User manual
of information system

User manual
CDS Gas

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CS OTE

D7 User manual for external users
CDS Gas

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Revision History

	Version	Status	Date	Author/Note
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61.	AX(0)	Working version	27 Dec 2013	Handl, Vařeka
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63.	AZ	Final	25 Feb 2014	Handl
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66.	BC	Final	5 Apr 2014	Handl
67.	BD(0)	Working version	5 Apr 2014	Handl, Vařeka
68.	BE	For comments by OTE	18 Aug 2014	Handl
69.	BF	Final	19 Aug 2014	Handl
70.	BG(0)	Working verison	19 Aug 2014	Handl, Vařeka
71.	BH	For comments by OTE	03 Oct 2014	Handl
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75.	BL	Final	01 Dec 2014	Handl
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79.	BP(0)	Working version	19 Jan 2005	Handl, Vařeka
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Description of changes

Date of change	Description	CR
22.12.2010	POF changes	CR086
25.3.2011	Periodic requests – sending and administration. Chapter 5 Description of the process of provision of data upon request by an external user.	CR066
24.6.2011	CDS changes from 1.7.2011 - Suspension of date sending (PDT with C and CM metering type)	CR117
24.6.2011	Change of supplier from 1.7.2011 - New reason for standard supplier change	CR127
25.7.2011	Overall document revision	-
30.9.2011	Addition of RMP locking scheme (chapter 7.9)	-
24.11.2011	Form Metered non-interval data (PDT with C and CM metering type, new input parameter „Selection method“ Registration of PDT (forward change date_from)	CR158 , CR159
1.1.2012	New PDT attributes. Termination of PDT validity in entered period	CR166
1.1.2012	Change of supplier from 1.1.2012	CR163
1.3.2012	Missing information added to chapter 3.2.8 Reverse change in LP class and selected attributes (6ustomer category and group are changeable to past)	-
5.3.2012	Correction of message code used in the manual – GBM for Copy of information about a change of supplier in progress	-
23.3.2012	PDT termination reasons	CR182
29.3.2012	POF – change of correction invoice identification	-
19.4.2012	Requested period length check	CR192
4.9.2012	Terms for supply period extension/reduction	
26.10.2012	Simlified list of PDT Request for meter readings entering to clearing POF – add number of repair invoice	CR203 CR213
7.1.2013	GAS – ZD change and extension/reduction of suply for 2013	CR219
20.3.2013	Clearing update – monthly and final monthly version	CR172
22.3.2013	SDS – Providing of historical values	CR209
24.4.2013	Reverse change in LP class and selected attributes	CR214
24.4.2013	Assignment of an observer to a PDT, Option for inserting list of PDT in data request	CR226
8.9.2013	Electronic invoice	CR130 CR248
25.10.2013	Competency for historical values for SS; Electronic invoice – online request	CR253
15.11.2013	Limits review – OTE website; Change of subject of settlement (change of supplier)	CR267 ; CR258 A
13.12.2013	Changes in web form change of supplier	CR255
17.2.2014	Check of conversion from m3 to kWh	
18.7.2014	Selection of meter reading in clearing MV	CR304
29.8.2014	Corrections of typos and claims from OTE	
26.11.2014	Minor changes based on OTE request	

18.12.2014	Cancel sending a request for continuation of supply Stopping standard change of supplier when a withdrawal, Transmission capacities of customers within grid 007.	CR330
20.2.2015	Change of service monitor	CR322
10.3.2015	Monthly balancing gas price	CR330
26.3.2015	Unification of reason codes in CS OTE	CR334
05.6.2015	Unification of reason codes in CS OTE	CR334
22.6.2015	Modification change of SS on PDT	CR362
28.8.2015	Changes in chapter 2.4 - Handover of messages via web interface	
24.9.2015	Add new groups of customers for case of emergency (D1,D2)	CR373
22.10.2015	Check during the closures on Reception of planned percentage of losses	CR384
25.11.2015	Query on the history of consumption C, CM	CR389
28.12.2015	Attribute for withdrawal authorization D, New type change of supplier SZD R3, The procedure for preventing the unauthorized consumption	CR389
21.4.2016	Query on the historical data of consumption A, B	CR406
28.4.2016	Company transformation	CR389
16.6.2016	Measurement data transfer, clearing Network Code on Gas Balancing	CR399 CR413

User Manual
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CDS Gas

Date	Describe of revision
31.12.2009	First version
31.5.2010	Update – aggregation and clearing, new scenário of chase of supplier, sending data from CS OTE portal, online regest for
28.6.2010	Update - partial changes in PDT registration and in proces sof chase of supplier, requests for data, comments by OTE or external users
14.7.2010	Update – comments by OTE
12.11.2010	Update – change requests
22.12.2010	POF changes
25.3.2011	Periodic requests – sending and administration. