Data Platform "Step"
Single Data Exchange Standard

The document has been developed by JSC 'Sadales tīkls' as the controller of the data platform in accordance with Cabinet Regulation No. 635 'Electric power trading and use regulations'.

The single data exchange standard is available in Latvian and English. If there are different interpretations of the standard, the Latvian text takes priority.

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VERSION HISTORY

Version	Date	Changes
1.0	05.04.2023	Original version
1.1	03.07.2023	Additions to the document: a) *GetCustomerAndObjectsEIC* MM more explanation added b) *GetCustomerAndObjectsEIC* MM object statuses added c) *GetObjectData* MM object statuses added d) *GetObjectConsumption* MM more explanation added e) *RevokeApplication* MM updated, with what messages can be cancelled with *RevokeApplication* f) *ConnectSupply* MM information added about *RevokeApplication* g) *DisconnectSupply* MM information added about *RevokeApplication* h) *StartPurchase* MM information added about *RevokeApplication* i) *EndPurchase* MM information added about *RevokeApplication* j) *DSOConfirmSupplyFGS* MM object statuses added k) *DSOTechnicalDataChange* MM updated with element *totalGenerationPower* l) *DSOSupplyStatus* MM object statuses added
		The PRINCIPLES FOR THE SUBMISSION OF MARKET MESSAGES section was expanded to include information about the processing of market messages for DSO whose system has fewer than 100,000 users connected to it
1.2	09.01.2024	Additions to the document: a) Term added: *Step data platform* b) *RevokeApplication* MM more explanation added c) *StartPurchase* MM more explanation added d) *EndPurchase* MM more explanation added e) *FindObjects* response structure expanded with new elements a) *GetObjectData* MM response expanded with manufacturer data b) *DSOTechnicalDataChanged* MM request expanded with manufacturer data c) *DSOConfirmSupplyFGS* MM request expanded with manufacturer data d) *DSOTechnicalDataChange* MM parameter *totalGenerationPower* removed e) The *averageYearlyConsumption* element of the MM response and service request and response structure expanded with an explanation f) *StartSupply* and *EndSupply* MM expanded with error message E_MM_OBJECTS_OWNED_BY_MULTIPLE_PARTIES g) *ChangeCustomerData* MM expanded with additional validation of the phone. The *GetObjectInfo* service response is expanded with the ability to return additional producer attribute types h) *FindObjects* service response expanded with manufacturer data i) *GetObjectDetailInfo* service response expanded with manufacturer data j) Consumption file names added to the upload section of consumption data files k) Additional explanation added to the *cons ref* element of the calculation row l) Additional explanation added to the *cons ref* element of the consumption confirmation m) The format of the consumption confirmation file expanded with the *orig_cons_ref* element and its explanation
		Corrections in the text: a) Changed reference from Cabinet Regulation No. 50 to Cabinet Regulation No. 635 b) *DSOCancelMoveIn* MM changed *customerEIC* required status

Version	Date	Changes
1.3.	10.06.2024	Additions to the document: a) List of abbreviations updated b) The section on 'Principles for the submission of market messages' updated for aggregators c) New *ChangeObjectData* MM d) Added additional search options to *FindCustomerInfo* using Meter Number, Metering Point Number e) *EndPurchase* MM expanded with the limiting of future dates f) New section 'Technical specifications for market message events' g) Consumption data exchange with loss channel expanded h) Consumption data exchange expanded with error handling messages i) New 'Reports' section added j) Classifier for the type of production by installed equipment added
1.4.	31.10.2024	Additions to the document: a) Added 2 new reports for Suppliers/Purchasers: "Daily Consumption 15M (DAILYCONS15M)" and "Daily Purchases 15M (DAILYPUR15M)." b) Changes for the implementation of a new trading interval. c) Display of production facility information in services and MM. Changes were made to: • *GetObjectData* MM • *DSOTechnicalDataChanged* MM • *DSOConfirmSupply* MM • *GetObjectDetailInfo* service • *GetDetailObjectConsumption* service • *FindObject* service d) DSO sections "Interval Consumption Data (DSO.CONS)," "Calculation Rows (DSO.BILL)," and "Consumption Confirmations (DSO.CONFIRM)" have been enhanced with functionality for reloading erroneous records. e) A new report added for DSO: "Unprocessed Consumption Data (UNPROCESSED CONSUMPTION)." f) The catalog of energy resource types has been expanded.

TERMS

Name	Notes
Aggregator	A market participant whose business is the provision of a demand response service.
Party in charge of balancing	The market participant or a representative appointed by one that is responsible for imbalance.
Balancing contract	A contract concluded between a transmission system operator and an electricity supplier that wants to receive a balancing service or to become a balancing service provider.
Balancing service contract	A contract for the provision of a balancing service between a balancing service provider and an electricity market participant.
STEP data platform	The electricity market data exchange and storage platform is an IT system aimed at the centralised and standardised storage of electricity market data and exchange of such data among market participants and power system operators. STEP stands for 'Smart Tech Energy Platform. This Single Data Exchange Standard includes the Step data platform portal datuplatforma.lv
Step data platform primary user	A user that the data platform controller has provided with access and that has the right to grant access to other users or additional users of that market participant's data platform.
STEP data platform user agreement	An agreement between electricity market participants, the system operator, and other stakeholders governing the procedures for transferring and updating data, personal data processing, and other matters, which is concluded with the data platform controller before the data platform is used.
STEP data platform user	A market participant that uses the data platform to support market processes based on a contract and other binding regulations.
STEP data platform controller	A distribution system operator to whose system more than one hundred thousand users are connected (Sadales tīkls AS), which sets up, maintains, and manages the data platform in accordance with the Electricity Market Law.
Integration period	The time interval, during which records electricity, e.g., hours
Client, also *User, Producer*	A natural individual or legal entity that buys electricity from a supplier and uses it for its own household or end consumption, for business or other professional purposes, including the production of electricity.
Law	Electricity Market Law. Electric power trading and use regulations. Electric Power Industry Network Code.
System use agreement	An agreement between a supplier and a system operator for the exchange of information necessary for trading transactions.
System service contract	A contract between a system operator and a client for the provision of system and other services.
Market participant	The following parties: transmission system operator, distribution system operator, electricity supplier, electricity buyer, electricity producer, party in charge of balancing, aggregator, end user, flexibility

	service provider, and others.
Market message	A method for exchanging the information necessary to support the electricity market processes based on a set data exchange format. Messages can be sent in .csv format using the portal, or in .xml format, if there is system-to-system integration.

The definitions of terms used in this document are based on the following laws and regulations: Electric Power Industry Network Code, Electricity Market Law, and Cabinet Regulation No. 635.

ABBREVIATIONS

Name	Notes
DP	Data platform Step
EIC	*Energy identification code*. The EIC system aims to provide a standardised approach for identifying elements and market participants in energy systems (electricity and gas). The EIC system is designed to facilitate the data exchange processes between energy system and market participants, at national and European levels. The abbreviation EIC is used in the technical section of this document.
ISP	Consumption accounting interval, used for transferring consumption data to suppliers, other market participants, system operators, and for billing clients.
MP	Metering point - a virtual metering point in a specific object.
LV	Latvia.
OBIS	Standardised code for retrieving values in the exchange of data (*Object Identification System*).
LGS	Final guaranteed supply
TSO	Transmission system operator — a company that transmits power in Latvia.
SFTP	**S**ecure **F**ile **T**ransfer **P**rotocol
SO	System operator.
SOAP / .xml	Data exchange service that uses an .xml format precisely defined by the data platform controller for the exchange of data between the data platform and the electricity supplier at the level of their databases (system-to-system).
PUC	Public Utilities Commission.
DSO	Distribution system operator — a company that distributes power in Latvia.

INTRODUCTION

The opening of the electricity market was a gradual process in Latvia, and since 1 January 2015, every consumer has been able to freely choose their supplier of electricity. Latvia has one transmission system operator and a number of distribution system operators. The list of registered electricity service providers is available on the webobject of the Public Utilities Commission.

On 30 January 2020, the Latvian Parliament adopted amendments to the Electricity Market Law giving Latvia's biggest distribution system operator, Sadales tīkls AS, the task of establishing, maintaining, and managing a platform for exchanging and storing electricity market data.

With the introduction of the STEP data platform, these data became available to all market participants, with the centralised exchange of data within one information exchange platform that follows a single standard for the circulation of data.

The purpose of the single data exchange standard is to set a national standard for the exchange of electricity market data, enabling the standardised and centralised storage of such data, and exchange of such data among market participants. The implementation of this single data exchange standard will harmonise and centralise the operating principles of the market and create a basis for its development. The single data exchange standard has been developed in accordance with the regulatory framework of the Republic of Latvia, including the Electricity Market Law and Cabinet Regulation No. 635 'Electric power trading and use regulations'. Any terms that are not included in the sections 'Terms' and 'Abbreviations' must be interpreted in accordance with the Electricity Market Law and Cabinet Regulation No. 635.

STEP offers access to basic object and client data, enabling electricity market processes through market messages, exchanging consumption data, and providing reports.

ADMISSION OF NEW MARKET PARTICIPANTS

Every electricity market participant that begins operations in Latvia must register in accordance with the applicable laws and regulations of the Republic of Latvia. Only those market participants who have met all the conditions below and whose contracts with system operators and the balancing service provider are in effect will be able to conclude a contract for the use of the Step data platform.

Transmission system operator (TSO):

a) licence for the transmission of electric power across Latvia received from PUC.

Distribution system operator (DSO):

a) licence specifying the service zone, received from PUC.

Supplier/Purchaser:

a) registered in the PUC register of electricity producers and suppliers;

b) has concluded a system use agreement with the transmission system operator;

c) has concluded a balancing service contract with a balancing service provider (or TSO);

d) has concluded a system use agreement with the distribution system operators in whose licence zones it intends to provide services to the end consumers of electricity.

Regulation service provider, including aggregators:

a) registered in the PUC aggregator register;

b) has concluded a system use agreement with the system operator to whose network the user's object is connected;

c) has concluded an agreement on the demand reaction for the object in question with the user;

d) has concluded a balancing service contract or a balancing contract with the same balancing service provider that provides the balancing service to the objects used to provide the demand reaction.

DATA PLATFORM GENERAL CONDITIONS OF USE

The STEP data platform user agreement sets the duties, responsibilities, and other provisions pertaining to the data platform controller and the data platform user. The STEP data platform user agreement is a standard agreement for all platform users.

Service interruptions

The DP controller has the right to temporarily suspend the operation of the data platform to perform system maintenance, by giving prior notice to the users of the data platform *('Electric power trading and use regulations').*

If a data platform user notices an interruption in the service of which the user was not informed, the user must immediately report this to the data platform controller.

USER MANAGEMENT

Creating data platform Users

The data platform can be used to create a system user, a primary portal user, and additional portal users.

A system user is necessary if the data platform user plan to use the system-to-system data exchange method for web services and market messages (XML). The creation of a system user can be requested by the primary portal user or by the person with rights to represent the company by sending a free form electronically signed application to the email step@sadalestikls.lv with the following information: username, reason for creation, required role, and email address to which the authorization token should be sent. Once the user is created, a token for authorization will be sent to the specified email for authorisation. The token has a limited validity period. One system user can be used in multiple user systems.

The primary portal user is the portal user who has the right and duty to maintain and update the list of users on the data platform STEP portal. It is the responsibility of the primary user to ensure that additional users are created and maintained. There can be no more than five of main users, for safety reasons. The first creation of primary portal users is provided by the data platform controller for users specified in the data platform STEP usage agreement. The creation of another primary user can be requested by the existing primary user or by the person with rights to represent the company by sending an electronically signed free form application to step@sadalestikls.lv with the following information: username, first name, last name, e-mail address, required role.

Additional user — a portal user added by the primary portal user of the Market Participant

After receiving the user information, the data platform controller creates the necessary users:

1. system – a system for users to use to call web services;
2. primary user of the data platform portal to be used to access the data platform portal.

Note: *ST staff cannot see or set a user's password; it is up to the user to set or change it.*

Each participant of the data platform has two roles in the portal: main user and additional user.

Authentication and authorisation (portal)

To log in to the portal, one must be a user registered on the data platform. The data platform controller handles the initial registration of the primary user of each market participant (see information above).

Once the user account is created, an activation link for the data platform portal will be sent to your e-mail. E-mail contents example:

Sveicināti!

Jums ir izveidots lietotājs "PIEMERS_PORTALS" ST elektroenerģijas tirgus datu apmaiņas un uzglabāšanas platformā.
Lai aktivizētu savu lietotāju lūdzu sekojiet lietotāja aktivizācijas saitei.

ar cieņu
Jūsu Sadales Tīkls.

Please follow this link to activate your user in the data platform portal. Contact us at step@sadalestikls.lv if you have any questions.

The initial authorisation of the primary portal user of a Market Participant takes place with the username and password issued by the data platform controller. After successful authentication, the password can be changed, if necessary, in the 'Password change' section.

The portal makes it possible for market participants to:

a) perform actions with market messages;
b) receive various reports;
c) perform other actions necessary for the electricity market.

DSO in the portal can:

a) record and amend master data on your clients and objects;
b) upload consumption data (load profile), consumption confirmation, and calculation rows;
c) perform actions with market messages;
d) receive various reports;
e) perform other actions necessary for the electricity market.

Authentication and authorisation (system-to-system)

This section describes the authentication and authorisation services required for the system-to-system exchange of data.

Service authentication

An authentication token is required for using the services. Without an authentication token, it is impossible to use the services.
Authentication tokens require the use of *Auth* services.
Marker authorisation takes place using the *HTML Authorisation* standard (based on the RFC standard) request section, i.e., following the *Bearer* method (*OAuth2* is also used):

```
Authorisation: Bearer <JWT>
```

This method requires that the authorisation information be fed as an *HTTP* request header rather than as data.

System:system user

This user is to be used for DP web service calls only!

Once the user account is created, an authorisation *token* will be sent to your e-mail address; the period of its validity is limited. E-mail content example *(a part of the token is hidden in the example).*

Sveicināti!

Jums ir izveidots sistēmas lietotājs "PIEMERS_SISTEMA" ST elektroenerģijas tirgus datu apmaiņas un uzglabāšanas platformā.
Lai aktivizētu savu lietotāju lūdzu izmantojiet šo marķieri:

```
eyJ.....VCJ9.eyJ.....OTA4MzB
9.tKB7KFhkhO7hN.....w
```

ar cieņu
Jūsu Sadales Tīkls.

After receiving the token, it must be used in the password changing service *ChangeCredentials* in order to activate it and set the password.

Example for setting the password:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:ser="https://sadalestikls.lv/STDH/services">
   <soap:Header/>
   <soap:Body>
      <ser:ChangeCredentialsRequest>
         <ser:userCredentials>
            <ser:secret>PietiekamiSarezgitaProle123!</ser:secret>
         </ser:userCredentials>
      </ser:ChangeCredentialsRequest>
   </soap:Body>
</soap:Envelope>
```

The token received by e-mail must be used as authentication token for setting the password. It must be inserted in the *HTTP* header *Authorization*.

```
...
Authorization: Bearer eyJ.....VCJ9.eyJ.....
...

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:ser="https://sadalestikls.lv/STDH/services">
   <soap:Header/>
   <soap:Body>
      <ser:ChangeCredentialsRequest>
         <ser:userCredentials>
            <ser:secret>PietiekamiSarezgitaProle123!</ser:secret>
         </ser:userCredentials>
      </ser:ChangeCredentialsRequest>
   </soap:Body>
</soap:Envelope>
```

Example request using *SoapUI*:

After setting the password it must be used in authentication in the DP web service in order to get tokens for further service requests.

After successful authentication in the Auth service, a temporary *JWT* standard token will be returned:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Body>
      <ser:AuthResponse xmlns:ser="https://sadalestikls.lv/STDH/services" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
         <ser:statusInfo>
            <ser:status>S</ser:status>
         </ser:statusInfo>
         <ser:authInfo>
            <ser:JWT>eyJhb.....9.eyJzdWIiOi.....
            <ser:secretChangeNeeded>false</ser:secretChangeNeeded>
            <ser:username>PIEMERS_SISTEMA</ser:username>
            <ser:name>Vards, uzvards</ser:name>
            <ser:email>e-pasta.adrese.lv</ser:email>
            <ser:phoneNumber>29999999</ser:phoneNumber>
            <ser:lastLoginDT>2022-09-27T12:04:09.891+03:00</ser:lastLoginDT>
            <ser:lastLoginIP>1.2.3.4</ser:lastLoginIP>
         </ser:authInfo>
      </ser:AuthResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

The received token must be used as authentication token for further service requests. Insert it in the *HTTP* header *Authorization.*

KEY DP FUNCTIONS AND DUTIES OF EVERY MARKET PARTICIPANT

The basic functions of the STEP data platform are described in Cabinet Regulation No. 635 'Electric power trading and use regulations'.

The duties and responsibilities of the data platform controller and the data platform user are described in the STEP data platform user agreement.

The transmission system operator:

a) Provides data about the creation of new objects in own licence area to the data platform;
b) Provides consumption data for billing purposes for its clients;
c) Informs the data platform of changes in client data or object specifications;
d) Processes the messages sent by the data platform;

The distribution system operator

a) Provides data about the creation of new objects in own licence area to the data platform;
b) Provides consumption data for billing purposes for its clients;
c) Informs the data platform of changes in client data or object specifications;
d) Processes the messages sent by the data platform;

Electricity supplier/buyer:

a) Request and receive data on clients and objects from the data platform, with the client's consent;
b) is in charge of maintaining up-to-date contact details of its clients on the data platform by sending market messages;
c) Submit applications for supplier and user changes, etc. using the data platform
d) Using the data platform, provide services to their clients by requesting the services available from system operators on the data platform (new connection, load changes, connection resumption, etc.);
e) Hand client consumption readings over to the data platform;
f) One (1) business day in advance, and no later than the last day of the month, report on the termination of electricity trading contracts concluded with clients as of the first day of the current month for any or all of client objects;
g) Request the provision of an electricity trading service for a new client object during the current month;
h) If a new generating plant at a client object is connected to the DSO's power system for parallel operation, or if the client changes at an object where the generating plant is located, then the client object may be included in the Supplier's balancing area for the current month, for the electricity fed to the power system;
i) Receive billing data from the data platform;

Flexibility service provider

a) Request and receive data on clients and objects from the data platform;
b) Builds a portfolio by adding or removing an object, and providing information about it on the data platform;

SINGLE EIC STANDARD

The data platform uses EIC. The purpose of the codes is to provide a standardised system for the identification of market operators and objects. AS 'Augstsprieguma tīkls' has been assigned as the EIC issuing authority for the Latvian electricity market and is in charge of maintaining the national register and organising the national governance processes, which includes issuing and deactivating codes, in accordance with established guidelines. An EIC consists of 16 characters. The first two denote the local issuing authority, AS 'Augstsprieguma tīkls', which has the code 43. The third character is the type of EIC, characters 4 though 15 are freely assigned combinations of letters and numbers, and the last one is the control character.

More information about EIC and the principles for awarding them:
https://www.entsoe.eu/data/energyidentification-codes-eic/

The data platform will use type X and Z EIC codes. Type X code denote users (clients), and type Z, denote objects.

Given that clients registered in Latvia may own facilities with different system operators, it is necessary to provide every client with a unique EIC regardless of system operator affiliation. For all type X codes, the EIC generation on the data platform for clients will be separate for natural individuals and legal entities. The range already issued by AS 'Augstsprieguma tīkls' will be used.

Given that a single object cannot be in the zone of multiple system operators at the same time, the code range assigned to each system operator will be used to generate a type Z code.

The data platform will make it possible to check whether a user has already been assigned an EIC or if a new code needs to be generated.

CHANNELS FOR TRANSFERRING DATA ON THE DATA PLATFORM

To exchange information with the data platform, market participants can use the data platform portal (market message templates in CSV file format) or system-to-system integration (using the SOAP/XML data exchange standard).

The processing of market messages within the data platform involves uploading the incoming CSV message files and then downloading the replies or error files for the market messages. The specifications for the CSV file are available in the 'Market message technical specifications' section of this document. Once the CSV file is uploaded, it undergoes a file structure check. If the file structure is wrong, an error message is returned immediately; if it is correct, the file is sent for further processing in the data platform. Files in .csv format must have WINDOWS-1257 (CP1257, Baltic) encoding.

In order to use system-to-system data exchange, participants must arrange the creation of a VPN tunnel with the controller of the data platform. The circulation of market messages takes place in accordance with the market message specifications.

PRINCIPLES FOR THE SUBMISSION OF MARKET MESSAGES

Market messages, the principles for the submission and processing of which are specified in the laws and regulations of the Republic of Latvia, must be submitted in accordance with these and within the deadlines specified.

The circulation of market messages for objects in the licence area of a DSO whose system has fewer than 100,000 users connected to it

All market messages must be sent and processed in accordance with laws and regulations. The Step data platform makes it possible to send market messages for the objects whose data are in the data platform. Every DSO is responsible for the quality and compliance of the data submitted. If the data are not up-to-date, suppliers will receive incorrect information about clients and objects from the Step data platform.

Every DSO is responsible for the timely processing of market messages. If the DSO has not processed the market messages, the supplier cannot fulfil its contractual obligations towards the client and the settlement data are incorrect. The processing of market messages which, for objective reasons, cannot take place before their effective date, may not exceed one month. The DSO informs the supplier and the data platform controller of such cases.

If there is uncertainty about the DSO's refusal received via the Step data platform (market message sent by the supplier has been rejected), the supplier contacts the DSO whose licence area the object is located in.

Suppliers must take into account the fact that the time and manner of processing market messages by the DSO can vary, subject to the deadlines set in laws, regulations, and other binding documents.

If the data platform controller needs to provide information to the DSO, the information is sent from step@sadalestikls.lv, and the response from the DSO is received at step@sadalestikls.lv.

More detailed instructions on how to process market messages are available in the Step portal (datuplatforma.lv)

Start supply

Suppliers apply to start trading at an object by submitting a *StartSupply* market message to the Step data platform. The electricity supplier may apply for the beginning of trading at the object for the following month by the deadline set in Cabinet Regulation No. 635. 'Electric power trading and use regulations'. In accordance with the Cabinet Regulation, on day 25, the DP controller informs the DSO of applications from suppliers to start trading at an object. objectThe DP controller processes the application and ensures that the supplier is connected to the object on the DP and provides confirmation to the supplier by the deadline specified in Cabinet Regulation No. 635. 'Electric power trading and use regulations'.

End supply

In order to stop trading at an object, the supplier sends an *EndSupply* market message by the last day of the current month in order to stop trading at the object as of the 1st of the following month. The DP controller informs the DSO of requests from suppliers to end trading at objects no later than the 1st of the following month or the 1st working day of that month. The DP controller processes the application and ensures that the trade connection for the object is terminated, effective next month, and sends confirmation to the supplier.

User Move In

In order for a user to apply for energy supply at an object with a future date (within the current month, though the effective date cannot be later than the 5th of the following month), the supplier sends a *MoveIn* market message via the Step data platform. The data platform controller informs the DSO of user requests for the supply of energy to objects in the DSO area. The DSO informs the data platform controller of the change of user in the Step data platform, or tells the controller that a user cannot apply for that object. After receiving the confirmation or rejection, the data platform controller carries out further processing and informs the supplier.

User Move Out

In order for a user to cancel the supply of energy at an object with a future date, the supplier sends a *MoveOut* market message to the Step data platform. Within one working day, the data platform controller informs the DSO of user cancellations for the supply of energy to objects in the DSO area. On the termination of the contract, the DSO informs the data platform controller within one working day that the energy supply has been cancelled or that the cancellation is impossible in the Step data platform. After receiving the confirmation or rejection, the data platform controller carries out further processing and informs the supplier.

Connection of object to the power grid

To connect object to the power grid, the supplier sends a *ConnectSupply* market message via the Step data platform. The data platform controller informs the DSO of the meters that must be connected. The DSO connects the meters within 5 days, makes changes in the Step data platform, and informs the data platform controller of the connection of the meters or of the reason why they cannot be connected. The data platform controller informs the supplier accordingly.

Disconnection of object from the power grid

To disconnect object from the power grid, the supplier sends a *DisconnectSupply* market message via the Step data platform. The data platform controller informs the DSO of the meters that must be disconnected. The DSO disconnects the meters within 5 days, makes changes in the Step data platform, and informs the data platform controller of the disconnection of the meters or of the reason why they cannot be disconnected. The data platform controller informs the supplier accordingly.

Starting electricity purchase at object

Purchasers apply to start purchasing at object by submitting a *StartPurchase* market message to the Step data platform. If the user of an object changes or a user switches from another billing system, the purchasing starts on the date specified by the purchaser, but no earlier than the following day. Purchasers can add new producers to their portfolio, effective on the present day, or in the past within the current month.

The DP controller informs the DSO of purchaser applications to start purchasing at the object. objectThe DP controller processes the application and ensures that the purchaser is connected to the object on the DP and provides confirmation to the purchaser by the deadline specified in the Cabinet Regulation.

Stopping electricity purchase at object

To stop purchasing at object, the purchaser sends an *EndPurchase* market message starting on the date indicated by the purchaser, but no earlier than the following day. The DP controller informs the DSO of purchaser applications to stop trading at the object. The DP controller processes the application

and ensures that the purchasing link for the object is terminated, effective on the date specified by the purchaser, and sends a confirmation to the purchaser.

Change of object name and address

In order to provide an up-to-date object name and address information via the data platform, the supplier may send a *ChangeObjectData* message. The message enables the submission of the object address and/or name changes to the DSO.

Inclusion of a user object to the aggregator's portfolio, including changing the user at the object

Having received an application from the aggregator, the DP controller informs the DSO accordingly. Within 1 working day, the DSO informs the DP controller if the object may be included in the aggregator's portfolio. After receiving the confirmation or rejection from the DSO, the DP controller carries out further processing and informs the supplier. If within 1 working day after sending a request to the system operator, the DP controller does not receive a refusal by the DSO and the reason, the DP controller processes the request and ensures the aggregator is assigned to the object on the data platform.

Changing the aggregator

The deadlines and requirements for replacing an aggregator are set in Cabinet Regulation No. 157 'Regulations on aggregators'. You can apply to change your aggregator starting from the following month by the date set in Cabinet Regulation No. 157 'Regulations on aggregators'. Having received an application from the aggregator, the DP controller informs the DSO of the change of the Aggregator at the object. If within 1 working day after sending a request to the system operator, the DP controller does not receive a refusal to change the aggregator by the DSO and the reason, the DP controller processes the request and ensures the aggregator is assigned to the object on the data platform. The data platform controllers inform the user's previous selected aggregator of this by the date set in Cabinet Regulation No. 157.

Removing a user object from the aggregator portfolio

Having received this application from the aggregator, the DP controller informs the DSO of the removal of the user object from the aggregator's portfolio, processes the application, and informs the aggregator of the result.

Circulation of market messages and data with aggregators

All market messages and requests must be submitted and processed in accordance with the laws and regulations. If the deadlines and requirements for submission are not specified in the legislation, aggregators must comply with the deadlines and requirements set in the 'Aggregator data exchange processes' document, available in the 'Useful information' section of the data platform portal.

The Step data platform makes it possible to send market messages for the objects whose data are in the data platform.

The aggregator has access to 2 market messages and 3 data processing requests, which can only be submitted after the creation of the main user of the data platform portal.

If there is uncertainty about the DSO's refusal (aggregator application rejected), the aggregator contacts the DSO whose licence area the object is located in.

Market message for client and object EIC receipt – *GetCustomerAndObjectsEIC*

The market message is available on the data platform Step, and it enables the Aggregator to obtain master data, including EIC, for the client/user and the objects under their management.

This market message may only be called if the user has given their consent to this and has been informed of what dataset will be obtained and for what purpose.

The requirements for the format of this market message and the dataset to be obtained are available here.

Market message for object historical consumption data receipt - *GetObjectConsumption*.

The market message is available via the data platform Step and enables the aggregator to obtain detailed consumption data for objects under the user's management.

This market message may only be called if the user has given their consent to this and has been informed of what dataset will be obtained and for what purpose.

The requirements for the format of this market message and the dataset to be obtained are available here.

Cabinet Regulation No. 157 'Regulations on aggregators' states that the demand reaction service must be provided at the object level, so if object has multiple meters, the consumption data from all meters will be included in the reply to this market message.

Data processing requests:

1. **Inclusion of a user object to the aggregator's portfolio, including changing the user at the object:** Aggregators must comply with the deadlines and requirements set in the document 'Aggregator data exchange processes'.
2. **Change of aggregator –** Aggregators must comply with the deadlines set in Cabinet Regulation No. 157 'Regulations on aggregators' and the requirements set in the 'Aggregator data exchange processes' document.
3. **Removal of a user object from the aggregator portfolio –** Aggregators must comply with the deadlines and requirements set in the 'Aggregator data exchange processes' document.

TECHNICAL SPECIFICATIONS FOR MARKET MESSAGES

Market messages are an essential function of the data platform, which enables cooperation between Suppliers and SOs in providing services to electricity clients in Latvia. In the context of market messages, the SO provides information related to the electrified object to the Suppliers, while the Suppliers provide information about electricity trading to the SO.

The purpose of the data platform is to enable the efficient exchange of market messages between any SO and Suppliers within the framework of existing legislation. DP acts as an intermediary in the exchange of the messages, using common standards and approaches for all parties involved in the exchange of the messages.

In order for a market participant to retrieve information from a data platform, the client's consent must be obtained. Market participants are responsible for the quality of the information they upload and send to the data platform.

Market messages are intended for the parties that have a role that allows them to act as a Supplier, SO, etc.

Market messages are divided into a few market message groups:

1. Market messages for Suppliers;

   1.1. Incoming and outgoing market messages;

Types of market messages

The table below lists the planned market messages.

Table 1 – types of incoming market messages available to Suppliers

	Market message code	Direction	Description/details
1.	GetCustomerAndObjects EIC	to DP	EIC receipt message for clients and objects
2.	GetObjectData	to DP	Client object technical information receipt message
3.	GetObjectConsumption	to DP	Object historical consumption data receipt message
4.	StartSupply	to DP	The message enables the beginning of trading on the object
5.	EndSupply	to DP	The message enables the discontinuation of trading at the object or revokes a message to start trading previously submitted
6.	MoveIn	to DP	User change at the object
7.	MoveOut	to DP	The message enables the user to cancel the supply of electricity at the object
8.	RevokeApplication	to DP	The message revokes a previously submitted application
9.	StartSupplyImmediate	to DP	The message enables the beginning of trading at the new objects of the client
10.	FinishSupply	to DP	The message enables the discontinuation of trading and SO services at the object

	Market message code	Direction	Description/details
11.	ChangeCustomerData	to DP	The message enables the hand over to the SO of changes related to the client and the client contract contact details
12.	ConnectSupply	to DP	The message enables the connection of the object to the power grid
13.	DisconnectSupply	to DP	The message enables the disconnection of the object from the power grid
14.	StartPurchase	to DP	The message enables the beginning of purchasing at the object
15.	EndPurchase	to DP	The message enables the end of purchasing at the object
16.	RequestControlReading	to DP	The message enables the processing of a control reading inspection request.
17.	ChangeObjectData	to DP	Message that enables the submission of object address and/or name changes to the SO

Table 2 – types of outgoing market messages available to Suppliers

	Market message code	Direction	Description/details
18.	DSOConfirmSupply	from DP	The message confirms the application for starting the trading for the supply of energy
19.	DSOConfirmSupplyFGS	from DP	The message confirms the DSO order to transfer the object to the PGP Supplier for servicing
20.	DSOCancelSupply	from DP	The message confirms the termination of trading or rejects an application for starting the trading for the supply of energy
21.	DSOCancelMoveIn	from DP	The message rejects a message about a user applying for electricity supply at object
22.	DSOTechnicalDataChanged	from DP	The message informs the Supplier about technical changes at the object where it provides the electricity trading service
23.	DSOSupplyStatus	from DP	The message informs the Supplier of changes in the connection status of an object
24.	DSOConfirmPurchase	from DP	The message confirms the application for starting the purchasing for the supply of energy
25.	DSOCancelPurchase	from DP	The message confirms the application for cancelling the purchasing for the supply of energy
26.	DSONewObjectAvailable	from DP	The message informs the Supplier about a new object controlled by the client, for which a trading application can be immediately submitted
27.	DSOControlReadingInfo	from DP	The message informs the Supplier about the results of the control inspection.

There are two types of data exchange on DP:

a) system — a system for exchanging data in SOAP/XML format;

b) manual data exchange via the data platform public portal, in CSV format.

The web service data exchange standard, SOAP, will be used to exchange data in XML format.

Both the types of data exchange have the same functions and are supported and will be developed by DP.

Data exchange via web services

A single *WSDL* (Web Service Description File) is prepared for every set of services and is provided to market Participants.

The messages used in the WSDL file will be described in several XSDs (diagram/type definition files): shared-type files (`STDHMMListTypes.xsd`, `STDHMMBaseTypes.xsd`, `STDHMMElementTypes.xsd`), and an element type file for web services (`STDHMMOperationsTypes.xsd`), which can be different for each set of services.

Processing of market messages using web services:

1. Market messages intended for supplier calls *(MarketMessagesSupplier*)

   1.1. Shared type XSD files:

      a) `STDHMMListTypes.xsd` — file structure (Unix EOL) provided in the annex.

      b) `STDHMMBaseTypes.xsd` — file structure (Unix EOL) provided in the annex.

      c) `STDHMMElementTypes.xsd` — file structure (Unix EOL) provided in the annex.

   1.2. Web service operation type file:

      a) `STDHMMOperationsTypes.xsd` — file structure (Unix EOL) provided in the annex.

   1.3. Web service description file:

      a) `STDHMarketMessagesSupplier.wsdl` — file structure (Unix EOL) provided in the annex.

2. Receipt market messages intended for suppliers *(MarketMessagesSupplierOut*)

   2.1. Shared type XSD files:

      a) `STDHMMListTypes.xsd` — file structure (Unix EOL) provided in the annex.

      b) `STDHMMBaseTypes.xsd` — file structure (Unix EOL) provided in the annex.

      c) `STDHMMElementTypes.xsd` — file structure (Unix EOL) provided in the annex.

   2.2. Web service operation type file:

      a) `STDHMMOperationsTypes.xsd` — file structure (Unix EOL) provided in the annex.

   2.3. Web service description file:

      a) `STDHMarketMessagesSupplierOut.wsdl` — file structure (Unix EOL) provided in the annex.

3. Market messages intended for buyer calls *(MarketMessagesPurchase*)

3.1. Shared type XSD files:

a) `STDHMMListTypes.xsd` — file structure (Unix EOL) provided in the annex.

b) `STDHMMBaseTypes.xsd` — file structure (Unix EOL) provided in the annex.

c) `STDHMMElementTypes.xsd` — file structure (Unix EOL) provided in the annex.

3.2. Web service operation type file:

a) `STDHMMOperationsTypes.xsd` — file structure (Unix EOL) provided in the annex.

3.3. Web service description file:

a) `STDHMarketMessagesPurchase.wsdl` — file structure (Unix EOL) provided in the annex.

4. Receipt market messages intended for buyers *(MarketMessagesPurchaseOut*)

4.1. Shared type XSD files:

a) `STDHMMListTypes.xsd` — file structure (Unix EOL) provided in the annex.

b) `STDHMMBaseTypes.xsd` — file structure (Unix EOL) provided in the annex.

c) `STDHMMElementTypes.xsd` — file structure (Unix EOL) provided in the annex.

4.2. Web service operation type file:

a) `STDHMMOperationsTypes.xsd` — file structure (Unix EOL) provided in the annex.

4.3. Web service description file:

a) `STDHMarketMessagesPurchaseOut.wsdl` — file structure (Unix EOL) provided in the annex.

Data exchange via the public portal of the data platform

Other SO and Suppliers that do not have access to the system-to-system market messaging features will use a simplified data exchange format based on the manual exchange of data in CSV files, using a self-service webobject.

A custom *XML* data exchange standard is used to exchange data in *CSV* format. The data separator for *CSV* files is ';' (semicolon); the values in the file are not provided with separators. *CSV* files must have *WINDOWS-1257 (CP1257, Baltic)* encoding.

The first row of the file contains the column names for easier data processing in *Excel*.

Please note that the files are exchanged exclusively in the *CSV* format; *XLSX/XLS* files are not supported!

Uploading and downloading of the *CSV* request files is done via the self-service portal of the data platform.

In order to use the market message functions in *CSV* format, the market participant must request the data platform controller to provide a portal user account.

Market message file specifications

This section of the document describes the file specifications for market messages in *XML* and *CSV* formats.

Incoming data retrieval messages

The incoming data messages whose purpose is to retrieve necessary information from DP and the processing of these messages involves returning the requested data in accordance with the message conditions, or returning an error list if the message is not formatted correctly or the data requested in the message do not comply with the message processing principles.

The incoming data retrieval messages are as follows:

1) ***GetCustomerAndObjectEIC*** — client and object EIC receipt message;
2) ***GetObjectData*** — client object technical information receipt message;
3) ***GetObjectConsumption*** – object historical consumption data receipt message.

GetCustomerAndObjectEIC — client and object EIC receipt message

This message enables market participants to retrieve basic data, including EICs, on the client and the objects under its control.

Since almost all messages offered by DP will always require the use of an EIC, client or object, this message can be viewed as the first message through which market participants will become familiar with the data of the client and the objects under their control.

System — *SOAP / XML* messaging system

Sample request

`GetCustomerAndObjectEIC_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetCustomerAndObjectEIC_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in CSV format

Sample request file

`GetCustomerAndObjectEIC_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Sample reply file

`GetCustomerAndObjectEIC_response.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table Nr. 3. – *GetCustomerAndObjectsEIC* request structure

Element	Type	Req.	Description/details
GetCustomerAndObjectsEICRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes [2]	Client EIC
customerInfo	-	Yes [2]	Compound client information element
private	-	Yes [3]	Compound private client information element
firstName	string(1-100)	Yes [5]	Client name
lastName	string(1-100)	Yes [5]	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
legal	-	Yes [3]	Compound legal entity client information element
name	string(1-255)	Yes [5]	Legal entity client name
registrationNumber	string(1-30)	Yes	Legal entity client registration number
customerPermission [4]	boolean	Yes	The flag indicates if the Supplier has the client's consent to the processing: • true (permission granted) • false (no permission granted)
DSOEIC	string(1-16)	No	DSO filter, which makes it possible to get information about what objects are connected to the network of the DSO specified

Explanations

[1] this element type is described in the '*Market message sharing types*' *section*

[2,3] only one of the elements flagged with the token must be selected

[4] if the Supplier has not obtained the client's consent to the data processing, the data are not returned. If the client has not consented to requests for their data, the request is not legal!

[5] Name, surname, company name are information parameters, and the search is done by personal identity number or registration number. The search for non-residents is done using the name and value entered by the supplier in the 'personal identity number' field when registering the client, e.g., personal identity number or date of birth (most common format: dd.mm.yyyy)

Table 4 – *GetCustomerAndObjectsEIC* reply structure

Element	Type	Req.	Description/details
GetCustomerAndObjectsEICResponse	-	Yes	Main reply element
customerEIC	string(1-16)	Yes	Client EIC
customerInfo	-	Yes	Compound client information element
private	-	Yes [1]	Compound private client information element
firstName	string(1-100)	Yes	Client name
lastName	string(1-100)	Yes	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
legal	-	Yes [1]	Compound legal entity client information element
name	string(1-255)	Yes	Legal entity client name
registrationNumber	string(1-30)	Yes	Legal entity client registration number
customerAddress	*address* ***or*** *addressOth* [2]	Yes	Compound client address information element
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	No	Compound object information element
DSOEIC	string(1-16)	Yes	EIC of the participant whose network the object is connected to
objectEIC	string(1-16)	Yes	Object EIC
objectName	string(1-255)	Yes	Object name
objectStatus	string	Yes	Object status: • CONNECTED (the object is connected) • DISCONNECTED (object disconnected)
objectAddress	*address* [2]	Yes	Compound object address information element
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity: • true (permission granted) • false (no permission granted)
aggregatorEIC	string(1-16)	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The flag indicates if the object participates in the regulation service: • true (participates) • false (does not participate)

Notes

[1] only one of the elements flagged with the token is returned

[2] these element types are described in the '*Market message sharing types*' section

Table 5 – *GetCustomerAndObjectsEIC* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_MULTIPLE_CUSTOMER_IDENTIFIER_FIELDS_SPECIFIED	More than one field for identifying the client is filled in. One of the parameters — EIC or personal identity number/registration number — must be specified.
E_MULTIPLE_CUSTOMERS_FOUND_WITH_EIC	More than one client has been found with this personal identity number/registration number: %1%.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_COMPANY_NAME_NOT_SPECIFIED	The legal entity has not name specified.
E_FIRSTNAME_OR_LASTNAME_OR_RESIDENT_NOT_SPECIFIED	The private individual does not have a name/surname indicated or does not have a 'resident' flag.
E_MISMACTH_CUSTOMER_NAMES	It is forbidden for a private individual to indicate a company name, and for a legal entity to indicate a personal name and surname.
E_CUSTOMER_IDENTIFIER_DOES_NOT_EXIST	Cannot find a client with personal identity number/registration number %1%.
E_DSO_EIC_DOES_NOT_EXIST	DSO EIC %1% does not exist, is blocked, or is not active.
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.
E_CUSTOMER_PERMISSION_CANNOT_BE_GIVEN	If the client is not specified, then client consent cannot be given.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 6 – *CSV* structure of the *GetCustomerAndObjectsEIC* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier

Column name	Req.	Note
klienta EIC	No [1,2]	Existing client EIC code
vārds	No [4]	Private individual name
uzvārds	No [4]	Private individual surname
uzņēmuma nosaukums	No [4]	Legal entity name
klienta identifikators	Yes	Private individuals have a personal identity number; legal entities, a registration number
klienta atļauja	Yes [3]	The flag indicates that the Supplier has the client's consent: Y/N
DSOEIC	No	DSO filter, which makes it possible to get information about what objects are connected to the network of the DSO specified

Paskaidrojumi

[1] The request searches for clients by client EIC code **OR** client identifier.

[2] May be omitted if the client identifier is specified.

[3] If the Supplier has not obtained the client's consent to the data processing, the data are not returned

[4] Name, surname, company name are information parameters, and the search is done by personal identity number or registration number. Searches for non-residents take place using the name, surname, and date of birth in the format dd.mm.yyyy

Table 7 – *CSV* structure of the *GetCustomerAndObjectsEIC* response

Column name	Req.	Note
klienta EIC	Yes	Client EIC
Klienta vārds	Yes [1]	Client name
Klienta uzvārds	Yes [1]	Client surname
Klienta personas kods	Yes [1]	Client personal identity number
Juridiskā klienta nosaukums	Yes [1]	Legal entity client name
Juridiskā klienta reģistrācijas numurs	Yes [1]	Legal entity client registration number
klienta adrese: valsts	Yes [2]	Client address: country (*ISO 3166-1 alpha-2 country code*)
klienta adrese: novads	No	Client address — municipality
klienta adrese: pilsēta	No	Client address: city
klienta adrese: pagasts	No	Client address: parish
klienta adrese: ciems	No	Client address: village
klienta adrese: iela	No	Client address: street

Column name	Req.	Note
klienta adrese: mājas nos.	No	Client address: house name
klienta adrese: dzīvokļa nr.	No	Client address: apartment No.
klienta adrese: VZD adreses kods	No	client address: SLS address code
klienta adrese: pasta indekss	No	Client address: postal code
klienta adrese: izņēmuma ēka	No	Client address: exception building
klienta ārzemju adrese: adrešu rinda 1	No	Client foreign address: address line 1
klienta ārzemju adrese: adrešu rinda 2	No	Client foreign address: address line 2
klienta ārzemju adrese: adrešu rinda 3	No	Client foreign address: address line 3
klienta ārzemju adrese: adrešu rinda 4	No	Client foreign address: address line 4
klienta ārzemju adrese: adrešu rinda 5	No	Client foreign address: address line 5
DSOEIC	Yes	EIC of the participant whose network the object is connected to
objekta EIC	Yes	Object EIC *(each object will have its own message row in the CSV file)*
objekta nosaukums	Yes	Object name
objekta statuss	Yes	Object status: • CONNECTED (object connected) DISCONNECTED (object disconnected)
objekta adrese: valsts	Yes	Object address: country (*ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos.	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods	No	Object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
norēķinu veicējs	Yes	The flag indicates if the Supplier is a paying entity
agregatora EIC	No	Aggregator EIC

Column name	Req.	Note
regulēšanas pakalpojuma nodroš.	No	The flag indicates if the object participates in the regulation service

Notes

[1] only information about the legal entity or private individual will be returned

[2] only information about the LV or foreign address of the client will be returned

GetObjectData — client object technical information receipt message

This message enables Participants to obtain detailed data for the facilities managed by the client.

Depending on the request data, the message returns the minimum required or additional technical data; see the message description section.

System — *SOAP / XML* messaging system

Sample request

`GetObjectData_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetObjectData_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`GetObjectData_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Sample reply file

`GetObjectData_response.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 8 – *GetObjectData* request structure

Element	Type	Req.	Description/details
GetObjectDataRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	No	Client EIC

Element	Type	Req.	Description/details
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Compound object information element
customerPermission [2]	boolean	Yes	The flag indicates if the Supplier has the client's consent to the processing: • true (permission granted) • false (no permission granted)

Notes

[1] this element type is described in the '*Market message sharing types*' *section*

[2] if the Supplier has not obtained the client's consent to the data processing, the data are not returned

Table 9. – *GetObjectData* reply structure

Element	Type	Req.	Description/details
GetObjectDataResponse	-	Yes	Main reply element
customerEIC	string(1-16)	Yes	Client EIC
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	No	Compound object information element
DSOEIC	string(1-16)	Yes	EIC of the participant whose network the object is connected to
objectEIC	string(1-16)	Yes	Object EIC
objectName	string(1-255)	Yes	Object name
objectStatus	string	Yes	Object status: • CONNECTED (object connected) • DISCONNECTED (object disconnected)
objectAddress	*address* [1]	Yes	Compound object address information element
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity : • true (is a paying entity) • false (not a paying entity)
aggregatorEIC	string(1-16)	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The flag indicates if the object participates in the regulation service • true (participates) • false (does not participate)
objectTechDataBasic	-	Yes [2]	Compound element of the basic technical information list for the object

Element	Type	Req.	Description/details
tariff	string(1-255)	Yes	Object-specific fee
voltage	string(1-255)	Yes	Voltage connected to the object
phaseCount	decimal	Yes	Number of phases installed at the object
permittedLoad	decimal	Yes	Power allowed for the object
current	decimal	Yes	Current allowed for the object
generator	string(1-255)	Yes[4]	Type of generator installed at the object
proprietaryBorder	string(1-255)	Yes	Object ownership boundary
readingType	string	No	Reading type at object level: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
isNETO	boolean	No[4]	The flag indicates if NETO is used at the object
typeCode	string(1-255)	No	Object type code
typeDescription	string(1-255)	No	Object type code description
generationAllowedPower	string	No[4]	Capacity specified in the permit by the manufacturer of the generator connected to the object
generationPermitNumber	string	No[4]	Number of the permit by the manufacturer of the generator connected to the object
generationPermitDateFrom	dateTime	No[4]	Initial date of the permit by the manufacturer of the generator connected to the object
generationPermitDateTo	dateTime	No[4]	End date of the temporary permit by the manufacturer of the generator connected to the object
maxAllowedExportPower	string	No[4]	Maximum export capacity of the generator connected to the object
producerType	string	No[4]	Type of generator installed at the object
isEnergySoldToPurchaser	boolean	No[4]	Flag indicating whether the electricity is traded to an electricity purchaser
objectTechDataExt	-	Yes [2]	Compound element of the extended technical information list for the object
tariff	string(1-255)	Yes	Object-specific fee
voltage	string(1-255)	Yes	Voltage connected to the object
phaseCount	decimal	Yes	Number of phases installed at the object
permittedLoad	decimal	Yes	Power allowed for the object
current	decimal	Yes	Current allowed for the object
generator	string(1-255)	Yes[4]	Type of generator installed at the object

Element	Type	Req.	Description/details
proprietaryBorder	string(1-255)	Yes	Object ownership boundary
readingType	string	No	Reading type at object level: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
isNETO	boolean	No[4]	The flag indicates if NETO is used at the object
typeCode	string(1-255)	No	Object type code
typeDescription	string(1-255)	No	Object type code description
generationAllowedPower	string	No[4]	Capacity specified in the permit by the manufacturer of the generator connected to the object
generationPermitNumber	string	No[4]	Number of the permit by the manufacturer of the generator connected to the object
generationPermitDateFrom	dateTime	No[4]	Initial date of the permit by the manufacturer of the generator connected to the object
generationPermitDateTo	dateTime	No[4]	End date of the permit by the manufacturer of the generator connected to the object
maxAllowedExportPower	string	No[4]	Maximum export capacity of the generator connected to the object
producerType	string	No[4]	Type of generator installed at the object
isEnergySoldToPurchaser	boolean	No[4]	Flag indicating whether the electricity is traded to an electricity purchaser
averageYearlyConsumption	decimal	No	Average annual consumption of the object for the last full 12-month billing period
previousMonthConsumption	decimal	No	Previous month's consumption
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractStartDate [3]	dateTime	No	Date of inclusion of the object in the DSO contract
DSOContractEndDateObject [3]	dateTime	No	Date of removal of the object from the DSO contract
DSOContractBillDeliveryType	string	No	Billing method for the object: • MAIL • EMAIL
DSOContractNr [3]	string(1-50)	No	DSO contract number, in which the object is included
DSOContractBillingAddress	*address* [1]	No	Compound billing address information element
DSOContractBillingEMail	string(4-250)	No	Billing e-mail

Element	Type	Req.	Description/details
DSOContractNotificationEMail	string(4-250)	No	Billing notification e-mail
DSOContractNotificationPhoneNumber	string(4-30)	No	Mobile number for billing notifications

Notes

[1] this element type is described in the '*Market message sharing types*' *section*

[2] only one of the elements flagged with the token is returned

[3] is not returned to private individuals

[4] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 10 – List of *GetObjectData* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_MULTIPLE_CUSTOMERS_FOUND_WITH_EIC	More than one client has been found with this personal identity number/registration number: %1%.
E_NO_ACTIVE_OBJECTS_FOR_CUSTOMER	The client with EIC %n% has no active objects.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_NO_OBJECTS_SPECIFIED	Market message number %n% does not indicate any objects.
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.
E_CUSTOMER_PERMISSION_CANNOT_BE_GIVEN	If the client is not specified, then client consent cannot be given.

Notes

The error codes common to all market messages are listed in the '*Market message sharing types*' *section.*

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 11 – *CSV* structure of the *GetObjectData* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier

Column name	Req.	Note
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
klienta atļauja [1]	Yes	The flag indicates that the Supplier has the client's consent: Y/N

Notes

[1] if the Supplier has not obtained the client's consent to the data processing, the data are not returned

Table 12 – *CSV* structure of the *GetObjectData* reply

Column name	Req.	Note
klienta EIC	Yes	Client EIC
DSOEIC	Yes	EIC of the participant whose network the object is connected to
objekta EIC	Yes	Object EIC *(each object will have its own message row in the CSV file)*
objekta nosaukums	Yes	Object name
objekta statuss	Yes	Object status • CONNECTED (object connected) • DISCONNECTED (object disconnected)
objekta adrese: valsts	Yes	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos.	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods	No	Object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
norēķinu veicējs	No	the flag indicates if the Supplier is a paying entity
agregatora EIC	No	Aggregator EIC
regulēšanas pakalpojuma nodroš.	No	The flag indicates if the object participates in the regulation service

Column name	Req.	Note
objekta tehn. informācija: tarifs	No	extended technical information about the object: rate
objekta tehn. informācija: spriegums (kV)	No	extended technical information about the object: voltage (kV)
objekta tehn. informācija: fāžu skaits	No	extended technical information about the object: number of phases
objekta tehn. informācija: atļautā slodze (kW)	No	extended technical information about the object: permitted load (kW)
objekta tehn. informācija: IAA strāvas lielums (A)	No	extended technical information about the object: IAA current (for estimates) (A)
objekta tehn. informācija: ģenerators	No[1]	extended technical information about the object: generator
objekta tehniskā informācija: piederības robeža	No	extended technical information about the object: ownership boundary
objekta tehn. informācija: nolasīšanas veids	No	extended technical information about the object: reading type at object level • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
objekta tehn. informācija: NETO	No[1]	extended technical information about the object: The flag indicates if NETO is used at the object: Y/N
objekta tehn. informācija: objekta rakstura kods	No	extended technical information about the object: object type code
objekta tehn. informācija: objekta rakstura koda apraksts	No	extended technical information about the object: object type code description
objekta tehn. informācija: vidējais objekta patēriņš gadā	No	extended technical information about the object: average annual consumption of the object
objekta tehn. informācija: iepriekšējā mēneša patēriņš	No	extended technical information about the object: previous month's consumption
datums ar kuru objekts iekļauts sistēmas pakalpojuma līgumā	No	the date, on which the object is included in the system service contract
datums, ar kuru objekts izņemts no sistēmas pakalpojuma līguma	No	the date, on which the object was removed from the system service contract
rēķinu nosūtīšanas veids	No	Billing method for this object: • MAIL • EMAIL
sistēmas pakalpojuma līguma nr.	No	system service contract No.
rēķina nosūtīšanas adrese: valsts	Yes	billing address: country *(ISO 3166-1 alpha-2 country code*)
rēķina nosūtīšanas adrese: novads	No	billing address: municipality.
rēķina nosūtīšanas adrese: pilsēta	No	billing address: city
rēķina nosūtīšanas adrese: pagasts	No	billing address: parish
rēķina nosūtīšanas adrese: ciems	No	billing address: village

Column name	Req.	Note
rēķina nosūtīšanas adrese: iela	No	billing address: street
rēķina nosūtīšanas adrese: mājas nos.	No	billing address: house name
rēķina nosūtīšanas adrese: dzīvokļa nr.	No	billing address: apartment No.
rēķina nosūtīšanas adrese: VZD adreses kods	No	billing address: SLS address code
rēķina nosūtīšanas adrese: pasta indekss	No	billing address: postal code
rēķina nosūtīšanas adrese: izņēmuma ēka	No	billing address: exception building
rēķina saņemšanas e-pasts	No	billing e-mail
rēķina paziņojumu saņemšanas e-pasts	No	e-mail for billing notifications
rēķina paziņojumu saņemšanas mobilā tālruņa numurs	No	mobile number for receiving billing notifications
objekta tehn. informācija: ražotājam atļaujā norādītā jauda	No[1]	Capacity specified in the permit by the manufacturer of the generator connected to the object
objekta tehn. informācija: ražotāja atļaujas numurs	No[1]	Number of the permit by the manufacturer of the generator connected to the object
objekta tehn. informācija: ražotāja atļaujas sākuma datums	No[1]	Initial date of the permit by the manufacturer of the generator connected to the object
objekta tehn. informācija: ražotāja atļaujas beigu datums	No[1]	End date of the permit by the manufacturer of the generator connected to the object
objekta tehn. informācija: maksimālā pieļaujamā eksporta jauda	No[1]	Maximum export capacity of the generator connected to the object
objekta tehn. informācija: uzstādītā ģeneratora veids	No[1]	Type of generator installed at the object
objekta tehn. informācija: eksistē elektroenerģijas iepircējs	No[1]	Flag indicating whether the electricity is traded to an electricity purchaser

[1] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

GetObjectConsumption – object historical consumption data receipt message

This message enables Participants to obtain detailed consumption data for the facilities managed by the client.

System — *SOAP / XML* messaging system

Sample request

`GetObjectConsumption_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetObjectConsumption_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`GetObjectConsumption_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Sample reply file

`GetCustomerAndObjectEIC_response.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 13 – *GetObjectConsumption* request structure

Element	Type	Req.	Description/details
GetObjectConsumptionRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
customerPermission [2]	boolean	Yes	The flag indicates if the Supplier has the client's consent to the processing: • true (permission granted) • false (no permission granted)
dateFrom [3]	dateTime	No	Starting date and time for filtering consumption data
dateTo [3]	dateTime	No	End date and time for filtering consumption data
registerType	string	No	Register name: • A+ • A-

Notes

[1] this element type is described in the '*Market message sharing types*' *section*

[2] if the Supplier has not obtained the client's consent to the data processing, the data are not returned

[3] The historical data retrieval range is the last 12 full months, based on the system clock date; if no starting period is specified, it is automatically assumed as the first month of the 12 month interval. If no end period is specified, it is automatically assumed as the last month of the 12 month interval. Date fields are treated as full months: the day in the field is ignored. In the event of a change of client, data on the client can be retrieved within the period between the start and end dates of their contract.

Table 14 – *GetObjectConsumption* reply structure

Element	Type	Req.	Description/details
GetObjectConsumptionResponse	-	Yes	Main reply element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
registerType	string	Yes	Register name: • A+ • A-
averageYearlyConsumption	decimal	No	Average annual consumption at the object
consInfo	-	No	Compound consumption information element (may repeat several times)
consDT	dateTime	Yes	Time, for which consumption is recorded
cons	decimal	Yes	Consumption for the time specified. Consumption interval (1h or 15 minutes) in a specific billing period. Regardless of consumption intervals at the specified time, the response will be received in one file.

Table 15 – List of *GetObjectConsumption* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_MULTIPLE_CUSTOMERS_FOUND_WITH_EIC	More than one client has been found with this personal identity number/registration number: %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_NO_OBJECTS_SPECIFIED	Market message number %1% does not indicate any objects.
E_OBJECT_CONSUMPTIONS_CHANNELS	Object consumption can only be requested for channel A+ or A-.
E_OBJECT_DOESNT_HAVE_A_NEG	The object with EIC %1% does not have an A- channel in the requested period.
E_OBJECT_HAS_NO_COUNTERS_INSTALLED	There are no meters installed at the object with EIC "%1%".
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.
E_CUSTOMER_PERMISSION_CANNOT_BE_GIVEN	If the client is not specified, then client consent cannot be given.

Error code	Description/notes
E_CUSTOMER_DOESNT_OWN_OBJECT_DURING_PERIOD	The object with EIC "%1%" did not belong to the client with EIC "%2%" during the period from %3% to %4%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_UNABLE_TO_REQUEST_OLDER_DATA	It is not possible to request data for a period longer than 1 year.
E_HIST_CONS_AVAILABLE_TILL_END_OF_PREVIOUS_MONTH	Historical interval consumption is only available until the end of the previous month
E_END_DATE_BEFORE_START_DATE	End date %1% must be after the start date: %2%.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 16 – CSV structure of the *GetObjectConsumption* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
klienta atļauja [2]	Yes	The flag indicates that the Supplier has the client's consent: Y/N
periods no [1]	No	Starting date of the historical data retrieval period *(date format DD.MM.YYYY*)
periods līdz [1]	No	End date of the historical data retrieval period *(date format DD.MM.YYYY*)
reģistra tips	No	Register name: • A+ • A-

Notes

[1] The historical data retrieval range is the last 12 full months, based on the system clock date; if no starting period is specified, it is automatically assumed as the first month of the 12 month interval. If no end period is specified, it is automatically assumed as the last month of the 12 month interval. Date fields are treated as full months: the day component of the field is ignored.

[2] if the Supplier has not obtained the client's consent to the data processing, the data are not returned

Table 17. – *CSV* structure of the *GetObjectConsumption* reply

Column name	Req.	Note
klienta EIC	Yes	Client EIC
objekta EIC	Yes	Object EIC
reģistra tips	Yes	Register name: • A+ • A-
vidējais gada patēriņš	No	Average annual consumption at the object
patēriņa datums, laiks	No	Time, for which consumption is recorded
patēriņš	No	Consumption for the time specified. Consumption interval as defined by DP (1h or 15 minutes) in a specific billing period. *(each consumption will have its own message row in the CSV file*)

Incoming data processing messages

The purpose of incoming data processing messages is to directly support business processes on the data platform, and the processing of these messages involves accepting the messages based on the processing logic of each message, returning an immediate reply that confirms that the message was accepted or a list of errors if the form of the message is wrong, or the request data it contains do not comply with the principles of processing the message.

The incoming data processing messages are as follows:

1) ***StartSupply*** — starts trading at the object;
2) ***EndSupply*** — discontinues trading at the object or revokes a message to start trading previously submitted;
3) ***MoveIn*** — enables the user to apply for energy supply at the object;
4) ***MoveOut*** — enables the user to cancel energy supply at the object;
5) ***RevokeApplication*** — cancels a previously submitted application;
6) ***StartSupplyImmediate*** — starts trading at a new client object;
7) ***FinishSupply*** — discontinues trading and SO services at the object;
8) ***ChangeCustomerData*** — hands over to the SO changes related to the client and the client contact details;
9) ***ConnectSupply*** — connects the object to the power grid;
10) ***DisconnectSupply*** — disconnects the object from the power grid;
11) ***RequestControlReading*** — processes a control reading inspection request.
12) ***ChangeObjectData*** – request to change the address and/or name of an object;

StartSupply — starts trading

This market message enables the receipt and processing of the Supplier's application to start trading electric power by the data platform.

The message can be sent by any Supplier for any object connected to the DSO's grid whose controller (client) has an agreement for trading electric power at that object.

The deadline for the submission of the message is set in the applicable law.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOConfirmSupply*;
2) *DSOCancelSupply*.

System — *SOAP / XML* messaging system

Sample request

`StartSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`StartSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`StartSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 18 – *StartSupply* request structure

Element	Type	Req.	Description/details
StartSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Starting date of the contract

Element	Type	Req.	Description/details
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (permission granted) • false (no permission granted)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 19 – *StartSupply* reply structure

Element	Type	Req.	Description/details
StartSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the *'Market message sharing types*' section

Table 20 – List of *StartSupply* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_MM_OBJECTS_OWNED_BY_MULTIPLE_PARTIES	The objects listed in *StartSupply* are not owned by the same DSO/TSO market participant.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 21 – *CSV* structure of the *StartSupply* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code

Column name	Req.	Note
objekta EIC	Yes	Object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
sākuma datums	Yes	Service starting date (first day of the month). *(date format DD.MM.YYYY*)
norēķinu veicējs	Yes	The flag indicates if the Supplier effects payments for the provision of system services on behalf of the user: Y/N
biržas klients	No	Indicates if the trade application is an exchange client application: Y/N

EndSupply — termination of trading

This market message enables the receipt and processing of the Supplier's application to end the trading of electric power by the data platform.

The message can be sent by any Supplier, for any object where it provides electricity trading services, regardless of which DSO's network the object is connected to.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The deadline for the submission of the message is set in the applicable law.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOCancelSupply*.

System — *SOAP / XML* messaging system

Sample request

`EndSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`EndSupply_response.xml` file (Unix EOL), available in the `samples/xsl` folder enclosed.

Data exchange in *CSV* format

Sample request file

`EndSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 22 – *EndSupply* request structure

Element	Type	Req.	Description/details
EndSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
dateTo	datetime	Yes	Contract end date
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractBillingAddress	*address* [1,2]	No	Compound client billing address element
DSOContractBillingEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationPhoneNumber	string(4-30)	No	Client billing phone

Notes

[1] this element type is described in the '*Market message sharing types*' section

[2] in the LV address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard

Table 23. – *EndSupply response* structure

Element	Type	Req.	Description/details
EndSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 24 – List of *EndSupply* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_MM_OBJECTS_OWNED_BY_MULTIPLE_PARTIES	The objects listed in *EndSupply* are not owned by the same DSO/TSO market participant.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 25. – *CSV* structure of the *EndSupply* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma unikāls identifikators	No	related message unique identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code. *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
beigu datums	Yes	Service end date (last day of the month). *(date format DD.MM.YYYY*)
klienta rēķinu sūtīšanas adreses: valsts	Yes	Client billing address element: country *(ISO 3166-1 alpha-2 country code*)
klienta rēķinu sūtīšanas adreses: novads	No	Client billing address element: municipality
klienta rēķinu sūtīšanas adreses: pilsēta	No	Client billing address element: city
klienta rēķinu sūtīšanas adreses: pagasts	No	Client billing address element: parish
klienta rēķinu sūtīšanas adreses: ciems	No	Client billing address element: village
klienta rēķinu sūtīšanas adreses: iela	No	Client billing address element: street
klienta rēķinu sūtīšanas adreses: mājas nos.	No	Client billing address element: house name
klienta rēķinu sūtīšanas adreses: dzīvokļa nr.	No	Client billing address element: apartment No.
klienta rēķinu sūtīšanas adrese: VZD adreses kods	No	Client billing address: SLS address code
klienta rēķinu sūtīšanas adreses: pasta indekss	No	Client billing address element: postal code
klienta rēķinu sūtīšanas adreses: izņēmuma ēka	No	Client billing address element: exception building
klienta rēķinu e-pasts	No	e-mail address to which the client would like to receive payment information

Column name	Req.	Note
klienta ziņojumu e-pasts	No	e-mail address to which the client would like to receive notifications about various activities of the system operator (e.g., planned outages, failures)
klienta ziņojumu telefona nr.	No	Mobile phone number to which the client wishes to receive text messages about the various activities of the system operator that affect the power supply to the client's Object (e.g., planned outages, failures)

MoveIn – user application of the supply of energy at the object

This market message enables the receipt, coordination, and processing of the Supplier's application to start trading electric power by the data platform, based on an application on the change of the client at the object.

The Supplier sends this message if a message has been received from the client and an agreement has been reached with the client on the provision of services to the Client at the new object.

The message can be sent by any Supplier, for any object where it provides electricity trading services, regardless of which DSO's network the object is connected to.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The deadline for the submission of the message is set in the applicable law.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOConfirmSupply*;
2) *DSOCancelSupply*;
3) *DSOCancelMoveIn*.

System — *SOAP / XML* messaging system

Sample request

`MoveIn_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`MoveIn_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`MoveIn_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 26 – *MoveIn* request structure

Element	Type	Req.	Description/details
MoveInRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
objectEIC	string(1-16)	Yes	Object EIC
customerEIC	string(1-16)	No	Client EIC
customerInfo	-	Yes	Compound client type information element
private	-	No [2]	Compound private client information element
firstName	string(1-100)	Yes	Client name
lastName	string(1-100)	Yes	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
phone	string(4-30)	No	Client phone number
email	string(4-250)	No	Client e-mail
isResident	boolean	Yes	The flag indicates if the client is a resident
customerLegalAddress	*address* ***vai*** *addressOth* [1,3]	No	Compound client registered address element
legal	-	No [2]	Compound legal entity client information element
name	string(1-255)	Yes	Legal entity client name
registrationNumber	string(1-30)	Yes	Legal entity client registration number
dateFrom	dateTime	Yes	Desired starting date of the contract
customerPermission [4]	boolean	Yes	Client consent to the processing of the client's personal data • true (permission granted) • false (no permission granted)
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is a paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object
isInheritanceMatter	boolean	No	The flag indicates if the disconnection from the supply of electricity at the object is related to an inheritance case
readingDay	decimal	No	Meter reading during the day
readingNight	decimal	No	Meter reading at night

Element	Type	Req.	Description/details
readingPeak	decimal	No	Meter reading during peak-hours
readingHolidays	decimal	No	Meter reading on weekends
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractNr	string(1-50)	No	DSO contract number, in which the object is included
DSOContractBillingAddress	*address* [1,3]	No	Compound client billing address element
DSOContractBillingEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationPhoneNumber	string(4-30)	No	Client billing phone
notes	string(1-1000)	No	Additional notes

Notes

[1] these element types are described in the 'Market message sharing types' section

[2] only one of the elements below needs to be filled in

[3] in the LV address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard

[4] if the Supplier has not obtained the client's consent to the data processing, the message is not accepted

Table 27 – *MoveIn* reply structure

Element	Type	Req.	Description/details
MoveInResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 28 – List of *MoveIn* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_MULTIPLE_CUSTOMER_IDENTIFIER_FIELDS_SPECIFIED	More than one field for identifying the client is filled in. One of the parameters — EIC or personal identity number/registration number — must be specified.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.

Error code	Description/notes
E_INVALID_RESIDENT_LEGAL_CUSTOMER_IDENTIFIER_FOR_LV	The registration number <registration number> does not conform to the format of the registration number adopted in the Republic of Latvia.
E_COMPANY_NAME_NOT_SPECIFIED	The legal entity has not name specified.
E_FIRSTNAME_OR_LASTNAME_OR_RESIDENT_NOT_SPECIFIED	The private individual does not have a name/surname indicated or does not have a 'resident' flag.
E_LEGAL_CUSTOMER_INVALID_FIELDS	For a legal entity client, no name, e-mail address, client address, or resident flag may be set. These fields can only be filled in by a private individual.
E_MISMACTH_CUSTOMER_NAMES	It is forbidden for a private individual to indicate a company name, and for a legal entity to indicate a personal name and surname.
E_FIRSTNAME_OR_LASTNAME_OR_RESIDENT_NOT_SPECIFIED	The private individual does not have a name/surname indicated or does not have a 'resident' flag.
E_INVALID_RESIDENT_PRIVATE_CUSTOMER_IDENTIFIER_FOR_LV	The personal identity number <personal identity number> does not comply with the format of the personal identity number of the Republic of Latvia.
E_INCORRECT_PHONE_VALUE_INCORRECT_FORMAT	Incorrect phone number value: <value>. The phone number can start with a '+' symbol, while the other symbols may only be digits: 0-9.
E_INCORRECT_EMAIL_VALUE_INCORRECT_FORMAT	Incorrect e-mail value: <entered e-mail>. Please check if the e-mail address you indicated is correct
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_OBJECT_ALREADY_BELONGS_TO_CUSTOMER	The object with EIC "%1%" already belongs to the client with EIC %2%.
E_OBJECT_NOT_TECHNICALLY_EQUIPPED	The object with EIC <EIC> is not technically equipped.
E_OBJECT_HAS_NO_COUNTERS_INSTALLED	There are no meters installed at the object with EIC "%1%".
E_CUSTOMER_PERMISSION_REQUIRED_ST	Processing the message requires client consent to the transfer of the data to ST.
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	The market participant with EIC <market participant's EIC> does not have a system use contract with the DSO/TSO market participant that owns the object.
E_INHERITANCE_MATTER_FLAG_ONLY_FOR_PRIVATE_CUSTOMER	The 'inheritance case' flag is only allowed if the client is a private individual.
E_EXISTS_UNPROCESSED_MM_FOR_OBJECT	A new market message MoveIn cannot be sent because an unprocessed MoveIn market message exists for the object with EIC xxxx.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 29 – *CSV* structure of a *MoveIn* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
objekta EIC	Yes	Object EIC
klienta EIC	No [1]	Client EIC
vārds	No	Name
uzvārds	No	Surname
uzņēmuma nosaukums	No	Company name
Klienta identifikators	No [1]	Private individuals have a personal identity number; legal entities, a registration number
kontakttālrunis (privātpersona)	No	Phone
e-pasts (privātpersona)	No	E-mail
rezidents (privātpersona)	No	Resident: Y/N
deklarētā adrese: valsts (privātpersona)	Yes	Registered address: country *(ISO 3166-1 alpha-2 country code*)
deklarētā adrese: novads (privātpersona)	No	Registered address: municipality.
deklarētā adrese: pilsēta (privātpersona)	No	Registered address: city
deklarētā adrese: pagasts (privātpersona)	No	Registered address: parish
deklarētā adrese: ciems (privātpersona)	No	Registered address: village
deklarētā adrese: iela (privātpersona)	No	Registered address: street
deklarētā adrese: mājas nos. (privātpersona)	No	Registered address: house No.
deklarētā adrese: dzīvokļa nr. (privātpersona)	No	Registered address: apartment No.
deklarētā adrese: VZD adreses kods (privātpersona)	No	Registered address: SLS address code
deklarētā adrese: pasta indekss (privātpersona)	No	Registered address: postal code

Column name	Req.	Note
deklarētā adrese: izņēmuma ēka (privātpersona)	No	Registered address: exception building
deklarētā adrese: adrešu rinda 1 [3]	No	Registered address: address line 1
deklarētā adrese: adrešu rinda 2 [3]	No	Registered address: address line 2
deklarētā adrese: adrešu rinda 3 [3]	No	Registered address: address line 3
deklarētā adrese: adrešu rinda 4 [3]	No	Registered address: address line 4
deklarētā adrese: adrešu rinda 5 [3]	No	Registered address: address line 5
līguma sākuma datums	Yes	Contract starting date *(date format DD.MM.YYYY*)
klienta atļauja [4]	Yes	The flag indicates that the Supplier has the client's consent: Y/N
norēķinu veicējs	Yes	The flag indicates if the Supplier is a paying entity: Y/N
biržas klients	No	Indicates if the trade application is an exchange client application: Y/N
mantojuma lieta	No	Specifies if the message is related to an inheritance case: Y/N
sākotnējais rādījums dienā [2]	No	Initial daytime reading
sākotnējais rādījums naktī [2]	No	Initial night-time reading
sākotnējais maksimum-stundās [2]	No	Meter reading during peak-hours
sākotnējais brīvdienas [2]	No	Meter reading on weekends
SSO līguma numurs	No	DSO contract number, in which the object is included
klienta rēķinu sūtīšanas adrese: valsts	Yes	Client billing address element: country *(ISO 3166-1 alpha-2 country code*)
klienta rēķinu sūtīšanas adrese: novads	No	Client billing address element: municipality
klienta rēķinu sūtīšanas adrese: pilsēta	No	Client billing address element: city
klienta rēķinu sūtīšanas adrese: pagasts	No	Client billing address element: parish
klienta rēķinu sūtīšanas adrese: ciems	No	Client billing address element: village
klienta rēķinu sūtīšanas adrese: iela	No	Client billing address element: street
klienta rēķinu sūtīšanas adrese: mājas nos.	No	Client billing address element: house name
klienta rēķinu sūtīšanas adrese dzīvokļa nr.	No	Client billing address element: apartment No.
klienta rēķinu sūtīšanas adrese: VZD adreses kods [2]	No	Client billing address: SLS address code
klienta rēķinu sūtīšanas adrese: pasta indekss	No	Client billing address element: postal code

Column name	Req.	Note
klienta rēķinu sūtīšanas adrese: izņēmuma ēka	No	Client billing address element: exception building
klienta rēķinu e-pasts	No	Client invoice e-mail for the object
klienta ziņojumu e-pasts	No	Client message e-mail for the object
klienta ziņojumu telefona nr.	No	Client message phone number for the object
piezīmes	No	Notes

Notes

[1] The field value may be omitted if the data for creating the client (client identifier) have been provided.

[2] If there are 24-hour readings, only the daytime reading is shown.

[3] Used for foreign addresses.

[4] if the Supplier has not obtained the client's consent to data processing, the message is not accepted.

MoveOut – user cancellation of energy supply at the object

This market message enables the receipt, coordination, and processing of the Supplier's application to end trading electric power by the data platform, based on an application on the client's withdrawal from the supply of power at the object.

The message can be sent by any Supplier, for any object where it provides electricity trading services, regardless of which DSO's network the object is connected to.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The deadline for the submission of the message is set in the applicable law.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOCancelSupply*.

System — *SOAP / XML* messaging system

Sample request

`MoveOut_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`MoveOut_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`MoveOut_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 30 – *MoveOut* request structure

Element	Type	Req.	Description/details
MoveOutRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateTo	datetime	Yes	Contract end date
moveOutType	string(1-30)	No	Type of denial (free form)
readingDay	decimal	No	Meter reading during the day
readingNight	decimal	No	Meter reading at night
readingPeak	decimal	No	Meter reading during peak-hours
readingHolidays	decimal	No	Meter reading on weekends
isInheritanceMatter	boolean	No	The flag indicates if the disconnection from the supply of electricity at the object is related to an inheritance case
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 31 – *MoveOut* reply structure

Element	Type	Req.	Description/details
MoveOutResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 32 – List of *MoveOut* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_CUSTOMER_DOESNT_OWN_OBJECT_DURING_PERIOD	The object with EIC "%1%" did not belong to the client with EIC "%2%" during the period from %3% to %4%.
E_INVALID_MOVE_OUT_EFFECTIVE_DATE	The effective date of the MoveOut market message cannot be in the past.
E_INCORRECT_MOVE_OUT_DATE_TO	The refusal date cannot be fewer than %1% days in the future
E_INHERITANCE_MATTER_FLAG_ONLY_FOR_PRIVATE_CUSTOMER	The 'inheritance case' flag is only allowed if the client is a private individual.
E_EXISTS_UNPROCESSED_MM_FOR_OBJECT	Market message MoveOut cannot be sent because an unprocessed MoveOut market message exists for the object with EIC xxxx.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 33 – *CSV* structure of a *MoveOut* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code
līguma beigu datums	Yes	DSO contract end date (*effective date*) *(date format DD.MM.YYYY)*
atteikuma veids	No	Type of denial (free form)
sākotnējais rādījums dienā [1]	No	Meter initial reading in the day zone
sākotnējais rādījums naktī [1]	No	Meter initial reading in the night zone
sākotnējais rādījums maksimum-stundās [1]	No	Initial meter reading during peak-hours

Column name	Req.	Note
sākotnējais rādījums brīvdienas [1]	No	Meter initial reading for weekends
mantojuma lieta	No	Specifies if the message is related to an inheritance case: Y/N
piezīmes	No	Notes field

Notes

[1] If there are 24-hour readings, only the daytime reading is shown.

RevokeApplication – makes it possible to revoke a previously sent message

The market message makes it possible to revoke a previously submitted *StartSupply*, *EndSupply*, *MoveIn*, *MoveOut*, *ConnectSupply*, *DisconnectSupply*, *StartPurchase*, *EndPurchase* message if the message does not have a status, in which it can no longer be revoked (not sent to the DSO system).

A market message can be revoked if it has the status: New (all sub-statuses) and In Process (sub-statuses: received, created, validation, pending, and event created while not sent to the SO system). It must be taken into account that the cancellation of the *EndSupply*, *MoveIn*, *MoveOut* , *ConnectSupply*, *DisconnectSupply*, *StartPurchase*, *EndPurchase* messages must be done as soon as possible before they are sent to the SO system. Message cancellation is possible according to the message processing rules, e.g., *StartSupply* can be cancelled up to the deadline of the 20th of the month, while *ConnectSupply* can be cancelled within no more than minutes.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOApplicationStatus*.

System — *SOAP / XML* messaging system

Sample request

`RevokeApplication_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`RevokeApplication_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`RevokeApplication_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 34 – *RevokeApplication* request structure

Element	Type	Req.	Description/details
RevokeApplicationRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the *'Market message sharing types'* section *(note: the request must indicate the identifier of the related message)*

Table 35 – *RevokeApplication* reply structure

Element	Type	Req.	Description/details
RevokeApplicationResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 36 – *CSV* structure of the *RevokeApplication* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
atsaucamā tirgus ziņojuma unikālais kods	Yes	If the reply is related to a "*StartSupply*", "*EndSupply*","*MoveIn*","*MoveOut*", "*ConnectSupply*", "*DisconnectSupply*", "*StartPurchase*", "*EndPurchase*" associated message, this field shows the unique code of the requested "*StartSupply*", "*EndSupply*","*MoveIn*","*MoveOut*", "*ConnectSupply*", "*DisconnectSupply*", "*StartPurchase*", "*EndPurchase*"
piezīmes	No	Notes field

StartSupplyImmediate – starts trading for the new objects of the client

Please note that the Client and the Supplier must have a power supply contract and the service can begin on the date when the object is included in the contract.

Using this market message, the Supplier announces that it is concluding a power trading contract with a client for the client's specific new objects, which are sent using the *DSONewObjectAvailable* message.

The market message can also be sent if the supplier has not received the message *DSONewObjectAvailable.*

In the event of errors, check the contents and act accordingly.

The deadline for the submission of the message is set in the applicable law.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOConfirmSupply*;
2) *DSOCancelSupply*.

System — *SOAP / XML* messaging system

Sample request

`StartSupplyImmediate_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`StartSupplyImmediate_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`StartSupplyImmediate_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 37 – *StartSupplyImmediate* request structure

Element	Type	Req.	Description/details
StartSupplyImmediateRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC

Element	Type	Req.	Description/details
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (permission granted) • false (no permission granted)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 38 – *StartSupplyImmediate* reply structure

Element	Type	Req.	Description/details
StartSupplyImmediateResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 39 – List of *StartSupplyImmediate* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_OBJECT_CONTRACT_LINE_PAST_DAYS	The object is included in the contract by more than %1% of days in the past.
E_EXISTS_RELATION_FOR_CONTRAT_LINE_START_DATE	The object was already registered with the supplier as of the date of its inclusion in the contract.
E_MM_OBJECTS_OWNED_BY_MULTIPLE_PARTIES	The objects listed in StartSupplyImmediate are not owned by the same DSO/TSO market participant.
E_DUPLICATE_OBJECT_CUSTOMER_PARTY	The message contains a duplicate record for the object EIC %1% / client EIC %2% / supplier EIC %3%.

Notes

The error codes common to all market messages are listed in the 'Common error codes for market messages' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 40 – *CSV* structure of *StartSupplyImmediate* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
norēķinu veicējs	Yes	The flag indicates if the Supplier effects payments for the provision of system services on behalf of the user: Y/N
biržas klients	No	Indicates if the trade application is an exchange client application: Y/N

FinishSupply – terminates commercial and SO services at the object

Using this market message, the Supplier reports that both the sale and supply of electricity at the object must be interrupted.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOCancelSupply*.

System — *SOAP / XML* messaging system

Sample request

`FinishSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`FinishSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`FinishSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 41 – *FinishSupply* request structure

Element	Type	Req.	Description/details
FinishSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 42 – *FinishSupply* reply structure

Element	Type	Req.	Description/details
FinishSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 43 – List of *FinishSupply* error messages

Column name	Req.
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_CUSTOMER_DOESNT_OWN_OBJECT_DURING_PERIOD	The object with EIC "%1%" did not belong to the client with EIC "%2%" during the period from %3% to %4%.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 44 – *FinishSupply* message structure for *CSV*

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
piezīmes	No	Notes field

ChangeCustomerData – hands over to the SO changes related to the client and the client contact details

The supplier sends this message if the contact details in the client object contract have changed.

System — *SOAP / XML* messaging system

Sample request

`ChangeClientData_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`ChangeClientData_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`ChangeClientData_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 45 – *ChangeCustomerData* request structure

Element	Type	Req.	Description/details
ChangeCustomerDataRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC

Element	Type	Req.	Description/details
customerPermission	boolean	Yes	The flag indicates if the Supplier has the client's consent to the processing • true (permission granted) • false (no permission granted)
customerInfo	-	No	Compound client information element
private	-	Yes [2]	Compound private client information element
firstName	string(1-100)	Yes	Client name
lastName	string(1-100)	Yes	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
legal	-	Yes [2]	Compound legal entity client information element
name	string(1-255)	Yes	Legal entity client name
registrationNumber	string(1-30)	Yes	Legal entity client registration number
customerAddress	*address* ***vai*** *addressOth* [1,3]	No	Compound client registered address element
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractBillingAddress	*address* [1,3]	No	Compound client billing address element
DSOContractBillingEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationPhoneNumber [4]	string(4-30)	No	Client billing phone

Notes

[1] these element types are described in the '*Market message sharing types*' section

[2] only one of the elements below needs to be filled in

[3] in the LV address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard

[4] Only Latvian mobile phone numbers are accepted here (starts with a '+' or '00', country code '371', the number consists of 8 digits, starts with a 2). If the value '0000' is specified in the element, the phone number is deleted.

Table 46 – *ChangeCustomerData* reply structure

Element	Type	Req.	Description/details
ChangeCustomerDataResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 47– List of *ChangeClientData* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_MULTIPLE_CUSTOMER_IDENTIFIER_FIELDS_SPECIFIED	More than one field for identifying the client is filled in. One of the parameters — EIC or personal identity number/registration number — must be specified.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_COMPANY_NAME_NOT_SPECIFIED	The legal entity has not name specified.
E_FIRSTNAME_OR_LASTNAME_OR_RESIDENT_NOT_SPECIFIED	The private individual does not have a name/surname indicated or does not have a 'resident' flag.
E_MISMACTH_CUSTOMER_NAMES	It is forbidden for a private individual to indicate a company name, and for a legal entity to indicate a personal name and surname.
E_NO_CUSTOMER_OR_CONTRACT_DATA_BEING_CHANGED	No changes to the contact details of the client or the client contract have been recorded.
E_MANDATROY_FOR_PRIVATE_INFORMATION	The personal identity number, name, and surname must be provided if the personal information of a private individual is changed.
E_DUPLICATE_OBJECT_CUSTOMER_PARTY	The message contains a duplicate record for the object EIC %1% / client EIC %2% / supplier EIC %3%.
E_INCORRECT_LATVIAN_MOBILE_VALUE	Wrong Latvian mobile phone number value: %1%. The mobile phone number can start with a '+' or '00', and country code '371', but the rest of the mobile number must be 8 characters long, start with a '2' and can only contain numbers from 0 to 9.

Notes

The error codes common to all market messages are listed in the 'Common error codes for market messages' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 48 – *CSV* structure of the *ChangeClientData* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Client EIC
objekta EIC	Yes	Object EIC

Column name	Req.	Note
klienta atļauja	Yes	The flag indicates if the Supplier has the client's consent to the processing
klienta vārds	No	Client name
klienta uzvārds	No	Client surname
uzņēmuma nosaukums	No	Company name
klienta identifikators	No	Client identifier
klienta deklarētā adrese: valsts	Yes [1]	Client registered address: country *(ISO 3166-1 alpha-2 country code*)
klienta deklarētā adrese: novads	No	Client registered address: municipality
klienta deklarētā adrese: pilsēta	No	Client registered address: city
klienta deklarētā adrese: pagasts	No	Client registered address: parish
klienta deklarētā adrese: ciems	No	Client registered address: village
klienta deklarētā adrese: iela	No	Client registered address: street
klienta deklarētā adrese: mājas nos.	No	Client registered address: house name
klienta deklarētā adrese: dzīvokļa nr.	No	Client registered address: apartment No.
klienta deklarētā adrese: VZD adreses kods [1]	No	Client registered address: SLS address code
klienta deklarētā adrese: pasta indekss	No	Client registered address: postal code
klienta deklarētā adrese: izņēmuma ēka	No	Client registered address: exception building
klienta ārzemju adrese: adrešu rinda 1	No	Client foreign address: address line 1
klienta ārzemju adrese: adrešu rinda 2	No	Client foreign address: address line 2
klienta ārzemju adrese: adrešu rinda 3	No	Client foreign address: address line 3
klienta ārzemju adrese: adrešu rinda 4	No	Client foreign address: address line 4
klienta ārzemju adrese: adrešu rinda 5	No	Client foreign address: address line 5
klienta rēķinu sūtīšanas adrese: valsts	Yes	Client billing address: country *(ISO 3166-1 alpha-2 country code*)
klienta rēķinu sūtīšanas adrese: novads	No	Client billing addresses: municipality
klienta rēķinu sūtīšanas adrese: pilsēta	No	Client billing addresses: city
klienta rēķinu sūtīšanas adrese: pagasts	No	Client billing addresses: parish

Column name	Req.	Note
klienta rēķinu sūtīšanas adrese: ciems	No	Client billing addresses: village
klienta rēķinu sūtīšanas adrese: iela	No	Client billing addresses: street
klienta rēķinu sūtīšanas adrese: mājas nos.	No	Client billing addresses: house name
klienta rēķinu sūtīšanas adrese: dzīvokļa nr.	No	Client billing addresses: apartment No.
klienta rēķinu sūtīšanas adrese: VZD adreses kods	No	Client billing addresses: SLS address code
klienta rēķinu sūtīšanas adrese: pasta indekss	No	Client billing addresses: postal code
klienta rēķinu sūtīšanas adrese: izņēmuma ēka	No	Client billing addresses: exception building
klienta rēķinu e-pasts objektam	No	Client invoice e-mail for the object
klienta ziņojumu e-pasts objektam	No	Client message e-mail for the object
klienta ziņojumu telefona nr. objektam	No	Client message phone number for the object

Notes

[1] The field is required only if an address is provided

ConnectSupply – connects the object to the power grid

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOSupplyStatus*.

System — *SOAP / XML* messaging system

Sample request

`ConnectSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`ConnectSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`ConnectSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 49 – *ConnectSupply* request structure

Element	Type	Req.	Description/details
ConnectSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 50. – *ConnectSupply* reply structure

Element	Type	Req.	Description/details
ConnectSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 51 – List of *ConnectSupply* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 52 – *CSV* structure of a *ConnectSupply* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
piezīmes	No	Reason for connection in free form

DisconnectSupply – disconnects the object from the power grid

The supplier sends this message if client objects connected to the network needs to be disconnected from the network, indicating the reason for the disconnection.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOSupplyStatus*.

System — *SOAP / XML* messaging system

Sample request

`DisconnectSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DisconnectSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DisconnectSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 53 – *DisconnectSupply* request structure

Element	Type	Req.	Description/details
DisconnectSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 54 – *DisconnectSupply* reply structure

Element	Type	Req.	Description/details
DisconnectSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 55 – List of *ConnectSupply* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 56 – *CSV* structure of a *DisconnectSupply* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
piezīmes	No	Reason for disconnection in free form

RequestControlReading – professing of a control inspection request

The Supplier sends this message if it is necessary to carry out a control inspection at one or more objects controlled by the client.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOControlReadingInfo*.

System — *SOAP / XML* messaging system

Sample request

`RequestControlReading_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`RequestControlReading_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`RequestControlReading_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 57 – *RequestControlReading* request structure

Element	Type	Req.	Description/details
RequestControlReadingRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element

Element	Type	Req.	Description/details
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 58 – *RequestControlReading* reply structure

Element	Type	Req.	Description/details
RequestControlReadingResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 59 – *RequestControlReading* error message list

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 60 – *CSV* structure of a *RequestControlReading* request

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code

Column name	Req.	Note
objekta EIC	Yes	Existing object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)

ChangeObjectData – submission of changes in the address and/or name of an object to the SO

The supplier sends this message if the address and/or the name of a client's object has changed.

System: *SOAP/XML* messaging system

Sample request

`GetObjectData_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetObjectData_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`GetObjectData_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 61 – *ChangeObjectData* request structure

Element	Type	Req.	Description/details
ChangeObjectDataRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string (1-16)	Yes	Client EIC
objectEIC	string (1-16)	Yes	Object EIC
name	string (1-255)	No [2]	Object name/description
address	*address*	No [2,4]	Compound information element
country	string (1-2)	Yes	ISO 3166-1 alpha-2 country code
region	string (1-100)	No [3]	Municipality, for LV addresses
city	string (1-100)	No [3]	City, for LV addresses
parish	string (1-100)	No [3]	Parish, for LV addresses

Element	Type	Req.	Description/details
village	string (1-100)	No [3]	Village, for LV addresses
street	string (1-100)	No [3]	Street, for LV addresses
houseNameOrNumber	string (1-100)	No [3]	House number and name, for LV addresses
flatNumber	string (1-100)	No [3]	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [3]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, for LV addresses (the rest of the address details must be entered as accurately as possible, according to the SLS address register)

Explanations

[1] these element types are described in the 'Market message sharing types' section

[2] only one of the elements below needs to be filled in

[3] address data must be entered according to the SLS address register

[4] The 'main' address fields such as country, municipality, city must not be changed for the address: the information entered in these parameters must match what is registered for the object when the *ChangeObjectData* message is called

Table 62. – *ChangeObjectData* reply structure

Element	Type	Req.	Description/details
ChangeObjectDataResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

List of Table 63. – *ChangeObjectData* error messages

Error code	Description/notes
E_OBJECT_INFO_CHANGE_DENIED	Changes in the information of object %1% are permitted for the participant providing services at that object.
E_DATA_CHANGE_REGISTERED_FOR_OBJECT	No changes for object %1% have been recorded
E_DUPLICATE_OBJECT_CUSTOMER_PARTY	The message contains a duplicate record for the object EIC %1% / client EIC %2% / supplier EIC %3%.
E_OBJECT_ADDRESS_CHANGE_DENIED	Change of address of object %1% is not allowed because the address elements to be changed do not match the actual address
E_INCORRECT_POSTAL_CODE	Postal code %1% incorrect

Error code	Description/notes
E_HOUSE_NUMBER_NAME_NOT_FOUND	House with number or name %1% does not exist
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%3%" as of %2%

Notes

The error codes common to all market messages are listed in the '*Common error codes for market messages*' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 64. – *ChangeObjectData* request *CSV* structure

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Client EIC
objekta EIC	Yes	Object EIC
objekta nosaukums	No [1]	Object name
objekta adrese	No [1]	Object address
objekta adrese: valsts	Yes	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No [2]	Object address: municipality
objekta adrese: pilsēta	No [2]	Object address: city
objekta adrese: pagasts	No [2]	Object address: parish
objekta adrese: ciems	No [2]	Object address: village
objekta adrese: iela	No [2]	Object address: street
objekta adrese: mājas nos.	No [2]	Object address: house name
objekta adrese: dzīvokļa nr.	No [2]	Object address: apartment No.
objekta adrese: VZD adreses kods	No [2]	Object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building

Explanations

[1] At least one of the elements must be specified

[2] Address data must be entered according to the SLS address register

Incoming buyer data processing messages

The purpose of incoming data processing messages is to directly support business processes on the data platform, and the processing of these messages involves accepting the messages based on the processing logic of each message, returning an immediate reply that confirms that the message was accepted or a list of errors if the form of the message is wrong, or the request data it contains do not comply with the principles of processing the message.

The incoming data processing messages are as follows:

1) ***StartPurchase*** — message for the start of purchasing at the object;
2) ***EndPurchase*** — message for the end of purchasing at the object.

StartPurchase – message that ensures the start of purchasing in object

Using this market message, the Buyer announces that it is concluding a power purchasing contract with a client for the client's specific objects.

If the user of an object changes or a user switches from another billing system, the purchasing starts on the date specified by the supplier, but no earlier than the following day. If the purchasing is to take effect on the following day, the message can be sent before 23:00. If the message is sent after 23:00, the date the purchasing takes effect must be indicated in the message request no earlier than the following day.

Purchasers can add new producers to their portfolio, effective on the present day, or in the past within the current month, for producers that have so far not selected their billing method.

The StartPurchase message can be sent up to 90 days in advance.

In the event of errors, check the contents and act accordingly.

Please note that the Client and the Buyer must have a power purchasing contract and the service can begin on the specified purchase date!

The message is only accepted if a system use contract has been concluded between the purchaser and the DSO whose grid the object is connected to.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOConfirmPurchase*;
2) *DSOCancelPurchase*.

System — *SOAP / XML* messaging system

Sample request

`StartPurchase_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`StartPurchase_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`StartPurchase_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 65 – *StartPurchase* request structure

Element	Type	Req.	Description/details
StartPurchaseRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	dateTime	Yes	Service starting date.
customerPermission [2]	boolean	Yes	The flag indicates if the Supplier has the client's consent to the processing • true (permission granted) • false (no permission granted)

Notes

[1] this element type is described in the '*Market message sharing types*' section

[2] if the Supplier has not obtained the client's consent to data processing, the message is not accepted

Table 66 – *StartPurchase* reply structure

Element	Type	Req.	Description/details
StartPurchaseResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 67. – List of *StartPurchase* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_MULTIPLE_CUSTOMERS_FOUND_WITH_EIC	More than one client has been found with this personal identity number/registration number: %1%.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_OBJECT_DOESNT_HAVE_CHANNEL	The object with EIC %1% does not have an A-channel in the requested period.
E_START_PURCHASE_DATE_FROM_ CANNOT_BE_IN_PAST	The StartPurchase starting date cannot be in the past.
E_START_PURCHASE_CANNOT_ REGISTER_FOR_NEXT_DAY	StartPurchase for the next day can only be registered by %1 on the previous day.
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.
E_CUSTOMER_PERMISSION_CANNOT_BE_GIVEN	If the client is not specified, then client consent cannot be given.
E_MM_NOT_ALLOWED	StartPurchase is not allowed for supplier %1%. No trade service provision recorded for the object %2%.
E_MM_FOR_OBJECT_ALREADY_REGISTERED_TO_DIFFERENT_PARTY	StartPurchase for the object with EIC %1% is already registered with another supplier as of %2%.
E_NO_MM_CONFIGURATION_SET_FOR_PARTY	No DSOCancelPurchase MM type configuration found for the market participant with EIC %1%.
E_DUPLICATE_OBJECT_CUSTOMER_PARTY	The message contains a duplicate record for the object EIC %1% / client EIC %2% / supplier EIC %3%.
E_START_PURCHASE_UNAVAILABLE_PAST_DATE	StartPurchase date cannot be the current date
E_START_PURCHASE_DATE_AFTER_FUTURE_LIMIT	StartPurchase date is beyond the specified future limit
E_START_PURCHASE_DATE_BEFORE_PAST_LIMIT	StartPurchase date is beyond the specified past limit
E_NO_ACTIVE_GENERATION_PERMIT	The object does not have an active generation permit
E_START_PURCHASE_DATE_CANNOT_BE_CURRENT_DATE	StartPurchase date cannot be the current date
E_NO_ACTIVE_DSO_CONTRACT_FOR_CUSTOMER	The customer does not have an active DSO contract
E_START_PURCHASE_NOT_IN_CURRENT_MONTH	StartPurchase date is not within the current month
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	*The market participant with %1% does not have a system use contract with the DSO/TSO market participant that owns the object.*

Notes

The error codes common to all market messages are listed in the 'Common error codes for market messages' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 68. – *StartPurchase* CSV structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file)*
sākuma datums	Yes	Service starting date (day) *(date format DD.MM.YYYY)*
klienta atļauja [1]	Yes	The flag indicates that the Supplier has the client's consent

Notes

[1] if the Supplier has not obtained the client's consent to data processing, the message is not accepted

EndPurchase – message for the end of purchasing at the object

Using this market message, the Buyer states that it stops purchasing power from the client for its specific objects. The end date indicated in the message is the last day of the purchasing. The message can be sent by 23:00 if the last valid date of purchase is the following day.

EndPurchase can be sent up to 90 days in advance.

In the event of errors, check the contents and act accordingly.

The Supplier can reject a message, by sending the message *RevokeApplication*, so that the SO can stop processing the message.

The following related market messages may be sent as a reply to this message (detailed descriptions available in the document):

1) *DSOCancelPurchase*.

System — *SOAP / XML* messaging system

Sample request

`EndPurchase_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`EndPurchase_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`EndPurchase_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 69 – *EndPurchase* request structure

Element	Type	Req.	Description/details
EndPurchaseRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string (1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string (1-16)	Yes	Object EIC
dateTo	dateTime	Yes	Service end date

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 70 – *EndPurchase* reply structure

Element	Type	Req.	Description/details
EndPurchaseResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 71 – List of *EndPurchase* error messages

Error code	Description/notes
E_CUSTOMER_IDENTIFIER_NOT_SPECIFIED	Client EIC or personal identity number/registration number is missing.
E_MULTIPLE_CUSTOMERS_FOUND_WITH_EIC	More than one client has been found with this personal identity number/registration number: %1%.
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.

Error code	Description/notes
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%
E_END_PURCHASE_DATE_TO_CANNOT_BE_IN_PAST	The EndPurchase end date cannot be in the past.
E_END_PURCHASE_CANNOT_REGISTER_FOR_NEXT_DAY	EndPurchase for the next day can only be registered by %1 on the previous day.
E_MM_NOT_ALLOWED	EndPurchase is not allowed for supplier %1%. No trade service provision recorded for the object %2%.
E_MM_OBJECTS_OWNED_BY_MULTIPLE_PARTIES	The objects listed in EndPurchase are not owned by the same DSO/TSO market participant.
E_DUPLICATE_OBJECT_CUSTOMER_PARTY	The message contains a duplicate record for the object EIC %1% / client EIC %2% / supplier EIC %3%.
E_END_PURCHASE_FUTURE_LIMIT	EndPurchase date %1% is more than %2% days in the future
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	The market participant with %1% does not have a system use contract with the DSO/TSO market participant that owns the object.

Notes

The error codes common to all market messages are listed in the 'Common error codes for market messages' section.

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 72 – *EndPurchase CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code *(if you need information about multiple objects of the client, you must create a message row for each object in the CSV file*)
beigu datums	Yes	Service end date (day) *(date format DD.MM.YYYY)*

Outgoing market messages

Outgoing market messages are intended to directly support business processes in DP and processing them involves sending messages according to the processing logic of each message.

The supplier must develop its services according to the standard set by the DP. These market messages are sent from DP to the network service specified by the Supplier, and replies can also be received via the portal https://datuplatforma.lv.

After these messages are sent, the Participant's system receiving the messages must return an acknowledgement if the message was successfully received by the system, or a denial if the message could not be accepted.

The outgoing market messages are as follows:

1) ***DSOConfirmSupply*** — confirms the application for starting the trading for the supply of energy;
2) ***DSOConfirmSupplyFGS*** — confirms the DSO order to transfer the object to the LGD Supplier for servicing;
3) ***DSOCancelSupply*** — approves the request for the termination or denial of the start of trading for the supply of energy;
4) ***DSOCancelMoveIn*** — rejects the request for the user to apply for energy supply at the object;
5) ***DSOTechnicalDataChanged*** — informs the Supplier about technical changes at the object where it provides the electricity trading service;
6) ***DSOApplicationStatus*** — informs the Supplier if revocation of the message was successful;
7) ***DSONewObjectAvailable*** — informs the Supplier about a new object controlled by the client, for which a trading application can be immediately submitted;
8) ***DSOControlReadingInfo*** — informs the Supplier about the results of the control inspection.

DSOConfirmSupply – application confirmation

The market message provides the Supplier with information about the successful confirmation of the trading services by the SO. Having received this message, the Supplier may provide services at the requested object, starting from the confirmed date.

The message can be sent to any Supplier for any object, regardless of which DSO's network the object is connected to.

System — *SOAP / XML* messaging system

Sample request

`DSOConfirmSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOConfirmSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOConfirmSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 73 – *DSOConfirmSupply* request structure

Element	Type	Req.	Description/details
DSOConfirmSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
dateFrom	dateTime	Yes	Confirmed starting date of the contract
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	No	Compound object information element
objectEIC	string(1-16)	Yes	Object EIC
objectAddress	*address* [1]	Yes	Compound object address information element
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is a paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	Yes	The flag indicates whether the client intends to use the exchange fee for this object

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 74 – *DSOConfirmSupply* reply structure

Element	Type	Req.	Description/details
DSOConfirmSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the 'Market message sharing types' section

Message CSV structure

This section describes the message structure for the CSV data exchange type.

Table 75 – *DSOConfirmSupply CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *StartSupply*, *MoveIn* associated message, this field shows the unique code of the requested *StartSupply*, *MoveIn*
klienta EIC	Yes	Existing client EIC code
līguma sākuma datums	Yes	Confirmed starting date of the contract *(date format DD.MM.YYYY*)
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
objekta adrese: valsts	Yes	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos.	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	Object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
norēķinu veicējs	Yes	The flag indicates if the Supplier effects payments for the provision of system services on behalf of the user: Y/N
biržas klients	Yes	The flag indicates whether the client intends to use the exchange fee for this object: Y/N

Note

[1] The SLS address code can be returned if the data were registered in the system using the SLS address register code

DSOApplicationStatus – application revocation status

The market message informs the Supplier if revocation of the message was successful.

System — *SOAP / XML* messaging system

Sample request

`DSOApplicationStatus_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOApplicationStatus_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOApplicationStatus_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the XML data exchange type.

Table 76 – *DSOApplicationStatus* request structure

Element	Type	Req.	Description/details
DSOApplicationStatusRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
applicationStatus	string	Yes	Referred market message status: • REVOKED • IRREVOCABLE
notes	string(1-1000)	No	Additional notes

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the CSV data exchange type.

Table 77. – *DSOApplicationStatus CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier

Column name	Req.	Note
saistītā ziņojuma identifikators	No	If the reply is related to a *RevokeApplication* associated message, this field shows the unique code of the requested *RevokeApplication*
atsaukuma statuss	Yes	Referred market message status: • REVOKED • IRREVOCABLE
piezīmes	No	Additional notes

DSOConfirmSupplyFGS – confirmation of application

The market message informs the LGD Supplier that it must begin providing the electricity trading service at the object, starting from the time specified in the market message. The message contains all the information the Supplier needs to successfully start trading at the object.

The message can be sent to any LGD Supplier for any object, for which no Supplier provides services, regardless of which DSO's network the object is connected to.

System — *SOAP / XML* messaging system

Sample request

`DSOConfirmSupplyFGS_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOConfirmSupplyFGS_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOConfirmSupplyFGS_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 78 – *DSOConfirmSupplyFGS* request structure

Element	Type	Req.	Description/details
DSOConfirmSupplyFGSRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC

Element	Type	Req.	Description/details
dateFrom	dateTime	Yes	Confirmed starting date of the contract
customerInfo	-	Yes	Compound client information element
private	-	Yes [2]	Compound private client information element
firstName	string(1-100)	Yes	Client name
lastName	string(1-100)	Yes	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
legal	-	Yes [2]	Compound legal entity client information element
name	string(1-255)	Yes	Legal entity client name
registrationNumber	string(1-30)	Yes	Legal entity client registration number
customerAddress	*address* ***vai*** *addressOth* [1]	Yes	Compound client address information element
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	Yes	Compound object information element
objectEIC	string(1-16)	Yes	Object EIC
objectName	string(1-255)	Yes	Object name
objectStatus	string	Yes	Object status: • CONNECTED • DISCONNECTED
objectAddress	*address* [1]	Yes	Compound object address information element
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is a paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	Yes	The flag indicates whether the client intends to use the exchange fee for this object
aggregatorEIC	boolean	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The flag indicates if the object participates in the regulation service • true (participates) • false (does not participate)
objectTechDataExt	-	Yes	Compound element of the extended technical information list for the object
tariff	string(1-255)	Yes	Object-specific fee
voltage	string(1-255)	Yes	Voltage connected to the object

Element	Type	Req.	Description/details
phaseCount	decimal	Yes	Number of phases installed at the object
permittedLoad	decimal	Yes	Power allowed for the object
current	decimal	Yes	Current allowed for the object
generator	string(1-255)	Yes[3]	Type of generator installed at the object
proprietaryBorder	string(1-255)	Yes	Object ownership boundary
readingType	string	No	Reading type at object level: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
isNETO	boolean	No[3]	The flag indicates if NETO is used at the object
typeCode	string(1-255)	No	Object type code
typeDescription	string(1-255)	No	Object type code description
generationAllowedPower	string	No[3]	Capacity specified in the permit by the manufacturer of the generator connected to the object
generationPermitNumber	string	No[3]	Number of the permit by the manufacturer of the generator connected to the object
generationPermitDateFrom	dateTime	No[3]	Initial date of the permit by the manufacturer of the generator connected to the object
generationPermitDateTo	dateTime	No[3]	End date of the permit by the manufacturer of the generator connected to the object
maxAllowedExportPower	string	No[3]	Maximum export capacity of the generator connected to the object
producerType	string	No[3]	Type of generator installed at the object
isEnergySoldToPurchaser	boolean	No[3]	Flag indicating whether the electricity is traded to an electricity purchaser
averageYearlyConsumption	decimal	No	Average annual consumption of the object for the last full 12-month billing period
previousMonthConsumption	decimal	No	Previous month's consumption
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractStartDate	dateTime	No	Starting date of the existing DSO contract
DSOContractEndDateObject	dateTime	No	Object end date in the existing contract
DSOContractBillDeliveryType	string	No	Billing method • MAIL • EMAIL
DSOContractNr	string(1-50)	No	DSO contract number, in which the object is included

Element	Type	Req.	Description/details
DSOContractBillingAddress	*address* [1]	No	Compound client billing address element
DSOContractBillingEMail	string(4-250)	No	Client billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Client e-mail for receiving information
DSOContractNotificationPhoneNumber	string(4-30)	No	Client phone for receiving information

Notes

[1] these element types are described in the '*Market message sharing types*' section

[2] only one of the elements flagged with the token is returned

[3] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 79 – *DSOConfirmSupplyFGS* reply structure

Element	Type	Req.	Description/details
DSOConfirmSupplyFGSResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 80 – *DSOConfirmSupplyFGS CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *StartSupply*, *MoveIn* associated message, this field shows the unique code of the requested *StartSupply*, *MoveIn*
klienta EIC	Yes	Existing client EIC code
sākuma datums	Yes	Confirmed starting date of the contract
vārds	No	Name
uzvārds	No	Surname
personas kods	Yes	Personal identity number
uzņēmuma nosaukums	No	Company name (if the client is a legal entity)

Column name	Req.	Note
uzņēmuma reģistrācijas numurs	No	Company registration number
klienta adrese: valsts	Yes	Client address — country *(ISO 3166-1 alpha-2 country code*)
klienta adrese: novads	No	Client address — municipality
klienta adrese: pilsēta	No	Client address: city
klienta adrese: pagasts	No	Client address: parish
klienta adrese: ciems	No	Client address: village
klienta adrese: iela	No	Client address: street
klienta adrese: mājas nos.	No	Client address: house name
klienta adrese: dzīvokļa nr.	No	Client address: apartment No.
klienta adrese: VZD adreses kods [1]	No	client address: SLS address code
klienta adrese: pasta indekss	No	Client address: postal code
klienta adrese: izņēmuma ēka	No	Client address: exception building
klienta ārzemju adrese: adrešu rinda 1	No	Client foreign address: address line 1
klienta ārzemju adrese: adrešu rinda 2	No	Client foreign address: address line 2
klienta ārzemju adrese: adrešu rinda 3	No	Client foreign address: address line 3
klienta ārzemju adrese: adrešu rinda 4	No	Client foreign address: address line 4
klienta ārzemju adrese: adrešu rinda 5	No	Client foreign address: address line 5
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
objekta nosaukums	No	Object name
objekta statuss	No	Object status: • CONNECTED • DISCONNECTED
objekta adrese: novads	No	Object address: municipality
objekta adrese: valsts	No	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos.	No	Object address: house number/name

Column name	Req.	Note
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
norēķinu veicējs	Yes	The flag indicates if the Supplier effects payments for the provision of system services on behalf of the user: Y/N
biržas klients	Yes	Indicates if the trade application is an exchange client application: Y/N
tarifs	No	Name of the fee package associated with the object
spriegums	No	Voltage connected at the object (kV)
fāzu skaits	No	Number of phases connected at the object
atļautā slodze	No	Total load (KW) allowed at the object
atļautais strāvas stiprums	No	Current connected at the object (A)
uzstādīta ģeneratora veids	No[2]	Information about the on-object generator
piederības robeža	No	Object ownership boundary
nolasījuma veids	No	Object consumption reading method • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
NETO	No[2]	The flag indicates if NETO is used at the object: Y/N
objekta rakstura kods	No	Object type code
objekta rakstura koda apraksts	No	Object type code description
objekta vidējais gada patēriņš	No	Average annual consumption by the object
iepr. mēneša patēriņš	No	Previous month's consumption
SSO līguma sākuma datums	No	Starting date of the DSO contract
SSO līguma beigu datums objektam	No	DSO contract end date for the object
SSO līguma rēķina nosūtīšanas veids	No	DSO contract billing method • MAIL • EMAIL
SSO līguma numurs	No	DSO contract number, in which the object is included
SSO līguma adrese: valsts	No	Client address — country *(ISO 3166-1 alpha-2 country code*)
SSO līguma adrese: novads	No	Client address — municipality
SSO līguma adrese: pilsēta	No	DSO contract address: city
SSO līguma adrese: pagasts	No	DSO contract address: parish
SSO līguma adrese: ciems	No	DSO contract address: village
SSO līguma adrese: iela	No	DSO contract address: street

Column name	Req.	Note
SSO līguma adrese: mājas nos.	No	DSO contract address: house name
SSO līguma adrese: dzīvokļa nr.	No	DSO contract address: apartment No.
SSO līguma adrese: VZD adreses kods [1]	No	DSO contract address: SLS address code
SSO līguma adrese: pasta indekss	No	DSO contract address: postal code
SSO līguma adrese: izņēmuma ēka	No	DSO contract address: exception building
SSO līguma rēķinu nosūtīšanas e-pasts	No	DSO contract billing e-mail
SSO līguma ziņojumu e-pasts	No	DSO contract billing e-mail
SSO līguma ziņojumu telefons	No	DSO contract message phone
ražotājam atļaujā norādītā jauda	No[2]	Capacity specified in the permit by the manufacturer of the generator connected to the object
ražotāja atļaujas numurs	No[2]	Number of the permit by the manufacturer of the generator connected to the object
ražotāja atļaujas sākuma datums	No[2]	Initial date of the permit by the manufacturer of the generator connected to the object
ražotāja atļaujas beigu datums	No[2]	End date of the permit by the manufacturer of the generator connected to the object
maksimālā pieļaujamā eksporta jauda	No[2]	Maximum export capacity of the generator connected to the object
uzstādītā ģeneratora veids	No[2]	Type of generator installed at the object
eksistē elektroenerģijas iepircējs	No[2]	Flag indicating whether the electricity is traded to an electricity purchaser

Note

[1] The SLS address code can be returned if the data were registered in the system using the SLS address register code

[2] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

DSOCancelSupply – confirmation of application

The market message provides the Supplier with information about the denial or cancellation of a trading service from the SO. Having received this message, the Supplier must stop service at the requested object, starting from the confirmed date.

The message can be sent to any Supplier for any object, regardless of which DSO's network the object is connected to.

System — *SOAP / XML* messaging system

Sample request

`DSOCancelSupply_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOCancelSupply_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOCancelSupply_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 81 – *DSOCancelSupply* request structure

Element	Type	Req.	Description/details
DSOCancelSupplyRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
dateTo	dateTime	Yes	Confirmed end date of the contract
