Fingrid Datahub Oy

18.2.2021

Instructions for the metering responsible parties

Change history

Version	Date	Changes
1.0	18 May 2020	First version of the document
1.1	16 September 2020	Added guidance to the form (Chapters 2 and 4.2) by which metering responsible parties report their party and metering grid area information
1.2	20 October 2020	Added link to the Agreement on testing associated with the go-live of a centralised information exchange system for electricity trade for the Chapter 4.4
1.3	10 December 2020	Specified to the Chapter 2 the procedure how new IDs and codes will be taken into use in eSett's imbalance settlement
1.4	18 February 2021	Added note on data integrity check for party and metering grid area information between the information reported to Fingrid Datahub and eSett in Chapter 2. Updated the link to the data migration plan in section 4.2 and updated the instructions for submitting data to the data migration service. Added description of the need for the agreement on the go-live testing in stage 4 of the data migration to section 4.2. Updated reference to certification use cases in section 4.3. Added guidance on starting the required agreement signing processes in section 4.4.

1 Introduction

In accordance with the Electricity Market Act, not all parties operating in the Finnish electricity market are directly included within the scope of the services of Datahub, a centralised information exchange unit for electricity trade. However, some of these parties will join the Datahub system based, for example, on responsibility for exchange point metering and when acting as electricity suppliers of production units from the perspective of imbalance settlement in a distribution network. Due to this perspective, these parties should also be configured in the Datahub system. With regard to responsibility for metering, the parties

are also obliged to report the exchange point metering data related to distribution networks under their responsibility to the Datahub system.

These instructions summarise the obligations of the Electricity Market Parties (hereinafter referred to as parties) joining the Datahub system with regard to the determination of new party IDs, metering grid area IDs and metering point IDs. In addition, the instructions describe what is required of the parties as regards the data migration service and the testing and certification service.

The instructions also refer to other documents of Fingrid Datahub Oy (Datahub), where instructions have been described in even greater detail.

2 Introduction of new IDs and codes

Upon the switch to Datahub's operational activities, all parties operating within the scope of the Datahub service and market parties joining the Datahub system must introduce new IDs and codes for information exchange in a harmonised manner. Here, parties refer to balance responsible parties, electricity suppliers, distribution system operators, other system operators and parties responsible for metering operating in Finland. From the perspective of national imbalance settlement, the introduction must be agreed on with eSett Oy, the imbalance settlement company operating national imbalance settlement, taking into account the deadlines it has specified for changes in information.

Market parties connected to the datahub system outside the Datahub service, the so-called parties responsible for metering, must provide the necessary party and the metering grid area information via a separate form, available at https://palvelut.datahub.fi/fi/datahub/valmistautuminen-kayttoonottoon. On the same site, there is a link available to a list of metering grid areas outside the datahub service that have an exchange point to the metering grid areas of the distribution grids within the datahub service.

The market party should take care that the party and metering grid area information submitted via the form above corresponds to the information provided to eSett by party. If changes occur to the party or metering grid area information, the market party shall submit the updated data again via the form to Datahub as well as provide the updated information also to eSett.

The document "Using GS1 IDs in the electricity retail market" describes what is meant by GS1, GLN and GSRN IDs as well as EIC codes, what they are needed for and how to acquire and generate them. The document "Using GS1 IDs in the electricity retail market" is available at https://palvelut.datahub.fi/api/documents/file/0-233044-1-295835.

Market parties', included within the scope of the services of Datahub, new market party IDs, metering grid area EIC-Y-codes and production unit GSRN IDs located in the distribution networks (except so called virtual production units) will be taken into use in eSett's imbalance settlement as defined below:

1. Datahub will inform new party IDs, GSRN IDs and EIC-Y-codes to eSett by end of the year 2021.

2. At the first phase, those new IDs and codes will be taken into use as alternative codes in eSett's settlement system during February 2021. This means that market parties are able to report data to eSett by using the new IDs/codes or old IDs/codes. eSett will report data to market parties by using only the old codes.

3. At the second phase, those new IDs and codes will be changed as first codes in eSett's settlement system during April 2021 and old codes will be changed as alternative codes. This means that market parties are able to report data to eSett by using the new IDs/codes or old IDs/codes. eSett will report data to market parties by using only the onew codes.

Market parties are able to change the new IDs/codes in eSett's settlement system before the procedure defined above. In this case market party need to agree those changes directly with eSett.

