblePowerGeneration": null, "usedPowerPlantTotalPower": null, "installedGeneratingPower": null, "powerPlantObject": { "powerPlantValidFrom": null, "powerPlantValidTo": null, "powerPlantObjectType": null }, "metersAmount": 1, "autoMetersAmount": 1, "smartMeterInstallationDate": "2022-08-05", "supplyState": "T", "supplyStateFrom": "1990-01-01", "supplyStateTo": null, "consumptionState": "V", "consumptionStateFrom": "1990-01-01", "consumptionStateTo": null, "usedPowerPlants": [], }]</pre>

	<pre>"voltage": 0.40000, "consumptionAverage": 314.10, "consumptionAverageCalculationDate": "2023-07-19", "consumptionAverageCalculationMonthsCount": 10 }]</pre>
–Possible request 2	Possible response data 2
URL parameters: • orderId - 100048	<pre>[{ "personCode": "333333333", "personName": "UAB įmonė 2024", "personSurname": null, "objectNumber": "20231026", "objectAddress": "Raistelių g. 14, Kybartai", "contractType": "SKMS", "permissiblePowerConsumption": 200, "permissiblePowerGeneration": 49.775, "usedPowerPlantTotalPower": 49.775, "installedGeneratingPower": 49.775, "powerPlantObject": { "powerPlantValidFrom": null, "powerPlantValidTo": null, "powerPlantObjectType": null }, "metersAmount": 2, "autoMetersAmount": 2, "smartMeterInstallationDate": "2023-03-10", "supplyState": "T", "supplyStateFrom": "2005-02-10", "supplyStateTo": null, "consumptionState": "V", "consumptionStateFrom": "2005-02-10", "consumptionStateTo": null, "usedPowerPlants": [{ "powerPlantObjectNumber": "20231026",</pre>

```
        "powerPlantType": "S",
        "generatingObjectType": "G",
        "powerPlantValidFrom": "2021-09-18",
        "powerPlantValidTo": null,
        "generatingPower": 49.775
    }
],
"voltage": 0.40000,
"consumptionAverage": 22348.83,
"consumptionAverageCalculationDate": "2023-07-19",
"consumptionAverageCalculationMonthsCount": 12
},
{
    "personCode": "333333333",
    "personName": "UAB įmonė 2024",
    "personSurname": null,
    "objectNumber": "20231027",
    "objectAddress": "Malūnų g. 14, Kybartai",
    "contractType": "SKMS",
    "permissiblePowerConsumption": 100,
    "permissiblePowerGeneration": null,
    "usedPowerPlantTotalPower": 49,
    "installedGeneratingPower": null,
    "powerPlantObject": {
        "powerPlantValidFrom": null,
        "powerPlantValidTo": null,
        "powerPlantObjectType": null
    },
    "metersAmount": 2,
    "autoMetersAmount": 2,
    "smartMeterInstallationDate": "2023-03-10",
    "supplyState": "T",
    "supplyStateFrom": "2005-02-10",
    "supplyStateTo": null,
    "consumptionState": "V",
    "consumptionStateFrom": "2005-02-10",
    "consumptionStateTo": null,
    "usedPowerPlants": [
```

	<pre> { "powerPlantObjectNumber": "20231031", "powerPlantType": "S", "generatingObjectType": "N", "powerPlantValidFrom": "2021-09-18", "powerPlantValidTo": null, "generatingPower": 49 }], "voltage": 0.40000, "consumptionAverage": 7164.75, "consumptionAverageCalculationDate": "2023-07-19", "consumptionAverageCalculationMonthsCount": 12 }]</pre>
--	---

5.3.8 GET/gateway/independent-aggregator/order/{orderId}/count

Resource description	
Definition	Method which will return count (number), how many items independent aggregator will get in ordered report (reports could have more than 1 item, so it is list). It should be used when independent aggregator needs to split data in few portions. This response should be used in reports' GET methods request, where independent aggregator can provide method parameters information.
Detailed description of method in API documentation for aggregators	GET/gateway/independent-aggregator/order/{orderId}/count
Request URL	https://dh-sandbox-api-v2.eso.lt/swagger-ui.html

Possible request 1	Possible response data 1
URL parameters: • orderId - 100048	<pre>{ "count": 2 }</pre>