cancelReason	string	Yes	Reasons for the suspension of services: • C — change of supplier • M — the object changes the client • T — more than one *StartSupply* application from multiple Suppliers per object • N — the object is no longer owned by the client • O — other reason for termination of service (if there are questions, please contact the ST operator) • F — supply of electricity to the object is suspended • S — no change of supplier, but changes in billing information
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	Yes	Compound object information element

Element	Type	Req.	Description/details
objectEIC	string(1-16)	Yes	Object EIC
objectAddress	*address* [1]	Yes	Compound object address information element
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is a paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	Yes	The flag indicates whether the client intends to use the exchange fee for this object

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 82. – *DSOCancelSupply* reply structure

Element	Type	Req.	Description/details
DSOCancelSupplyResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 83 – *DSOCancelSupply CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *EndSupply*, *MoveOut* associated message, this field shows the unique code of the requested *EndSupply*, *MoveOut*
klienta EIC	Yes	Existing client EIC code
līguma apstiprinātais beigu datums	Yes	Date on which the suspension of services is confirmed *(date format DD.MM.YYYY)*

iemesls	Yes	Reasons for the suspension of services: • C — change of supplier • M — the object changes the client • T — more than one StartSupply application from multiple Suppliers per object • N — the object is no longer owned by the client • O — other reason for termination of service (if there are questions, please contact the ST operator) • F — supply of electricity to the object is suspended • S — no change of supplier, but changes in billing information
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
objekta adrese: valsts	Yes	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos.	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	Object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
norēķinu veicējs	Yes	The flag indicates if the Supplier effects payments for the provision of system services on behalf of the user: Y/N
biržas klients	Yes	Indicates if the trade application is an exchange client application: Y/N

Note

[1] The SLS address code can be returned if the data were registered in the system using the SLS address register code

DSOCancelMoveIn – application confirmation

The market message provides the Supplier with information about the revocation (together with the reason for it) of a previously submitted *MoveIn* (client change at the object) message by the SO. Having received this message, the Supplier must stop any ongoing processes or trading events related to the cancelled message.

The message can be sent to any Supplier for any object, regardless of which DSO's network the object is connected to.

System — *SOAP / XML* messaging system

Sample request

`DSOCancelMoveIn_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOCancelMoveIn_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOCancelMoveIn_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 84 – *DSOCancelMoveIn* request structure

Element	Type	Req.	Description/details
DSOCancelMoveInRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string (1-16)	No	Client EIC
objectEICList	-	Yes	Compound object EIC list element
objectEIC	string (1-16)	Yes	Object EIC
cancelReason	string	Yes	Reason for cancelling the application

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 85 – *DSOCancelMoveIn* reply structure

Element	Type	Req.	Description/details
DSOCancelMoveInResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 86. – *DSOCancelMoveIn CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *MoveIn* associated message, this field shows the unique code of the requested *MoveIn*
klienta EIC	No	Existing client EIC code
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
iemesls	Yes	*MoveIn* reason for cancellation, free-form

DSOTechnicalDataChanged – application confirmation

This market message informs the Supplier of changes in the fees/rates or other technical characteristics of the object.

The message can be sent to any Supplier for any object, regardless of which DSO's network the object is connected to.

System — *SOAP / XML* messaging system

Sample request

`DSOTechnicalDataChanged_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOTechnicalDataChanged_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOTechnicalDataChanged_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 87 – *DSOTechnicalDataChanged* request structure

Element	Type	Req.	Description/details
DSOTechnicalDataChangedRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	Yes	Compound object information element
changeDate	dateTime	Yes	Change date
DSOEIC	string(1-16)	Yes	EIC of the participant whose network the object is connected to
objectEIC	string(1-16)	Yes	Object EIC
objectName	string(1-255)	Yes	Object name
objectAddress	*address* [1]	Yes	Compound object address information element
aggregatorEIC	string(1-16)	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The flag indicates if the object participates in the regulation service
objectTechData	-	Yes	Compound element of the technical information list for the object
tariff	string(1-255)	Yes	Object-specific fee
voltage	string(1-255)	Yes	Voltage connected to the object
phaseCount	decimal	Yes	Number of phases installed at the object
permittedLoad	decimal	Yes	Power allowed for the object
current	decimal	Yes	Current allowed for the object
generator	string(1-255)	Yes[2]	Type of generator installed at the object
proprietaryBorder	string(1-255)	Yes	Object ownership boundary
readingType	string	No	Reading type at object level: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
isNETO	boolean	No[2]	The flag indicates if NETO is used at the object
typeCode	string(1-255)	No	Object type code
typeDescription	string(1-255)	No	Object type code description
generationAllowedPower	string	No[2]	Capacity specified in the permit by the manufacturer of the generator connected to the object
generationPermitNumber	string	No[2]	Number of the permit by the manufacturer of the generator connected to the object
generationPermitDateFrom	dateTime	No[2]	Initial date of the permit by the manufacturer of the generator connected to the object

Element	Type	Req.	Description/details
generationPermitDateTo	dateTime	No[2]	End date of the permit by the manufacturer of the generator connected to the object
maxAllowedExportPower	string	No[2]	Maximum export capacity of the generator connected to the object
producerType	string	No[2]	Type of generator installed at the object
isEnergySoldToPurchaser	boolean	No[2]	Flag indicating whether the electricity is traded to an electricity purchaser
DSOContractBillingInfo	-	No	Compound client invoice information element
DSOContractEndDateObject	dateTime	No	Object end date in the existing contract

Notes

[1] this element type is described in the '*Market message sharing types*' section

[2] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 88 – *DSOTechnicalDataChanged* reply structure

Element	Type	Req.	Description/details
DSOTechnicalDataChangedResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 89 – *DSOTechnicalDataChanged CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
klienta EIC	Yes	Existing client EIC code
izmaiņu datums	Yes	Date on which the change takes effect *(date format DD.MM.YYYY)*
DSOEIC	Yes	EIC of the participant, which the object is connected to
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file)*

Column name	Req.	Note
objekta nosaukums	Yes	Object name
objekta adrese: valsts	No	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas nos./nr.	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building
Agregatora EIC	No	Aggregator EIC
regulēšanas pakalpojuma nodroš.	No	The flag indicates if the object participates in the regulation service
tarifs	No	Name of the fee package associated with the object
spriegums	No	Voltage connected at the object (kV)
fāzu skaits	No	Number of phases connected at the object
atļautā jauda	No	Total power (KW) allowed at the object
strāvas stiprums	No	Current connected at the object (A)
ģenerators	No[2]	Information about the on-object generator
piederības robeža	No	Object ownership boundary
nolasījuma veids objekta līmenī	No	Object reading method: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
NETO	No[2]	The flag indicates if NETO is used at the object: Y/N
objekta rakstura kods	No	Object type code
objekta rakstura koda apraksts	No	Object type code description
objekta beigu datums SSO līgumā	No	Object end date in the DSO contract
ražotājam atļaujā norādītā jauda	No[2]	Capacity specified in the permit by the manufacturer of the generator connected to the object
ražotāja atļaujas numurs	No[2]	Number of the permit by the manufacturer of the generator connected to the object

Column name	Req.	Note
ražotāja atļaujas sākuma datums	No[2]	Initial date of the permit by the manufacturer of the generator connected to the object
ražotāja atļaujas beigu datums	No[2]	End date of the permit by the manufacturer of the generator connected to the object
maksimālā pieļaujamā eksporta jauda	No[2]	Maximum export capacity of the generator connected to the object
uzstādītā ģeneratora veids	No[2]	Type of generator installed at the object
eksistē elektroenerģijas iepircējs	No[2]	Flag indicating whether the electricity is traded to an electricity purchaser

Note

[1] The SLS address code can be returned if the data were registered in the system using the SLS address register code

[2] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

DSOSupplyStatus – changes in the connection status of an object

This market message informs the Supplier of changes in the network connection status of the objects it serves. The message can be sent as a reply to *ConnectSupply*/*DisconnectSupply*, or as an unrelated message if the DSO disconnects the object itself.

This market message can be sent more than once for a set of different objects.

System — *SOAP / XML* messaging system

Sample request

`DSOSupplyStatus_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOSupplyStatus_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOSupplyStatus_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the XML data exchange type.

Table 90 – *DSOSupplyStatus* request structure

Element	Type	Req.	Description/details
DSOSupplyStatusRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string(1-16)	Yes	Object EIC
statusCode	string	Yes	Object status: • CONNECTED (object is connected) • DISCONNECTED (object is disconnected) • DISCONNECT_FORBIDDEN (object may not be disconnected) • CONNECT_CANCEL (object will not be connected) • objectDISCONNECT_CANCEL (object will not be disconnected)
statusDate	dateTime	Yes	Object status change date

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 91 – *DSOSupplyStatus* reply structure

Element	Type	Req.	Description/details
DSOSupplyStatusResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 92. – *DSOSupplyStatus CSV* structure

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *ConnectSupply*, *DisconnectSupply* associated message, this field shows the unique code of the requested message

Column name	Req.	Note
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
statusa kods	Yes	Object status • CONNECTED (object is connected) • DISCONNECTED (object is disconnected) • DISCONNECT_FORBIDDEN (object may not be disconnected) • CONNECT_CANCEL (object will not be connected) • DISCONECT_CANCEL (object will not be disconnected)
statusa datums	Yes	Status date and time in DD.MM.YYYY HH24:MI:SS format. *(the actual time of connection/disconnection of the object is returned — or the message response time if the object is not connected or disconnected on request.)*

DSONewObjectAvailable – a new client-managed object with immediate start of trade

Through this message, the DSO hands the information over to potential (legal entities or private individuals with a distribution service system service contract that are current suppliers of the client's objects) electricity suppliers about new client objects that do not yet have a supplier.

This market message can be sent more than once for a set of different objects.

System — *SOAP / XML* messaging system

Sample request

`DSONewObjectAvailable_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSONewObjectAvailable_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSONewObjectAvailable_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 93 – *DSONewObjectAvailable* request structure

Element	Type	Req.	Description/details
DSONewObjectAvailableRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string (1-16)	Yes[2]	Client EIC
objectEICList	-	Yes	Compound list element for object information
objectEIC	string (1-16)	Yes	Object EIC
DSOContractNr	string(1-50)	Yes	DSO contract number, in which the object is included
DSOContractStartDate	dateTime	Yes	Date of inclusion of the object in the DSO contract

Notes

[1] this element type is described in the '*Market message sharing types*' section

[2] Messages are only prepared for legal entities

Table 94 – *DSONewObjectAvailable* reply structure

Element	Type	Req.	Description/details
DSONewObjectAvailableResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 95 – *DSONewObjectAvailable CSV* structure

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	Not currently used
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
līguma numurs	Yes	DSO contract number, in which the object is included
sākuma datums	Yes	Date of inclusion of the object in the DSO contract

DSOControlReadingInfo – results of the control inspection

This market message informs the Supplier of the meter readings in the objects it serves obtained as part of inspections and carried out regularly by ST or at the request of the Supplier.

This market message can be sent more than once for a set of different objects.

System — *SOAP / XML* messaging system

Sample request

`DSOControlReadingInfo_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOControlReadingInfo_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOControlReadingInfo_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 96 – *DSOControlReadingInfo* request structure

Element	Type	Req.	Description/details
DSOControlReadingInfoRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectControlReadingDataList	-	Yes	Compound list element for object information
objectControlReadingData	-	Yes	Compound object information element
objectEIC	string(1-16)	Yes	Object EIC
meteringPointControlReadingDataList	-	Yes	Compound element of the object MS information list
meteringPointControlReadingData	-	Yes	Compound object MS information element
MPNumber	string(1-50)	Yes	Metering station number
meterControlReadingDataList	-	Yes	Meter information list element

Element	Type	Req.	Description/details
meterControlReadingData	-	Yes	Meter information element
meterNumber	string(1-50)	Yes	Meter number
readingDay	decimal	Yes	Meter reading during the day
readingNight	decimal	No	Meter reading at night
readingPeak	decimal	No	Meter reading during peak-hours
readingHolidays	decimal	No	Meter reading on weekends
avgConsumptionDay	decimal	Yes	Average daytime consumption
avgConsumptionNight	decimal	No	Average night-time consumption
avgConsumptionPeak	decimal	No	Average peak-hour consumption
avgConsumptionHolidays	decimal	No	Average weekend consumption
controlReadingDT	dateTime	Yes	Control inspection date and time
controlReadingType	string	Yes	Control reading types: • KA — control inspection reading • SR — initial reading if a meter is installed • BR — final reading in the event of meter removal • NEPS — not possible to access the meter

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 97 – *DSOControlReadingInfo* reply structure

Element	Type	Req.	Description/details
DSOControlReadingInfoResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 98 – *DSOControlReadingInfo CSV* structures

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier

Column name	Req.	Note
saistītā ziņojuma identifikators	No	If the reply is related to a *ConnectSupply*, *DisconnectSupply* associated message, this field shows the unique code of the requested message
klienta EIC	Yes	Existing client EIC code
objekta EIC	Yes	Existing object EIC code
mērījuma punkta numurs	Yes	Existing metering station number for the object
skaitītāja numurs	Yes	Existing meter number for the measurement station of the object
skaitītāja rādījums dienas zonā	Yes	Meter reading in the day zone
skaitītāja rādījums nakts zonā	No	Meter reading in the night zone (if available)
skaitītāja rādījums maksimum-stundās	No	Meter reading during peak hours (if available)
skaitītāja rādījums brīvdienās	No	Meter reading on weekends (if available)
vidējais patēriņš pēc KA dienā	Yes	Average daytime consumption, based on KA (kWh)
vidējais patēriņš pēc KA naktī	No	Average night-time consumption, based on KA (kWh)
vidējais patēriņš pēc KA maksimum-stundās	No	Average peak-hour consumption, based on KA (kWh)
vidējais patēriņš pēc KA brīvdienas	No	Average weekend consumption, based on KA (kWh)
kontorlapgaites datums un laiks	Yes	Control inspection date and time *(date format DD.MM.YYYY HH24:MI:SS)*
kontrolrādījuma nolasījuma veids	Yes	Control reading types: • KA — control inspection reading • SR — initial reading if a meter is installed • BR — final reading in the event of meter removal • NEPS — not possible to access the meter

Outbound buyer market messages

Outgoing market messages are intended to directly support business processes in DP, and processing them involves sending messages according to the processing logic of each message.

The supplier must develop its services according to the standard set by the DP. These market messages are sent from DP to the network service specified by the Supplier, and replies can also be received via the portal https://datuplatforma.lv.

After these messages are sent, the Participant's system receiving the messages must return an acknowledgement if the message was successfully received by the system, or a denial if the message could not be accepted.

The outgoing market messages are as follows:

1) ***DSOConfirmPurchase*** — message confirming the beginning of energy supply purchasing application;
2) ***DSOCancelPurchase*** — message confirming the cancellation of energy supply purchasing application;

DSOConfirmPurchase – confirms the beginning of energy supply purchasing application

This market message informs the Buyer of the successful confirmation of a *StartPurchase* request. Having received this market message, the Buyer is entitled to provide services to the Client for specific objects of the Client, with a specific starting date.

This market message can be sent more than once for a set of different objects.

System — *SOAP / XML* messaging system

Sample request

`DSOConfirmPurchase_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOConfirmPurchase_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOConfirmPurchase_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 99 – *DSOConfirmPurchase* request structure

Element	Type	Req.	Description/details
DSOConfirmPurchaseRequest	-	Jā	Main demand element
MMIdentification	*MMId* [1]	Jā	Compound identification information element
customerEIC	string(1-16)	Jā	Client EIC
dateFrom	dateTime	Jā	Confirmed starting date of the contract
objectInfoList	-	Jā	Compound list element for object information
objectInfo	-	Jā	Compound object information element
objectEIC	string(1-16)	Jā	Object EIC
objectAddress	*address* [1]	Jā	Compound object address information element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 100 – *DSOConfirmPurchase* reply structure

Element	Type	Req.	Description/details
DSOConfirmPurchaseResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 101 – *DSOConfirmPurchase CSV* structure

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *StartPurchase* associated message, this field shows the unique code of the requested *StartPurchase*
klienta EIC	Yes	Existing client EIC code
līguma sākuma datums	Yes	Service provision confirmation date *(date format DD.MM.YYYY*)
objekta EIC	Yes	Object EIC code. *(details about multiple client objects is shown as a separate row in the CSV file*)
objekta adrese: valsts	No	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building

Note

[1] The SLS address code can be returned if the data were registered in the system using the SLS address register code

DSOCancelPurchase – confirmation of the application for the termination of energy supply purchasing

This market message informs the Buyer of a termination resulting from a successful *EndPurchase* request, and of the client stopping receiving the services from the Buyer. Having received this market message, the Buyer must terminate the service contract with the Client for specific objects of the Client, with a specific starting date.

This market message can be sent more than once for a set of different objects.

System — *SOAP / XML* messaging system

Sample request

`DSOCancelPurchase_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`DSOCancelPurchase_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Data exchange in *CSV* format

Sample request file

`DSOCancelPurchase_request.csv` file (Unix EOL), available in the `samples/csv` folder enclosed.

Message XML structures

This section describes the message structure for the *XML* data exchange type.

Table 102 – *DSOCancelPurchase* request structure

Element	Type	Req.	Description/details
DSOCancelPurchaseRequest	-	Yes	Main demand element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
dateTo	dateTime	Yes	Confirmed end date of the contract

Element	Type	Req.	Description/details
cancelReason	string(1-30)	Yes	Reason for contract rejection Currently possible reasons for cancellation: • C – change of purchaser • F – date of termination of the contract • D – purchase is not possible because another purchaser starts to provide services at this object on that date • N – no generating facilities at the object • O – other reason (if unsure, please contact the SO) • X – link deactivation • E – message error
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	Yes	Compound object information element
objectEIC	string(1-16)	Yes	Object EIC
objectAddress	*address* [1]	Yes	Compound object address information element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Table 103 – *DSOCancelPurchase* reply structure

Element	Type	Req.	Description/details
DSOCancelPurchaseResponse	*MMResp* [1]	Yes	Main reply element

Notes

[1] this element type is described in the '*Market message sharing types*' section

Message CSV structure

This section describes the message structure for the *CSV* data exchange type.

Table 104 – *DSOCancelPurchase CSV* structure

Column name	Req.	Note
unikāls ziņojuma identifikators	Yes	Unique message identifier
saistītā ziņojuma identifikators	No	If the reply is related to a *EndPurchase* associated message, this field shows the unique code of the requested *EndPurchase*

klienta EIC	Yes	Existing client EIC code
Līguma beigu datums	Yes	Date on which the suspension of services is confirmed *(date format DD.MM.YYYY*)
iemesls	Yes	Reason for contract rejection Currently possible reasons for cancellation: • C – change of purchaser • F – date of termination of the contract • D – purchase is not possible because another purchaser starts to provide services at this object on that date • N – no generating facilities at the object • O – other reason (if unsure, please contact the SO) • X – link deactivation • E – message error
objekta EIC	Yes	Object EIC code *(details about multiple client objects is shown as a separate row in the CSV file*)
objekta adrese: valsts	No	Object address: country *(ISO 3166-1 alpha-2 country code*)
objekta adrese: novads	No	Object address: municipality
objekta adrese: pilsēta	No	Object address: city
objekta adrese: pagasts	No	Object address: parish
objekta adrese: ciems	No	Object address: village
objekta adrese: iela	No	Object address: street
objekta adrese: mājas num./nos	No	Object address: house number/name
objekta adrese: dzīvokļa nr.	No	Object address: apartment No.
objekta adrese: VZD adreses kods [1]	No	object address: SLS address code
objekta adrese: pasta indekss	No	Object address: postal code
objekta adrese: izņēmuma ēka	No	Object address: exception building

Note

[1] The SLS address code can be used instead of the full address

Market message sharing types

The processing of market messages will involve shared types that are used with several or all market messages as part of the system-to-system exchange type.

Market message identification type

The market message identification type is used in all market messages to uniquely identify the market messages, as well as to indicate whether the market message is related to any other market message.

Table 105 – *MMIdentification* type structure

Element	Type	Req.	Description/details
MMId	-	-	Compound identification information element
messageIc	string(1-64)	Yes	Unique message identifier
relatedMessageIc	string(1-64)	No	Related message identifier

Data retrieval market message error type

The market message error type is used to forward an error to the caller that arose during market message data checks, processing, or otherwise.

This type is not described in the detailed description of each data retrieval message but note that this type may be returned in the call reply for any message!

Table 106 – *errorList* type structure

Element	Type	Req.	Description/details
errorList	-	-	Compound list element for error information
error	-	Yes	Compound error information element
errorCode	string(1-250)	Yes	Error code
errorMessage	string(1-4000)	Yes	Error description

Data processing market message reply type

The data processing market message reply type is only used in the asynchronous data processing of market messages, to tell the caller if its market message has been accepted for further processing.

The same type of reply must be used by the caller to inform DP of an error in the processing of market messages.

Table 107 – *MMResp* type structure

Element	Type	Req.	Description/details
MMResp	-	Yes	Main reply element
statusInfo	-	Yes	Call status information element
status	string	Yes	Call status: • A — accepted • R — rejected
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string(1-250)	Yes	Error code
errorMessage	string(1-4000)	Yes	Error message

Latvian address type (address)

The Latvian address type is used in all market messages where the only intended address can be in the Republic of Latvia, e.g., for objects there.

Table 108 – Structure of the Latvian address type

Element	Type	Req.	Description/details
address	-	Yes	LV address element
country	string(1-2)	Yes	ISO 3166-1 alpha-2 country code
region	string(1-100)	No [1]	Municipality, for LV addresses
city	string(1-100)	No [1]	City, for LV addresses
parish	string(1-100)	No [1]	Parish, for LV addresses
village	string(1-100)	No [1]	Village, for LV addresses
street	string(1-100)	No [1]	Street, for LV addresses
houseNameOrNumber	string(1-100)	No [1]	House number and name, for LV addresses
flatNumber	string(1-100)	No [1]	Apartment, for LV addresses
postalCode	string(1-7)	No	Postal code, for LV addresses
classifierCode	string(1-100)	No [1]	SLS address code, for LV addresses
customAddressDetail	string(1-255)	No	Exception building, for LV addresses (the rest of the address details must be entered as accurately as possible, according to the SLS address register)

Notes

[1] address data must be entered according to the SLS address register

[2] the SLS address code can be used instead of the full address

Address type for other countries (addressOth)

The address type of other countries is used in all market messages where the foreign-country addresses are expected to be entered or returned, e.g., an address in the contact details of a client. Currently, the type is not used separately, and only shows up in the address selection type.

Table 109 –Structure of the address type for other countries

Element	Type	Req.	Description/details
addressOth	-	Yes	Address element for addresses in other countries
country	String(1-2)	Yes	ISO 3166-1 alpha-2 country code
addressLine1	string(1-255)	Yes	Address line 1, for other countries

Element	Type	Req.	Description/details
addressLine2	string(1-255)	No	Address line 2, for other countries
addressLine3	string(1-255)	No	Address line 3, for other countries
addressLine4	string(1-255)	No	Address line 4, for other countries
addressLine5	string(1-255)	No	Address line 5, for other countries

Common error messages for market messages

All market message processing involves uniform processing of errors. An error element is returned in the *SOAP/XML* exchange.

Please note that *%n%* in the messages means the value of the parameter.

Below is a list of possible processing errors.

Table 110 – possible common error messages in the processing of market messages

Error code	Description/notes
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_TOKEN_NOT_VALID	Token %1% invalid!
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_VALUE_WRONG_FORMAT	Value does not match the format, "%1%".
E_INVALID_VALUE_TOO_LONG	Value too long.
E_NON_LV_ADDRESS_LINES	Only the address lines need to be filled for non-LV addresses.
E_UNKNOWN_CONTAINER_EXCEPTION	Error registering MM container %1%.
E_MESSAGE_IC_NOT_UNIQUE	Market message IC %1% must be unique within the %2% range of the market participant.
E_FIELD_IS_MANDATORY	Field "%1%" is required for market message type %2%.
E_INVALID_ADDRESS_LINES_VALUES_FOR_LV_ADDRESS	Address lines must be empty for LV addresses.
E_MESSAGE_NOT_ALLOWED_FOR_PRIVATE_CUSTOMERS	Market message %1% not allowed for private-individual clients.
E_MESSAGE_NOT_ALLOWED_FOR_LEGAL_CUSTOMERS	Market message %1% not allowed for legal-entity clients.
E_MM_NOT_ALLOWED	%1% is not allowed for supplier %2%. No trade service provision recorded for the object %2%.
E_MM_TYPE_DOES_NOT_EXIST	Market message type %1% does not exist.
E_MM_TYPE_NOT_AVAILABLE_FOR_PROCESSING	Market message type %1% is not available for processing.

Table 111 – possible common error messages in the processing of *CSV* market messages

Error code	Description/notes
E_CSV_FILE_CONTAINS_MORE_RECORDS_THAN_ALLOWED	CSV file %1% contains more records than allowed. The maximum number of messages of a given market message type in a CSV file is %2%.
E_CSV_LINE_NOT_HAVE_ENOUGH_COLUMNS	The CSV row has fewer columns than required (%1%).
E_COLUMN_CANNOT_BE_EMPTY	The field "%1%" is required
E_COLUMN_VALUE_TOO_LONG	The maximum length allowed for the field %1% is %2%.
E_COLUMN_VALUE_NOT_LONG_ENOUGH	The minimum length allowed for the field %1% is %2%.
E_COLUMN_VALUE_NOT_ALLOWED	Field value %1% is not allowed. The permitted values are: %2%.
E_COLUMN_VALUE_WRONG_DATE_FORMAT	Wrong date format used in the field %1%.
E_CSV_LINE_CONTAINS_MORE_COLUMNS_THAN_ALLOWED	CSV row has more columns than allowed.

TECHNICAL SPECIFICATIONS FOR MARKET MESSAGE EVENTS

This section is intended for the DSO that want to automate their processing of market messages.

Market messages are an essential function of the data platform, which enables cooperation between suppliers and the SO in providing services to electricity clients in Latvia. In the context of market messages, the SO provides information about the electrified object to the suppliers, while the suppliers provide information about electricity trading to the SO.

The purpose of the data platform is to enable the efficient exchange of market messages between any SO and suppliers within existing legislation. The data platform acts as an intermediary in the exchange of the messages, using common standards and approaches for all parties involved in the exchange of the messages.

Market message events fall into several categories:

a) as a continuation of the processing of market message data: the participant sends a market message which is saved in the system, while further actions and data exchange is done with the DSO/TSO's systems;

b) as independent events received from SO systems, the processing of which may also trigger the creation of new market messages to be sent to suppliers.

Types of market message events

The following types of market message events are kept in the DP.

Table 112 – Types of outgoing market message events (DP --> SO)

Market message event code	Field	Description/details
DHStartSupplyMME	from DP	Trade beginning event
DHEndSupplyMME	from DP	Trading interruption event
DHMoveInMME	from DP	Event that enables the client to enter the object
DHMoveOutMME	from DP	Event that allows the client to exit the object
DHChangeCustomerDataMME	from DP	Client data change event
DHConnectSupplyMME	from DP	Object connection event
DHDisconnectSupplyMME	from DP	Object disconnection event
DHStartPurchaseMME	from DP	Purchase initiation event
DHEndPurchaseMME	from DP	Purchase termination event
DHRequestControlReadingMME	from DP	Control reading inspection request event
DHFinishSupplyMME	from DP	Contract termination event between supplier and DSO/TSO
DHChangeObjectDataMME	from DP	Object address and/or name change event

Table 113 – Types of incoming market message events (SO --> DP)

Market message event code	Field	Description/details
SOConfirmSupplyMME	to DP	Trade link creation/change event
SOCancelSupplyMME	to DP	Trade link closure or cancellation event
SOChangeSupplyStatusMME	to DP	Object connection/disconnection confirmation/rejection event
SOConfirmPurchaseMME	to DP	Purchase link creation/change event
SOCancelPurchaseMME	to DP	Purchase link closure event
SORegisterControlReadingMME	to DP	Control reading inspection completion event
SOConfirmCustomMME	to DP	Event that closes ST-specific processing for the messages *MoveInClient* (end reply stating that the message is completed), *ChangeClientData* (to prevent simultaneous processing of client data).

Market message event exchange types

One data exchange type is intended for the exchange of data with the data platform:

a) system: a system for exchanging data in *SOAP/XML* format;

The web service data exchange standard, *SOAP*, is used to exchange data in *XML* format.

Data exchange via web services

A single *WSDL* (Web Service Description File) is prepared for every set of services, and is submitted.

The message events used in the *WSDL* file will be described in several *XSD* (diagram/type definition files): shared-type files (`STDHMMEListTypes.xsd`, `STDHMMEBaseTypes.xsd`, STDHMMElementTypes.xsd), and element type files for web services (`STDHMMEOperationsTypes.xsd`), which can be different for each set of services.

Processing of market message events

1. Files for outgoing market message events *(MarketMessageEventsSystemOperatorOut*):
    a. Sharing type XSD files:
        1. `STDHMMListTypes.xsd` – file structure (Unix EOL) provided in the annex.
        2. `STDHMMBaseTypes.xsd` – file structure (Unix EOL) provided in the annex.
        3. `STDHMMElementTypes.xsd` – file structure (Unix EOL) provided in the annex.
    b. Web service operation type file:
        1. `STDHMMOperationsTypes.xsd` – file structure (Unix EOL) provided in the annex.
    c. Web service description file:
        1. `STDHMarketMessageEventsSOOut.wsdl` – file structure (Unix EOL) provided in the annex.

2. Files for incoming market message events *(MarketMessageEventsSystemOperator*):
    a. Sharing type XSD files:
        1. `STDHMMListTypes.xsd` – file structure (Unix EOL) provided in the annex.
        2. `STDHMMBaseTypes.xsd` – file structure (Unix EOL) provided in the annex.
        3. `STDHMMElementTypes.xsd` – file structure (Unix EOL) provided in the annex.
    b. Web service operation type file:
        1. `STDHMMOperationsTypes.xsd` – file structure (Unix EOL) provided in the annex.
    c. Web service description file:
        1. `STDHMarketMessageEventsSO.wsdl` – file structure (Unix EOL) provided in the annex.

Market message event file specifications

This section of the document describes the specifications for market message events in *XML* format.

Outgoing market message events

Outgoing market message events are intended for the exchange of business data with the SO and are a continuation of the processing of market messages, always initiated by the DP.

The processing of the event is done via *SOAP/XML.*

The outgoing market message events include:

1. ***DHStartSupplyMME*** – trade beginning event;
1. ***DHEndSupplyMME*** – trade interruption event;
2. ***DHMoveInMME*** – event that enables the client to enter the object;
3. ***DHMoveOutMME*** – event that enable the client to exit the object;
4. ***DHChangeCustomerDataMME*** – client data change event;
5. ***DHConnectSupplyMME*** – object connection event;
6. ***DHDisconnectSupplyMME*** – object disconnection event;
7. ***DHStartPurchaseMME*** – purchase initiation event;
8. ***DHEndPurchaseMME*** – purchase termination event;
9. ***DHRequestControlReadingMME*** – control reading inspection request event;
10. ***DHFinishSupplyMME*** – contract termination event between supplier and DSO/TSO;
11. ***DHChangeObjectDataMME – object address and/or name change event.***

DHStartSupplyMME – trade beginning event

The event follows up the processing of the market message *StartSupply* received from the supplier. The DP informs the corresponding SO that the client has entered into a trading contract with the supplier.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOConfirmSupplyMME* – the SO replies to the DP that trading may start at the object;
2. *SOCancelSupplyMME* – the SO replies to the DP that trading cannot start at the object, or the application for its beginning is cancelled, giving reasons;

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHStartSupplyMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHStartSupplyMME_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 114 – *DHStartSupplyMME* request structure

Element	Type	Req.	Description/details
DHStartSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
agreementType	string	Yes	Trading start type: a) REGULAR – standard trading b) IMMEDIATE – accelerated beginning of trading
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC

dateFrom	datetime	Yes	Service start date
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object

Explanations

[1] this element type is described in the 'Market message sharing types' section

Table 115 – *DHStartSupplyMME* reply structure

Element	Type	Req.	Description/details
DHStartSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message sharing types' section

DHEndSupplyMME – trade interruption event

The event follows up the processing of the market message *EndSupply* received from the supplier. The DP informs the corresponding SO that the client has terminated a trading contract with the supplier.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOCancelSupplyMME* – the SO replies to the DP stating that the electricity trading must be stopped or not started at the object.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHEndSupplyMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHSEndSupplyMME_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 116 – *DHEndSupplyMME* request structure

Element	Type	Req.	Description/details
DHEndSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateTo	datetime	Yes	Service suspension date
DSOContractBillingInfo	-	Yes	Compound client invoice information element
DSOContractBillingAddress	*AddrLV* [1,2]	No	Compound billing address information element
DSOContractBillingEMail	string(4-250)	No	Billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Billing notification e-mail
DSOContractNotificationPhoneNumber	string (4-30)	No	Mobile number for billing notifications
DSOContractNr	string (1-50)	No	DSO contract number, in which the object is included

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 117 – *DHEndSupplyMME* reply structure

Element	Type	Req.	Description/details
DHEndSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHMoveInMME – event that enables the client to enter the object

The event follows up the processing of the market message *MoveIn* received from the supplier. The DP informs the corresponding SO that the client, new or current, has gained the right to control the object specified and has entered into a trading contract with the supplier.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOConfirmSupplyMME* – the SO replies to the DP that the trading may start at the object;
2. *SOCancelSupplyMME* – the SO replies to the DP that the trading cannot start at the object, or the application for its beginning is cancelled, giving reasons.
3. *SOCancelMoveInMME* – the SO replies to the DP stating that the electricity trading must be stopped or not started at the object, giving reasons.

The SO must be aware that if the client is new, then after its registration using the master data exchange mechanism, the client master data set must also be sent to DP as described in the *'Principles for processing changes in master data'* section.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHMoveInMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHMoveInMME_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 118 – *DHMoveInMME* request structure

Element	Type	Req.	Description/details
DHMoveInMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	No	Client EIC
customerInfo	-	No	Compound client type information element
private	-	No [2]	Compound private client information element
firstName	string (1-100)	Yes	Client name
lastName	string (1-100)	Yes	Client surname
personIdentifier	string (1-30)	Yes	Client personal identity number
phone	string (4-30)	No	Client phone number

email	string (4-250)	No	Client e-mail
isResident	boolean	Yes	The flag indicates if the client is a resident
customerLegalAddress	*AddrCh* [1,3]	No	Compound client registered address element
legal	-	No [2]	Compound legal entity client information element
name	string (1-255)	Yes	Legal entity client name
registrationNumber	string (1-30)	Yes	Legal entity client registration number
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	dateTime	Yes	Desired starting date of the service
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object
isInheritanceMatter	boolean	No	The flag indicates if the application for the supply of electricity at the object is related to an inheritance case
readingDay	decimal	No	Meter reading during the day
readingNight	decimal	No	Meter reading at night
readingPeak	decimal	No	Meter reading during peak-hours
readingHolidays	decimal	No	Meter reading on weekends
DSOContractBillingInfo	-	Yes	Compound client invoice information element
DSOContractBillingAddress	*AddrLV* [1,3]	No	Compound billing address information element
DSOContractBillingEMail	string (4-250)	No	Billing e-mail
DSOContractNotificationEMail	string (4-250)	No	Billing notification e-mail
DSOContractNotificationPhoneNumber	string (4-30)	No	Mobile number for billing notifications
DSOContractNr	string (1-50)	No	DSO contract number, in which the object is included
notes	string (1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

[2] only one of the elements below needs to be filled in

[3] in the LV address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard

Table 119 – *DHMoveInMME* reply structure

Element	Type	Req.	Description/details
DHMoveInMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHMoveOutMME – event that enables the client to exit the object

The event follows up the processing of the market message *MoveOut* received from the supplier. The DP informs the corresponding SO that the client has lost the right to control the object specified and has terminated the trading contract with the supplier.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOCancelSupplyMME* – the SO replies to the DP stating that the electricity trading must be stopped or not started at the object.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHMoveOutMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHMoveOutMME_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 120 – *DHMoveOutMME* request structure

Element	Type	Req.	Description/details
DHMoveOutMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element

MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateTo	dateTime	Yes	Desired service termination date
moveOutType	string(1-30)	No	ST-specific *MoveOut* type *For information (for clarity, the determination of value in the linked MM is as follows):* • NEW_CUSTOMER – after the client leaves, a new client enters the object • DISCONNECT – the client leaves the object *If the value is not specified or specified incorrectly, the default value is DISCONNECT.*
readingDay	decimal	No	Meter reading during the day
readingNight	decimal	No	Meter reading at night
readingPeak	decimal	No	Meter reading during peak-hours
readingHolidays	decimal	No	Meter reading on weekends
isInheritanceMatter	boolean	No	The flag indicates if the application for the supply of electricity at the object is related to an inheritance case
DSOContractNr	string (1-50)	No	DSO contract number, in which the object is included
notes	string (1-1000)	No	Additional notes received from the Supplier
upcomingMoveInMME [2]	-	No	Future *MoveIn* compound information element
dateFrom	dateTime	Yes	Future *MoveIn* start date
customerEIC	string(1-16)	Yes	Future *MoveIn* client identifier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 121 – *DHMoveOutMME* reply structure

Element	Type	Req.	Description/details
DHMoveOutMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHChangeCustomerDataMME – client data change event

The event follows up the processing of the market message *ChangeCustomerData* received from the supplier. The DP informs the corresponding SO that the supplier has submitted an application for changing client data.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOConfirmCustomMME* – the SO replies to the DP stating that the client data have been changed.

The SO must be aware that if a client changes in their systems, this must also be registered in the DP using the master data exchange mechanism as described in the *'Principles for processing changes in master data'* section.

No additional synchronisation with other DSO systems is foreseen once the data are received from the SO.

System: SOAP/XML messaging system

Sample request

`DHChangeCustomerDataMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHChangeCustomerDataMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 122 – *DHChangeCustomerDataMME* request structure

Element	Type	Req.	Description/details
DHChangeCustomerDataMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
changeDate	dateTime	Yes	Date of changes
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC

customerInfo	-	No	Compound client type information element
private	-	No [2]	Compound private client information element
firstName	string(1-100)	Yes	Client name
lastName	string(1-100)	Yes	Client surname
personIdentifier	string(1-30)	Yes	Client personal identity number
customerLegalAddress	*AddrCh* [1,3]	No	Compound client registered address element
legal	-	No [2]	Compound legal entity client information element
name	string(1-255)	Yes	Legal entity client name
DSOContractBillingInfo	-	Yes	Compound client invoice information element
DSOContractBillingAddress	*AddrLV* [1,3]	No	Compound billing address information element
DSOContractBillingEMail	string(4-450)	No	Billing e-mail
DSOContractNotificationEMail	string(4-450)	No	Billing notification e-mail
DSOContractNotificationPhoneNumber	string(4-30)	No	Mobile number for billing notifications
DSOContractNr	string(1-50)	No	DSO contract number, in which the object is included

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

[2] only one of the elements below needs to be filled in

[3] in the LV address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard

Table 123 – *DHChangeCustomerDataMME* reply structure

Element	Type	Req.	Description/details
DHChangeCustomerDataMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHConnectSupplyMME – object connection event

The event follows up the processing of the market message *ConnectSupply* received from the supplier. The DP informs the corresponding SO that the supplier requests that the object be connected to the grid.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOChangeSupplyStatusMME* – the SO replies to the DP that the connection status of this object has been changed or the connection request is cancelled.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHConnectSupplyMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHConnectSupplyMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 124 – *DHConnectSupplyMME* request structure

Element	Type	Req.	Description/details
DHConnectSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dueDate	datetime	Yes	The desired connection date for the object
notes	string(1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 125 – *DHConnectSupplyMME* reply structure

Element	Type	Req.	Description/details
DHConnectSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHDisconnectSupplyMME – object disconnection event

The event follows up the processing of the market message *DisconnectSupply* received from the supplier. The DP informs the corresponding SO that the supplier requests that the object be disconnected from the grid.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOChangeSupplyStatusMME* – the SO replies to the DP that the connection status of this object has been changed or the connection request is cancelled.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHDisconnectSupplyMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHDisconnectSupplyMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 126 – *DHDisconnectSupplyMME* request structure

Element	Type	Req.	Description/details
DHDisconnectSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC

objectEIC	string(1-16)	Yes	Object EIC
dueDate	datetime	Yes	The desired disconnection date for the object
notes	string(1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 127 – *DHDisconnectSupplyMME* reply structure

Element	Type	Req.	Description/details
DHDisconnectSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHStartPurchaseMME – purchase initiation event

The event follows up the processing of the market message *StartPurchase* received from the supplier. The DP informs the corresponding SO that the client has entered into a purchase contract with the purchaser.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOConfirmPurchaseMME* – the SO replies to the DP that the electricity purchase may be initiated at this object;
2. *SOCancelPurchaseMME* – the SO replies to the DP that no purchase of electricity can be initiated at this object, or that the request for initiation is cancelled, giving reasons.

System: SOAP/XML messaging system

Sample request

`DHStartPurchaseMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHStartPurchaseMME_response.xml`f file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 128 – *DHStartPurchaseMME* request structure

Element	Type	Req.	Description/details
DHStartPurchaseMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Service start date

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 129 – *DHStartPurchaseMME* reply structure

Element	Type	Req.	Description/details
DHStartPurchaseMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHEndPurchaseMME – purchase termination event

The event follows up the processing of the market message *EndPurchase* received from the supplier. The DP informs the corresponding SO that the client has terminated a purchase contract with the purchaser.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SOCancelPurchaseMME* – the SO replies to the DP that the object must stop or not start purchasing electricity.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHEndPurchaseMME_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHEndPurchaseMME_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 130 – *DHEndPurchaseMME* request structure

Element	Type	Req.	Description/details
DHEndPurchaseMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateTo	datetime	Yes	Service suspension date
notes	string(1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 131 – *DHEndPurchaseMME* reply structure

Element	Type	Req.	Description/details
DHEndPurchaseMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHRequestControlReadingMME – control reading inspection request event

The event follows up the processing of the market message *RequestControlReading* received from the supplier. The DP informs the corresponding SO that the supplier requests an inspection at the object specified.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing via one of the following incoming events:

1. *SORegisterControlReadingMME* – the SO replies to the DP that an inspection has been performed of the object, indicating the results.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHRequestControlReadingMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHRequestControlReadingMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 132 – *DHRequestControlReadingMME* request structure

Element	Type	Req.	Description/details
DHRequestControlReadingMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dueDate	datetime	Yes	The desired inspection date
notes	string(1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 133 – *DHRequestControlReadingMME* reply structure

Element	Type	Req.	Description/details
DHRequestControlReadingMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHFinishSupplyMME – termination event for a contract between the supplier and the DSO/TSO

The event follows up the processing of the market message *FinishSupply* received from the supplier. The DP informs the corresponding SO that the client wishes to terminate the contract with the supplier and with the SO.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing using the master data synchronisation mechanism that enables the exchange of object status, contract, and other data for the termination of the contract.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`DHFinishSupplyMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHFinishSupplyMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 134 – *DHFinishSupplyMME* request structure

Element	Type	Req.	Description/details
DHFinishSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateTo	datetime	Yes	Contract termination date
notes	string(1-1000)	No	Additional notes received from the Supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 135 – *DHFinishSupplyMME* reply structure

Element	Type	Req.	Description/details
DHFinishSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

DHChangeObjectDataMME – object address and/or name data change event.

The event follows up the processing of the market message *ChangeObjectData* received from the supplier. The DP informs the corresponding SO that the supplier has submitted an application for changing the object address and/or name data.

Further processing of the event in the SO system is independent from DP.

Once the event is processed by the SO, the SO must inform the DP of the result of the event's processing using this incoming event:

1. *SOConfirmCustomMME* – the SO replies to the DP stating that the object data have been changed.

The SO must be aware that after an object address and/or name change in their systems, this must also be registered in the DP using the master data exchange mechanism as described in the '*Principles for processing changes in master data*' section.

No additional synchronisation with other DSO systems is foreseen once the data are received from the SO.

System: SOAP/XML messaging system

Sample request

`DHChangeObjectDataMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`DHChangeObjectDataMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 136 – *DHChangeObjectDataMME* request structure

Element	Type	Req.	Description/details
DHChangeObjectDataMMERequest	-	Yes	Main demand element
MMEIdentification	MMEId [1]	Yes	Compound identification information element

MMIdentification	*MMId* [1]	Yes	Compound identification information element
customerEIC	string (1-16)	Yes	Client EIC
objectEIC	string (1-16)	Yes	Object EIC
name	string (1-255)	No [2]	Object name/description
address	*address*	No [2]	Compound information element
country	string (1-2)	Yes	ISO 3166-1 alpha-2 country code
region	string (1-100)	No [3]	Municipality, for LV addresses
city	string (1-100)	No [3]	City, for LV addresses
parish	string (1-100)	No [3]	Parish, for LV addresses
village	string (1-100)	No [3]	Village, for LV addresses
street	string (1-100)	No [3]	Street, for LV addresses
houseNameOrNumber	string (1-100)	No [3]	House number and name, for LV addresses
flatNumber	string (1-100)	No [3]	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [3]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, for LV addresses (the rest of the address details must be entered as accurately as possible, according to the SLS address register)

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

[2] only one of the elements below needs to be filled in

[3] address data must be entered according to the SLS address register

Table 137 – *DHChangeObjectDataMME* reply structure

Element	Type	Req.	Description/details
DHChangeObjectDataMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Incoming market message events

Incoming events are intended to enable direct business processes between the SO and the DP, and for the indirect involvement of the supplier, which receives the result of the processing of the event once these events are processed.

The processing of events involves the receipt of events according to the processing logic of each event, returning an immediate reply as an acknowledgement of the event's receipt, or an error list if the event is incorrectly formatted or if the request data it contains do not comply with the principles for the processing of events.

The incoming data processing message events are:

1. ***SOConfirmSupplyMME*** – trade application creation/change event;
2. ***SOCancelSupplyMME*** – trade request close or cancel event;
3. ***SOCancelMoveInMME*** – client object move-in application cancellation event;
4. ***SOChangeSupplyStatusMME*** – object connection/disconnection confirmation/rejection event;
5. ***SOConfirmPurchaseMME*** – purchase request creation/change event;
6. ***SOCancelPurchaseMME*** – purchase request close event;
7. ***SORegisterControlReadingMME*** – inspection completion event;
8. ***SOConfirmCustomMME*** – specific event processing closing event.

SOConfirmSupplyMME – trade application creation/change event

The event provides the DP with information about the successful confirmation of the trading services by the SO. The DP processes this event, creates a market message, and sends it to the supplier who, upon receiving this event, is entitled to provide services at the requested object, starting from the date confirmed.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by the DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via the DP without a request by the Supplier, or in response to such events:

1. Event independently generated by the SO (not initiated by the Supplier, i.e., no linked market message exists).
1. As a reply to the following events:
   1.1. *DHStartSupplyMME* – confirmed trade initiation event;
   1.2. *DHMoveInMME* – confirmed event that allows a client to move into an object.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOConfirmSupplyMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOConfirmSupplyMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 138 – *SOConfirmSupplyMME* request structure

Element	Type	Req.	Description/details
SOConfirmSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
externalReference	string(1-50)	Yes	External system identifier, which indicates the identifier of the supplier-object electricity trading link (contract) created in the SO system
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Confirmed service start date
dateTo	datetime	No	Confirmed service discontinuation date
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object
isSystemOperator	boolean	No	The flag indicates if the service is started for the SO

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 139 – *SOConfirmSupplyMME* reply structure

Element	Type	Req.	Description/details
SOConfirmSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 140 – *SOConfirmSupplyMME* error message list

Error code	Description/details
E_MM_EVENT_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_MM_EVENT_PARTY_EIC_INVALID	Market participant with EIC %1% not found, blocked, or not active MME with IC: %2%
E_MM_EVENT_EXTERNAL_REFERENCE_FOUND	Active SOConfirmSupplyMME MME type link with external key %1% already exists. Event %2% set to pending status for link cancellation
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	Object with EIC %1% does not belong to client with EIC %3% as of %2%
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_INCORRECT_DATE_VALUES	Incorrectly indicated start "%1%" and/or end "%2%" dates
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns object %3%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_CUSTOMER_EIC_IS_MANDATORY	Client EIC field is required for the event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type %2% in system %1%
E_MME_EXTERNAL_REFERENCE_IS_NOT_SUPPLY_TYPE	External system key %1% not linked to the electricity trading service
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_PARTY	Market participant %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_OBJECT	Object %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_CUSTOMER	Client %1% is not linked to external system key %2%

SOCancelSupplyMME – trade request close or cancel event

The event provides the DP with information about the successful termination of the trading services by the SO. The DP processes this event, creates a market message, and sends it to the supplier who, upon receiving this event, must terminate the trading service at the requested object.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via the DP without a request by the Supplier, or in response to such events:

1. Event independently generated by the SO (not initiated by the Supplier, i.e., no linked market message exists).

1. As a reply to the following events:

   1.1. *DHStartSupplyMME* – suspended trade start event;

   1.2. *DHEndSupplyMME* – confirmed trade end event;

   1.3. *DHMoveOutMME* – confirmed event that enables the client to move out of the object (for a trading service).

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOCancelSupplyMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOCancelSupplyMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 141 – *SOCancelSupplyMME* request structure

Element	Type	Req.	Description/details
SOCancelSupplyMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
externalReference	string(1-64)	No	External system identifier, which indicates the identifier of the supplier-object electricity trading link (contract) created in the SO system
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	Yes	Object EIC

dateFrom	datetime	Yes	Confirmed service start date
dateTo	datetime	No	Confirmed service discontinuation date
isSettlementServiceProvided	boolean	Yes	The flag indicates if the Supplier is a paying entity • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates whether the client intends to use the exchange fee for this object
isSystemOperator	boolean	No	The flag indicates if the service is started for the SO
cancelReason	string(1)	Yes	Specify the reason for service termination: • C – change of supplier; • M – the object changes the client; • T – more than one StartSupply application from multiple Suppliers per object; • N – object no longer controlled by the client; • O – other reason for termination of service (if there are questions, please contact the ST operator); • F – the supply of electricity to the object is suspended; • S – no change of supplier, but changes in billing information; • X – link deactivation; • E – message error;
notes	string(1-1000)	No	Additional notes received from SO

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 142 – *SOCancelSupplyMME* reply structure

Element	Type	Req.	Description/details
SOCancelSupplyMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 143 – *SOCancelSupplyMME* error message list

Element	Description/details

E_MME_RELATED_CUSTOMER_NOT_FOUND	Cannot find client data using external key %1% for event type SOCancelSupplyMME
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type SOCancelSupplyMME in system %1%
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns the object %3%
E_INCORRECT_DATE_VALUES	Incorrectly indicated start "%1%" and/or end "%2%" dates
E_MME_CONFIRM_CANCEL_DATE_OVERLAP	Future SOConfirmSupplyMME start date %1% overlaps with SOCancelSupplyMME end date %2%
E_MME_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_CANCEL_REASON_IS_MANDATORY	Service termination reason required for event type %1%
E_MME_CANCEL_REASON_INVALID	Wrong service cancellation reason for event type %1%. Must be one of: %2%
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type %2% in system %1%
E_MME_EXTERNAL_REFERENCE_IS_NOT_SUPPLY_TYPE	External system key %1% not linked to the electricity trading service
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_PARTY	Market participant %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_OBJECT	Object %1% is not linked to external system key %2%

SOCancelMoveInMME – client object move-in application cancellation event

The event provides the DP with information about the successful start of the trading services by the SO. The DP processes this event, creates a market message, and sends it to the supplier who, upon receiving this event, must cancel all requests associated with the message.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via DP without a request by the Supplier, or in response to this event:

1. In response to the event:

    1.1. *DHMoveInMME* – confirmed event that allows a client to move in to an object.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOCancelMoveInMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOCancelMoveInMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 144 – *SOCancelMoveInMME* request structure

Element	Type	Req.	Description/details
SOCancelMoveInMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
externalReference	string(1-64)	Yes	External system identifier (currently not used)
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Cancelled service start date
notes	string(1-1000)	No	Additional notes received from SO

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 145 – *SOCancelMoveInMME* reply structure

Element	Type	Req.	Description/details
SOCancelMoveInMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 146 – *SOCancelMoveInMME* error message list

Element	Description/details
E_MME_CUSTOMER_NOT_YET_SYNCHRONIZED	client with identifier %1%, specified in associated MoveIn with IC %2%, not yet synchronised with the system
E_MME_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_MME_RELATED_CUSTOMER_NOT_FOUND	Cannot find client data using external key %1% for event type SOCancelMoveInMME
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns object %3%

SOChangeSupplyStatusMME – object connection/disconnection confirmation/rejection event

The event provides the DP with information about the successful object status change from the SO. The DP processes this event, creates a market message, and sends it to the supplier who, upon receiving this event, is informed of the status of the request. It must be taken into account that the SO must also synchronise the actual status of the object/MP/meters with the DP using the master data synchronisation mechanism described in the '*Principles for processing changes in master data*' section.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by DP, as well as the identifier of the market message, if one was sent.

This event can be received in response to the following events:

1. As a reply to the following events:

   1.1. *DHConnectSupplyMME* – successful or failed object connection event;

   1.2. *DHDisconnectSupplyMME* – successful or unsuccessful object disconnection event.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOChangeSupplyStatusMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOChangeSupplyStatusMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 147 – *SOChangeSupplyStatusMME* request structure

Element	Type	Req.	Description/details
SOChangeSupplyStatusMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	No	Compound identification information element
externalReference	string(1-64)	Yes	External system identifier, which indicates the identifier of the object in the SO system whose status has changed (external system identifier of the object)
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
statusCode	string(1-50)	Yes	Request reply status code Changed object status code: • CONNECTED (object is connected) • DISCONNECTED (object is disconnected) • DISCONNECT_FORBIDDEN (object may not be disconnected) • CONNECT_CANCEL (object will not be connected) • CONNECT_CANCEL_DEBT (object will not be connected because the client has arrears with ST) • DISCONECT_CANCEL (object will not be disconnected)
statusDate	datetime	Yes	Confirmed service start date
emailNotes	string(1-4000)	No	Additional notes received from SO that are included in the e-mail message for the supplier

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 148 – *SOChangeSupplyStatusMME* reply structure

Element	Type	Req.	Description/details
SOChangeSupplyStatusMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 149 – *SOChangeSupplyStatusMME* error message list

Element	Description/details
E_MME_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns the object %3%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_MME_STATUS_CODE_IS_MANDATORY	Status field is required for event type %1%
E_MME_EXTERNAL_REFERENCE_DOES_NOT_MATCH_OBJECT_EIC	Object with external key %1% not found or does not match EIC %2%

SOConfirmPurchaseMME – purchase request creation/change event

The event provides the DP with information about the successful confirmation of the purchase services by the SO. The DP processes this event, creates a market message, and sends it to the purchaser who, upon receiving this event, is entitled to provide services at the requested object, starting from the date confirmed.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via the DP without a request by the Supplier, or in response to such events:

1. Event independently generated by the SO (not initiated by the Supplier, i.e., no linked market message exists).
2. As a reply to the following events:

   2.1. *DHStartPurchaseMME* – confirmed trade initiation event.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOConfirmPurchaseMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOConfirmPurchaseMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 150 – *SOConfirmPurchaseMME* request structure

Element	Type	Req.	Description/details
SOConfirmPurchaseMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
externalReference	string(1-64)	Yes	External system identifier, which indicates the identifier of the supplier-object electricity purchasing link (contract) created in the SO system
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Confirmed service start date
dateTo	datetime	No	Confirmed service discontinuation date

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 151 – *SOConfirmPurchaseMME* reply structure

Element	Type	Req.	Description/details
SOConfirmPurchaseMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 152 – *SOConfirmPurchaseMME* error message list

Element	Description/details
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_CUSTOMER_EIC_IS_MANDATORY	Client EIC field is required for the event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type %2% in system %1%
E_MME_EXTERNAL_REFERENCE_IS_NOT_PURCHASE_TYPE	External system key %1% not linked to the electricity purchasing service
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_PARTY	Market participant %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_OBJECT	Object %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_CUSTOMER	Client %1% is not linked to external system key %2%

SOCancelPurchaseMME – purchase request close event

The event provides the DP with information about the successful termination of the purchase services by the SO. The DP processes this event, creates a market message, and sends it to the purchaser who, upon receiving this event, must terminate the purchase services at the object or cancel all requests associated with the message.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by the DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via the DP without a request by the Supplier, or in response to such events:

1. Event independently generated by the SO (not initiated by the Supplier, i.e., no linked market message exists).

2. As a reply to the following events:

   2.1. *DHStartPurchaseMME* – suspended purchase start event;

   2.2. *DHEndPurchaseMME* – confirmed trade end event;

   2.3. *DHMoveOutMME* – confirmed event that enables the client to move out of the object (for a purchasing service).

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SOCancelPurchaseMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOCancelPurchase_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 153 – *SOCancelPurchaseMME* request structure

Element	Type	Req.	Description/details
SOCancelPurchaseMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	Yes	Compound identification information element
externalReference	string(1-64)	No	External system identifier, which indicates the identifier of the supplier-object electricity purchasing link (contract) created in the SO system
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
dateFrom	datetime	Yes	Confirmed service start date (used in the event of cancellation)
dateTo	datetime	No	Confirmed service termination date (must be specified if the link is terminated)
cancelReason	string(1)	Yes	Specify the reason for service termination: • C – change of purchaser • F – termination of contract at the purchaser's request (EndPurchase

			message received) • D – purchase is not possible because another purchaser starts to provide services at this object on that date • N – no generating facilities at the object • O – other reason (if unsure, please contact the SO) • X – link deactivation • E – message error
notes	string(1-1000)	No	Additional notes received from SO

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 154 – *SOCancelPurchaseMME* reply structure

Element	Type	Req.	Description/details
SOCancelPurchaseMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 155 – *SOCancelPurchaseMME* error message list

Element	Description/details
E_MME_RELATED_CUSTOMER_NOT_FOUND	Cannot find client data using external key 72152676 for event type SOCancelPurchaseMME
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	Object specified with EIC 43Z-STO00790398Q is not controlled by the client with EIC 43X-STJ00312726V.
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type SOCancelPurchaseMME in system %1%
E_MME_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_INCORRECT_DATE_VALUES	Incorrectly indicated start "%1%" and/or end "%2%" dates
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_CANCEL_REASON_IS_MANDATORY	Service termination reason required for event type %1%

E_MME_CANCEL_REASON_INVALID	Wrong service cancellation reason for event type %1%. Must be one of: %2%
E_MME_EXTERNAL_REFERENCE_IS_NOT_PURCHASE_TYPE	External system key %1% not linked to the electricity purchasing service
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_PARTY	Market participant %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_OBJECT	Object %1% is not linked to external system key %2%

SORegisterControlReadingMME – inspection completion event

The event provides the DP with information about the successful completion of an inspection from the SO. The DP processes this event, creates a market message, and sends it to the supplier who, upon receiving this event, is entitled to calculate the actual consumption if necessary.

An event can be received from the SO for any object to whose network it is connected. The event must contain the identifier of the initial event sent by the DP, as well as the identifier of the market message, if one was sent.

This event can be received independently if the SO makes changes via the DP without a request by the Supplier, or in response to such events:

1. Event independently generated by the SO (not initiated by the Supplier, i.e., no linked market message exists).
2. As a reply to the following events:

   2.1. *DHRequestControlReadingMME* – successfully processed inspection request event.

Events are processed in the same way for all SO.

System: SOAP/XML messaging system

Sample request

`SORegisterControlReadingMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SORegisterControlReadingMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 156 – *SORegisterControlReadingMME* request structure

Element	Type	Req.	Description/details
SORegisterControlReadingMMERequest	-	Yes	Main demand element

MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	No	Compound identification information element
externalReference	string(1-64)	Yes	External system identifier, which indicates the identifier of the performed inspection in the SO system
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
MPNumber	string(1-50)	Yes	Metering point external link *(external_reference*)
meterNumber	string(1-50)	Yes	Meter number
OBISCode	string(1-20)	Yes	OBIS registry code
averageYearlyConsumption	float	Yes	Calculated average annual consumption (as per KA)
readingValue	float	Yes	Inspection reading value
readingDate	datetime	Yes	Inspection dates
readingType	string(1-50)	Yes	Types of inspection read-outs: • KA – control inspection reading • SR – initial reading if a meter is installed • BR – final reading in the event of meter removal • NEPS – not possible to access the meter

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 157 – *SORegisterControlReadingMME* reply structure

Element	Type	Req.	Description/details
SORegisterControlReadingMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 158 – *SORegisterControlReadingMME* error message list

Error code	Description/details
E_MME_CONTROL_READING_DATE_IN_FUTURE	Inspection registration date cannot be in the future

E_MME_METER_NUMBER_INVALID	Meter %1% does not exist, is not connected or not active, or not connected to metering point %2%
E_MME_METERING_POINT_INVALID	Metering point %1% does not exist, is not active, or is not linked to object %2%
E_MME_OBJECT_OBIS_CODE_MISMATCH	OBIS code %1% does not match the OBIS code registered for the object in the system
E_MME_OBJECT_HAS_MULTIPLE_CUSTOMERS_ON_DATE	The object with EIC "%1%" is linked to multiple clients as of %2%
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%
E_MME_RELATED_MME_DATA_NOT_FOUND	Linked event with identifier %1% not found in %2% month period or is not linked to the object with EIC %3% and the client with EIC %4%
E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns object %3%

SOConfirmCustomMME – specific event processing closing event

The event provides the DP with information about the successful processing of various requests from the SO. The DP processes this event. There is no market report creation function for this event.

An event can be received from the SO for any object included in a DP request to whose grid it is connected. The event must contain the identifier of the initial event sent by the DP, as well as the identifier of the market message, if one was sent.

This event can be received in response to the following events:

1. As a reply to the following events:

   1.1. *DHChangeClientDataMME* – confirmed client data change initiation event (not handed over to the supplier).

   1.2. *DHChangeObjectDataMME* – confirmed object address and/or name data change initiation event (not handed over to the supplier).

System: SOAP/XML messaging system

Sample request

`SOConfirmCustomMME_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply:

`SOConfirmCustomMME_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the XML data exchange type.

Table 159 – *SOConfirmCustomMME* request structure

Element	Type	Req.	Description/details
SOConfirmCustomMMERequest	-	Yes	Main demand element
MMEIdentification	*MMEId* [1]	Yes	Compound identification information element
MMIdentification	*MMId* [1]	No	Compound identification information element
externalReference	string(1-64)	Yes	External system identifier, which indicates the identifier of the entity processed in the SO system
customerEIC	string(1-16)	No	Client EIC
objectEIC	string(1-16)	No	Object EIC
effectiveDate	datetime	No	Confirmation date
notes	string(1-1000)	No	Additional notes received from SO

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 160 – *SOConfirmCustomMME* reply structure

Element	Type	Req.	Description/details
SOConfirmCustomMMEResponse	*MMEResp* [1]	Yes	Main reply element

Explanations

[1] this element type is described in the 'Market message event-sharing types' section

Table 161 – *SOConfirmCustomMME* error message list

Element	Description/details
E_PARTY_DOES_NOT_HAVE_SYSTEM_USAGE_CONTRACT	As of date %2%, the market participant with EIC %1% does not have an active system use contract with the DSO/TSO market participant that owns object %3%
E_MME_OBJECT_UNRELATED_TO_CUSTOMER	The specified object with EIC %1% is not managed by the client with EIC %2%

E_MME_START_DATE_IS_MANDATORY	Start date field is required for event type %1%
E_MME_CUSTOMER_EIC_IS_MANDATORY	Client EIC field is required for the event type %1%
E_MME_OBJECT_EIC_IS_MANDATORY	Object EIC field is required for the event type %1%
E_MME_EXTERNAL_REFERENCE_IS_MANDATORY	The external system identifier field is required for event type %1%
E_MME_EXTERNAL_REFERENCE_DOES_NOT_EXIST	No external key found for type %2% in system %1%
E_MME_EXTERNAL_REFERENCE_IS_NOT_SUPPLY_TYPE	External system key %1% not linked to the electricity trading service
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_PARTY	Market participant %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_OBJECT	Object %1% is not linked to external system key %2%
E_MME_EXTERNAL_REFERENCE_NOT_RELATED_TO_CUSTOMER	Client %1% is not linked to external system key %2%

Market message event-sharing types

The processing of market message events will involve shared types that are used with several or all market messages.

Market message identification type

The market message identification type is used in all events to uniquely identify specific messages, as well as to indicate whether the event is related to any other events.

Table 162 – MMEIdentification type structure

Element	Type	Req.	Description/details
MMEId	-	-	Compound identification information element
eventIc	string (1-64)	Yes	Unique event identifier
relatedEventIc	string (1-64)	No	Related event identifier

Market message identification type

The market message identifier type is used in all events making it possible to allow the SO to save the identifier of the market message as well as other market message information associated with the event.

Table 163 – MMIdentification type structure

Element	Type	Req.	Description/details
MMId	-	-	Compound identification information element
supplierEIC	string	Yes	Supplier EIC

supplierMessageIc	string	No	Unique message identifier
supplierUserName	string	No	Supplier user name
supplierUserEmail	string	No	Supplier user e-mail
supplierUserPhoneNumber	string	No	Supplier user phone number

Market message event reply type

The market message event reply type is used to tell the caller if its market message event has been accepted for further processing.

The same type of reply must be used by the caller to inform DP of errors in the processing of market messages.

Table 164 – MMEResp type structure

Element	Type	Req.	Description/details
MMEResp	-	Yes	Main reply element
statusInfo	-	Yes	Call status information element
status	string	Yes	Call status • A – accepted • R – rejected
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message

Latvian address type

The Latvian address type is used in some market message events where the only intended address can be in the Republic of Latvia, e.g., for objects there.

Table 165 – Structure of the Latvian address type

Element	Type	Req.	Description/details
addrLV	-	Yes	LV address element
country	string (1-2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No [1]	Municipality, for LV addresses
city	string (1-100)	No [1]	City, for LV addresses
parish	string (1-100)	No [1]	Parish, for LV addresses
village	string (1-100)	No [1]	Village, for LV addresses
street	string (1-100)	No [1]	Street, for LV addresses

houseNameOrNumber	string (1-100)	No [1]	House number and name, for LV addresses
flatNumber	string (1-100)	No [1]	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [2]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, for LV addresses (the rest of the address details must be entered as accurately as possible, according to the SLS address register)

Details

[1] address data must be entered according to the SLS address register

[2] the SLS address code can be used instead of the full address

Other country address type

The address type of other countries is used in all market message events where the foreign-country addresses are expected to be entered or returned, e.g., an address in the contact details of a client. Currently, the type is not used separately, and only shows up in the address selection type.

Table 166 – structure of the address type for other countries

Element	Type	Req.	Description/details
addrOth	-	Yes	Address element for addresses in other countries
country	string (1-2)	Yes	*ISO 3166-1 alpha-2* country code
addressLine1	string (1-255)	Yes	Address line 1, for other countries
addressLine2	string (1-255)	No	Address line 2, for other countries
addressLine3	string (1-255)	No	Address line 3, for other countries
addressLine4	string (1-255)	No	Address line 4, for other countries
addressLine5	string (1-255)	No	Address line 5, for other countries

Address selection type

The address selection type of other countries is used in those market message events where the foreign-country addresses are expected to be entered or returned, e.g., an address in the contact details of a client.

Table 167 – Structure of the selection address type

Element	Type	Req.	Description/details
addrCh	-	Yes	Compound address selection information

			element
address	*addrLV* [1]	Yes	LV address element
addressOth	*addrOth* [1]	Yes	Address element for addresses in other countries

Details

[1] The address types are defined in the subsections above

Common error messages for market message events

All market message event processing involves the uniform processing of errors. An error element is returned in the *SOAP/XML* exchange.

Please note that *%n%* in the messages means the value of the parameter.

Below is a list of possible processing errors.

Table 168 – All error messages possible in the processing of market message events

Element	Description/details
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_TOKEN_NOT_VALID	Token %1% invalid!
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_MESSAGE_IC_NOT_UNIQUE	Market message IC %1% must be unique within the %2% range of the market participant.
E_PARTY_NOT_VALID	Market participant %1% does not exist, is blocked, or is not active.
E_CUSTOMER_DOES_NOT_EXIST	Client with EIC %1% does not exist or is not active
E_MME_OBJECT_DOES_NOT_EXIST	Object with EIC %1% does not exist or is not active
E_MME_IC_EQUAL_RELATED_MME_IC	Associated event identifier %1% cannot be the same as the identifier of the event itself
E_MME_MESSAGE_AND_EVENT_UNRELATED	Supplier message IC %1% and associated event IC %2% are not mutually related
E_MME_OBJECT_PARTY_UNRELATED	Object with EIC %1% does not exist, is not active, or is not owned by the market participant with EIC %2%
E_MME_OBJECT_HAS_MULTIPLE_CUSTOMERS_ON_DATE	The object with EIC "%1%" is linked to multiple clients as of %2%
E_MME_OBJECT_HAS_NO_RELATED_CUSTOMER	Object with EIC %1% is not owned by a client as of %2%.

SPECIFICATIONS FOR ADDITIONAL DP PUBLIC SERVICES

Types of public services. The table below lists the public services currently offered and planned by ST at the time this document is prepared.

Table 169 – types of incoming market messages available to Suppliers

Public service code	Direction	Description/details
GetObjectDetailInfo	to DP	Retrieval of detailed object and technical information
GetDetailedObjectConsumption	to DP	Retrieval of detailed object consumption information
FindObjects	to DP	Object information searching service

Data exchange via web services

The exchange of data using the services offered by DP takes place exclusively in *XML* format. The *SOAP* web services data exchange standard will be used.

A single *WSDL* (Web Service Description File) is prepared for every set of services and is provided to market Participants.

The messages used in the *WSDL* file will be described in several *XSDs* (diagram/type definition files): shared-type files (`STDHADDWSListTypes.xsd`, `STDHADDWSBaseTypes.xsd`, `STDHADDWSElementTypes.xsd`), and an element type file for web services (`STDHADDWSOperationsTypes.xsd`), which can be different for each set of services.

Using web services for additional processing of services:

1. Public services for market participant calls (*STDHAdditionalServices*)
   1.1. Shared type XSD files:
      a) `STDHADDWSListTypes.xsd` — file structure (Unix EOL) provided in the annex.
      b) `STDHADDWSBaseTypes.xsd` — file structure (Unix EOL) provided in the annex.
      c) `STDHADDWSElementTypes.xsd` — file structure (Unix EOL) provided in the annex.
   1.2. Web service operation type file:
      a) `STDHADDWSOperationsTypes.xsd` — file structure (Unix EOL) provided in the annex.
   1.3. Web service description file:
      a) `STDHAdditionalServices.wsdl` — file structure (Unix EOL) provided in the annex.

Additional public service specifications

This section describes the additional data retrieval services in the self-service portal.

The additional data retrieval services include:

1) ***GetObjectDetailInfo*** — retrieval of detailed object and technical information;

2) ***GetDetailedObjectConsumption*** — retrieval of detailed object consumption information;

3) ***FindObjects*** — object information searching service.

GetObjectDetailInfo — retrieval of detailed object and technical information

The service returns the object and detailed technical information about it.

The service provides information about the meters at the object and the time zones available for each of the meters on-object.

System — *SOAP / XML* messaging system

Sample request

`GetObjectDetailInfo_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetObjectDetailInfo_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 170 – *GetObjectDetailInfo* request structure

Element	Type	Req.	Description/details
GetObjectDetailInfoRequest	-	Yes	Main demand element
customerEIC	string(1-16)	Yes	Client EIC
objectEIC	string(1-16)	Yes	Object EIC
effectiveDate	dateTime	No	Date for which data available in DP are to be selected
customerPermission [1]	boolean	Yes	The flag indicates if the Participant has the client's consent to the processing • true (permission granted) • false (no permission granted)

Notes

[1] if the Supplier has not obtained the client's consent to data processing, the message is not accepted

Table 171 – *GetObjectDetailInfo* reply structure

Element	Type	Req.	Description/details
GetObjectDetailInfoResponse	-	Yes	Main reply element
DSOEIC	string(16)	Yes	EIC of the participant whose network the object is connected to
eic	string(1-16)	Yes	Object EIC
name	string(1-100)	No	Object name/description
DSOContractBillingInfo	-	Yes	Compound client invoice information element
DSOContractBillingAddressFull	string(1-1000)	No	Billing address merged into one field
DSOContractBillingAddress	*address* [1]	No	Compound billing address information element
DSOContractBillingEMail	string(4-250)	No	Billing e-mail
DSOContractNotificationEMail	string(4-250)	No	Billing notification e-mail
DSOContractNotificationPhoneNumber	string(4-30)	No	Mobile number for billing notifications
objectTechData	-	Yes	Compound element of the extended technical information list for the object
tariff	string(1-255)	No	Object-specific fee
voltage	string(1-255)	No	Voltage supplied to the object
phaseCount	decimal	No	Number of phases installed at the object
permittedLoad	decimal	No	Power allowed for the object
current	decimal	No	Current rating of the input protection device
generator	string(1-255)	No[3]	Type of generator installed at the object
proprietaryBorder	string(1-255)	No	Object ownership boundary
readingType	string	No	Reading type at object level: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (the meter is read in another way)
producerType	string(1-255)	No[3]	Producer type
installedPower	string(1-255)	No	Power installed
generationDelta	decimal	No[3]	Difference between the consumption power and the production power of the producer
totalGenerationPower	string(1-255)	No[3]	Power specified in the permit of the producer
accessInfo	string(1-255)	No	Access information for the object

Element	Type	Req.	Description/details
aggregatorEIC	string(1-16)	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The object participates in the provision of the regulation service • true (participates) • false (does not participate)
cadastralNr	string(1-255)	No	Cadastral designation of the object land unit
generationPermitNumber	string(1-255)	No[3]	Producer permit number
microgenPermitNumber	string(1-255)	No[3]	Micro-generator certificate No
microgenAllowedPower	string(1-255)	No[3]	Micro-generator permitted power
maxAllowedExportPower	string(1-255)	No[3]	The NETO principle is applied to the object at MS level
isNETO	boolean	No[3]	Voltage level
voltageLevel	string(1-255)	No	Party in charge of the condition of the contacts
objectResponsible	string(1-255)	No	Coordinates
objectCoordinates	string(1-255)	No	Cadastral designation of the object land unit
averageYearlyConsumption	decimal	No	Average annual consumption of the object for the last full 12-month billing period
previousMonthConsumption	decimal	No	Previous month's consumption
subscriptionServiceInfoList	-	No	Compound element for the list of connected services
subscriptionServiceInfo	-	Yes	Compound element for connected services
name	string(1-255)	Yes	Service name
meterInfoList	-	Yes	Compound meter list element
meterInfo	-	No	Compound meter element
externalReference	string(1-50)	Yes	Identifier in the source system
meterNumber	string(1-50)	Yes	Meter number
isAMR	Boolean	Yes	The flag indicates if the meter is a smart meter
description	string(1-255)	No	Name/description of the meter type
status	string	Yes	Meter status 1. CONNECTED 1. DISCONNECTED
statusDate	dateTime	No	Date of the last status change of the meter in the DSO system
dateFrom	dateTime	Yes	Meter starting date
dateTo	dateTime	No	Meter end date

Element	Type	Req.	Description/details
MPInfo	-	Yes	Compound measurement station element
MPNumber	string(1-50)	Yes	Measurement station
TPNumber	string(1-50)	No	Transformer station number (from MS)
TPName	string(1-50)	No	Transformer station name (from MS)
feederNumber	string(1-50)	No	Feeder number (from MS)
loadPointNumber	string(1-50)	No	Load station number (from MS)
registerInfoList	-	Yes	Compound meter register list element
registerInfo	-	Yes	Compound meter register element
OBISCode	string(5-10)	Yes	Register OBIS code
registerType	string(2)	Yes	Register name: 1. A+ 2. A- 3. R+ 1. R-
legacyRegisterName [2]	string(1-50)	Yes	Historical name of the register (e.g., DAY, DAY_2_ZONES, etc.)
lastBilledReadingValue	decimal	No	Last billable reading

Notes

[1] The address types are defined in the subsections above

[2] Historical register/area code for interoperability purposes

[3] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 172 – List of *GetObjectDetailInfo* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_NO_ACTIVE_OBJECTS_FOR_CUSTOMER	The client with EIC %n% has no active objects.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_NO_OBJECTS_SPECIFIED	Market message number %n% does not indicate any objects.
E_OBJECT_HAS_NO_COUNTERS_INSTALLED	There are no meters installed at the object with EIC "%1%".

Error code	Description/notes
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.

Notes

The error codes common to all market messages are listed in the '*Market message sharing types*' *section.*

GetDetailedObjectConsumption — detailed object consumption information retrieval

The service returns detailed consumption information for the object.

Explanation: only the data and granularity available in the DP are returned.

System — *SOAP / XML* messaging system

Sample request

`GetDetailedConsumption_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`GetDetailedConsumption_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 173 – *GetDetailedObjectConsumption* request structure

Element	Type	Req.	Description/details
GetDetailedObjectConsumptionRequest	-	Yes	Main demand element
cEIC	string(1-16)	Yes	Client EIC
oEIC	string(1-16)	Yes	Object EIC
mPNr	string	No	MS number
dtF	dateTime	Yes	Start of the period for which consumption data must be returned
dtT	dateTime	Yes	End of the period for which consumption data must be returned

Element	Type	Req.	Description/details
gr	string(1)	Yes	Data granularity: • H — hourly consumption; • D — daily consumption data; • M — data for the billing period; • N — 'native' consumption data at the meter integration level.
customerPermission [1]	boolean	Yes	If the caller has the client's consent to retrieving consumption data. • true (permission granted) • false (no permission granted)

Notes

[1] if the Supplier has not obtained the client's consent to data processing, the message is not accepted

Table 174 – *GetDetailedObjectConsumption* reply structure

Element	Type	Req.	Description/details
GetDetailedObjectConsumptionResponse	-	Yes	Main reply element
cEIC	string(1-16)	Yes	Client EIC
oEIC	string(1-16)	Yes	Object EIC
objCData	-	Yes	Compound object consumption data element
oEPT	string(1-255)	No[2]	Producer type
mpCData	-	Yes	Compound measurement station list element
mpNr	string(1-50)	Yes	Metering station number
mInfo	-	Yes	Compound meter list element
mData	-	Yes	Compound meter element
mNr	string(1-50)	Yes	Meter number
dtF	dateTime	Yes	Meter date from
dtT	dateTime	No	Meter date to
enTCInfo	-	Yes	Compound element of the list of energy types and consumptions
enTCData	-	Yes	Compound element of energy types and consumptions
enTp	string(2)	Yes	Energy type (A+, A-, R+, R-)
cData	-	Yes	Compound consumption information element
cDt	dateTime	Yes	Date and time of consumption

Element	Type	Req.	Description/details
cSt	string(1-50)	Yes	Consumption status
cVal	decimal	Yes	Consumption value (to be used in payments)
cActVal	decimal	Yes	First-read consumption value
cTZData	-	Yes	Compound consumption time zone information element
cTOB	string(5-10)	Yes	Time zone OBIS code
cTZ [1]	string(1-50)	Yes	Historical name of the register (time zone) (e.g., DAY, DAY_2_ZONES, etc.)
cVal	decimal	Yes	Consumption value (to be used in payments) - *bill*
cActVal	decimal	Yes	First-read consumption value - *raw*

Notes

[1] Historical register/area code for interoperability purposes.

[2] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 175 – List of *GetDetailedConsumption* error messages

Error code	Description/notes
E_CUSTOMER_EIC_DOES_NOT_EXIST	Cannot find a client with EIC %1%.
E_NO_ACTIVE_OBJECTS_FOR_CUSTOMER	The client with EIC %n% has no active objects.
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_CUSTOMER_DOESNT_OWN_OBJECT_FOR_DATE	The object with EIC "%1%" does not belong to the client with EIC "%2%" as of %3%.
E_CUSTOMER_DOESNT_OWN_OBJECT_DURING_PERIOD	The object with EIC "%1%" did not belong to the client with EIC "%2%" during the period from %3% to %4%.
E_ACTIVE_MP_NUMBER_DOES_NOT_EXIST	MS number %1% is not active or does not exist.
E_OBJECT_HAS_NO_COUNTERS_INSTALLED	There are no meters installed at the object with EIC "%1%".
E_END_DATE_BEFORE_START_DATE	End date %1% must be after the start date: %2%
E_REQUEST_CUSTOMER_PERMISSION_REQUIRED	In order to obtain this type of data, the client must give their consent to the request in question.

Notes

The error codes common to all market messages are listed in the '*Market message sharing types*' *section.*

FindObjects — object information search service

The service makes it possible to search for information about an object using its EIC or address.

The service is used for finding the EIC of an object and basic information about the object, if the EIC is not known.

System — *SOAP / XML* messaging system

Sample request

`FindObjects_request.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Sample reply

`FindObjects_response.xml` file (Unix EOL), available in the `samples/xml` folder enclosed.

Message XML structure

This section describes the message structure for the *XML* data exchange type.

Table 176 – *FindObjects* request structure

Element	Type	Req.	Description/details
FindObjectsRequest	-	Yes	Main demand element
objectEIC	string(1-16)	No [2]	Object EIC
objectAddress	*address* [1]	No [2]	Object address
supplierEIC	string(1-16)	No [3]	The EIC of the Supplier currently providing services at the object
meterNr	string(1-50)	No [3]	Meter number
maxCount	int	Yes	How many entries must be returned in a reply
rowsFrom	int	No	From what entry data must be returned (used for paging)
rowsTo	int	No	Up to what entry data must be returned (used for paging)

Notes

[1] The address types are defined in the subsections above

[2] At least one of the elements flagged with this token must be indicated

[3] The elements flagged with this token have a filtering function and cannot be used as basic search criteria

Table 177 – *FindObjects* reply structure

Element	Type	Req.	Description/details
FindObjectsResponse	-	Yes	Main reply element
objectInfoList	-	Yes	Compound list element for object information
objectInfo	-	No	Compound object information element
DSOEIC	string(1-16)	Yes	EIC of the participant whose network the object is connected to
eic	string(1-16)	Yes	Object EIC
name	string(1-255)	Yes	Object name
addressFull	*address* [1]	Yes	Object address merged into one field
objectTechData	-	No	Compound element of the extended technical information list for the object
readingType	string(5-30)	No	Reading type at object level
tariff	string(1-255)	No	Object-specific fee
phaseCount	string(1-255)	No	Number of phases installed at the object
voltage	string(1-255)	No	Voltage connected to the object
current	decimal	No	Current rating of the input protection device
permittedLoad	string(1-255)	No	Power allowed for the object
proprietaryBorder	string(1-255)	No	Object ownership boundary
generator	string(1-255)	No[2]	Type of generator installed at the object
microgenAllowedPower	string(1-255)	No[2]	Micro-generator permitted capacity
totalGenerationPower	string(1-255)	No[2]	Specified capacity permitted for the object producer
maxAllowedExportPower	string(1-255)	No[2]	Maximum export capacity of the generator connected to the object
producerType	string(1-255)	No[2]	Producer type
meterNumber	string(1-255)	No	Meter number
meterStatus	string(1-255)	No	Meter status: • INSTALLED • CONNECTED • DISCONNECTED • REMOVED
DSOContractEndDateObject	dateTime	No	Object end date in the contract
aggregatorEIC	string(1-16)	No	Aggregator EIC
isGridRegulationParticipant	boolean	No	The object participates in the provision of the regulation service • true (participates) • false (does not participate)

Element	Type	Req.	Description/details
rn	int	Yes	Serial number of returned results

Notes

[1] The address types are defined in the subsections above

[2] the information of a producing object is shown, if the object has a valid producer's permit (STDH code: GENERATION_PERMIT_NUMBER) **or** microgenerator act no. (STDH code: MICROGENERATOR_PERMIT_NUMBER) **and** the object has a valid "Generator" (STDH code: GENERATOR_TYPE) value of "Microgenerator (production)" **or** "Generator (production)"

Table 178 – List of *FindObjects* error messages

Error code	Description/notes
E_OBJECT_DOES_NOT_EXIST	Cannot find an object with EIC %1%.
E_NO_OBJECTS_SPECIFIED	Market message number %n% does not indicate any objects.

EXCHANGE OF CONSUMPTION DATA

The purpose of this section of the document is to describe the terminology and specifications for the exchange of consumption data and to provide information about the mechanisms for processing and saving consumption data.

The DP receives data from data sources managed by the DSO in *CSV* file format via a shared *SFTP* server, following the specifications of this standard. DSO consumption data can also be uploaded via the DP portal.

As long as the client's object is connected to the power grid, the DSO handles the accounting of its electricity consumption and the corresponding submission of the accounts to the DP in a timely manner.

The DP receives data on the electricity consumption of the objects served by the DSO through the data sources managed by the DSO using the following file types:

- **Interval consumption (DSO.CONS)**. In each trading interval, the amount of electricity delivered to the distribution system operator's power grid and received from the power grid at the user's objects, that the data source obtains from the meters, as well as any changes to this data that the data source makes later. The trading interval is defined in Cabinet of Ministers regulations no. 635.
  DSO can also submit interval consumption to the Data Platform on a daily basis. Submitting data by 08:00, "Daily consumptions (DAILYCONS)", "Daily purchases (DAILYPUR)" reports will be created for Suppliers.
- **Consumption confirmations (DSO.CONFIRM)**. Confirmations issued by the data source to the DP that the consumption data are correct and ready for processing (e.g., handing over to the supplier for settlement with the end user).

Calculation rows (DSO.BILL). Information about the services provided by the DSO that the DP receives from the DSO and hands over to the supplier. Suppliers can include this in their invoices. The calculation rows are not necessary if the client settles with the DSO for services provided by the DSO separately (the supplier is not a paying entity). If the supplier is the paying entity, then DSO must submit the billing row file. The data platform receives the following reports from the distribution system operators:

- **Loss data (DSO.LOSSES)**. Monthly report on internal consumption and process consumption (losses) that is intended for the loss purchaser.
- **Balance data (DSO.BALANCE)** Distribution system operator balance intended for the TSO.

Responsibility for the quality of consumption data

Every DSO is responsible for validating, reconciling, and correcting consumption data.

Net system

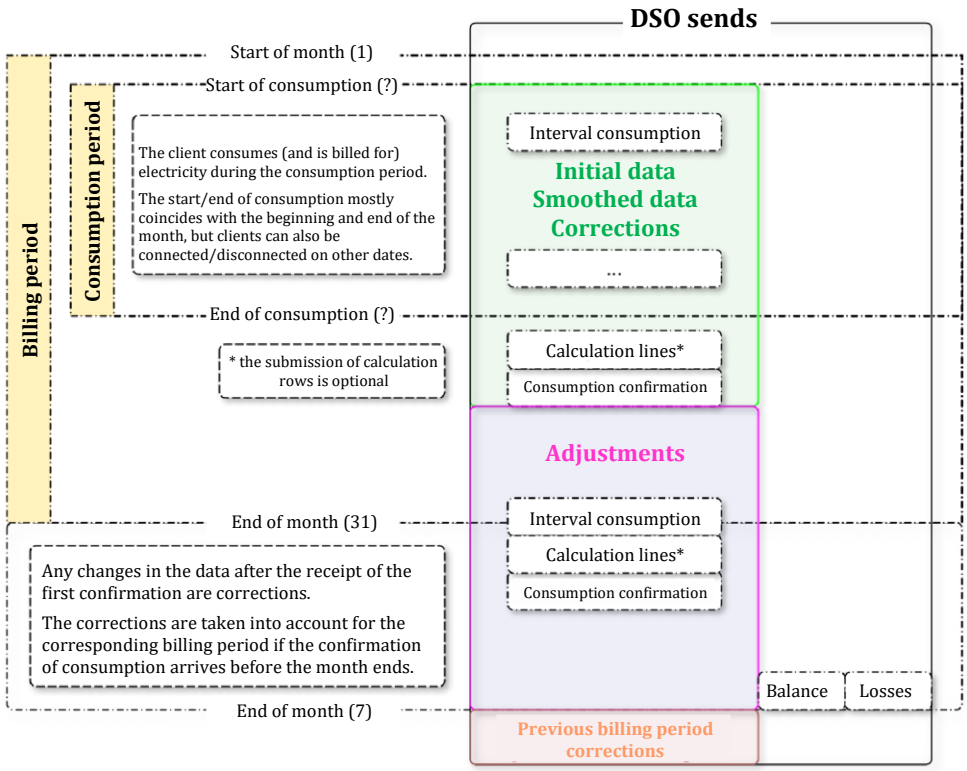
If the client has the **net metering** system active (the original net metering system), it transfers the electricity it generates to the power grid (creating virtual savings) and spends the saved electricity for its own purposes within the net metering year (according to Cabinet Regulation 635, at the time of the

preparation of this document, the metering year starts on 1 March and ends on the last day of February of the following calendar year). If the client has transferred more electricity to the grid during the billing period than it has consumed during that period, it does not pay the supplier for the electricity consumed and the difference is carried over to the next billing period within the net metering year (at the time of the preparation of this document, according to Cabinet Regulation 635, the net savings are voided at the end of the net metering year). If the client has transferred less electricity to the grid during the billing period than it has consumed during that period, it uses up its net savings (for which it also does not pay the supplier). If the client's consumption exceeds both the generated and the saved amounts, the additional electricity received by the client is accounted for according to the standard monthly load distribution schedule (not the client's actual consumption). The net metering system operates within individual MP: the net savings are not shared between different metering points of the same client.

In order to provide the data platform with information about the calculated electricity consumption of net metering system participants, the data source sends the net channel consumption values in addition to the A+ and A- channel consumption values (the actual A+ and A- values are required by the DP for reporting to system operators, which, unlike reporting to suppliers and purchasers, does not use net consumption data). The channel net consumption must be transmitted to the DP for the whole period during which the net metering is active (this can also be multiple periods within a month). If the actual A+ consumption of a billing period is fully covered by the electricity generated during the billing period and the net savings accumulated in previous billing periods, then '0' values must be submitted via the net channel. If A+ excess consumption occurs during the billing period, the client's smoothed excess consumption (based on a standard load distribution schedule) must be submitted via the net channel. The net savings values are not submitted to the DP: they must be stored and processed independently, in the DSO's systems.

If the client has an active **net billing** system (the new net system), the net consumption values are not accounted at the DSO level and are not submitted to the data platform as net channel consumption values, but are calculated at the supplier level (the suppliers are provided with data for A+ and A- channels according to actual consumption, and they perform the net calculations outside the data platform). The processing of such clients' consumption values on the data platform is no different from those for which the net system is not activated.

Sending of data over time



The monthly accounting of a client's consumption usually starts on the 1st of the current month and ends on the last day of the month. A client's contract may also take effect and be terminated on any other date, so the end and start dates of the client's **consumption period** can differ from those of a calendar month.

Calendar month-based accounting is used for data exchange and billing between system operators and market participants, so this period is called the **billing period**. Data on connected client objects must be sent to the DP as soon as they are available; however, they are not always available immediately after the billing period, so each DSO sets a date and time for the **closing of the month** (usually on the 7th of the following month, at 23:59), by which all the billing period's data for all client objects must be ready and sent to the DP.

The DSO sends the DP data for each **interval's consumption** for client objects within their respective consumption periods.

Initial read data can be sent to the DP as soon as they are available (but no later than by the closing of the month) and as often as necessary. Given the large amount of interval consumption data, it is more efficient to send interval consumption data to the DP as often as possible (e.g., every day for the consumption recorded on the previous day), rather than sending the entire period's consumption data set after the end of the period.

If the data were initially not read at all or were read incorrectly, the data source can resend the updated data to the DP. The data source may also round consumption data, fill in missing data and smoothen the data as it sees fit, or change the data for other reasons, and send these changes to the DP. If only some of the consumption intervals are changed, it is allowed only to send the DP the data that have been changed: there is no need to resend the data for the whole consumption period.

At the end of the consumption period, the data source sends a **consumption confirmation** to the DP, which signals that the consumption data (interval consumption and calculation rows) are correct and ready to be processed (e.g., for sending to the supplier). At the time of the confirmation of

consumption, the DP must have all the interval consumption data, for which a confirmation has been sent, as well as all the calculation rows to be sent to the supplier.

Given that over time, interval consumption data may change for various reasons, it is the confirmation of consumption that authorises the use of consumption data for processing (including their submission to the supplier). Consumption confirmations for all active objects must be sent to the DP as soon as they are available, but no later than the end of the month. Based on the additional information included in the consumption confirmations, the DP verifies the interval consumption data and only sends complete and correct data to the suppliers. Because the DP has no way of checking that all calculation rows have been submitted on time and are correct, the DP does not send an alert to the DSO.

Once the interval consumption data are sent to the supplier (after the receipt of first consumption confirmation), further changes in the interval consumption data are referred to as **corrections**. Like adjustments before the receipt of the consumption confirmation, corrections need only be sent to the DP for those consumption intervals for which the data have changed. After sending all the modified data to the DP, the data source must send a consumption confirmation, on the basis of which the correction can be sent to the supplier. Corrections for the same consumption period can be made repeatedly for up to 12 months after the end of the consumption period.

The data source can also send **calculation rows**. They contain information about the services provided by the DSO (such as connection, electricity distribution) and their costs, which suppliers include in their bills. This information is not required if the client has a contract with the DSO and pays for the DSO services separately (the supplier is not a paying entity). The calculation rows must be sent to the DP as soon as they are available, but no later than the end of the month.

Metering points, meters, registers, and channels

Electricity consumption is recorded by meters, which may have one or more **registers** active. Registers can be activated and deactivated on any day of the month. The data platform supports internationally accepted types of meter registers (the codes are defined according to the *OBIS* standard).

For consumption processing purposes, the DP defines 6 possible measurement **channels** (net and losses are virtual channels calculated by other systems, but processed by the DP in the same way as others).

Table 179 – Channel codes and names

Code	Name	Description/details
1	A+	electricity received from the grid at any time of the day or night
2	A-	electricity returned to the grid at any time of the day or night
3	R+	reactive energy received from the grid at any time of the day or night
4	R-	reactive energy returned to the grid at any time of the day or night
N	NETO	calculated consumption taking into account net savings and generation
L	Losses	electricity losses in the distribution system

The interval consumption and consumption confirmations for a data source must be sent separately (in separate rows of the data files) for each of the channels that were active during the consumption period. No data needs to be sent for inactive channels.

Data for different channels can be sent to the DP at different times (net channel data are typically only sent at the end of the consumption period, because they can only be calculated once the data source has collected all the other consumption data for the period). Each channel can be active on different days, or not be active at all. For example, a net channel can be activated and deactivated multiple times during the same consumption period. Consumption acknowledgements must be sent for the exact consumption periods of the channels in question, for the time when the channel is active and the interval consumption data are submitted to the data platform. Consumption confirmations for the consumption that is to be included in a single client invoice must be sent together (in one file). For example, if a net channel is activated and deactivated multiple times within a billing period, there must be a separate confirmation for each of these consumption periods (they must be sent together – after the end of the overall consumption period).

Because the DSO can change the meters of the objects over time and because the meter numbers are not unique, the meters are linked to **the metering points**. The MP is identified by a number unique within the DSO, and it logically points to a single electricity connection. One or more MP can exist at any single object. Every metering point corresponds to one and only one active meter at a time (but historically there may be several different ones, each active in their own period).

For the purposes of consumption accounting, it is irrelevant which meter is active at which time during the period, so in interval consumption data and in consumption confirmations, consumption is only identified by the MP number. Meter readings are neither used nor saved for interval consumption accounting.

Since suppliers and other market participants must include both the MP number and the meter number in the individual DP reports, the system has to be able to identify which meter is active in which consumption interval (and there must be only one meter in each consumption interval; otherwise, it will not be possible to generate these reports). The meter change information must be transmitted to the DP before the consumption confirmation is sent (and no later than by the closing of the month). If it is necessary to change a meter number already sent to the supplier, this can only be done by cancelling all incorrectly sent consumption confirmations, then correcting the data and sending a new confirmation.

Error processing

Structural validation

When a new file is received, the DP first checks if the received file:

- is in *CSV* format;
- has the correct number of fields;
- has every field in the correct format.

The check is carried out for every row. The processing stops at the first error detected. The following information is sent to the e-mail address provided by the DSO (if the DSO has agreed to receive e-mail notifications from the DP controller):

- the name of the file containing the error;
- the number of the row with the error;
- the row with the error (length limited to 500 characters);
- the text of the error message.

Table 180 – List of structural errors in *CSV* files

Error message	Description

Invalid file	The file is empty or characters are found in the first row that are not in the *WINDOWS-1257* encoding, or no semicolons are found in the first row
Line too long	File row is longer than the specifications allow (taking into account the total of the maximum lengths of all fields)
Invalid number of fields	Number of fields in a row does not comply with the specifications
Invalid field type	A field value does not comply with the format defined in the specifications (type, length, permitted values)

Logical validation

If the file is structurally correct, it can be processed further. The processing does not stop at logical errors found in the file: only the incorrect rows do not see further processing. If errors are found during the logical validation process, a *CSV* error file is created that includes the error row and an additional field, i.e., the error message. This file is saved on the same shared *SFTP* server or portal as a received file, and a notification of its creation is sent to the e-mail address specified by the DSO. The notification includes the name of the error file.

Lists of logical validation error messages are available under Interval consumption data (DSO.CONS), Calculation rows (DSO.BILL), Consumption confirmations (DSO.CONFIRM).

Consumption data file loading

Placement of files

For each type of incoming file (interval consumption data, consumption confirmations, calculation rows, loss data, balance data), a separate shared *SFTP* server configuration (server address, access information, folders) is defined for every DSO. DSO continuously uploads files to the corresponding directories, doing so as often as necessary. Given the large amount of data, it is best to send interval consumption files as often as possible.

The data platform constantly checks the directories of the shared *SFTP* server and, if new files are found, adds them to the processing queue. DP can process incoming files in parallel, splitting them into multiple fragments.

The following types of consumption data received from the SO are currently supported:

Table 181 – Consumption data types

Code	Name	File name templates
CONS	Interval consumption data	*DSO.CONS*.zip, *DSO.CONS*.csv
BILL	Invoice/calculation data	*DSO.BILL*.zip, *DSO.BILL*.csv
CONFIRM	Consumption confirmation data	*DSO.CONFIRM*.zip, *DSO.CONFIRM*.csv
LOSSES	Loss data	*DSO.LOSSES*.zip, *DSO.LOSSES*.csv
BALANCE	Balance sheet data	*DSO.BALANCE*.zip, *DSO.BALANCE*.csv

File names must comply with the file name templates specified in the table above; files that do not comply with these templates will not be processed. It is preferable (but not required) to compress the files using the *.zip* method.

If the SO does not wish to create or use its own custom file names (which must comply with the file name templates), please use the template provided below (see template and example below).

For clarity, it is preferable (but not required) that the file names follow this template:

```
<PERIOD>_<NAME>_<EIC>_<YYYMMDDHH24MMSS>.csv.zip
```

The following placeholders are used in the file name template.

Table 182 – Placeholders used in the *CSV* file name templates

Template placeholder	Description/details of the placeholder
PERIOD	Settlement period in MM-YYYY format
NAME	File type (corresponds to the file name templates described above).
EIC	EIC of the participant that prepared the file
YYYYMMDDHH24MMSS	File preparation time YYYYMMDDHH24MMSS format

Example:

```
11-2022_DSO.CONS_43X-S-ST002100-4_20221201144532.csv.zip
```

File format

All information to be transferred to the data platform must be sent to the data sources in *CSV* file format.

Table 183 – *CSV* file characteristic values for exchanging consumption data

Characteristic value	Format/specifications
File encoding	WINDOWS-1257
First row	Column field headings (DP does not load and process the first row in the file)
Column separator	';' (semicolon), note that it is not possible to set ';' as a component of data fields
Decimal part separator	'.' (point)
Date format	YYYY-MM-DD (Latvian time zone)
Date and time format	YYYY-MM-DDTHH24:MM:SSZ (UTC time zone) or YYYY-MM-DDTHH24:MM:SS±HH:MM (indicating the time zone)
Additional	Column values are not put in quotes ("")

In incoming files, all data indicating the time of day **must** specify the time zone. The DP supports the inclusion of the following time zones:

- *UTC* in the following format: YYYY-MM-DDTHH24:MM:SSZ;
- Latvian standard (winter) time in the following format: YYYY-MM-DDTHH24:MM:SS+02:00;
- Latvian summer time in the following format: YYYY-MM-DDTHH24:MM:SS+03:00.

If the data source does not use the *UTC* time zone format, it must ensure the correct and timely conversion of the specified time zone when Latvia switches to and from summer time (*UTC* +02:00 to *UTC* +03:00).

Dates (if no time is specified in the field, i.e., exactly the date format) are interpreted in Latvian time.

Interval consumption data (DSO.CONS)

Consumption accounting intervals In the data platform, the consumption accounting interval (ISP) coincides with the trading interval specified in regulatory acts, which is used to hand over consumption data to suppliers, other market participants, system operators, and as part of billing for the clients. As the trading interval changes in Cabinet of Ministers regulations no. 635, the length of the data platform's consumption accounting interval will be reduced accordingly. On DP, during the billing period, 1 consumption accounting interval can exist at the same time, that divides the full 1 hour into equal parts.

Typically, the DSO sends the DP interval consumption data for the accounting intervals defined for the whole system, but the DSO can also send consumption data with a different accounting interval duration (**integration period**) and change this duration over time as often as necessary (there is no option to notify the data platform of a change in the integration period). The DP may accept and store data for any integration period that is not less than 1 minute or more than the length of the *ISP* and that divides a full 1 hour into equal parts (i.e., 15, 10, 6, 5, 3, 2, 1 minutes). Submitted consumption data in another integration period will be available to Suppliers with the web service *GetDetailedObjectConsumption*, choosing "native" data granularity.

The DP does not have the function to change the integration period (accounting interval) for existing, saved interval consumption data. For example, if for a particular hour, interval consumption data are received with a 15-minute integration period (i.e., 4 interval consumption records are stored in the system for that hour), the corresponding MP for that hour will continue to have a 15-minute integration period even if the data source cancels and submits new interval consumption data. This should be taken into account when sending corrections to consumption data for previous settlement periods: data for these must be sent at the same intervals as the original submissions. For example, when the electricity market moves from a 1 hour to a 15 minute ISP interval, corrections to past data submitted with a 1 hour accounting interval can only be submitted with the same 1 hour accounting interval.

The time of the received consumption interval (in the way this must be specified in the interval consumption file) indicates the time immediately after the end of the interval. This time must be either in the *UTC* time zone or in the Latvian time zone, indicating the correct time zone. For example, if the interval consumption file uses the Latvian time zone and has records at hourly intervals, the interval time for the first consumption value of the day (i.e., the records were kept from 00:00:00 to 01:00:00) is 01:00:00 of the day of consumption and for the last consumption value of the day it is 00:00:00 of the following day. This aspect must also be taken into account when changing time zones (moving to summer or winter time), e.g., in 2022:

In spring, the day of the daylight savings switch began with the following interval times (ISP interval 1 h):
`2022-03-27T01:00:00+02:00`
`2022-03-27T02:00:00+02:00`
`2022-03-27T03:00:00+02:00`
`2022-03-27T05:00:00+03:00`
`2022-03-27T06:00:00+03:00`
	An example. In spring, the time change hour starts with the following interval times (ISP interval 15 min):
	`2022-03-27T03:00:00+02:00`
	`2022-03-27T03:15:00+02:00`
	`2022-03-27T03:30:00+02:00`
	`2022-03-27T03:45:00+02:00`
	`2022-03-27T05:00:00+03:00`

In autumn, the day of the daylight savings switch began with the following interval times (ISP interval 1 h): 2022-10-30T01:00:00+03:00 2022-10-30T02:00:00+03:00 2022-10-30T03:00:00+03:00 2022-10-30T04:00:00+03:00 2022-10-30T04:00:00+02:00 2022-10-30T05:00:00+02:00 2022-10-30T06:00:00+02:00	*An example.* In autumn, the time change hour starts with the following interval times (ISP interval 15 min): 2022-10-30T04:00:00+03:00 2022-10-30T04:15:00+03:00 2022-10-30T04:30:00+03:00 2022-10-30T04:45:00+03:00 2022-10-30T04:00:00+02:00 2022-10-30T04:15:00+02:00 2022-10-30T04:30:00+02:00

Consumption statuses

Status is a feature of consumption that describes the origin of each individual interval consumption value: the consumption value can be read from the meter if the meter is functioning correctly, or be calculated/changed for various reasons. For every interval consumption value, the system can receive multiple statuses at the same time and save them. If consumption is read correctly, the status is specified accordingly. The status codes are as follows.

Table 184 – Consumption status codes

Code	Description/details
C	No consumption data (e.g., data not read or implausible value)
N	Voltage cut-off during the integration period (if not combined with *C*, the consumption data can be used)
U	Value error (if not combined with *C*, the consumption data can be used)
D	Consumption data changed in consumption processing (e.g., smoothing or rounding)
E	Consumption data manually entered into the data source

Two consumption values are stored for each interval consumption record: *raw* (as-read) and *bill* (as-billed). If no consumption record exists in the system for the interval, the new consumption value is recorded as both *raw* and *bill*. If a consumption record has already been stored for the interval, the new consumption value always overwrites the *bill* value of the existing record.

It is possible to keep a previously stored *raw* consumption value that was correctly read or manually entered, while also saving the consumption value changed during DSO processing, which can be used for billing (*bill* value). The new consumption value always overwrites the *raw* value of an existing entry, unless both of the following conditions are met:

1. if the status of the incoming interval consumption is *D* (no other codes) and
2. if the previously received interval consumption status does not contain *C* (meaning that the saved *raw* consumption value is correct) or contains both *C* and *E* (the value failed to read and was manually entered).

Raw and *bill* consumption values are available to Suppliers in the *GetDetailedObjectConsumption* service

File format

The file format is suitable for sending all consumption intervals data: first-read data, smoothed data, as well as corrections and adjustments.

If the DSO has arranged for interval consumption data to be sent every day

The data may not be completely entered, some values may be blank if the reading value failed to read. For one day, 24 hours of consumption must be submitted. For hours in which the MP was not connected, consumption of zero ('0') must be sent. The data must be sent for the previous day by 8:00 a.m.

If the DSO has arranged for interval consumption data to be sent once a month, covering the settlement period

Fully completed data for all metering points must be submitted. The files must be submitted by the end of the month, for the previous settlement period. There must be no blank consumption fields; if there are no data, enter '0'. If the DSO cannot provide interval consumption data, i.e., the meter only records monthly consumption on the 1st of each month, or if its readings are taken manually, then we propose distributing the month consumption according to this Standard load distribution schedule.

It consists of the following fields. All the fields are required (*status* can be empty).

Table 185 – Interval consumption file format

Name	Type	Description/details
datetime	datetime	End time of the consumption interval, indicating the time zone. Must be in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Cannot have a future value If ISP interval 1h: • The first value of the day of consumption is 01:00:00, which is the consumption from 00:00 to 01:00, and the last value of the day of consumption is 00:00:00, which is the consumption from 23:00 to 00:00. If ISP interval 15 min: • The first value of the day of consumption is 00:15:00, which is the consumption from 00:00 to 00:15, and the last value of the day of consumption is 00:00:00, which is the consumption from 23:45 to 00:00:00.
mp	string	The metering point number (*external_reference*) specified in the master data. Each MP number is unique for the DSO. May repeat for various DSO If the MP number does not exist, the entry will not be saved. Maximum length: 30 characters
channel	char	Measurement channel code. 1 character. The following channel codes are provided: 1, 2, 3, 4, N, L. If any of the channels is missing, no data are submitted for it.
status	string	Status value. Blank (if consumption is read correctly), or has at least one of the following codes: C, D, E, N, U (without punctuation or other characters between them if several are to be indicated at the same time). Maximum length – 8 characters
consumption	float	Consumption in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
timestamp	datetime	Time of consumption reading/calculation, indicating the time zone. Must be in

		YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format

The timestamp of the consumption reading/calculation indicates the time of origin of each consumption value (original reading time if the consumption value is correct, or re-reading time if the value is re-read, manually entered, or calculated). It can also be the time at which the consumption value is received, saved, or created by the data source, but it is important that it is updated every time the data source changes the consumption values (e.g., when it is re-read, edited, or smoothed). This value is later used in the consumption approval process, compared with what is received in the consumption confirmation file. The data source must ensure that the timestamp value included in the consumption confirmation exactly matches the most recent consumption interval timestamp values sent to the DP (meaning that if different systems are responsible for creating these files, the data source must ensure that they communicate with each other, in order for the field value in the two files to match).

Due to the large size of the interval consumption file, the error message that the MP number does not exist is included in the error file only once for each such MP.

The following error messages are possible in interval consumption files.

Table 186 – list of logical errors in interval consumption files

Error code	Description
E_CONS_DATE_IN_FUTURE	Future dates not allowed
E_FILE_ERROR	An error occurred processing the file, please check if the file is correct as per the specifications. Technical error: %1%
E_MP_NOT_FOUND	Metering point %1% not found The MP number specified does not exist for the DSO that sent the file. For each MP that does not exist, this message is included in the file only once

Reloading erroneous records

When uploading interval consumption files to the DP, business errors may occur. The DP provides automatic reloading of business errors within a specified time period.[1] If there is an (R) attached to the error description in the error files, then it is not necessary to manually reload this line in the DSO, as it will be reloaded automatically as soon as the data that prevented the initial upload arrives.

Notes:

[1] The DP provides two parameters: one parameter that determines how often erroneous data is reloaded per day, and another parameter that specifies the period during which the DP attempts to reload erroneous data. Currently, data reloading is set to every 24 hours from the last unsuccessful data upload attempt. Data older than 30 days will not be reloaded.

Table 187 – List of interval consumption business errors for automatic reloading

Error code	Description
E_MP_NOT_FOUND	Metering point %1% not found (R)

A report is generated for erroneously loaded interval consumption data. The report description is available here.

Calculation rows (DSO.BILL)

The calculation rows are the information for the services provided by the DSO (connection provision, power distribution, etc.) that the DP receives from the DSO and passes on to the supplier, if the supplier is the paying entity, and not the DSO. Suppliers include it in their invoices to clients.

The calculation rows do not need to be submitted if the client settles with the DSO for services provided by the DSO separately (the supplier is not the paying entity, and the DSO sends its own invoices to its clients). If the supplier is the paying entity, the calculation rows must be submitted.

The DP does not process the information received: it is forwarded to the supplier, without change.

File format

The calculation rows file consists of the following fields.

Table 188 – File format of the calculation rows

Name	Type	Description/details
cons ref	string	Billing/calculation reference identifier. A combination of characters that uniquely identifies a row or set of rows for the same client, object, and period, and cannot repeat later (in other calculation row files). The *cons ref* value cannot be the same for calculation rows with different client EIC, object EIC, and supplier EIC codes in the same period. The *cons ref* value can be the same for the rows of the same client, object, and period, with different channels. Maximum length: 16 characters. Field required
bill line ref	string	Unique number of the calculation row. Cannot be repeated within a DSO. Maximum length: 16 characters. Field required
supplier eic	string	Supplier EIC code. Maximum length: 16 characters. Field required
customer eic	string	Client EIC code. Maximum length: 16 characters. Field required
object eic	string	EIC code of the object. Maximum length: 16 characters. Field required
meter	string	Meter number (if the calculation row refers to a meter). It may also contain a description to the subject of the invoice if the meter number is not available. Maximum length: 255 characters
date from	date	Consumption period start. Must be in YYYY-MM-DD format. Field required
date to	date	Consumption period end. Must be in YYYY-MM-DD format. May not be earlier than *date from*. The settlement period in this field must match the period in the *date from* field. Field required
tariff	string	Connection rate name. Maximum length: 255 characters
component code	string	Rate component code. Maximum length: 255 characters
component description	string	Rate component description. Maximum length: 255 characters
reading from	float	Meter reading at the beginning of the consumption period. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
reading to	float	Meter reading at the end of the consumption period. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
quantity	float	Calculates the quantity of services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. For the rows that need to be

		cancelled, all listed service amounts related to the specific object must be entered with the oppoobject sign (e.g., a minus sign). Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
uom	string	Unit of measurement of the services listed in the calculation row. Maximum length: 16 characters
price	float	Calculates the price of the services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
amount	float	Calculates the sum of the services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. For the rows that need to be cancelled, all listed service amounts related to the specific object must be entered with the oppoobject sign (e.g., a minus sign). Maximum integer part length: 2 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
tax rate	float	The percentage of the tax rate applicable to the service listed in the calculation row. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 2 digits. Maximum integer part length: 2 digits. Omitting the initial zero is allowed

It is only possible to save a calculation row if during the consumption period specified:

- the object specified exists and is connected to the DSO that sent the file;
- the supplier specified exists and is active;
- the client specified exists and is active.

The invoice/estimate reference identifier *(cons ref*) refers to a specific invoice or calculation that contains the corresponding calculation row. Calculation rows intended for different clients or different suppliers may not be included in the same invoice/calculation. *Cons ref* cannot repeat in other DSO calculation row files, and all calculation rows related to the same invoice/calculation must be included in the same DSO calculation row file. Calculation rows with the same *cons ref* and *object eic* are always sent to the supplier together (in one file). Calculation rows with different *cons ref* may be sent to the supplier separately.

The following error messages are possible in calculation row files.

Table 189 – List of logical errors in calculation row files

Error message	Description
E_CONS_DATE_FROM_GREATER_DATE_TO	The start date specified is later than the end date.
E_DATE_OUT_OF_PERIOD	Date is outside the specified period
E_INVALID_SUPPLIER	Wrong supplier: %1%
E_INVALID_CUSTOMER	Wrong client: %1%
E_INVALID_OBJECT	Wrong object: %1%
E_CONSREF_ALREADY_USED	CONS REF %1% identifier already used
E_CONSREF_ALREADY_SENT	CONS REF %1% identifier has been cancelled, sent to a supplier, or does not belong to this supplier/client
E_BILLREF_ALREADY_USED	BILL REF %1% identifier already used
E_FILE_ERROR	An error occurred processing the file, please check if the file is correct as per the specifications. Technical error: %1%

Reloading erroneous records

When uploading interval consumption files to the DP, business errors may occur. The DP provides automatic reloading of business errors within a specified time period.[1] If there is an (R) attached to the error description in the error files, then it is not necessary to manually reload this line in the DSO, as it will be reloaded automatically as soon as the data that prevented the initial upload arrives.

Notes:

[1] The DP provides two parameters: one parameter that determines how often erroneous data is reloaded per day, and another parameter that specifies the period during which the DP attempts to reload erroneous data. Currently, data reloading is set to every 24 hours from the last unsuccessful data upload attempt. Data older than 30 days will not be reloaded.

Table 190 – List of business errors for automatic reloading

Error code	Description
E_INVALID_SUPPLIER	Incorrect supplier: %1% (R)
E_INVALID_CUSTOMER	Incorrect customer: %1% (R)
E_INVALID_OBJECT	Incorrect object: %1% (R)

A report is generated for erroneously loaded data. The report description is available here.

Consumption confirmations (DSO.CONFIRM)

A consumption confirmation is a file that serves as a confirmation sent by the data source to the DP that the consumption data are correct and ready for use (including for handing over to the supplier). A consumption confirmation is expected for every MP channel (separately) after the end of the consumption period. The first confirmation must be sent to the DP before the end of the month of the respective billing period.

Initial approvals, corrections and cancellations

The file format for consumption confirmations supports two types of confirmation: **confirmation messages** and **cancellation messages**.

Because different consumption data for the same MP channel can be included in different bills (e.g., when A+ and A- channels are connected to different suppliers), it is possible to both confirm and cancel consumption data for each MP channel separately. Each MP channel can also have its own consumption period, because the change of supplier can also occur on different dates for each MP channel.

Both the initial confirmation of consumption and any subsequent corrections use confirmation messages in the same format. The system does not automatically cancel previously received confirmations when a confirmation message is received. The consumption periods (from-to dates) if MP channels cannot be split, merged, or otherwise modified by a correction confirmation message: consecutive consumption confirmations for the same MP channel can only have the same or non-overlapping consumption periods. Corrections also cannot be used to change such previously confirmed values as the client, supplier, and others. New confirmation messages are in addition to the information already communicated to the supplier during the previously defined consumption period. New (additional) calculation rows can also be added to them.

If it is necessary to indicate that previous invoices have been cancelled, a cancellation message must be sent before the new confirmation message for the corresponding correction. Only the most recent confirmation message can be cancelled. The cancellation period must match the period of the previous confirmation (multiple confirmations for different consumption periods cannot be cancelled with the same cancellation message). There may be calculation rows associated with a cancellation message: the DP does not create these itself.

Cancellation messages are used when it is necessary to correct not only the interval consumption data but also information like the consumption period (e.g., if the client's contract took effect or was terminated on dates other than those previously indicated), the meter number, client details, etc.

Linking confirmations to other consumption data

A consumption confirmation is the basis for transferring the consumption data (interval consumption and calculation rows) to the supplier for use in reports sent to system operators. The DP does not transfer consumption data to the supplier until these are confirmed. Consumption data are not included in the reporting to system operators until they are confirmed. The consumption confirmation itself is not sent to market participants, while the information it contains indicates the data to be sent.

Interval consumption data show the consumption values for every MP channel. Consumption confirmations validate the total consumption for the consumption period specified in each MP channel by referring to the previously transmitted interval consumption data for that MP channel, and linking these consumption data to the supplier, the client, and the object.

The calculation rows indicate the additional information that needs to be sent to the supplier in question, together with the interval consumption for the specified client and object. In order to show to the DP which calculation rows can be linked with which interval consumption values (and sent

together to the supplier), the invoice/calculation reference identifier (*cons ref*) is used in the consumption confirmations. Every individual invoice or calculation has its own identifier.

Based on the *cons ref* value, the DP groups the information to be sent to the supplier: the data related to the same object and having the same *cons ref* are always only sent together. *Cons ref* separates individual adjustments (and cancellations) from each other: data related to consecutive adjustments/cancellations must be sent with different *cons ref* values, and it is not intended that a consumption confirmation with the same *cons ref* as that used in previous files is received later.

If at one of the objects, this client produces electricity that is purchased by another market participant (not the same supplier), the consumption confirmations for the electricity produced at this object (A-channel) must have a different *cons ref*.

Note that all confirmations must have the same *cons ref* if one supplier has to transmit consumption data for several channels of the same MP at the same time (e.g., if net metering is used and data for A+, A-, and net channels are sent to the DP). This is necessary because if the supplier has to combine several channels in the consumption reports (e.g., replacing the A+ channel consumption by the net channel consumption on certain days), these actions can only be performed for consumption with the same *cons ref*.

Confirmations for different channels of the same MP can be related to different *cons ref*, different suppliers, different consumption periods, and sent at different times, but all confirmations with the same *cons ref* must be included in the same file (to prevent situations in which data for different channels that must be processed together are received by the DP when the processing is already complete and the data have been partially sent).

An acceptable situation may arise whereby a supplier is required to provide calculation rows without interval consumption data for an object, or a supplier is required to provide interval consumption data without calculation rows. In both these cases, the consumption confirmation must also be sent to the DP, as only the consumption confirmation authorises the DP to send the data to the supplier.

File format

The structure of consumption confirmation files is described in the table below, whereas the specific conditions for completing the fields are listed here:

- if the consumption confirmation does not refer to consumption, the MP number, *channel* and *consumption* are not required,
- confirmation messages need not include *annuled cons ref*,
- cancellation messages need not include a timestamp,
- the *orig_cons_ref* field is optional,
- the rest of the fields are required.

Table 191 – File format for consumption confirmations

Name	Type	Description/details
cons ref	string	Billing/calculation reference identifier. A combination of characters that uniquely identifies a row or set of rows for the same client, object, and period, and cannot repeat later (in other calculation row files). The *cons ref* value cannot be the same for calculation rows with different client EIC, object EIC, and supplier EIC codes in the same period. The *cons ref* value can be the same for the rows of the same client, object, and period, with different channels. Maximum length: 16 characters. Field required
annuled	string	Reference identifier of the invoice/calculation confirmation to be cancelled. Indicating a

cons ref		field means that the row is a cancellation message (the previous confirmation is cancelled). Maximum length: 16 characters
supplier eic	string	Supplier EIC code. Maximum length: 16 characters
customer eic	string	Client EIC code. Maximum length: 16 characters
object eic	string	EIC code of the object. Maximum length: 16 characters
mp	string	Metering point number (*external_reference*). Each MP number is unique for the DSO. May repeat for various DSO Entering the value is not required. Maximum length: 30 characters
date from	date	Consumption period start. Must be in YYYY-MM-DD format. Cannot have a future value
date to	date	Consumption period end. Must be in YYYY-MM-DD format. May not be earlier than *date from*. Cannot have a future value. The settlement period in this field must match the period in the *date from* field
billing date	date	Invoice/calculation issuing date. Must be in YYYY-MM-DD format. Cannot have a future value
channel	char	Measurement channel code. Not specified if no MP is indicated. 1 character. The following channel codes are provided: 1, 2, 3, 4, N, L
consumption	float	Consumption for the whole period, in kilowatt-hours. Not specified if no MP is indicated. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
timestamp	datetime	Latest consumption reading/calculation time (indicating the time zone) confirmed by this message. Must be in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Need not be specified in a cancellation message
orig_cons_ref	string	Reference identifier of the original invoice/calculation confirmation. Indicating a value in this field means that the corresponding calculation rows were sent previously, using the *cons ref* specified, and the system need not wait for them for this confirmation. Maximum length: 16 characters

The following additional checks are performed in the initial processing of incoming consumption confirmations (a row cannot be processed further if one of these conditions is not met):

1. if the specified object is connected to the DSO that sent the file;
2. if the specified supplier, client, object, and MP exist.

The following additional checks are also performed when receiving confirmation messages (but not cancellation messages) (a row cannot be processed further if one of these conditions is not met):

1. if the specified channel exists and was active during the specified period;
2. if this combination of supplier, client, object, and MP (regardless of the channel) exists and was active throughout the period specified.

The invoice/calculation reference identifier *(cons ref*) field is only used in the data platform for the correct grouping of data and linking of consumption confirmations to calculation rows. This field is required even if no calculation rows are sent.

If the *annuled cons ref* field is blank, the row is a consumption confirmation message. If the *annuled cons ref* is not blank, the line is a cancellation message. The *annuled cons ref* field indicates the *cons ref* value of a previously sent consumption confirmation which this cancellation message cancels. A

consumption confirmation file cannot contain a cancellation message for a consumption confirmation contained in the same file. The reverse is allowed: i.e., including in one file the cancellation of a previously sent consumption confirmation and a new consumption confirmation. Please note that if the cancellation of a previously sent consumption confirmation and a new consumption confirmation are included in the same file, and the loading of the cancellation message is not possible due to an error, the subsequent confirmation message will also not be accepted.

The metering point number is not provided (blank) if this consumption confirmation is not related to consumption but only confirms the transmission of the calculation rows. This can be used if the data source for an object only needs to provide the supplier with the calculation rows without interval consumption values (this can be for certain individual services). For consumption confirmations that have no interval consumption data, the *channel* and *consumption* fields are left blank.

The *date from* and *date to* fields indicate the consumption period. They must be within one calendar month from each other. If consumption data have already been confirmed for a consumption period, the next consumption confirmation for the same MP channel can only be for a consumption period that does not overlap or exactly match the previously confirmed one. If it is necessary to change the consumption period, the previous confirmation must be cancelled.

A consumption confirmation cannot be sent for a consumption period older than 12 months. For example, new confirmations for consumption on 1 January 2021 can be sent until the billing period for January 2022 ends, i.e., until 7 February 2022 (or any other month end date specified in the DSO configuration).

Billing date is the date of issue or creation of the invoice/calculation (identified by the *cons ref* field) that the specific consumption confirmation pertains to.

The ***Consumption*** **field must state the full (total) consumption on the channel within the specified consumption period**. Full consumption, and not the difference since the previous confirmation, must also be specified for corrections. If a correction is confirmed and only some of the consumption intervals are affected by its changes, the cumulative consumption for the whole consumption period, also taking into account the previously confirmed consumption intervals, must also be indicated in this field.

The following fields must be the same in the cancellation message and in the consumption confirmation it cancels:

- *supplier eic*,
- *client eic*,
- *object eic*,
- *mp*,
- *date from*,
- *date to*,
- *channel*,
- *consumption*.

In the cancellation message, the *annuled cons ref* field must contain the *cons ref* of the consumption confirmation to be cancelled. Meanwhile, the *cons ref* field must be different. The cancellation date must be specified in the *billing date*. Only the previous (most recent) consumption confirmation for the corresponding MP channel of the same consumption period can be cancelled. A cancelled consumption confirmation cannot be cancelled more than once. A cancellation message cannot be cancelled.

The *orig cons ref* field is intended to tell the data platform that the calculation rows for the confirmed consumption were sent to the DP before (with the *cons ref* specified), so that even if the supplier is the paying entity for the consumption in question, the DP does not have to wait for new calculation rows.

Checking consumption data and sending them to the supplier

For each consumption confirmation received (excluding cancellation messages), the following checks are regularly carried out by the DP:

1. if the MP channel does not have any interval consumption with the latest (last received for the interval) status containing *C* during the specified consumption period (unless the statuses *C* and *E* are present at the same time);
2. the MP channel does not have any interval with no consumption value during the consumption period specified;
3. if the consumption reading/calculation time (timestamp) for the MP channel in the consumption confirmation for the specified consumption period matches the latest timestamp among all received consumption intervals (the fields must match exactly);
4. if the total consumption (consumption) for the MP channel in the consumption confirmation for the specified consumption period matches the entire interval consumption total received.

The DP does not hand the following data over to suppliers (the rest of the processing for these data is no different from that of any other data: these are also checked):

- reactive energy consumption data (channels R+ and R-)
- active energy consumption data (channels A+ and A-) on days when NET consumption (channel N) is active (and confirmed).

The DP queues consumption data for sending once:

- the consumption data have been checked and are correct for all MP channels of the same client object for which the same *cons ref* is specified, or
- (for individual suppliers, as specified in the DP configuration), the consumption data have been checked and are correct for all metering point channels of the same object for which the same *cons ref* is specified, or
- consumption data are linked to cancellation messages.

If the consumption dataset to be sent contains A+ or net consumption for one object and the trading link for the object is marked as the supplier performing the settlement, the DP also waits for the calculation row for that object before queueing this consumption dataset for transmission.

At any time while the consumption data are not queued for transmission, the data source can send and update interval consumption data and send calculation rows. Once the data are queued for transmission, they can no longer be changed or expanded: new interval consumption data are treated as adjustments which have to be confirmed separately with a new consumption confirmation.

The following error messages are possible in consumption confirmation files.

Table 192 – List of logical errors in the consumption confirmation files

Error message	Description

E_CONS_DATE_FROM_GREATER_DATE_TO	The start date specified is later than the end date.
E_CONS_DATE_IN_FUTURE	Future dates not allowed
E_DATE_OUT_OF_MAX_CORR_AGE	Date is older than the permitted adjustment period
E_DATE_OUT_OF_PERIOD	Date is outside the specified period
E_INVALID_SUPPLIER	Wrong supplier: %1%
E_INVALID_CUSTOMER	Wrong client: %1%
E_INVALID_OBJECT	Wrong object: %1%
E_NO_ACTIVE_DSO_RELATION	No active link between DSO %1% and object %2%
E_NO_ACTIVE_RELATION	No active link between supplier %1%, client %2%, and object %3%
E_MP_NOT_CONNECTED_TO_OBJECT	Metering point not connected to the specified object for the entire period indicated
E_CHANNEL_NOT_ACTIVE	Channel %1% not active
E_DUPLICATE_CONFIRM	The file contains more than one confirmation for client %1% and object %2% for the same period and channel
E_CONSREF_ALREADY_USED	CONS REF %1% identifier already used
E_BILLREF_ALREADY_USED	BILL REF %1% identifier already used
E_NO_DETERMINANT	No determinant to be cancelled found according to CONS REF %1% and period %2%
E_RELATED_ANNULATION_FAILED	Determinant associated with the cancellation not loaded due to errors
E_START_DATE_MISMATCH	Start dates do not match; %1% was expected but %2% was retrieved
E_END_DATE_MISMATCH	End dates do not match; %1% was expected but %2% was retrieved
E_CONS_AMT_MISMATCH	Consumption total does not match; %1% was expected but %2% was retrieved
E_ANNULATION_DETERM	Cancellation determinant cannot be cancelled
E_DETERM_ANNULLED	Determinant with CONS REF %1% already cancelled
E_NEWER_DETERM_FOUND	Determinant version found that is newer than the one that is cancelled
E_PERIOD_DATES_MISMATCH	Determinant periods do not match
E_INVALID_DATE	Wrong date: %1%
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_MP_NOT_FOUND	Metering point %1% not found
E_INVALID_DATE	Wrong date: %1%
E_FILE_ERROR	An error occurred processing the file, please check if the file is correct as per the specifications. Technical error: %1%

Reloading erroneous records

When uploading interval consumption files to the DP, business errors may occur. The DP provides automatic reloading of business errors within a specified time period.[1] If there is an (R) attached to the error description in the error files, then it is not necessary to manually reload this line in the DSO,

as it will be reloaded automatically as soon as the data that prevented the initial upload arrives.

Notes:

[1] The DP provides two parameters: one parameter that determines how often erroneous data is reloaded per day, and another parameter that specifies the period during which the DP attempts to reload erroneous data. Currently, data reloading is set to every 24 hours from the last unsuccessful data upload attempt. Data older than 30 days will not be reloaded.

Table 193 – List of consumption confirmation business errors for automatic reloading

Error code	Description
E_INVALID_SUPPLIER	Incorrect supplier: %1% (R)
E_INVALID_CUSTOMER	Incorrect customer: %1% (R)
E_INVALID_OBJECT	Incorrect object: %1% (R)
E_NO_ACTIVE_DSO_RELATION	No active link between DSO %1% and object %2%. (R)
E_NO_ACTIVE_RELATION	No active link between supplier %1%, customer %2%, and object %3%. (R)
E_MP_NOT_CONNECTED_TO_OBJECT	The metering point is not connected to the specified object for the entire indicated period. (R)
E_CHANNEL_NOT_ACTIVE	Channel %1% is not active. (R)
E_NO_DETERMINANT	The determinant to be cancelled was not found by CONS REF %1% and period %2%. (R)
E_RELATED_ANNULATION_FAILED	The determinant related to the cancellation was not loaded due to errors. (R)

A report is generated for erroneously loaded interval consumption data. The report description is available here.

DISTRIBUTION SYSTEM OPERATOR REPORTS

Loss data (DSO.LOSSES)

Every month after the end of the billing period, every DSO prepares and submits loss data to the DP. The DP saves these data and hands them over to the purchaser of the losses without modification. The loss data file consists of the following fields (all the fields are required).

Table 194 – Loss data file format

Name	Type	Description/details
dso eic	string	DSO EIC code. Maximum length: 16 characters
datetime	datetime	Consumption interval end time in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+	float	Consumption on channel A+ in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
self/technical consumption	float	Electricity losses for the A+ channel, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
total	float	Total channel A+ consumption in kilowatt-hours, including losses. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed

The loss file must contain data for all *ISP* intervals that month.

The following error messages are possible for loss files.

Table 195 – list of logical errors in loss files

Error message	Description
E_MISSING_HOUR_DATA	File does not contain all hours of the month
E_FILE_ERROR	An error occurred processing the file, please check if the file is correct as per the specifications. Technical error: %1%

Balance data (DSO.BALANCE)

Each month after the end of the billing period, each DSO prepares and submits the DP balance data (based on the *ASTSUM* report created by the data platform), within the time set in the Network Code. The DP saves them and hands them over to the TSO without changes.

The balance data file consists of the following fields (all fields are required).

Table 196 – Balance data file format

Name	Type	Description/details
supplier eic	string	Supplier EIC code. Maximum length: 16 characters
dso eic	string	DSO EIC code. Maximum length: 16 characters
interval start	datetime	Consumption interval start time in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-

		DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
interval stop	datetime	Consumption interval end time in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+ current	float	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed. Field must not be left blank: if there are no data, enter a zero.
A+ corrections	float	Adjustments for channel A+ consumption in the previous 12 months, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed. Field must not be left blank: if there are no data, enter a zero.
A+ total	float	Channel A+ consumption in kilowatt-hours, including the current billing period and adjustments for the last 12 months. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed. Field must not be left blank: if there are no data, enter a zero.
A- current	float	Channel A- consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed. Field must not be left blank: if there are no data, enter a zero.

The balance file must contain data for all *ISP* intervals that month, for each included supplier.

Time change

The time of the received consumption interval (in the way this must be specified in the interval consumption file) indicates the time immediately after the start and end of the interval. This time must be either in the *UTC* time zone or in the Latvian time zone, indicating the correct time zone. For example, if the interval consumption file uses the Latvian time zone and has records at hourly intervals, the interval time for the first consumption value of the day (i.e., the records were kept from 00:00:00 to 01:00:00), and for the last consumption value of the day, it is 00:00:00 of the following day. This aspect must also be taken into account when changing time zones (moving to summer or winter time), e.g., in 2024:

- In spring, the day of the daylight savings switch began with the following interval times:

Table 197 – Example of time interval change in spring 1h ISP

Interval start	Interval end
2024-03-31T00:00:00+02:00	2024-03-31T01:00:00+02:00
2024-03-31T01:00:00+02:00	2024-03-31T02:00:00+02:00
2024-03-31T02:00:00+02:00	2024-03-31T04:00:00+03:00
2024-03-31T04:00:00+03:00	2024-03-31T05:00:00+03:00
2024-03-31T05:00:00+03:00	2024-03-31T06:00:00+03:00

Table 198 – Example of time interval change in spring 15 min ISP

Interval start	Interval end
2024-03-31T02:00:00+02:00	2024-03-31T02:15:00+02:00
2024-03-31T02:15:00+02:00	2024-03-31T02:30:00+02:00
2024-03-31T02:30:00+02:00	2024-03-31T02:45:00+02:00
2024-03-31T02:45:00+02:00	2024-03-31T04:00:00+03:00
2024-03-31T04:00:00+03:00	2024-03-31T04:15:00+03:00
2024-03-31T04:15:00+03:00	2024-03-31T04:30:00+03:00
2024-03-31T04:30:00+03:00	2024-03-31T04:45:00+03:00
2024-03-31T05:00:00+03:00	2024-03-31T05:15:00+03:00

- In autumn, the day of the daylight savings switch began with the following interval times:

Table 199 – Example of time interval change in autumn 1h ISP

Interval start	Interval end
2024-10-27T00:00:00+03:00	2024-10-27T01:00:00+03:00
2024-10-27T01:00:00+03:00	2024-10-27T02:00:00+03:00
2024-10-27T02:00:00+03:00	2024-10-27T03:00:00+03:00
2024-10-27T03:00:00+03:00	2024-10-27T04:00:00+03:00
2024-10-27T03:00:00+02:00	2024-10-27T04:00:00+02:00
2024-10-27T04:00:00+02:00	2024-10-27T05:00:00+02:00
2024-10-27T05:00:00+02:00	2024-10-27T06:00:00+02:00

Table 200 – Example of time interval change in autumn 15min ISP

Interval start	Interval end
2024-10-27T03:00:00+03:00	2024-10-27T03:15:00+03:00
2024-10-27T03:15:00+03:00	2024-10-27T03:30:00+03:00
2024-10-27T03:30:00+03:00	2024-10-27T03:45:00+03:00
2024-10-27T03:45:00+03:00	2024-10-27T03:00:00+02:00
2024-10-27T03:00:00+02:00	2024-10-27T03:15:00+02:00
2024-10-27T03:15:00+02:00	2024-10-27T03:30:00+02:00
2024-10-27T03:30:00+02:00	2024-10-27T03:45:00+02:00

Full file examples are provided in the files with names:

- *2024-03_DSO.BALANCE_43X-S-ST002100 4_20230103111337_PAVASARA_LAIKA_MAINA.csv*
- *2024-03_DSO.BALANCE_43X-S-ST002100 4_20230103111337_15min_PAVASARA_LAIKA_MAINA.csv*

- *2024-10_DSO.BALANCE_43X-S-ST002100-4_20230103111337_RUDENS_LAIKA_MAINA.csv*
- *2024-10_DSO.BALANCE_43X-S-ST002100-4_20230103111337_15min_RUDENS_LAIKA_MAINA.csv*

The following error messages are possible for balance files.

Table 201 – list of logical errors in balance files

Error message	Description
E_FILE_ERROR	An error occurred processing the file, please check if the file is correct as per the specifications. Technical error: %1%
E_INVALID_VALUES	One of the values indicated incorrectly or not indicated at all
E_SYS_SUPPL_DSO_CONTRACT_INVALID	Supplier %1% currently has no active system use contract with DSO %2%
E_MISSING_SUPPL_HOUR_DATA	File does not contain all hours of the month for supplier %1%

If the DSO finds that it has submitted an erroneous balance file to the data platform and needs to correct it, then by 16:40 of the 9th, the DSO uploads the correct balance file. If the error is detected after 16:40, the DSO uploads the correct balance file, notifies the data platform's controller of the need to launch the process of sending the balance from the data platform, and informs the TSO of the upload of the correct file.

MASTER DATA EXCHANGE

Master data are the data that are necessary for the operation of the market as well as the data platform. Master data are divided into two parts: client-related master data and object-related master data.

In the context of the DP, the client is the end-user of electricity consumed or generated by the objects under its control, while the object is the place where the consumption or generation takes place.

Client-related master data

1. Clients are power consumers, i.e., natural individuals and legal entities that control one or more objects where the electricity sale or purchase services are provided; in certain situations, a client may exist without an object under their control;
2. client contracts are contracts, physical or virtual, between an SO and a client, confirming that the client's objects are connected to the SO's network;
    1. client contract rows are the part of the contract that specifies the objects that are connected to the SO's network.
3. client contract attributes contain additional information that can be specified for a particular contract, e.g.:
    1. contract information e-mail of the contract's client;
    2. contact phone number of the contract's client;
    3. other possible attributes described under client information API in this document.
4. client contact person is the person designated by the client according to the classification below:
    1. contact person for technical matters;
    2. contact person for legal matters;
    3. contact person for other matters.

Object-related master data

1. Objects are buildings, flats, warehouses, and other structures where electricity can be consumed and/or generated;
    1. Object attributes contain additional information about a specific object that can be indicated, e.g., *ACCESS_INFO* provides detailed information about where the metering point is located;
2. client supplier contracts (relations) are supplier links between a client object and a supplier providing an electricity trading or purchasing service at the object;
3. metering points are virtual locations where one meter is located;

1. metering point attributes contain additional information that can be specified about the metering point, e.g., 'net' is set if net metering is used at the metering point of the object.

4. meters are physical or virtual devices that measure the amount of electricity consumed and/or generated;

5. registers available in the meter are the types of accounting available in the meter, e.g.:

    1. electricity received from the grid at any time of the day or night (*OBIS*: 1.x.y / A+, for example: 1.8.2);

    2. electricity received from the grid during daytime hours (*OBIS*: 2.x.y / A-, for example: 2.8.1);

    3. corresponding reactive energy types (*OBIS*: 3.x.y, 4.x.y, for example: 3.8.4).

Principles for processing changes in master data, for DSO and TSO

The principles for the exchange of master data require that the same web service structure is used for the submission of both new information and information changes. The web service structure is designed to allow both new master data entries and changes in existing data entries to be submitted in the same way, using the same service.

In web service structures, many data elements are optional, while control elements are always required (client contract number or personal identity number are data elements, while references to external systems or client EIC are control elements). In order to ensure the correct receipt of data, the values, their accuracy, and whether they are optional or required is controlled via the DB API.

A hierarchical structure is used for data exchange that unambiguously defines the links between data levels. For example, in client data exchange, the top level is the client; any of the lower levels always pertain to this client. For example, the attributes of client contract rows do not need to reference the client or any of the levels above them.

Web services are used to create and update master data.

- Services and description files for master data synchronisation:
    - Sharing type XSD files:
        - `STDHDSListTypes.xsd – file (Unix EOL), available in the xsd.wsdl/xsd folder enclosed`
        - `STDHDSBaseTypes.xsd` – file (Unix EOL), available in the `xsd.wsdl/xsd` folder enclosed
        - `STDHDSElementTypes.xsd` – file (Unix EOL), available in the `xsd.wsdl/xsd` folder enclosed
    - Web service operation type file:
        - `STDHDSOperationsTypes.xsd` – file (Unix EOL), available in the `xsd.wsdl/xsd` folder enclosed
    - Web service description file:
        - `STDHDataSyncServices.wsdl` – file (Unix EOL), available in the `xsd.wsdl/wsdl` folder enclosed

Client information exchange (MergeCustomerInfo)

The exchange of client data is performed via this type of web service, which contains all the necessary attributes for the successful creation of a client in the DP. The client master data exchange service makes it possible to

1. create a client object and update client-related information;
2. create a new contract and update information in an existing contract;
3. create new contract rows and update information about existing contract lines;
4. add new contract attributes to a contract and update existing contract attribute information;
5. add a contact person to a client and update information for an existing client contact person.

If a new client is created, the DP generates and assigns a unique EIC to the new client. In the case of an existing client, the existing EIC is used.

In situations where an existing client's information has been successfully updated, the reply also contains the EIC code of that client.

Table 202 – *MergeCustomerInfo* service request structure

Element	Type	Req.	Description/details
MergeCustomerInfoRequest	-	Yes	Main demand element
customerInfo	-	Yes	Client information element
eic	string (1-16)	No [1]	Client EIC
type	string (1-50)	No [2.8]	Type of client • PRIVATE (natural individual) • LEGAL (legal entity)
identifier	string (1-30)	No [2.8]	Client identifier (personal identity number or company registration number)
previousIdentifier	string (1-30)	No [2.7]	Client identifier (previous ('old' type) personal identity number)
isResident	boolean	No [2.8]	The flag indicates if the client is a resident
customerNameInfo	-	Yes [2]	Client name information element
private	-	Yes [4]	Private client name information element
firstName	string (1-100)	Yes	Client name (natural individual)
lastName	string (1-100)	Yes	Client surname (natural individual)
legal	-	Yes [4]	Legal entity client name information element
businessName	string (1-255)	Yes	Client name (legal entity)
legalAddress	-	No	Client/company registered address

address	-	Yes [3]	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No [5]	Municipality, for LV addresses
city	string (1-100)	No [5]	City, for LV addresses
parish	string (1-100)	No [5]	Parish, for LV addresses
village	string (1-100)	No [5]	Village, for LV addresses
street	string (1-100)	No [5]	Street, for LV addresses
houseNameOrNumber	string (1-100)	No [5]	House number and name, for LV addresses
flatNumber	string (1-100)	No [5]	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [5]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, applies to LV addresses
addressOth	-	Yes [3]	Address element for addresses in other countries
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
addressLine1	string (1-255)	Yes	Address line 1, for other countries
addressLine2	string (1-255)	No	Address line 2, for other countries
addressLine3	string (1-255)	No	Address line 3, for other countries
addressLine4	string (1-255)	No	Address line 4, for other countries
addressLine5	string (1-255)	No	Address line 5, for other countries
email	string (4-250)	No [2]	Client e-mail address
notificationEmail	string (4-250)	No [2]	Client message e-mail address
phoneNumber	string (4-30)	No [2]	Client phone number (except mobile)
mobilePhoneNumber	string (4-30)	No [2]	Client mobile phone number
customerContracts	-	No [2]	Client contract list element
contractInfo	-	Yes	Client contract element

externalReference	string (1-50)	Yes	Reference to the source system
contractNumber	string (1-50)	No [2.8]	Contract number
contractType	string (1-50)	No [2.8]	Type of contract • DSO_CUSTOMER (DSO contract with the client) • TSO_CUSTOMER (TSO contract with the client)
dateFrom	datetime	No [2.8]	Contract effective from date
dateTo	datetime	No [2]	Contract effective to date
status	string (1-50)	No [2.8]	Contract status • ACTIVE (active) • INACTIVE (inactive)
isActive [6]	boolean	No [2]	The flag indicates if the contract is active (correct)
customerContractLines	-	No [2]	Client contract row list element
contractLineInfo	-	Yes	Client contract row element
externalReference	string (1-50)	Yes	Reference to the source system
objectEIC	string (1-16)	No [2.8]	Object EIC
dateFrom	datetime	No [2.8]	Date from which the contract row is in effect
dateTo	datetime	No [2]	Date until which the contract row is in effect
status	string (1-50)	No [2.8]	Contract row status • ACTIVE • INACTIVE
isActive [6]	boolean	No [2.8]	The flag indicates if the contract row is active (correct)
customerContractAttributes	-	No [2]	Client contract attribute list element
contractAttributeInfo	-	Yes	Client contract attribute element
externalReference	string (1-50)	Yes	Reference to the source system
type	string (1-50)	No [2.8]	Attribute type • NOTIF_INFO_EMAIL (notification e-mail) • BILLING_INFO_EMAIL (notification e-mail for billing) • NOTIF_INFO_PHONE (notification mobile phone) • BILLING_ADDRESS (billing address)
isActive [6]	boolean	No [2.8]	Is the attribute active (correct)
valueStr	string (1-255)	No [2]	Text value
valueInt	int	No [2]	Number value
valueDate	datetime	No [2]	Date value
valueAddr	-	No	Address value element

address	-	Yes [3]	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No [5]	Municipality, for LV addresses