3 Imbalance settlement and responsibility for metering in metering grid areas

In Finland, the imbalance settlement of electricity deliveries is done by metering grid area. A metering grid area refers to the transmission grid, a high-voltage distribution network, distribution network, closed distribution network or part thereof, or the internal network of a property or a similar group of properties forming its own settlement area in imbalance settlement. A metering grid area is separated from other metering grid areas by means of exchange point metering. A metering grid area must always have one responsible party that is responsible for the imbalance settlement in the metering grid area in question and for reporting its imbalance settlement information to other Electricity Market Parties entitled to this information (responsibility for metering).

3.1 Datahub’s role in imbalance settlement (as of February 2022)

Datahub will be tasked with the imbalance settlement of electricity trade in distribution networks when its operational activities begin in February 2022. Here, a distribution network refers to a power network with a nominal voltage of less than 110 kV. Datahub will therefore carry out the imbalance settlement in the metering grid areas of a distribution network for those distribution system operators that have been granted an electricity grid permit for power grid operations in a distribution network or closed distribution network. To carry out imbalance settlement in a distribution network, Datahub needs all exchange point metering of the metering grid areas in the distribution network against other metering grid areas.

3.2 Parties currently responsible for imbalance settlement in metering grid areas

3.2.1 Responsibility of a distribution system operator

A distribution system operator refers to a system operator that manages a distribution network (nominal voltage less than 110 kV) or high-voltage distribution network (nominal voltage greater than or equal to 110 kV) and that practices licensed power grid operations in that network. The Energy Authority determines the geographical area of responsibility of

the distribution system operator for the distribution network in the distribution system operator's electricity grid permit. The distribution system operator is responsible for imbalance settlement in its own distribution network. The responsibility of a distribution system operator is laid down in the Government decree on the settlement and metering of electricity deliveries.

3.2.2 Responsibility of a closed distribution system operator

A closed distribution system operator refers to a party with a closed distribution network electricity grid permit in accordance with the Electricity Market Act in a geographically limited industrial or commercial area or in a distribution network or high-voltage distribution network located in an area providing common services. The Energy Authority grants the permit based on an application to an applicant that meets the conditions of that permit. The closed distribution system operator is responsible for imbalance settlement in its own closed distribution network.

3.2.3 Responsibility of a balance responsible party

A balance responsible party can agree with the imbalance settlement unit eSett and with the system operator to whose power network the internal network of a property or a group of properties (e.g. industrial network or production network) managed by the balance responsible party is connected that its power network or part thereof be designated as a separate metering grid area. In this case, the balance responsible party is subject to the same obligations as the system operator with regard to imbalance settlement in the metering grid areas it is responsible for. The responsibility of a balance responsible party is also laid down in the Government decree on the settlement and metering of electricity deliveries (Section 2 Metering grid area).

3.2.4 Other responsibility of a party maintaining a metering grid area

An operator of the internal network of a property or a similar group of properties (e.g. industrial network), i.e. a so-called party maintaining a metering grid area, that is not a balance responsible can agree with the imbalance settlement unit eSett and with the system operator to whose power network the internal network of a property or a group of properties is connected that its power network be designated as a separate metering grid area. The duties and responsibilities of such a party maintaining a metering grid area in imbalance settlement are agreed on in an agreement between Fingrid's imbalance power unit and the party maintaining a metering grid area. Based on the above-mentioned agreement, the party maintaining a metering grid area is responsible for imbalance settlement in its own metering grid area (see Government decree on the settlement and metering of electricity deliveries (Section 2 Metering grid area)).

4 Instructions for parties responsible for metering joining Datahub

To carry out imbalance settlement in a distribution network, Datahub needs all exchange point metering of the metering grid areas in the distribution network from all the parties responsible for metering in the metering grid areas that have exchange point metering in distribution networks.

The figure and examples below illustrate this in more detail.

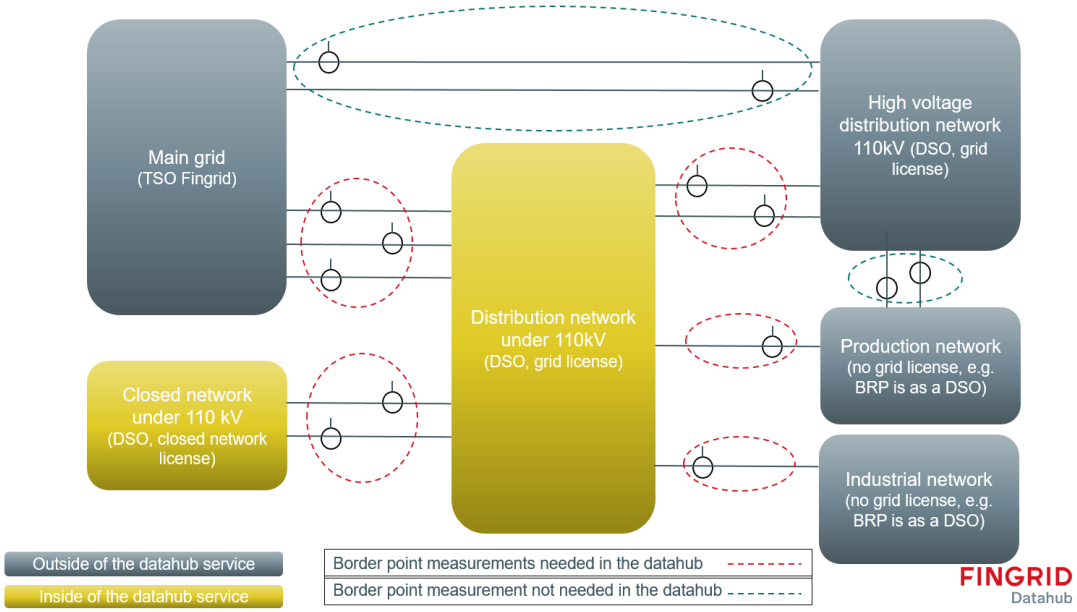

Figure 1. Exchange point metering required for imbalance settlement in a distribution network.

Datahub needs the exchange point metering inside the red dashed line for imbalance settlement in a distribution network. Responsibility for exchange point metering is shown in the figure so that the responsibility for metering belongs to the party whose metering grid area is closer to the metering in the figure. The determination of new party IDs, metering grid area IDs and metering point IDs applies to all parties in the figure.

For example, the industrial network (less than 110 kV) on the right in the middle of the figure has exchange point metering to the distribution network in the middle of the figure, and the exchange point metering in question is the responsibility of the party responsible for metering in that industrial network (operator of the metering grid area). This means that the party responsible for metering in the industrial network must submit the exchange point metering in question to Datahub for imbalance settlement in the distribution network via Datahub's connection interfaces. The party responsible for metering in the industrial network must also acquire a GS1 company ID and use it to generate a GLN party ID, based on which the party generates a GSRN ID for the exchange point metering in question in accordance with Datahub's instructions. The party responsible for metering in the industrial network must also acquire an EIC-Y code for the industrial network metering grid area, which the party responsible for metering must use when reporting the exchange point metering in question to Datahub and to the Datahub system.

As another example, at the bottom right in the figure is a production network with exchange point metering to the distribution network in the middle. This exchange point metering is the responsibility of the distribution system operator, which submits the metering data to Datahub. The GLN party ID of the party responsible for metering in the production network and the EIC-Y code of the production network metering grid area must be used in message traffic when reporting the metering grid area data. The party responsible for metering in the production network must acquire a GS1 company ID and use it to generate a GLN ID, as well as acquire an EIC-Y code for the production network metering grid area.

4.1 Electricity retail market business processes in Datahub

The document “Electricity retail market business processes in Datahub” describes matters related to the processing of metering data in chapter *3.3 DH-200 Processing metering data*. The document “Business processes” is available at https://palvelut.datahub.fi/api/documents/file/0-232454-1-294929.

The document “Datahub events” contains interface descriptions related to Datahub’s information exchange. The document is based on Datahub’s business processes and data model. The document’s

- chapters 1–3 describe the general interface specifications of the Datahub system and the descriptions of Datahub events
- chapter 5 the metering data maintenance processes
- chapter 13 the message type descriptions, and especially
    - 13.3.11 E66 Metering data
    - 13.3.12 F07 Metering data reminder
    - 13.3.13 F08 Metering data request

The document “Datahub events” is available at https://palvelut.datahub.fi/api/documents/file/0-232449-1-294924.

Datahub’s interface and system documentation includes the specification documents and message descriptions of Datahub’s technical interfaces. This documentation is available at https://palvelut.datahub.fi/en/datahub/dokumentaatio-ja-materiaalit.