city	string (1-100)	No [5]	City, for LV addresses
parish	string (1-100)	No [5]	Parish, for LV addresses
village	string (1-100)	No [5]	Village, for LV addresses
street	string (1-100)	No [5]	Street, for LV addresses
houseNameOrNumber	string (1-100)	No [5]	House number and name, for LV addresses
flatNumber	string (1-100)	No [5]	Apartment, for LV addresses
postalCode	string (1-7)	No [5]	Postal code, for LV addresses
classifierCode	string (1-100)	No [5]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No [5]	Exception building, applies to LV addresses
addressOth	-	Yes [3]	Address element for addresses in other countries
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
addressLine1	string (1-255)	Yes	Address line 1, for other countries
addressLine2	string (1-255)	No	Address line 2, for other countries
addressLine3	string (1-255)	No	Address line 3, for other countries
addressLine4	string (1-255)	No	Address line 4, for other countries
addressLine5	string (1-255)	No	Address line 5, for other countries
customerContactPersons	-	No [2]	Client contact person list element
contactPersonInfo	-	Yes	Client contact person element
externalReference	string (1-50)	Yes	Reference to the source system
type	string (1-50)	No [2.8]	Type of contact person • TECHNICAL (contact for technical topics) • LEGAL (contact person for legal matters) • GENERIC (other contact person type)
firstName	string (1-100)	No [2]	Contact person name

lastName	string (1-100)	No [2]	Contact person surname
phoneNumber	string (4-30)	No ***2.8***	Contact person phone number
email	string (4-250)	No [2]	Contact person e-mail
notes	string (1-1000)	No [2]	Notes about the contact person
isActive [6]	boolean	No [2]	The flag indicates if the contact person is active (correct)

Notes

[1] If the element is specified and the value entered, the request is recorded as a data change.

[2] The required nature of the values is determined by the type of change; for new entries, all required elements must be specified, while for entry changes, only those that have been changed.

[3] For addresses, it must be chosen whether to use a Latvian address or a universal address structure for other countries; it is not possible to choose both types of address at the same time, and the universal structure cannot be used if LV is specified as the country.

[4] Only the name and surname, or company name can be entered when submitting data; these 3 fields cannot all be filled in at the same time.

[5] In the address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard.

[6] The flag has been introduced to allow the 'logical' deletion of an entry if it has been entered incorrectly or must never have taken effect; if the flag is not indicated when the entry is created, it is assumed that the flag is set to the affirmative value.

[7] According to the law ('Since 1 July 2017, a person is entitled to PERSONALLY change their personal identity number ONCE if they were assigned a personal identity number containing the date of birth (personal identity numbers up to and including 30 June 2017'), a person may have both a 'new' and an 'old' personal identity number that can be used to search for that client in the system; if both the personal identity numbers are registered in the system, only the 'new' one will be returned.

[8] Elements required when creating an entry for a new entity, e.g., a new client.

Table 203 – *MergeCustomerInfo* service reply structure

Element	Type	Req.	Description/details
MergeCustomerInfoResponse	-	Yes	Main reply element
statusInfo	-	Yes	Call status information element
status	string (1)	Yes	Call status • A (accepted) • R (rejected)
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code

errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system
customerEICInfo	-	Yes	Client identification information element
eic	string (1-16)	Yes [1]	Client EIC

Details

[1] The generated or existing client's EIC is returned.

Below is a list of possible errors in processing this request.

Table 204 – Possible error messages from the client data exchange service

Error code	Description/details
E_TOKEN_NOT_VALID	Token %1% invalid!
E_TOKEN_DOES_NOT_EXIST	Authentication token does not exist
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_USER_ROLE_PERMISSION	User %1% does not have access to this function
E_INCORRECT_CUSTOMER_IDENTIFIER	Client personal identity number % entered incorrectly
E_INVALID_CUSTOMER_DATA	Failed to validate client data
E_CITY_NOT_FOUND	City % does not exist
E_STREET_NOT_FOUND	Street % does not exist
E_INCORRECT_POSTAL_CODE	Postal code % incorrect
E_HOUSE_NUMBER_NAME_NOT_FOUND	House with number or name % does not exist
E_APPARTMENT_NOT_FOUND	Apartment with number % does not exist
E_INCORRECT_EMAIL_VALUE_INCORRECT_FORMAT	Incorrect e-mail value: % Please check if the e-mail address is entered correctly
E_VALUE_IS_MANDATORY	The value 'type' is required
E_INVALID_LOOKUP_VALUE	Cannot determine classified code for type STDH_CUSTOMER_TYPES
E_INACTIVE_CONTRACT_LINE	The deleted contract with *external_reference* %1% has an undeleted contract row with *external_reference* %2%
E_OBJECT_EIC_NOT_FOUND	Object with % does not exist.
E_CONTRACT_REGISTERED_TO_DIFFERENT_CUSTOMER	Contract (%1%) with *external reference* %2% is already registered to different customer. Please contact the data platform support.
E_CONTRACT_LINE_REGISTERED_TO_DIFFERENT	Contract line (%1%) with *external reference* %2% is

_CONTRACT	already registered to different contract. Please contact the data platform support.
E_CONTRACT_ATTRIBUTE_REGISTERED_TO_DIFFERENT_CONTRACT	Contract attribute (%1%) with *external reference* %2% is already registered to different contract. Please contact the data platform support.
E_CONTACT_PERSON_REGISTERED_TO_DIFFERENT_CUSTOMER	Customer contact person (%1%) with *external reference* %2% is already registered to different customer. Please contact the data platform support.
E_INVALID_REQUEST	The message does not comply with XSD.

Examples of SOAP/XML messages

New client creation

The example clearly shows how to submit a client, the client contract, the contract rows, as well as the client contract attributes (e-mails and address).

- Sample request
  - `MergeCustomerInfo_request-new.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `MergeCustomerInfo_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Updating existing client data

The example below clearly illustrates how to submit such changes:

1. the client's e-mail address is removed;
2. the client has changed the message e-mail address;
3. for the second row of the client's contract, the end date is set, and the row is deactivated, changing the status;
4. an additional contract row is added for the client; the third attribute of the client contract (address) is deactivated.

As the example shows, one request is used for both the creation of a new object and the modification of an existing object, not different requests.

Common element processing principles:

- elements whose values are not specified in the request are not changed;
- elements whose values are specified in the request are changed to the value specified;
  - if `nil="true"` is specified for an element, the value of the element is deleted.

- Sample request
  - `MergeCustomerInfo__request-upd.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Example of a reply, the same as for 'New client creation'
  - `MergeCustomerInfo _response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Batch client information exchange (MergeCustomerInfoBatch)

This service enables exchanging data for more than one client in a single service call. All processing conditions and error codes shown in the description of the service *MergeCustomerInfo* also apply to this service.

For specific service changes, see the service description tables below.

Table 205 – *MergeCustomerInfoBatch* service request structure

Element	Type	Req.	Description/details
MergeCustomerInfoBatchRequest	-	Jā	Main demand element
customerInfoList	-	Jā	Compound list element for client information
customerInfo	-	*Jā*	*Compound client information element (for details, see service MergeCustomerInfo element clientInfo)*
...	...	...	...

Table 206 – *MergeCustomerInfoBatch* service reply structure

Element	Type	Req.	Description/details
MergeCustomerInfoBatchResponse	-	Yes	Main reply element
batchStatusInfoList 2	-	Yes	Compound call status information list element
batchStatusInfo	-	Yes	Compound detailed call status information element
statusInfo	-	Yes	Compound call status information element
/ status	string (1)	Yes	Call status • A (accepted) • R (rejected)
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system
customerEICInfo	-	Yes	Client identification information element
identifier	string(1-30)	Yes	Client identifier
eic	string (1-16)	Yes [1]	Client EIC
statusInfo 2	-	Yes	Call status information element
status	string (1)	Yes	Call status • A (accepted) • R (rejected)

errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system

Details

[1] The generated or existing client's EIC is returned.

[2] Only one of the elements is returned.

Examples of SOAP/XML messages

New client creation

The example clearly shows how to submit clients, client contracts, contract rows, as well as client contract attributes (e-mails and address).

- Sample request
  - `MergeCustomerInfoBatch_request-new.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `MergeCustomerInfoBatch_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Exchange of object information (MergeObjectInfo)

The exchange of object data is performed via this type of web service, which contains all the necessary attributes for the successful creation of an object on the DP. The object master data exchange service makes it possible to

1. create a new object, update information about an existing object;
2. create a supplier link (link between client, object, and supplier) and update existing link information;
3. create metering points at the object and update existing information;
4. create meters at the object and update existing information;
5. create object attributes for an object and update existing information;
6. create metering point attributes at the object and update existing information;
7. create meter metering registers at the object and update existing register information.

A successful request results in an EIC code for the object that is uniquely generated and can be used to search for or update information about the object.

Table 207 – *MergeObjectInfo* service request structure

Element	Type	Req.	Description/details
MergeObjectInfoRequest	-	Yes	Main demand element
objectInfo	-	Yes	Object information element
externalReference	string (1-50)	Yes	Reference to the source system
eic	string (1-16)	No [2]	EIC of the object (specified only for ST and AST objects)
description	string (1-255)	No [2]	Object name
readingType	string (1-50)	No [2.8]	Type of meter reading at the object • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (other, the meter is read in a different way)
cadastralNr	string (1-30)	No [2]	Cadastral designation of the object's land unit
characterCode	string (1-100)	No [2]	Object type code
characterCodeDescription	string (1-255)	No [2]	Object type code description
isActive	boolean	No [2]	If the object participates in the market
averageYearlyConsumption	decimal	No [2]	Average annual consumption in the last 12 full-month billing periods
address	-	No [2]	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No [5]	Municipality, for LV addresses
city	string (1-100)	No [5]	City, for LV addresses
parish	string (1-100)	No [5]	Parish, for LV addresses
village	string (1-100)	No [5]	Village, for LV addresses
street	string (1-100)	No [5]	Street, for LV addresses
houseNameOrNumber	string (1-100)	No [5]	House number and name, for LV addresses
flatNumber	string (1-100)	No [5]	Apartment, for LV addresses
postalCode	string (1-7)	No [5]	Postal code, for LV addresses
classifierCode	string (1-100)	No [5]	SLS address code
customAddressDetail	string (1-	No [5]	Exception building, applies to LV addresses

	255)		
relations	-	No [2]	Metering point list element
relationInfo	-	Yes	Metering point element
externalReference	string (1-50)	Yes	Reference to the source system
supplierEIC	string (1-16)	No [2.8]	Supplier EIC
customerEIC	string (1-16)	No [2.8]	Client EIC, to unambiguously identify the client for the link
type	string (1)	No [2.8]	Type of link (trade or purchase) • S (trading) • P (purchaser)
dateFrom	datetime	No [2.8]	Link effective from date
dateTo	datetime	No [2]	Link effective to date
status	string (1)	No [2.8]	Link status (active or inactive) • A (Active) • I (Inactive)
isSettlementServiceProvided	boolean	No [2.8]	The flag indicates if the Participant provides payer functions during the operation of this link • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No [2.8]	The flag indicates if an exchange rate is planned for the object
meteringPoints	-	No [2]	Metering point list element
meteringPointInfo	-	Yes	Metering point element
externalReference	string (1-50)	Yes	Reference to the source system
MPNumber	string (1-50)	No [2.8]	Metering point number
TPNumber	string (1-255)	No [2]	Transformer station number
TPName	string (1-255)	No [2]	Transformer station name
feederNumber	string (1-255)	No [2]	Feeder number
loadPointNumber	string (1-255)	No [2]	Load point number
dateFrom	datetime	No [2.8]	Metering point effective from date
dateTo	datetime	No [2]	Metering point effective to date
isActive [6]	boolean	No [2.8]	The flag indicates if the metering point is active (correct)
meters	-	No [2]	Meter list element
meterInfo	-	Yes	Meter element
externalReference	string (1-50)	Yes	Reference to the source system

meterNumber	string (1-50)	No [2.8]	Meter number
dateFrom	datetime	No [2.8]	Meter effective from date
dateTo	datetime	No [2]	Meter effective to date
isAMR	boolean	No [2.8]	The flag indicates if the meter is a smart meter
isMeterTransit	boolean	No [2.8]	The flag indicates if the meter is a transit meter
isMeterVirtual	boolean	No [2.8]	The flag indicates if the meter is a virtual meter (no accounting)
status	string (1-50)	No [2.8]	Meter status: • INSTALLED (installed) • CONNECTED (connected) • DISCONNECTED_DEBT (disconnected due to arrears) • DISCONNECTED_TIME (temporarily disconnected) • DISCONNECTED (disconnected) • REMOVED (removed)
statusDate	dateTime	No [2.8]	Status change date
isActive [6]	boolean	No [2.8]	The flag indicates if the meter is active (correct)
meterRegisters	-	No [2]	Meter register list element
meterRegisterInfo	-	Yes	Meter register element
externalReference	string (1-50)	Yes	Reference to the source system
OBISCode	string (1-50)	No [2.8]	Register OBIS code • Classifier: Types of meter register
description	string (1-255)	No [2]	Meter description/notes
dateFrom	datetime	No [2.8]	Date from which the contract row is in effect
dateTo	datetime	No [2]	Date until which the contract row is in effect
isActive [6]	boolean	No [2.8]	The flag indicates if the meter register is active (correct)
MPAttributes	-	No [2]	Metering station point attribute list element
objectMPAttributeInfo	-	Yes	Metering point attribute element
externalReference	string (1-50)	Yes	Reference to the source system
attributeType	string (1-50)	No [2.8]	Attribute type • Classifier: Types of object/MP attribute types
attributeValue	string (1-255)	No [2.8]	Attribute value in text format
dateFrom	datetime	No [2.8]	Date from which the contract row is in effect
dateTo	datetime	No [2]	Date until which the contract row is in effect
isActive [6]	boolean	No [2.8]	The flag indicates if the MP attribute is active (correct)

objectAttributes	-	No [2]	Object attribute list element
objectMPAttributeInfo	-	Yes	Object attribute element
externalReference	string (1-50)	Yes	Reference to the source system
attributeType	string (1-50)	No [2.8]	Attribute type • Classifier: Types of object/MP attribute types
attributeValue	string (1-255)	No [2.8]	Attribute value in text format
dateFrom	datetime	No [2.8]	Date from which the contract row is in effect
dateTo	datetime	No [2]	Date until which the contract row is in effect
isActive [6]	boolean	No [2.8]	The flag indicates if the object's attribute is active (correct)

Details

[1] If the element is specified and the value entered, the request is recorded as a data change.

[2] The required nature of the values is determined by the type of change; for new entries, all required elements must be specified, while for entry changes, only those that have been changed.

[3] For addresses, it must be chosen whether to use a Latvian address or a universal address structure for other countries; it is not possible to choose both types of address at the same time, and the universal structure cannot be used if LV is specified as the country.

[4] Only the name and surname, or company name can be entered when submitting data; these 3 fields cannot all be filled in at the same time.

[5] In the address structure, one must enter address data according to the values of the SLS address structure classifier or select the SLS address classifier code that represents the exact address according to the SLS standard.

[6] The flag has been introduced to allow the 'logical' deletion of an entry if it has been entered incorrectly or must never have taken effect; if the flag is not indicated when the entry is created, it is assumed that the flag is set to the affirmative value.

[7] According to the law ('Since 1 July 2017, a person is entitled to PERSONALLY change their personal identity number ONCE if they were assigned a personal identity number containing the date of birth (personal identity numbers up to and including 30 June 2017'), a person may have both a 'new' and an 'old' personal identity number that can be used to search for that client in the system; if both the personal identity numbers are registered in the system, only the 'new' one will be returned.

[8] Elements required when creating an entry for a new entity, e.g., a new client.

Table 208 –*MergeObjectInfo* service reply structure

Element	Type	Req.	Description/details
MergeObjectInfoResponse	-	Yes	Main reply element
statusInfo	-	Yes	Call status information element
status	string (1)	Yes	Call status • S (success) • E (error/failure)
errorList	-	No	Error list element

error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system
objectEICInfo	-	Yes	Object identification information element
eic	string (1-16)	Yes [1]	Object EIC

Details

[1] The generated or existing object's EIC is returned.

Below is a list of possible errors in processing this request.

Table 209 – Possible error messages from the object data exchange service

Error code	Description/details
E_TOKEN_NOT_VALID	Token %1% invalid!
E_TOKEN_DOES_NOT_EXIST	Authentication token does not exist
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_USER_ROLE_PERMISSION	User %1% does not have access to this function
E_INCORRECT_CUSTOMER_IDENTIFIER	Client personal identity number % entered incorrectly
E_INVALID_CUSTOMER_DATA	Failed to validate client data
E_CITY_NOT_FOUND	City % does not exist
E_STREET_NOT_FOUND	Street % does not exist
E_INCORRECT_POSTAL_CODE	Postal code % incorrect
E_HOUSE_NUMBER_NAME_NOT_FOUND	House with number or name % does not exist
E_APPARTMENT_NOT_FOUND	Apartment with number % does not exist
E_VALUE_IS_MANDATORY	The value % is required.
E_INVALID_OBJECT_ATTRIBUTE_VALUE	Value for the object/MP attribute with *external reference* %1% is incorrect.
E_RELATION_REGISTERED_TO_DIFFERENT_OBJECT	Relation (%1%) with *external reference* %2% is already registered to different object. Please contact the data platform support.
E_MP_REGISTERED_TO_DIFFERENT_OBJECT	Metering point (%1%) with *external reference* %2% is already registered to different object. Please contact the data platform support.

E_METER_REGISTERED_TO_DIFFERENT_MP	Meter (%1%) with *external reference* %2% is already registered to different metering point. Please contact the data platform support.
E_METER_REGISTER_REGISTERED_TO_DIFFERENT_METER	Meter register (%1%) with *external reference* %2% is already registered to different meter. Please contact the data platform support.
E_OBJECT_ATTRIBUTE_REGISTERED_TO_DIFFERENT_OBJ_MP	Object attribute (%1%) with *external reference* %2% is already registered to different object/MP. Please contact the data platform support.
E_INVALID_REQUEST	The message does not comply with XSD.

Examples of SOAP/XML messages

New object creation

The example clearly shows how to send the object, meter, metering point, metering point attributes, object attributes, meter registers

- Sample request
  - `MergeObjectInfo_request-new.xml-` file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `MergeObjectInfo_response.xml` file (Unix EOL) available the annex, located in the `samples/xml` folder.

Updating existing object data

Unlike for the creation of a new object, this example shows

1. how to change the *averageYearlyConsumption* parameter;
2. how to temporarily disconnect a meter.

As the example shows, one request is used for both the creation of a new object and the modification of an existing object, not different requests.

Common element processing principles:

- elements whose values are not specified in the request are not changed;
- elements whose values are specified in the request are changed to the value specified;
  - if nil="true" is specified for an element, the value of the element is deleted.

- Sample request
  - `MergeObjectInfo_request-upd.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Example reply (the examples for new data entry and changes are the same)
  - `MergeObjectInfo_response.xml` file (Unix EOL) available the annex, located in the `samples/xml` folder.

Batch object information exchange (MergeObjectInfoBatch)

This service enables exchanging data for more than one object in a single service call. All processing conditions and error codes shown in the description of the service *MergeObjectInfo* also apply to this service.

For specific service changes, see the service description tables below.

Table 210 – *MergeObjectInfoBatch* service request structure

Element	Type	Req.	Description/details
MergeObjectInfoBatchRequest	-	Yes	Main demand element
customerInfoList	-	Yes	Compound list element for object information
customerInfo	-	*Yes*	*Compound object information element (for details see service MergeObjectInfo element objectInfo)*
...	...	...	...

Table 211 – *MergeObjectInfoBatch* service reply structure

Element	Type	Req.	Description/details
MergeObjectInfoBatchResponse	-	Yes	Main reply element
batchStatusInfoList [2]	-	Yes	Compound call status information list element
batchStatusInfo	-	Yes	Compound detailed call status information element
statusInfo	-	Yes	Compound call status information element
status	string (1)	Yes	Call status • A (accepted) • R (rejected)
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system
objectEICInfo	-	Yes	Object identification information element
externalReference	string(1-50)	Yes	Object external system identifier
eic	string (1-16)	Yes [1]	Object EIC
statusInfo [2]	-	Yes	Call status information element
status	string (1)	Yes	Call status • A (accepted)

			• R (rejected)
errorList	-	No	Error list element
error	-	Yes	Error details element
errorCode	string (1-250)	Yes	Error code
errorMessage	string (1-4000)	Yes	Error message
entityType	string (1-50)	No	Erroneous entity code
entityExternalReference	string (1-50)	No	Erroneous entity reference to the external system

Details

[1] The generated or existing object's EIC is returned.

[2] Only one of the elements is returned.

Examples of SOAP/XML messages

New object creation

The example clearly shows how to send object, meter, metering point, metering point attributes, object attributes, meter registers

- Sample request
  - `MergeObjectInfoBatch_request-new.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `MergeObjectInfoBatch_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Master data retrieval services

This section describes the master data exchange data retrieval services. These services are offered to DSO and TSO, enabling them retrieve and read the data stored in the DP.

All data retrieval services are restricted to data only for objects connected to the grid of a particular participant, i.e., the objects of other DSO of the same client are not returned.

The master data retrieval services are:

1. *FindCustomerInfo* – search for an existing client by EIC, client identifier, object EIC, or object address;
2. *GetCustomerInfo* – retrieve all binding information of an existing client by entering the client's EIC;
3. *GetObjectInfo* – retrieve all binding information for an existing object by specifying the object's EIC.

Client master information search service (FindCustomerInfo)

The service looks for and returns master information about the client in the DP, as well as the object managed by the client in a specific SO's area of operation. The service makes it possible to search for data by client, by object, or by the EIC of both the elements at the same time. Data can be also searched using the client identifier (personal identity number/registration number), client name, and the addresses of the facilities managed by the client.

If data are searched using a client EIC that exists in the DP, but there are no objects under that client's management that are connected to the participant's network, only the client's data are returned, and the list of objects is empty.

If the data are searched for using an object EIC that exists in the DP but does not belong to the participant making the service call, the data are not returned to the service.

Table 212 – *FindCustomerInfo* service request structure

Element	Type	Req.	Description/details
FindCustomerInfoRequest	-	Yes	Main demand element
searchInfo	-	Yes	Search information element
customerEIC	string (1-16)	No	Client EIC
objectEIC	string (1-16)	No	Object EIC
customerIdentifier	string (1-30)	No	Client registration number
customerName	string (1-100)	No	Client name
objectAddress	-	No	Object address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No	Municipality, for LV addresses
city	string (1-100)	No	City, for LV addresses
parish	string (1-100)	No	Parish, for LV addresses
village	string (1-100)	No	Village, for LV addresses
street	string (1-100)	No	Street, for LV addresses
houseNameOrNumber	string (1-100)	No	House number and name, for LV addresses
flatNumber	string (1-100)	No	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [2]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, applies to LV addresses
MPNumber	string (1-50)	No	Metering point number
meterNumber	string (1-50)	No	Meter number

Processing of requests

The search takes place for all the specified parameters at the same time; if an object or object address is specified, only the objects matching the search criteria are available on the list of objects.

The address must be entered in accordance with the SLS address register; the SLS address code may also be entered if known.

Searching by both the EIC and by the client identifier is exact, i.e., the values are searched for exactly as entered.

Searching by client name takes place, replacing Latvian letters with Latin letters; quotation marks and other similar symbols are not taken into account. The % search mask can be used in the search, provided that the mask can only be used in the search criteria starting with the 4th character.

The maximum amount of returned data is 100 entries, regardless of the number of entries actually found.

Table 213 – *FindCustomerInfo* service reply structure

Element	Type	Req.	Description/details
FindCustomerInfoResponse	-	Yes	Main reply element
customerInfoList	-	Yes	Client information list element
customerInfo	-	No	Client information element
eic	string (1-16)	Yes	Client EIC
identifier	string (1-30)	Yes	Client personal identity number/registration number
customerNameInfo	-	Yes	Client name information element
private	-	Yes [1]	Private client name information element
firstName	string (1-100)	Yes	Private individual client name
lastName	string (1-100)	Yes	Private individual client surname
legal	-	Yes [1]	Legal entity client name information element
businessName	string (1-255)	Yes	Legal entity client name
objectList	-	Yes	Object information list element
objectInfo	-	No	Object information element
eic	string (1-16)	Yes	Object EIC
description	string (1-255)	No	Object name
addressFull	string (1-1000)	Yes	Object address merged into one field

Details

[1] One of the elements with this marker is returned.

Below is a list of possible errors in processing this request.

Table 214 – possible error messages of the client master data search service

Error code	Description/details
E_TOKEN_NOT_VALID	Token %1% invalid!
E_TOKEN_DOES_NOT_EXIST	Authentication token does not exist

E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_USER_ROLE_PERMISSION	User %1% does not have access to this function
E_CUSTOMER_NOT_FOUND	Client not found on request.
E_INVALID_REQUEST	The message does not comply with XSD.

Examples of SOAP/XML messages

Clients can be searched by: client EIC, client identification code, client name/surname, EIC of the object linked to the client.

- Sample request
  - `FindCustomerInfo_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `FindCustomerInfo_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Client information retrieval service (GetCustomerInfo)

The service returns all master data information about the requested client available in the DP, basic client information, contract information, contract row information. Master client data are always returned, while additional data related to the participant are only returned if stored in the DP. Data of other participants are not returned as part of the service.

Table 215 – *GetCustomerInfo* service request structure

Element	Type	Req.	Description/details
GetCustomerInfoRequest	-	Yes	Main demand element
eic	string (1-16)	Yes	Client EIC

Table 216 – *GetCustomerInfo* service reply structure

Element	Types	Req.	Description/details
GetCustomerInfoResponse	-	Yes	Main reply element
customerInfo	-	Yes	Client information element
eic	string (1-16)	No	Client EIC
type	string (1-50)	No	Type of client • PRIVATE (natural individual) • LEGAL (legal entity)
identifier	string (1-30)	No	Client identifier (personal identity number or company registration number)
isResident	boolean	No	The flag indicates if the client is a resident

firstName	string (1-100)	No	Client name (natural individual)
lastName	string (1-100)	No	Client surname (natural individual)
businessName	string (1-255)	No	Client name (legal entity)
legalAddress	-	No	Client/company registered address
address	-	Yes [1]	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No	Municipality, for LV addresses
city	string (1-100)	No	City, for LV addresses
parish	string (1-100)	No	Parish, for LV addresses
village	string (1-100)	No	Village, for LV addresses
street	string (1-100)	No	Street, for LV addresses
houseNameOrNumber	string (1-100)	No	House number and name, for LV addresses
flatNumber	string (1-100)	No	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No [2]	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, applies to LV addresses
addressOth	-	Yes [1]	Address element for addresses in other countries
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
addressLine1	string (1-255)	Yes	Address line 1, for other countries
addressLine2	string (1-255)	No	Address line 2, for other countries
addressLine3	string (1-255)	No	Address line 3, for other countries
addressLine4	string (1-255)	No	Address line 4, for other countries
addressLine5	string (1-255)	No	Address line 5, for other countries
email	string (4-250)	No	Client e-mail address
notificationEmail	string (4-250)	No	Client message e-mail address
phoneNumber	string (4-30)	No	Client phone number (except mobile)
mobilePhoneNumber	string (4-30)	No	Client mobile phone number
customerContracts	-	No	Client contract list element
contractInfo	-	Yes	Client contract element
externalReference	string (1-50)	Yes	Reference to the source system
contractNumber	string (1-50)	No	Contract number
contractType	string (1-50)	No	Type of contract • DSO_CUSTOMER (DSO contract with the client) • TSO_CUSTOMER (TSO contract with the client)

dateFrom	datetime	No	Contract effective from date
dateTo	datetime	No	Contract effective to date
status	string (1-50)	No	Contract status • ACTIVE (active) • INACTIVE (inactive)
isActive	boolean	No	The flag indicates if the contract is active (correct)
customerContractLines	-	No	Client contract row list element
contractLineInfo	-	Yes	Client contract row element
externalReference	string (1-50)	Yes	Reference to the source system
objectEIC	string (1-16)	No	Object EIC
dateFrom	datetime	No	Date from which the contract row is in effect
dateTo	datetime	No	Date until which the contract row is in effect
status	string (1-50)	No	Contract row status • ACTIVE (active) • INACTIVE (inactive)
isActive	boolean	No	The flag indicates if the contract row is active (correct)
customerContractAttributes	-	No	Client contract attribute list element
contractAttributeInfo	-	Yes	Client contract attribute element
externalReference	string (1-50)	Yes	Reference to the source system
type	string (1-50)	No	Attribute type
isActive	boolean	No	Is the attribute active
valueStr	string (1-255)	No	Text value
valueInt	int	No	Number value
valueDate	datetime	No	Date value
valueAddr	-	No	Address value element
address	-	Yes [3]	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No	Municipality, for LV addresses
city	string (1-100)	No	City, for LV addresses
parish	string (1-100)	No	Parish, for LV addresses
village	string (1-100)	No	Village, for LV addresses
street	string (1-100)	No	Street, for LV addresses
houseNameOrNumber	string (1-100)	No	House number and name, for LV addresses
flatNumber	string (1-100)	No	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses

classifierCode	string (1-100)	No	SLS address code, for LV addresses
customAddressDetail	string (1-255)	No	Exception building, applies to LV addresses
addressOth	-	Yes [3]	Address element for addresses in other countries
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
addressLine1	string (1-255)	Yes	Address line 1, for other countries
addressLine2	string (1-255)	No	Address line 2, for other countries
addressLine3	string (1-255)	No	Address line 3, for other countries
addressLine4	string (1-255)	No	Address line 4, for other countries
addressLine5	string (1-255)	No	Address line 5, for other countries
customerContactPersons	-	No	Client contact person list element
contactPersonInfo	-	Yes	Client contact person element
externalReference	string (1-50)	Yes	Reference to the source system
type	string (1-50)	No	Type of contact person • TECHNICAL (contact for technical topics) • LEGAL (contact person for legal matters) • GENERIC (other contact person type)
firstName	string (1-100)	No	Contact person name
lastName	string (1-100)	No	Contact person surname
phoneNumber	string (4-30)	No	Contact person phone number
email	string (4-250)	No	Contact person e-mail
notes	string (1-1000)	No	Notes about the contact person
isActive	boolean	No	The flag indicates if the contact person is active (correct)

Details

[1,3] One of the elements with this marker is returned.

[2] The *classifierCode* element value is not returned; only the full address information is returned.

Below is a list of possible errors in processing this request.

Table 217 – Possible error response messages sent by the client master data return service

Error code	Description/details
E_TOKEN_NOT_VALID	Token %1% invalid!
E_TOKEN_DOES_NOT_EXIST	Authentication token does not exist
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!

E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_USER_ROLE_PERMISSION	User %1% does not have access to this function
E_CUSTOMER_NOT_FOUND	Client not found on request.
E_INVALID_REQUEST	The message does not comply with XSD.

Examples of SOAP/XML messages

Client information search service using the client's EIC.

- Sample request
  - `GetCustomerInfo_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `GetCustomerInfo_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

Object information retrieval service (GetObjectInfo)

The service returns all master data for the requested object available in the DP: object information, metering point information, meter information, attribute information, and relation information. The service only returns information if the object is connected to the participant's network.

Table 218 – *GetObjectInfo* service request structure

Element	Type	Req.	Description/details
GetObjectInfoRequest	-	Yes	Main demand element
eic	string (1-16)	Yes	Object EIC

Table 219 – *GetObjectInfo* service reply structure

Element	Type	Req.	Description/details
GetObjectInfoResponse	-	Yes	Main reply element
objectInfo	-	Yes	Object information element
externalReference	string (1-50)	Yes	Reference to the source system
eic	string (1-16)	No	Object EIC
description	string (1-255)	No	Object name
readingType	string (1-50)	No	Type of meter reading at the object: • AMR (the meter is read remotely) • LEGACY (the meter is not read remotely) • OTHER (other, the meter is read in a different way)
cadastralNr	string (1-30)	No	Cadastral designation of the object's land unit
characterCode	string (1-100)	No	Object type code

characterCodeDescription	string (1-255)	No	Object type code description
isActive	boolean	No	If the object participates in the market
averageYearlyConsumption	decimal	No	Average annual consumption in the last 12 full-month billing periods
address	-	No	LV address element • Classifiers: SLS address classifiers
country	string (2)	Yes	*ISO 3166-1 alpha-2* country code
region	string (1-100)	No	Municipality, for LV addresses
city	string (1-100)	No	City, for LV addresses
parish	string (1-100)	No	Parish, for LV addresses
village	string (1-100)	No	Village, for LV addresses
street	string (1-100)	No	Street, for LV addresses
houseNameOrNumber	string (1-100)	No	House number and name, for LV addresses
flatNumber	string (1-100)	No	Apartment, for LV addresses
postalCode	string (1-7)	No	Postal code, for LV addresses
classifierCode	string (1-100)	No	SLS address code
customAddressDetail	string (1-255)	No	Exception building, applies to LV addresses
relations	-	No	Relation information list element
relationInfo	-	Yes	Relation information element
externalReference	string (1-50)	Yes	Reference to the source system
supplierEIC	string (1-16)	No	Supplier EIC
customerEIC	string (1-16)	No	Client EIC, to unambiguously identify the client for the link
type	string (1)	No	Type of link (trade or purchase) • S (trading) • P (purchasing)
dateFrom	datetime	No	Link effective from date
dateTo	datetime	No	Link effective to date
status	string (1)	No	Link status (active or inactive) • A (active) • I (inactive)
isSettlementServiceProvided	boolean	No	The flag indicates if the Participant provides payer functions during the operation of this link • true (is the paying entity) • false (not a paying entity)
isStockExchangeCustomer	boolean	No	The flag indicates if an exchange rate is planned for the object
meteringPoints	-	No	Metering point list element
meteringPointInfo	-	Yes	Metering point element

externalReference	string (1-50)	Yes	Reference to the source system
MPNumber	string (1-50)	No	Metering point number
TPNumber	string (1-255)	No	Transformer station number
TPName	string (1-255)	No	Transformer station name
feederNumber	string (1-255)	No	Feeder number
loadPointNumber	string (1-255)	No	Load point number
dateFrom	datetime	No	Metering point effective from date
dateTo	datetime	No	Metering point effective to date
isActive	boolean	No	The flag indicates if the metering point is active (correct)
meters	-	No	Meter list element
meterInfo	-	Yes	Meter element
externalReference	string (1-50)	Yes	Reference to the source system
meterNumber	string (1-50)	No	Meter number
dateFrom	datetime	No	Meter effective from date
dateTo	datetime	No	Meter effective to date
isAMR	boolean	No	Is the meter installed a smart meter
isMeterTransit	boolean	No	The flag indicates if the meter is a transit meter
isMeterVirtual	boolean	No	The flag indicates if the meter is a virtual meter (no accounting)
status	string (1-50)	No	Meter status • INSTALLED (installed) • CONNECTED • DISCONNECTED_DEBT (disconnected due to arrears) • DISCONNECTED_TIME (temporarily disconnected) • DISCONNECTED (disconnected) • REMOVED (removed)
statusDate	dateTime	No	Status change date
isActive	boolean	No	The flag indicates if the meter is active (correct)
meterRegisters	-	No	Meter register list element
meterRegisterInfo	-	Yes	Meter register element
externalReference	string (1-50)	Yes	Reference to the source system
OBISCode	string (1-20)	No	Register OBIS code • Classifier: Types of meter register
description	string (1-255)	No	Meter description/notes
dateFrom	datetime	No	Date from which the contract row is in effect
dateTo	datetime	No	Date until which the contract row is in effect

isActive	boolean	No	The flag indicates if the meter register is active (correct)
MPAttributes	-	No	Metering station point attribute list element
objectMPAttributeInfo	-	Yes	Metering point attribute element
externalReference	string (1-50)	Yes	Reference to the source system
attributeType	string (1-50)	No	Attribute type • Classifier: Types of object/MP attribute types
attributeValue	string (1-255)	No	Attribute value in text format
dateFrom	datetime	No	Date from which the contract row is in effect
dateTo	datetime	No	Date until which the contract row is in effect
isActive	boolean	No	The flag indicates if the MP attribute is active (correct)
objectAttributes	-	No	Object attribute list element
objectMPAttributeInfo	-	Yes	Object attribute element
externalReference	string (1-50)	Yes	Reference to the source system
attributeType	string (1-50)	No	Attribute type • Classifier: Types of object/MP attribute types
attributeValue	string (1-255)	No	Attribute value in text format
dateFrom	datetime	No	Date from which the contract row is in effect
dateTo	datetime	No	Date until which the contract row is in effect
isActive	boolean	No	The flag indicates if the object's attribute is active (correct)

Below is a list of possible errors in processing this request.

Table 220 – possible error response messages during request processing

Error code	Description/details
E_TOKEN_NOT_VALID	Token %1% invalid!
E_TOKEN_DOES_NOT_EXIST	Authentication token does not exist
E_UNSUCCESSFUL_PROCESSING	Failed processing! Please check your data and try again.
E_INVALID_TOKEN_USER_COMBINATION	Token does not belong to the user!
E_AUTHORIZATION_FAILED	Authorisation failed; call not available for this user!
E_INVALID_USER_ROLE_PERMISSION	User %1% does not have access to this function
E_INVALID_REQUEST	The message does not comply with XSD.
E_OBJECT_NOT_FOUND	Object not found on request.

Examples of SOAP/XML messages

Object information search service using the object's EIC.

- Sample request
  - `GetObjectInfo_request.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.
- Sample reply
  - `GetObjectInfo_response.xml` – file (Unix EOL), available in the `samples/xml` folder enclosed.

REPORTS

For different purposes, the data platform creates reports in the form of a *CSV* data file using saved consumption data, client, object, market participant data and events. The reports are the main way in which the DP communicates mass consumption data to market participants.

Report file format

All information generated for market participants by the data platform is created in *CSV* file format.

Because the dates and times for suppliers and purchasers are in the Latvian time zone, reports with separate rows or columns for each hour of the day have one less entry when switching to daylight saving time (23 entries on the day of the time change if there is a 1-hour ISP interval, 92 entries if there is a 15-minute ISP interval) and one more entry when switching to standard time (25 entries on the day of the time change if there is a 1-hour ISP interval, 100 entries if there is a 15-minute ISP interval). Note that on the day of the change, there are two entries for 04:00, which are only distinguished by their order in the reference file.

Table 221 – CSV file characteristic values for exchanging consumption data

Characteristic value	Description/details
File encoding	WINDOWS-1257
First row	Column field headings
Column separator	';' (semicolon), note that it is not possible to set ';' as a component of data fields
Decimal part separator	'.' (point)
Date format	Suppliers and Purchasers: DD.MM.YYYY (Latvian time zone) Other market participants: YYYY-MM-DD (Latvian time zone)
Date and time format	Suppliers and Purchasers: DD.MM.YYYY HH24:MM (Latvian time zone) Other market participants: YYYY-MM-DDTHH24:MM:SS±HH:MM (indicating Latvian time zone)
Additional	Column values are not put in quotes ("")

Report file names

Every report is given its own file name, which must be unique.

For clarity, the placeholders used in the filename templates are shown below.

Table 222 – Placeholders used in the CSV file name templates

Characteristic value	Description/details
EIC	EIC of the participant for which the report is intended
YYYY	Year, always 4 symbols
MM	Month, always 2 symbols

DD	Day, always 2 symbols
HH24	Hour, 24 h format, always 2 symbols
MI	Minutes, always 2 symbols
SS	Seconds, always 2 symbols
PERIOD	Billing period in YYYY-MM format
DATE	Date of consumption in YYYY-MM-DD format

Reports for suppliers

These are reports on electricity trading. They are created for suppliers and for purchasers who act as suppliers.

Daily consumption (DAILYCONS)

The Daily Consumption report is a report that shows the consumption data of the supplier's clients for the previous day at the level of the metering point. If the DSO has not sent data for a metering point, that metering point (MP) will not be included in the report.

The supplier receives the report at two times:

- *Starting from* 8:30, the supplier receives data on its clients' consumption at MP level for the previous day.
- *Starting from* 9:50, the supplier receives data on its clients' consumption at MP level for the day before last. If the DSO has not received a complete percentage breakdown of the consumption data for the metering point for the current day, this report shows the more complete data with a higher percentage share.

  Example:

  06.03.2024 08:30 05-03-2024_DAILYCONS_EIC_20240306083009.csv.zip
  06.03.2024 09:50 04-03-2024_DAILYCONS_EIC_20240306095006.csv.zip

Both reports should not be totalled together.

The Daily Consumption or DAILYCONS data received are preliminary and must not be used for billing purposes with the client. The supplier may use the report to forecast future consumption and to use control mechanisms for its own operations.

If the reference day is the day on which the time zone changes (to or from daylight saving time), the number of columns represents the actual number of hours on that day: 23 hours for daylight saving time and 25 hours for standard time

Report file name template

`<DATE>_DAILYCONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`08-12-2023_DAILYCONS_EIC_20231209083004.csv` – the file is available in the annex, folder `samples/csv`.

Table 223 – Structure of the Daily Consumption report

Element	Type	Description/details
date	DATE	Date of consumption in DD.MM.YYYY format
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
HH24:MM	NUMBER	Consumption in kilowatt-hours for each interval. As many fields as there are intervals in a day (24 if the duration of the interval is 1 hour). Indicates the time immediately after the end of the interval (e.g., with hourly records, the first interval is 01:00 and the last is 24:00). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed
total	NUMBER	Consumption in kilowatt-hours for the whole day. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
missing %	NUMBER	Percentage of unread consumption intervals (shows the % of hours for which data are not available). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part.
dso eic	NUMBER	DSO EIC code

Daily Consumption 15M (DAILYCONS15M)

The "Daily Consumption report 15" is a report that shows the consumption data of the supplier's clients for the previous day at the metering point level in 15-minute intervals. If the DSO has not sent data for a metering point, that metering point (MP) will not be included in the report.

The supplier receives the report at two times:

- Starting from 9:00, the supplier receives data on its clients' consumption at MP level for the previous day.
- Starting from 10:30, the supplier receives data on its clients' consumption at MP level for the day before last. If the DSO has not received a complete percentage breakdown of the consumption data for the metering point for the current day, this report shows the more complete data with a higher percentage share.

  Example:

  06.03.2024 09:00 05-03-2024_DAILYCONS15M_EIC_20240306083009.csv.zip
  06.03.2024 10:30 04-03-2024_DAILYCONS15M_EIC_20240306095006.csv.zip

Both reports should not be totalled together.

The Daily Consumption data received are preliminary and must not be used for billing purposes with the client. The supplier may use the report to forecast future consumption and to use control mechanisms for its own operations.

If the reference day is the day on which the time zone changes (to or from daylight saving time), the number of columns represents the actual number of hours on that day: 23 hours for daylight saving

time (92 entries if there is a 15-minute ISP interval) and 25 hours for standard time (100 entries if there is a 15-minute ISP interval)

Report file name template

`<DATE>_DAILYCONS15M_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`08-12-2023_DAILYCONS15M_EIC_20231209083004.csv` – the file is available in the annex, folder `samples/csv`.

Table 224 – Structure of the Daily Consumption 15M report

Element	Type	Description/details
date	DATE	Date of consumption in DD.MM.YYYY format
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
HH24:MM	NUMBER	Consumption in kilowatt-hours for each interval. As many fields as there are intervals in a day (96 if the duration of the interval is 15minutes). Indicates the time immediately after the end of the interval (e.g., with hourly records, the first interval is 00:00 and the last is 23:45). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed
total	NUMBER	Consumption in kilowatt-hours for the whole day. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
missing %	NUMBER	Percentage of unread consumption intervals (shows the % of hours for which data are not available). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part.
dso eic	NUMBER	DSO EIC code

Status corrections (STATKOR)

The status correction report is prepared and sent to the supplier on day 8 of every month, including the previous month's fiscal power metering data as well as the total corrections for the previous billing periods in the last 12 months. The data are provided at the client level. If the DSO sends billing confirmation data after the 8th of the month, the data will count towards the next month's STATKOR report.

If any of the supplier's clients have had their electricity consumption at the client's object corrected, the correction is shown in the report for the month in which the resulting electricity consumption was corrected.

The report is not used for the supplier's settlements with its clients. It is used as an auxiliary tool for the transmission system operator's balance settlements and is indicative in nature.

Report file name template

<PERIOD>_STATKOR_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]

Report sample

11-2023_STATKOR_EIC_20231208073006.csv – the file is available in the annex, folder samples/csv.

Explanation

11 – month of the billing period; 2023 – year of the billing period; 20231208073006 – dated time when the report was created. In this example, it is read as follows: On 08.12.2023, at 07:30:06

Table 225 – Structure of the Status Corrections report

Element	Type	Description/details
customer eic	TEXT	Client EIC code
customer name	TEXT	Client name
R MM.YYYY	NUMBER	Electricity consumed during the current billing period, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K total	NUMBER	The total of the corrections for consumption in the previous 12 billing periods, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period a month ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 2 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 3 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 4 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 5 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 6 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

K MM.YYYY	NUMBER	Consumption corrections for the billing period 7 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 8 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 9 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 10 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 11 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 12 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
dso eic	TEXT	DSO EIC code

My market messages (MMLIST)

At the request of the supplier, a report is prepared that includes all market messages received and sent by the supplier.

The supplier name, client name, object name, object address values are determined using the latest information saved in the DP at the time of the creation of the file.

The object status indicates if, at the time of the creation of the report, the object has at least one MP freely active, with at least one meter that has the status *CONNECTED*: *A* – active; *I* – inactive.

Report file name template

`<PERIOD>_MMLIST_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`12-2023_MMLIST_EIC_20230719214439.csv` – the file is available in the annex, folder `samples/csv`.

Table 226 – Structure of the 'My market messages' report

Element	Type	Description/details
mm type code	TEXT	Market message code

mm date	DATE	Date of registration of the market message, in DD.MM.YYYY HH24:MM:SS format
message ic	TEXT	Market message identifier
supplier name	TEXT	Supplier name
customer name	TEXT	Client name
customer eic	TEXT	Client EIC code
object eic	TEXT	EIC code of the object
object name	TEXT	Object name
object status	TEXT	Object status (permitted values: I – INACTIVE, A – ACTIVE)
object address	TEXT	Full object address:
period	DATE	Effective date of the market message, in DD.MM.YYYY format
status	TEXT	Market message processing status (permitted values: NEW, PROCESSING, FINISHED, ERROR)
phase	TEXT	Market message processing sub-status (permitted values: RECEIVED, CREATED, VALIDATION, WAIT, EVENT_CREATED, EVENT_RECEIVED, PROCESSED)
file name	TEXT	File name
direction	TEXT	Market message direction (permitted values: IN, OUT)
type	TEXT	Type of market message (permitted values: CSV, XML)
dso eic	TEXT	DSO EIC code

All my clients (ALLCUST)

'All my clients' is a report showing the supplier's client portfolio.

The supplier may create this report on request and it shows the supplier's current client portfolio at the time of the request. The report only includes those clients and client objects, for which the DSO has assigned a supplier link.

The report is automatically created and available to Suppliers on the 26th of the month, when the report shows not only the current client portfolio, but also clients and their objects whose contracts will start the following month. Between the 1st and the 25th of the month, the supplier sees the current client portfolio at the time of the request.

By the 26th of the month, the DSO informs suppliers about the next-month changes in their client portfolios (following the legally prescribed supplier change procedure) using the 'All my clients (ALL CUST)' report.

The meter number is determined by the current information stored in DP at the time of the creation of the file. The report must include all objects that are covered by contracts, both with active and inactive MPs/meters. One active meter corresponds to one MP during one *ISP* interval. Different *ISP* intervals can have different meters for the same MP, which are also accordingly shown in this file. Portfolio change is the change in the supplier's portfolio since the beginning of the reference month,

with a *Y* for those IM or clients that joined or left. Replacing a meter does not affect the supplier's portfolio.

Report file name template

`<PERIOD>_ALLCUST_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`12-2023_ALLCUST_EIC_20231122100003.csv` – the file is available in the annex, folder `samples/csv`.

Explanation

12 – period month, for which the data are sent; `2023` – period year; `20231122100003` – dated time when the report was created. In this example, it is read as follows: 22.11.2023, at 10:00:03

Table 227 – Structure of the 'All my clients' report

Element	Type	Description/details
supplier name	TEXT	Supplier name
start date	DATE	Trading link start date in DD.MM.YYYY format
customer eic	TEXT	Client EIC code
customer name	TEXT	Client name
object eic	TEXT	EIC code of the object
object name	TEXT	Object type
object address	TEXT	Full object address:
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
meter nr	TEXT	Meter number
meter status	TEXT	Meter status
reading type	TEXT	Meter reading type
tariff	TEXT	Rate
dso eic	TEXT	DSO EIC code
portfolio changes	TEXT	Portfolio changes at MP level N – there are no changes Y – there are changes

Interval consumption (CONS)

The report is intended to be used for billing purposes!

The 'Interval consumption' report contains each A+, NETO, and L channel's total consumption entry interval consumption version number that corresponds to the interval consumption values for each *ISP* interval.

The 'Interval consumption' report, or CONS, has information about electricity consumption provided by the system operator, serving as the basis for the electricity billing between the supplier and its client.