4.2 Tasks of other system operators and parties responsible for metering in data migration

Datahub data migration means quality assurance and initial download of master data and metering data of electricity retail market business processes from source systems to the new Datahub system before its commissioning. The source systems are primarily the business applications of distribution system operators and electricity suppliers, in which customer, accounting point, contract and metering data are kept. In addition, data is also required from the systems of transmission grid and regional grid operators.

The data migration work has two main goals:

- The harmonisation of data supplied from source systems
- The initial load of the Datahub system.

Datahub’s data migration is implemented in accordance with the prepared Data Migration Plan. The Data Migration Plan is available at https://palvelut.datahub.fi/api/documents/file/0-232886-1-295631.

Parties responsible for metering that are not directly included within the scope of the services of Datahub in accordance with the Electricity Market Act must provide the following information in accordance with Datahub's Data Migration Plan:

- **Party information**
- **Metering grid area data** for their respective metering grid area(s)
- **Exchange point data** for those exchange points that fall under the party's responsibility for metering
- **Metering data** for exchange points where the party is responsible for metering

The information is submitted to the Titta service in accordance with the Migration File instructions, which describe in more detail the instructions for submitting the information. Migration file instructions can be found with example files at https://palvelut.datahub.fi/en/datahub/dokumentaatio-ja-materiaalit#tietokonversio.

Before using the Titta data migration service, the party mut sign the data migration service agreement.

If the metering responsible party of a metering grid area has exchange points to a distribution network, and the distribution system operator is responsible for the metering of all the exchange points, then the party does not need to sign the data migration service agreement. However, the party must still provide the necessary party and the metering grid area information via a separate form, available at https://palvelut.datahub.fi/fi/datahub/valmistautuminen-kayttoonottoon (the form was discussed in chapter 2, as well).

In addition to the data migration service agreement, the parties responsible for the metering must sign an agreement on testing associated with the go-live of a centralized information exchange system for electricity trade. The purpose of this agreement is to cover all pre go-live phases related to go-live testing which include personal data processing. If the metering responsible party of a metering grid area has exchange points to a distribution network, and the distribution system operator is responsible for the metering of all the exchange points, then the party does not need to sign the agreement on the go-live testing.

4.3 Tasks of other system operators and parties responsible for metering in the testing and certification service

Certification refers to the verification of the party's compatibility with Datahub. An uncertified market operator is not allowed to use Datahub's processes with production material. Certification is mandatory for all parties using Datahub's B2B interface.

Certification is implemented as part of Datahub's testing and certification service – Tepa. The service allows parties to independently test and certify predefined use cases. Use cases consist of Datahub messages and include entire business processes. A list of use cases included in certification is available in the certification service web site at: https://sertifiointi.datahub.fi/#/certifications/all.

Parties responsible for metering that are not directly included within the scope of the services of Datahub in accordance with the Electricity Market Act must carry out certification insofar as these companies use Datahub's interfaces and processes. For example, if a party only sends metering data for exchange points, the certification will only cover use cases related to that. The list of use cases is defined by Fingrid Datahub on a party-specific basis. Before starting certification and the testing and certification service, the party must sign an agreement on the use of test environments.

If the party responsible for the metering in the metering grid area is not responsible for the exchange point metering in the distribution networks, then it is also not required to be certified or to have an agreement on the use of the test environments.

4.4 Datahub agreements required from other parties responsible for metering

As described in sections 4.2 and 4.3, if the party responsible for the metering grid area has exchange points to a distribution network, and that party is responsible for the metering of these exchange points, the party should sign the agreements described in sections 4.2 and 4.3 with Datahub. These agreements are the Data Migration service agreement, the Agreement on the use of test environments, and the Agreement on the go-live testing.

The party must notify via Datahub's support service https://support.datahub.fi/fingrid if the party is responsible for metering of the exchange points related to the distribution network. Based on the notification, Datahub can start the signature process of the agreements with the party. The support service type should be set to "Other" and the service request should be set to "Commissioning – Go-Live". If the party has not previously logged in to Datahub's support service or party has challenges to sign in or use of a service, the party should be in contact with Datahub by e-mail: datahub@fingrid.fi.

All agreements can be found in the Datahub Services portal:

Data migration service agreement https://palvelut.datahub.fi/api/documents/file/0-228862-1-289241.

Agreement on the use of test environments https://palvelut.datahub.fi/api/documents/file/0-233045-1-295836.

Agreement on testing associated with the go-live of a centralised information exchange system for electricity trade https://palvelut.datahub.fi/api/documents/file/0-247143-2-320208.

Agreement on joining the Datahub system (this will be drawn up later)