It is prepared and sent to the supplier for the client object, at the level of the metering point. The allocation of metering point consumption is done at hourly intervals. The consumption allocation range can vary depending on legislation. The report includes all meters that are associated with the included metering points and are active during the report's billing period.

The system operator determines the client's electricity consumption for billing purposes:

- *using distance communication methods, if the users have a smart fiscal power metering device installed;*
- *using the client's historical average monthly electricity consumption, adjusted according to the reading of the fiscal metering device recorded during the control inspection;*
- *the readings taken from a fiscal metering device and declared by the user, which it submits to the system operator or supplier in the manner they prescribed.*

Aggregate consumption records with the same DSO, supplier, object, client, MP, and *related id* are treated as one set, and are processed together. Aggregate consumption records without the metering point are not used in this report. The meter number is determined by the current information stored in DP at the time of the creation of the file. The report must include all meters linked to the included MPs and active during the settlement period of the report.

It must be noted that the CONS report allows the supplier to receive consumption data not only for the previous electricity period billing but also for cancellation, correction, and additional billing.

Report file name template

`<PERIOD>_CONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_CONS_EIC_20231214222630.csv` – the file is available in the annex, folder `samples/csv`.

Explanation

11 – period month, for which the data are sent. 2023 – billing period year. 20231214222630 – dated time when the report was created. In this example, it is read as follows: 14.12.2023, at 22:26:30

Table 228– Structure of the 'Interval consumption' report

Element	Type	Description/details
day	NUMBER	Consumption interval end day number in the month
month	NUMBER	Consumption interval end month number in the year
year	NUMBER	Consumption interval end year
time	TIME	Consumption interval end time in HH24:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
customer eic	TEXT	Client EIC code
object eic	TEXT	EIC code of the object

mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
meter nr	TEXT	Meter number
A+	NUMBER	Consumption for channel A+ (or NETO), in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part. If a channel has losses (L channel), these are added to A+ consumption.
A-	NUMBER	Field not used in the report: it always shows '0'
status	TEXT	Consumption status. The following status codes used: R, A, P, K, where: • R – invoice • A – cancellation • P – additional invoice • K – correction
related id	TEXT	Linked billing/calculation reference identifier
dso eic	TEXT	DSO EIC code

Billing rows (BILL)

The 'Billing rows' report is only generated and sent for the client objects where the supplier, in its contract with the client, indicated itself as the billing provider in accordance with Cabinet Regulation No. 635. In accordance with the laws and regulations, the supplier is the default billing provider for individual clients in a segment.

The BILL report shows the fees for electricity supply and distribution system services, taking into account the technical characteristics of the distribution system connection and the amount of electricity supplied from the grid.

Based on the interval consumption report *CONS*, a billing row report is created, containing the billing rows records associated with each aggregate consumption record to be sent.

The *BILL* report is typically planned as part of the *CONS* report generation process, with a reference to the generated *CONS* report as a parameter. The creation time of the *BILL* report included in its file name must be identical to the creation time included in the file name of the corresponding *CONS* report.

Report file name template

`<PERIOD>_BILL_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_BILL_EIC_20231214222630.csv` – the file is available in the annex, folder `samples/csv`.

Explanation

11 – period month, for which the data are sent. `2023` – billing period year. `20231214222630` – dated time when the report was created for the supplier. In this example, it is read as follows: 14.12.2023, at 22:26:30

Table 229– Structure of the 'Billing rows' report

Element	Type	Description/details
dso bill id	TEXT	Billing/calculation reference identifier. A combination of characters uniquely identifying a group of rows
dso bill line id	TEXT	Unique number of the calculation row. Cannot repeat within a DSO
customer eic	TEXT	Client EIC code
object eic	TEXT	EIC code of the object
object name	TEXT	Object name
object address	TEXT	Object address
tariff	TEXT	Connection rate name
price component code	TEXT	Rate component code
price component description	TEXT	Rate component description
meter nr	TEXT	Meter number (if the calculation row refers to a meter). It may also contain a description to the subject of the invoice if the meter number is not available. If an asterisk (*) is added to a metering point, the measurement was not taken remotely, and the billing is done using an average reading.
reading from to	TEXT	Meter reading at the beginning and at the end of the consumption period (two float values separated by a '-'). Only digits and one decimal separator (dot) are allowed in each value. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part.
date from	DATE	Consumption period start. Must be in DD.MM.YYYY format
date to	DATE	Consumption period end. Must be in DD.MM.YYYY format
quantity	NUMBER	Calculates the quantity of services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
uom	TEXT	Unit of measurement of the services listed in the calculation row
price	NUMBER	Calculates the price of the services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
amount	NUMBER	Calculates the sum of the services listed in the row. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
tax rate	TEXT	The percentage of the tax rate applicable to the service listed in the calculation row (together with the percentage sign). The field only allows digits, with one decimal separator (dot) and the percentage sign. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

related id	TEXT	Linked billing/calculation reference identifier
dso eic	TEXT	DSO EIC code

Reports on producing objects

These reports are generated for suppliers and concern purchases of electricity produced (transferred to the grid).

Daily purchases (DAILYPUR)

The 'Daily purchases' report is a report that shows the electricity produced by the purchaser's client objects at the measurement point level on the previous day. If the DSO has not sent data for a metering point, that metering point will not be included in the report.

The supplier receives the report at two times:

- Starting from 8:30, the purchaser receives data on the electric power generated by its clients at the metering point level for the previous day.
- Starting from 9:00, the purchaser receives data on the electric power generated by its clients at the metering point level for the day before yesterday. If the metering point *has not sent the full* scope of electricity generation data for the current *day*, then *this report shows the more complete data.*

  Example:

  06.03.2024 08:30 05-03-2024_DAILYPUR_EIC_20240306083008.csv.zip

  06.03.2024 09:00 04-03-2024_DAILYPUR_EIC_20240306090004.csv.zip

The data are retrieved from the interval consumption data structure: all active A-channel entries are sent. The ownership of the report recipients and DSO for each of the interval consumption records is determined by the active purchase contracts in the system on the consumption date of the report. No verification of other information is required for the purposes of this report.

If the reference day is the day on which the time zone changes (to or from daylight saving time), the number of columns represents the actual number of hours on that day: 23 hours for daylight saving time and 25 hours for standard time

The 'Daily purchases' or DAILYPUR data received are preliminary and must not be used for billing purposes with the client.

Report file name template

`<DATE>_DAILYPUR_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`06-03-2024_DAILYPUR_EIC_20240306083003.csv` – the file is available in the annex, folder `samples/csv`.

Table 230– Structure of the 'Daily purchases' report

Element	Type	Description/details
date	DATE	Amount generated date in DD.MM.YYYY format
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
HH24:MM	NUMBER	Amount generated for each of the intervals, in kilowatt-hours. As many fields as there are intervals in a day (24 if the duration of the interval is 1 hour). Indicates the time immediately after the end of the interval (e.g., with hourly records, the first interval is 01:00 and the last is 24:00). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed
total	NUMBER	Kilowatt-hours generated for the whole day. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
missing %	NUMBER	Percentage of unread generated amount intervals (shows the % of hours for which data are not available). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
dso eic	TEXT	DSO EIC code

Daily purchases 15M (DAILYPUR15M)

The 'Daily purchases 15M' report is a report that shows the electricity produced by the purchaser's client objects for the previous day at the metering point level in 15-minute intervals. If the DSO has not sent data for a metering point, that MP will not be included in the report.

The suppliers receive the report at two times:

- Starting from 09:00 the supplier receives data on the amount of electricity produced by their customers at the metering point level for the previous day.
- Starting from 9:00, the supplier receives data on the amount of electricity produced by their customers at the metering point level for the day before yesterday. If the MP has not sent the full scope of electricity generation data for the current day, then this report shows the more complete data.

  Example:

  06.03.2024 09:00 05-03-2024_DAILYPUR15M_EIC_20240306083008.csv.zip

  06.03.2024 10:30 04-03-2024_DAILYPUR15M_EIC_20240306090004.csv.zip

Both reports should not be totalled together.

The data are retrieved from the interval consumption data structure: all active A-channel entries are sent. The ownership of the report recipients and DSO for each of the interval consumption records is determined by the active purchase contracts in the system on the consumption date of the report. No verification of other information is required for the purposes of this report.

If the reference day is the day on which the time zone changes (to or from daylight saving time), the number of columns represents the actual number of hours on that day: 23 hours for daylight saving time (93 entries if there is a 15-minute ISP interval) and 25 hours for standard time (100 entries if there is a 15-minute ISP interval)

The 'Daily purchases 15M' data received are preliminary and must not be used for billing purposes with the client.

Report file name template

`<DATE>_DAILYPUR15M_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`06-03-2024_DAILYPUR_EIC_2024030609003.csv` – the file is available in the annex, folder `samples/csv`.

Table 231– Structure of the 'Daily purchases' report

Element	Type	Description/details
date	DATE	Amount generated date in DD.MM.YYYY format
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
HH24:MM	NUMBER	Amount generated for each of the intervals, in kilowatt-hours. As many fields as there are intervals in a day (96 if the duration of the interval is 15minutes). Indicates the time immediately after the end of the interval (e.g., with hourly records, the first interval is 00:00 and the last is 23:45). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed).
total	NUMBER	Kilowatt-hours generated for the whole day. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
missing %	NUMBER	Percentage of unread generated amount intervals (shows the % of hours for which data are not available). Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
dso eic	TEXT	DSO EIC code

Purchase status (PURSTAT)

The 'Purchase status' report is prepared and sent to the purchaser by the 8th of the month, including the fiscal metering data for the previous month's total electricity production, with the period not exceeding 2 months.

According to the specifications, the report includes 3 periods:

- the period for which the report is created
- the previous period

- the period before the previous period

The field *generation type* is filled using the attribute *ENERGY_PRODUCER_TYPE* (if any) of the object as the short type of energy generation code. If no MP is specified for the object attribute, the producer type applies to all MP that the object has. If an MP is specified for the object attribute, the producer type applies to that specific MP. If there is no such object attribute, the field is kept blank. If the electricity produced at the client's object has been corrected for one of the purchaser's clients, the electricity produced correction is indicated in the report for the specific month in which the electricity consumption value retrieved was corrected. For a 2-month period, the report may include clients and their objects with whom the contract has been terminated.

The report is not used for the purchaser's settlements with its clients. It is used as an auxiliary tool for the transmission system operator's balance settlements and is indicative in nature.

Report file name template

`<PERIOD>_PURSTAT_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_PURSTAT_EIC_20231207210629.csv` – the file is available in the annex, folder `samples/csv`.

Table 232 – Structure of the 'Purchase status' report

Element	Type	Description/details
customer eic	TEXT	Client EIC code
customer name	TEXT	Client name
object eic	TEXT	EIC code of the object
object name	TEXT	Object type
generation type	TEXT	Type of electricity producer. One of the Energy production type STDH_ENERGY_PRODUCER_TYPE codes
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
R MM.YYYY	NUMBER	Electricity produced in the current billing period (channel A), in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Corrections for electricity produced in the previous billing period (channel A), in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Corrections for electricity produced in the billing period 2 months ago (channel A), in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

A- total	NUMBER	Electricity produced in the current billing period (channel A), including corrections for the previous 2 months, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
dso eic	TEXT	DSO EIC code

Purchase data (PURCHASE)

The report is the basis for the purchased electricity billing between the supplier and its client. The PURCHASE report shows the information about the amount of electricity generated, as provided by the system operator. The report contains each A-channel's aggregate generated amount for the entry interval generated amount version number that corresponds to the interval consumption values for each *ISP* interval.

It is prepared and sent to the purchaser for the client object, at the level of the metering point, by day 8 of every month. The allocation of metering point consumption is done at hourly intervals. The consumption allocation range can vary depending on legislation. The report includes all meters that are associated with the included metering point.

Aggregate generated amount records with the same DSO, purchaser, object, client, MP, and *related id* are treated as one set, and are processed together. Aggregate generated amount records without the metering point are not used in this report.

The meter number is determined by the current information stored in DP at the time of the creation of the file. The report must include all meters linked to the included MPs and active during the settlement period of the report. One active meter corresponds to one MP during one *ISP* interval. Different *ISP* intervals can have different meters for the same MP, which are also accordingly shown in this file.

Report file name template

`<PERIOD>_PURCHASE_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_PURCHASE_EIC_20231207202624.csv` – the file is available in the annex, folder `samples/csv`.

Table 233 – Structure of the 'Purchase data' report

Element	Type	Description/details
day	NUMBER	Generated amount interval end day number in the month
month	NUMBER	Generated amount interval end month number in the year
year	NUMBER	Generated amount interval end year
time	TIME	Generated amount interval end time in HH24:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
customer eic	TEXT	Client EIC code

object eic	TEXT	EIC code of the object
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
meter nr	TEXT	Meter number
A-	NUMBER	Kilowatt-hours generated on channel A-. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
status	TEXT	Amount generated status The following status codes are used: R, A, P, K, where: • R – invoice • A – cancellation • P – additional invoice • K – correction
dso eic	TEXT	DSO EIC code

All purchaser clients (ALLPURCH)

'All purchaser clients' is a report showing the purchaser's client portfolio.

The purchaser may create this report on request and it shows the purchaser's current client portfolio at the time of the request. The report shows only those clients and client objects for which the corresponding DSO has a purchaser link based on the *StartPurchase* market message sent by the purchaser, as well as historical clients and their generation objects for the last 2 months.

If the purchaser specified this at the time of reporting, the period of the client's contract is also indicated in the report.

The report includes MP/meter information for all objects covered by the contract.

Report file name template

`<PERIOD>_ALLPURCH_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_ALLPURCH_EIC_20231204085408.csv` – the file is available in the annex, folder `samples/csv`.

Table 234 – Structure of the report 'All purchaser clients'

Element	Type	Description/details
purchaser name	TEXT	Purchaser name
start date	DATE	Purchase link start date
end date	DATE	Purchase link end date
customer eic	TEXT	Client EIC code
customer name	TEXT	Client name/name and surname
object eic	TEXT	EIC code of the object

object name	TEXT	Object name
object address	TEXT	Full object address
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
meter nr	TEXT	Meter number
meter status	TEXT	Meter status
reading type	TEXT	Meter reading type
dso eic	TEXT	DSO EIC code

Reports for DSO

Consumption data verification result (CONSVERIFSTAT)

It analyses the DSO.CONS, DSO.BILL and DSO.COMFIRM files sent. The report acts as a control tool: the answer shown in the report is the result of verification of the consumption data. The report does not include data that have already been sent to the supplier for billing its client.

This is a separate report for each DSO, which includes a list of missing data or data not sent to suppliers and purchasers, with the reason for why it was not sent. Currently, the report is prepared for a 12-month period – including the current billing period.

Accordingly, the report not only checks the consumption data for the current billing period but also the consumption and billing adjustments uploaded by the DSO for the previous 12 months.

Table 235 – Verification result codes

Code	Name	Description/details
W	Waiting	Consumption data not sent – other consumption data, which must be sent at the same time as these, have not yet been verified, or information from all required channels has not been received, or invoice rows have not been received
C	Incorrect Consumption	Consumption data not sent – consumption confirmation aggregate consumption (consumption) does not match interval consumption data aggregate consumption (bill consumption)
T	Incorrect Timestamp	Consumption data not sent – the latest consumption reading/billing time (timestamp) included in the consumption confirmation does not match the latest consumption reading/billing time interval of the consumption entries
U	Unreliable Data	Consumption data not transmitted – at least one ISP period does not match any interval's consumption, or at least one of the interval's consumption entries for a consumption period has the bill status C
M	Missing Confirmation	No consumption confirmation received for active MP channel
S	Ready to Send	The consumption data related to the determinant are ready to be sent to the supplier/purchaser

The data channels match the following meter registers:

- Channel 1 (A+): registers 1.8.0, 1.8.1, 1.8.2, 1.8.3, 1.8.4;
- Channel 2 (A-): registers 2.8.0, 2.8.1, 2.8.2, 2.8.3, 2.8.4;
- Channel 3 (R+): registers 3.8.0, 3.8.1, 3.8.2, 3.8.3, 3.8.4;
- Channel 4 (R-): registers 4.8.0, 4.8.1, 4.8.2, 4.8.3, 4.8.4;

If one of these registers is active for even one day of the billing period, the system must have a determinant for the corresponding channel.

Information about whether the NETO channel is provided for a metering point is specified in the MP's attributes.

Because the loss channel (*L*) is virtual, its existence is not checked: if the DSO has not sent data for it, they are not used in the billing, but its absence is not reported.

Report file name template

`<PERIOD>_CONSVERIFSTAT_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`12-2023_CONSVERIFSTAT_EIC_20231214051259.csv` – the file is available in the annex, folder `samples/csv`.

Table 236 – Structure of the report 'Consumption data check result'

Element	Type	Description/details
cons ref	TEXT	Billing/calculation reference identifier (if the determinant exists)
dso eic	TEXT	DSO EIC code
supplier eic	TEXT	EIC code of the Supplier or Purchaser
customer name	TEXT	Client name
customer eic	TEXT	Client EIC code
object eic	TEXT	EIC code of the object
mp nr	TEXT	Metering point number (external_reference).
billing period	DATE	Billing period in YYYY-MM-DD format
channel	TEXT	Measurement channel code. One of such codes: 1, 2, 3, 4, N, L
status	TEXT	Verification result code. One of such codes: W, C, T, U, M, S
error reason	TEXT	Verification result description. Possible error types: • Not a full interval data set • Determinant contains consumption with status C • Determinant timestamp does not match the latest consumption timestamp • Determinant consumption does not match the interval consumption data total • Metering point of an object does not have determinants for all channels • One of the client's PURCH objects not ready to be sent • One of the client's SUPPL objects not ready to be sent

		• No channel information for metering point • Not all channel determinants received for metering point (%1% expected, %2% received) • No hourly consumption data • No invoice rows received for S channel group • A+ channel not received for metering point • A- channel not received for metering point • NETO channel determinant dates received do not match NETO period dates for metering point • One of client objects is not ready for sending • NETO channel determinant duration received does not match NETO period duration for metering point • No invoice rows received for PS channel group • Invoice rows not received
annulation	TEXT	If the erroneous data sent are cancellation data. One of these values is: Y, N (yes or no, respectively)
date from	DATE	Start of the consumption period in YYYY-MM-DD format (if a consumption confirmation or DSO.COMFIRM has been sent)
date to	DATE	End of the consumption period in YYYY-MM-DD format (if a consumption confirmation or DSO.COMFIRM has been sent)
confirmed consumption	NUMBER	Consumption for the whole period, in kilowatt-hours, as specified in the determinant (if it exists). The field only allows digits, with one decimal separator (full stop). Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
interval consumption	NUMBER	Consumption for the whole period, summing up the interval consumption entry bill consumption values (if the determinant exists), in kilowatt-hours. The field only allows digits, with one decimal separator (full stop). Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
confirmed timestamp	DATE	Latest consumption reading/calculation time, as indicated in the determinant (if a determinant exists), in YYYY-MM-DDTHH24:MM:SS±HH:MM format
interval timestamp	DATE	Latest consumption reading/calculation time of all the consumption period interval consumption entries (if a determinant exists), in YYYY-MM-DDTHH24:MM:SS±HH:MM format
invalid intervals	NUMBER	Number of interval consumption entries with bill status C (if a determinant exists). Only digits are allowed in the field

AST sum (ASTSUM)

A separate report for every DSO is produced on the 8th of every month, after the closing of the DSO billing period. The report include aggregated interval consumption data for the A+ and A- channels, as well as the last 12 months' corrections for every supplier's clients with A+ or A- channel determinants and have already been processed.

The ASTSUM report consists of the submitted consumption confirmation files, or DSO.COMFIRM. If no confirmation file has been submitted, or if it has been submitted, but is incorrect, the data do not appear in the report.

The DSO uses the *ASTSUM* as auxiliary report to create its own balance report to be submitted to the TSO.

If consumption data corrections are made after receiving the ASTSUM report, these corrections will appear in the next month's ASTSUM report under the A+ corrections section. Corrections must be made by the settlement period closing date. If a correction is made after the settlement period closing date, it will not be reflected in the current report. However, if it is necessary to include the corrections in an existing report, the DSO should sent a request to the email step@sadalestikls.lv for creating a revised report.

Report file name template

`<PERIOD>_ASTSUM_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_ASTSUM_EIC_20231129082916.csv` – the file is available in the annex, folder `samples/csv`.

Table 237 – Structure of the ASTSUM report

Element	Type	Description/details
supplier eic	TEXT	EIC code of the Supplier or Purchaser
dso eic	TEXT	DSO EIC code
interval start	DATE	Consumption interval start time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
interval stop	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+ current	NUMBER	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part The value consists of the consumption data sent to the supplier
A+ corrections	NUMBER	Adjustments for channel A+ consumption in the previous 12 months, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part The value consists of corrections made for previous billing periods sent to the supplier
A+ total	NUMBER	Channel A+ consumption in kilowatt-hours, including the current billing period and adjustments for the last 12 months. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part Formula: (A+ Current) + (A+ correction)= A+ total
A- current	NUMBER	The amount produced on channel A during the current billing period, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Correction sum (STATSUM)

A separate report for every DSO is produced on the 8th of every month, after the closing of the DSO billing period; the report contains the aggregate period consumption date and the corrections for the last 12 months, for every supplier's A+ channel data submitted to the supplier.

The DSO uses the *STATSUM* report to check correction and balance data.

Report file name template

`<PERIOD>_STATSUM_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_STATSUM_EIC_20231208063001.csv` – the file is available in the annex, folder `samples/csv`.

Table 238 – Structure of the STATSUM report

Element	Type	Description/details
supplier eic	TEST	Supplier EIC code
supplier name	TEXT	Supplier name
dso eic	TEXT	DSO EIC code
R MM.YYYY	DATE	Electricity sold during the current billing period, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K total	NUMBER	The total of the corrections for consumption in the previous 12 billing periods, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Corrections for consumption in the previous billing period, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 2 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 3 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 4 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 5 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

K MM.YYYY	NUMBER	Consumption corrections for the billing period 6 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 7 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 8 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 9 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 10 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 11 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
K MM.YYYY	NUMBER	Consumption corrections for the billing period 12 months ago, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

DSO consumption (DSOCONS)

On the 8th of every month after the closing of the DSO billing period, a separate report is generated for each DSO's own electricity consumption (broken down by supplier), which includes aggregate interval consumption data for the DSO themselves as clients at their own objects, which have A+, A-, R+, or R- channel determinants and have already been processed.

The report includes the interval start and the interval stop times. Both the times are obtained from the ISP correspondence table: the start of the interval is the value of the *ISP interval* field and the end of the interval is the value of the *To* field.

The following consumption values are included in the report (all the conditions must be met at the same time):

- whose object's owner is the DSO, for which the report is generated,
- whose object is included in the client contract row for a client that is the DSO (based on EIC code) for which the report is generated,
- those that have an active trading and/or purchasing link with a supplier/purchaser.

Report file name template

<PERIOD>_DSOCONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]

Report sample

11-2023_DSOCONS_EIC_20231208080000.csv – the file is available in the annex, folder samples/csv.

Table 239 – Structure of the 'DSO consumption' report

Element	Type	Description/details
supplier eic	TEXT	EIC code of the Supplier or Purchaser
dso eic	TEXT	DSO EIC code
interval start	DATE	Consumption interval start time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
interval stop	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+	NUMBER	Consumption on channel A+, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A-	NUMBER	Kilowatt-hours generated on channel A-. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
R+	NUMBER	Reactive energy consumed on the R+ channel. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
R-	NUMBER	Reactive energy transferred to the grid on the R-channel. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Unprocessed Consumption Data (UNPROCESSED CONSUMPTION)

A separate report is generated for each DSO to inform about unprocessed consumption data, including consumption data (CONS, BILL, CONFIRM) that, for some reason (matching the error file), has not been loaded into the Data Platform. The reports include all unprocessed consumption data for the last 30 (parameter) days. A separate report is created for each type of consumption.

- **Unprocessed Billing Rows (UNPROCESSED BILL)**

Report file name template:

<PERIOD>_UNPROCESSEDBILL_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]

Example report:

08-08-2024_UNPROCESSEDBILL_EIC_20240808150840.csv – file available in the samples/csv directory.

Table 240 – Data file structure for unprocessed billing rows in the "Unprocessed Consumption Data" report

Element	Type	Description/details
message code	TEXT	Error code
message text	TEXT	Error code description
cons ref	string	Invoice/calculation reference identifier. A character combination that uniquely identifies a row group and cannot be repeated in later calculation row files. It cannot match calculation rows with different customer EIC and Supplier EIC codes. Max length – 16 characters. Required field
bill line ref	string	Unique calculation row number. Cannot be repeated within the DSO. Max length – 16 characters. Required field
supplier eic	string	Supplier EIC code. Max length – 16 characters. Required field
customer eic	string	Customer EIC code. Max length – 16 characters. Required field
object eic	string	Object EIC code. Max length – 16 characters. Required field
meter	string	Meter number (if the calculation row relates to a meter). May contain descriptive text about the billing subject if the meter number is not available. Max length – 255 characters
date from	date	Start of the consumption period. Must be in YYYY-MM-DD format. Required field
date to	date	End of the consumption period. Must be in YYYY-MM-DD format. Cannot be earlier than date from. The period in this field must match the date from period. Required field
tariff	string	Connection tariff name. Max length – 255 characters
component code	string	Tariff component code. Max length – 255 characters
component description	string	Tariff component description. Max length – 255 characters
reading from	float	Meter reading at the start of the consumption period. Only digits and one decimal separator (dot) are allowed. Max decimal length – 6 digits. Max integer length – 9 digits. Leading zeros may be omitted
reading to	float	Meter reading at the end of the consumption period. Only digits and one decimal separator (dot) are allowed. Max decimal length – 6 digits. Max integer length – 9 digits. Leading zeros may be omitted
quantity	float	Quantity of services listed in the calculation row. Only digits, one decimal separator (dot), and minus sign are allowed. Max decimal length – 6 digits. Max integer length – 9 digits. Leading zeros may be omitted
uom	string	Unit of measure for services listed in the calculation row. Max length – 16 characters
price	float	Price of services listed in the calculation row. Only digits, one decimal separator (dot), and minus sign are allowed. Max decimal length – 6 digits. Max integer length – 9 digits. Leading zeros may be omitted

amount	float	Sum of services listed in the calculation row. Only digits, one decimal separator (dot), and minus sign are allowed. Max decimal length – 2 digits. Max integer length – 9 digits. Leading zeros may be omitted
tax rate	float	Applicable tax rate percentage for the service listed in the calculation row. Only digits and one decimal separator (dot) are allowed. Max decimal length – 2 digits. Max integer length – 2 digits. Leading zeros may be omitted

- **Unprocessed Interval Consumption (UNPROCESSED CONS)**

Report file name template:

`<PERIOD>_UNPROCESSEDCONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Example report:

`08-08-2024_UNPROCESSEDCONS_EIC_20240808150840.csv` – file available in the samples/csv directory.

Table 241 - Data file structure in the "Unprocessed Consumption Data" report

Element	Type	Description/details
message code	TEXT	Error code
message text	TEXT	Error code description
datetime	datetime	End time of the consumption interval, including time zone. Must be in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Cannot be a future date
mp	string	Metering point number (external_reference). Each MP number is unique within the DSO but may repeat for different DSOs. Max length – 30 characters
channel	char	Measurement channel code. 1 character. Allowed channel codes: 1, 2, 3, 4, N, L
status	string	Status value. Blank if consumption is read correctly, or at least one of these codes: C, D, E, N, U (without punctuation or other characters between them if multiple is to be indicated simultaneously). Max length – 8 characters
consumption	float	Consumption in kilowatt-hours. Only digits, one decimal separator (dot), and minus sign are allowed. Max decimal length – 6 digits. Max integer length – 9 digits. Leading zeros may be omitted
timestamp	datetime	Time of consumption reading/calculation, including time zone. Must be in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format

- **Unprocessed Consumption confirmation (UNPROCESSED CONFIRM)**

Report file name template:

`<PERIOD>_UNPROCESSEDCONFIRM_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Example report:

`08-08-2024_UNPROCESSEDCONFIRM_EIC_20240808144834.csv` – file available in the samples/csv directory.

Table 242 – Data file structure for unprocessed consumption confirmation in the "Unprocessed Consumption Data" report

Elements	Tips	Apraksts/detalizācija
message code	TEXT	Error code
message text	TEXT	Error code description
cons ref	string	Billing/calculation reference identifier. A combination of characters that uniquely identifies a row or set of rows for the same client, object, and period, and cannot repeat later (in other calculation row files). The *cons ref* value cannot be the same for calculation rows with different client EIC, object EIC, and supplier EIC codes in the same period. The *cons ref* value can be the same for the rows of the same client, object, and period, with different channels. Maximum length: 16 characters. Field required
annuled cons ref	string	Reference identifier of the invoice/calculation confirmation to be cancelled. Indicating a field means that the row is a cancellation message (the previous confirmation is cancelled). Maximum length: 16 characters
supplier eic	string	Supplier EIC code. Maximum length: 16 characters
customer eic	string	Client EIC code. Maximum length: 16 characters
object eic	string	Object EIC code. Maximum length: 16 characters
mp	string	Metering point number (*external_reference*). Each MP number is unique for the DSO. May repeat for various DSO. Entering the value is not required. Maximum length: 30 characters.
date from	date	Consumption period start. Must be in YYYY-MM-DD format. Cannot have a future value
date to	date	Consumption period end. Must be in YYYY-MM-DD format. May not be earlier than date from. Cannot have a future value. The settlement period in this field must match the period in the date from field
billing date	date	Invoice/calculation issuing date. Must be in YYYY-MM-DD format. Cannot have a future value
channel	char	Measurement channel code. Not specified if no MP is indicated. 1 character. The following channel codes are provided: 1, 2, 3, 4, N, L
consumption	float	Consumption for the whole period, in kilowatt-hours. Not specified if no MP is indicated. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Maximum integer part length: 6 digits. Maximum integer part length: 9 digits. Omitting the initial zero is allowed
timestamp	datetime	Latest consumption reading/calculation time (indicating the time zone) confirmed by this message. Must be in YYYY-MM-DDTHH24:MM:SSZ or YYYY-MM-DDTHH24:MM:SS±HH:MM format. Need not be specified in a cancellation message

orig cons ref	string	Reference identifier of the original invoice/calculation confirmation. Indicating a value in this field means that the corresponding calculation rows were sent previously, using the cons ref specified, and the system need not wait for them for this confirmation. Maximum length: 16 characters

Reports for TSO

Certificate of origin – interval consumption data (GOINTERVAL)

By the 15th of every month after the closing of the DSO billing period, a separate report is prepared for the TSO on the electricity generated by individual *(GO*) objects, which includes interval consumption data for all these objects that have A+ and/or A- channel determinants and have already been processed. The TSO uses this report to generate certificates of origins of electricity.

The report includes the interval start and the interval stop times. Both the times are obtained from the ISP correspondence table: the start of the interval is the value of the *ISP interval* field and the end of the interval is the value of the *To* field.

The report includes the consumption at those MP for which the *GO* attribute is set to *true* in the object attributes. The *GO* attribute is set by the DP controller upon request by the TSO. The report can only include consumption for the days when this attribute is active. If the attribute is set for a specific MP, the consumption of that MP is included in the report. If the attribute is set for an object without indicating a specific MP, the report includes the consumption at all of that object's MP.

Report file name template

`<PERIOD>_GO_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_GOINTERVAL_EIC_20231214142223.csv` – the file is available in the annex, folder `samples/csv`.

Table 243 – Structure of the report 'Certificates of origin – interval consumption data (GOINTERVAL)'

Element	Type	Description/details
object eic	TEXT	EIC code of the object
dso eic	TEXT	DSO EIC code
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
producer type	TEXT	Energy production type code for equipment installed (according to the STDH_ENERGY_PRODUCER_TYPES classifier)
interval start	DATE	Consumption interval start time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
interval stop	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+	NUMBER	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are

		allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A-	NUMBER	Amount generated on channel A- during the current billing period, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Balance (BALANCE)

By day 8 of every month following the end of the DSO billing period, every DSO prepares balance data (based on the *AST SUM* report generated by the data platform) to be submitted to the DP in the same way as other consumption data files. The DP hands it over to the TSO without validation or changes.

Report file name template

`<PERIOD>_BALANCE_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_BALANCE_EIC_20231127162050.csv` – the file is available in the annex, folder `samples/csv`.

Table 244 – Structure of the 'Balance' report

Element	Type	Description/details
supplier eic	TEXT	EIC code of the Supplier or Purchaser
dso eic	TEXT	DSO EIC code
interval start	DATE	Consumption interval start time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
interval stop	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
A+ current	NUMBER	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part. The value consists of the consumption data sent to the supplier
A+ corrections	NUMBER	Adjustments for channel A+ consumption in the previous 12 months, in kilowatt-hours. Only numbers, one decimal separator (full stop), and the minus sign are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A+ total	NUMBER	Channel A+ consumption in kilowatt-hours, including the current billing period and adjustments for the last 12 months. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A- current	NUMBER	Amount generated on channel A- during the current billing period, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Client EIC changes (CUSTEIC)

Every month after the end of a DSO billing period, the DP produces a report on new and deleted client EIC codes.

The report includes clients for which:

- the time of creation of the client entry in the database is on one of the days of the reported billing period
- the client's deactivation date is on a day within the billing period

Note that if the report is created again, the selected clients are included in it again.

Report file name template

`<PERIOD>_CUSTEIC_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_CUSTEIC_EIC_20231214113002.csv` – the file is available in the annex, folder `samples/csv`.

Table 245 – Structure of the report 'Client EIC changes'

Element	Type	Description/details
customer eic	TEXT	Customer EIC code
customer identifier	TEXT	Customer identifier (personal identity number or registration number)
function	TEXT	Always value: "Customer"
action	TEXT	Action: a) Created – new customer created; b) Deleted – customer deleted
action date	DATE	Action date in YYYY-MM-DD format

Object EIC changes (OBJEIC)

Every month after the end of a DSO billing period, the DP produces a report on new and deleted object EIC codes.

The report includes objects for which:

- the time of creation of the object entry in the database is on one of the days of the reported billing period
- the object deactivation date (object_inactivation_date) is on a day within the billing period

Note that if the report is created again, the selected objects are included in it again.

Report file name template

`<PERIOD>_OBJEIC_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`11-2023_OBJEIC_EIC_20231214113002.csv` – the file is available in the annex, folder `samples/csv`.

Table 246 – Structure of the report 'Object EIC changes'

Element	Type	Description/details
object eic	TEXT	Object EIC code
dso eic	TEXT	SSO EIC code
function	TEXT	Always value: "Object"
action	TEXT	Action: a) Created – new object created; b) Deleted – object deleted
action date	DATE	Action date in YYYY-MM-DD format

Reports for aggregators

Interval consumption for regulation/aggregation service providers (BSPCONS)

By the 10th of every month after the closing of the billing period, a separate report is prepared for every regulation and aggregation service provider, which includes interval consumption data for the A+ and/or A- channels of each of the metering points included in their portfolios that have the A+ or A- channel determinants and have been processed.

Note that if the determinants processed are in the loss channel, then during the creation of the report, the losses are added to the A+ channel consumption. The report compiles the original interval consumption values for the settlement period corresponding to each of the *ISP* intervals at each MP.

The meter number is determined by the current information stored in DP at the time of the creation of the file. The report must include all meters linked to the included MPs and active during the settlement period of the report. One active meter corresponds to one MP during one *ISP* interval. Different *ISP* intervals can have different meters for the same MP, which are also accordingly shown in this file.

Report file name template

`<PERIOD>_BSPCONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_BSPCONS_43X-EIC_20231201141610.csv` – the file is available in the annex, folder `samples/csv`.

Table 247 – Structure of the report 'Interval consumption for regulation/aggregation service providers'

Element	Type	Description/details
service unit eic	TEXT	Service unit EIC Code
dso eic	TEXT	DSO EIC code
datetime	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
service provider eic	TEXT	EIC code of the regulation or aggregation service provider

service customer eic	TEXT	EIC code of the recipient of regulation or aggregation services
supplier eic	TEXT	EIC code of the Supplier or Purchaser
object eic	TEXT	EIC code of the object
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
producer type	TEXT	Energy production type code for equipment installed (according to the STDH_ENERGY_PRODUCER_TYPES classifier)
meter nr	TEXT	Meter number
A+	NUMBER	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A-	NUMBER	Channel A- consumption in kilowatt-hours for current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Interval consumption for regulation/aggregation service recipients (BSPCONS)

By the 10th of every month after the closing of the billing period, a separate report is prepared for every regulation and aggregation service recipients (market participants, for which these services are active), which includes interval consumption data for the A+ and/or A- channels of each of the metering points included in the portfolios of the regulation or aggregation services provided to them that have the A+ or A- channel determinants and have been processed.

Note that if the determinants processed are in the loss channel, then during the creation of the report, the losses ~~must be added~~ to the A+ channel consumption. The report compiles the original interval consumption values for the settlement period corresponding to each of the *ISP* intervals at each MP.

The meter number is determined by the current information stored in DP at the time of the creation of the file. The report must include all meters linked to the included MPs and active during the settlement period of the report. One active meter corresponds to one MP during one *ISP* interval. Different *ISP* intervals can have different meters for the same MP, which are also accordingly shown in this file.

Report file name template

`<PERIOD>_BSPCUSTCONS_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`09-2023_BSPCUSTCONS_EIC_20231201104506.csv` – the file is available in the annex, folder `samples/csv`.

Table 248 – Structure of the report 'Interval consumption for regulation/aggregation service recipients'

Element	Type	Description/details
service unit eic	TEXT	Service unit EIC Code
dso eic	TEXT	DSO EIC code

datetime	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.
service customer eic	TEXT	EIC code of the recipient of regulation or aggregation services
service provider eic	TEXT	EIC code of the regulation or aggregation service provider
supplier eic	TEXT	EIC code of the Supplier or Purchaser
object eic	TEXT	EIC code of the object
mp nr	TEXT	Metering point number (external_reference). Each MP number is unique for the DSO. May repeat for various DSO
producer type	TEXT	Energy production type for equipment installed (according to the STDH_ENERGY_PRODUCER_TYPES classifier)
meter nr	TEXT	Meter number
A+	NUMBER	Channel A+ consumption in kilowatt-hours for the current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
A-	NUMBER	Channel A- consumption in kilowatt-hours for current billing period. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

Reports for loss purchasers

Losses (LOSSES)

Every month following the end of a DSO billing period, every DSO prepares loss data (DSO.LOSSES) to be submitted to the DP similarly to other consumption data files. The DP hands it over to the loss purchaser without validation or changes. The loss purchaser is defined in the participant contract LS_SUPPL_DSO, of which there can be only one per DSO.

If the corresponding DSO does not have an active contract with a loss purchaser, the losses for that DSO need not be included in any report.

Report file name template

`<PERIOD>_LOSSES_<EIC>_<YYYYMMDDHH24MISS>.csv[.zip]`

Report sample

`01-2023_LOSSES_EIC_20230224133933.csv` – the file is available in the annex, folder `samples/csv`.

Table 249 – Structure of the 'Losses' report

Element	Type	Description/details
dso eic	TEXT	DSO EIC code
datetime	DATE	Consumption interval closing time in YYYY-MM-DDTHH24:MM:SS±HH:MM format. Time format according to the trading interval defined in Cabinet of Ministers Regulation No. 635.

A+	NUMBER	Consumption on channel A+ in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
self/technical consumption	NUMBER	Electricity losses for the A+ channel, in kilowatt-hours. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part
total	NUMBER	Total channel A+ consumption in kilowatt-hours, including losses. Only numbers and one decimal separator (full stop) are allowed in the field. Omitting the initial zero is allowed. Final zeros are omitted in the decimal fraction part

CLASSIFIERS

This chapter describes the classifier values used in the exchange of master data with the SO.

Object/MP attribute types

The DP has attribute types for objects and metering points. The classifier will be loaded into the system and cannot be changed by the user.

Table 250 – Object/MP attribute type classifier

Code	Name/description/details
AGGREGATOR	Aggregator EIC
AGGREGATION_EIC	Aggregation asset EIC
REGULATION	The object participates in the provision of the regulation service (new attribute type)
CURRENT	Total amperage/IAA current value (for calculations)
DSO_TARIFF	DSO rate name
ENERGY_PRODUCER_TYPE	Type of manufacturer of the equipment installed, values according to the classifier
GENERATOR_TYPE	Type of the energy generator installed at the object (manufacturer type), values according to the classifier
GENERATION_PERMIT_NUMBER	Producer permit number
TOTAL_GENERATION_POWER	Capacity specified in the permit of the producer
MICROGENERATOR_PERMIT_NUMBER	Micro-generator certificate No.
MICROGENERATOR_ALLOWED_POWER	Micro-generator permitted capacity
GENERATION_DELTA	Difference between the consumption capacity and the production capacity of the producer
ACCESS_INFO	Access information for the object
M2M_AUTH	M2M authorisation
M2M_SERVICE	M2M service availability
NETO	The NETO principle is used for the object at the MM level
NOTIFY_SUPPLIER	EIC of the supplier that must be informed of the existence of a new object using MM *DSONewObjectAvailable*
OBJECT_RESPONSIBLE	Party in charge of the condition of the contacts
INSTALLED_POWER	Capacity installed
PERMITTED_LOAD	Permitted load at the object
PHASE_COUNT	Number of phases
PROPRIETARY_BORDER	Ownership boundary (catalogue)
VOLTAGE	Voltage
VOLTAGE_LEVEL	Voltage level

OBJECT_COORDINATES	Coordinates
SMART_METER_DESCRIPTION	Smart meter
MAX_ALLOWED_EXPORT_POWER	Maximum export capacity of the generator connected to the object

OBIS codes for meter registers

The data platform records internationally accepted types of meter registers.

Table 251 - OBIS code description

Code	Name	Type of energy	Description/details
1.8.0	(+)WTsum	A+	electricity received from the grid at any time of the day or night
1.8.1	(+)WT1	A+	electricity received from the grid during peak hours (rate 1)
1.8.2	(+)WT2	A+	electricity received from the grid during daytime hours (rate 2)
1.8.3	(+)WT3	A+	electricity received from the grid during weekends (rate 3)
1.8.4	(+)WT4	A+	electricity received from the grid during night/weekend hours (rate 4)
2.8.0	(-)WTsum	A-	electricity returned to the grid at any time of the day or night
2.8.1	(-)WT1	A-	electricity returned to the grid during peak hours (rate 1)
2.8.2	(-)WT2	A-	electricity returned to the grid during daytime hours (rate 2)
2.8.3	(-)WT3	A-	electricity returned to the grid during weekends (rate 3)
2.8.4	(-)WT4	A-	electricity returned to the grid during night/weekend hours (rate 4)
3.8.0	(+)QTsum	R+	reactive energy received from the grid at any time of the day or night
3.8.1	(+)QT1	R+	reactive energy received from the grid during peak hours (rate 1)
3.8.2	(+)QT2	R+	reactive energy received from the grid during daytime hours (rate 2)
3.8.3	(+)QT3	R+	reactive energy received from the grid during weekend hours (rate 3)
3.8.4	(+)QT4	R+	reactive energy received from the grid during night/weekend hours (rate 4)
4.8.0	(-)QTsum	R-	reactive energy returned to the grid at any time of the day or night
4.8.1	(-)QT1	R-	reactive energy returned to the grid during peak hours (rate 1)
4.8.2	(-)QT2	R-	reactive energy returned to the grid during daytime hours (rate 2)
4.8.3	(-)QT3	R-	reactive energy returned to the grid during weekend hours (rate 3)

Code	Name	Type of energy	Description/details
4.8.4	(-)QT4	R-	reactive energy returned to the grid during night/weekend hours (rate 4)

SLS address classifiers

To ensure the quality of address data, their compliance is checked using the address classifiers published by the Latvian State Land Service.

Addresses are checked both using the SLS address classifier code and the compliance of the address' components with the classifiers. The checks are only done for addresses located in Latvia.

Energy resource type classifier for equipment installed Table 252 – Types of energy resource, STDH_ENERGY_PRODUCER_TYPES

Type	Code	Name/description/details
STDH_ENERGY_PRODUCER_TYPES	AES	Nuclear power plant
STDH_ENERGY_PRODUCER_TYPES	BESS	Battery
STDH_ENERGY_PRODUCER_TYPES	BGKES	Biogas cogeneration plant
STDH_ENERGY_PRODUCER_TYPES	BGKES+AK	Biogas cogeneration plant + battery
STDH_ENERGY_PRODUCER_TYPES	BGKES+SES	Biogas cogeneration + solar power plant
STDH_ENERGY_PRODUCER_TYPES	BGKES+SES+AK	Biogas cogeneration + solar power plant + battery
STDH_ENERGY_PRODUCER_TYPES	BMKES	Biomass cogeneration station
STDH_ENERGY_PRODUCER_TYPES	BMKES+AK	Biomass cogeneration station + battery
STDH_ENERGY_PRODUCER_TYPES	BMKES+SES	Biomass cogeneration + solar power plant
STDH_ENERGY_PRODUCER_TYPES	DGKES	Natural gas cogeneration plant
STDH_ENERGY_PRODUCER_TYPES	DGKES+AK	Natural gas cogeneration plant + battery
STDH_ENERGY_PRODUCER_TYPES	DGKES + BMKES	Natural gas + biomass cogeneration plant
STDH_ENERGY_PRODUCER_TYPES	DGKES+SES	Natural gas cogeneration + solar power plant
STDH_ENERGY_PRODUCER_TYPES	DIZ	Diesel generator
STDH_ENERGY_PRODUCER_TYPES	GES	Geothermal power plant
STDH_ENERGY_PRODUCER_TYPES	HES	Hydroelectric power plant
STDH_ENERGY_PRODUCER_TYPES	HES+AK	Hydroelectric power plant + battery
STDH_ENERGY_PRODUCER_TYPES	HES + SES	Hydroelectric + solar power plant
STDH_ENERGY_PRODUCER_TYPES	HES+SES+BESS	Hydroelectric + solar plant + battery
STDH_ENERGY_PRODUCER_TYPES	KES	Cogeneration plant
STDH_ENERGY_PRODUCER_TYPES	KOES	Condensation power plant
STDH_ENERGY_PRODUCER_TYPES	SES	Solar power plant
STDH_ENERGY_PRODUCER_TYPES	SES_AK	Solar power plant + battery
STDH_ENERGY_PRODUCER_TYPES	SES_ST	Solar power plant ST
STDH_ENERGY_PRODUCER_TYPES	SG	Loading generator
STDH_ENERGY_PRODUCER_TYPES	VES	Wind power plant
STDH_ENERGY_PRODUCER_TYPES	VES+AK	Wind power plant + battery
STDH_ENERGY_PRODUCER_TYPES	VES-SES	Wind power plant + solar power plant
STDH_ENERGY_PRODUCER_TYPES	VES+SES+BESS	Wind power plant + solar power plant + battery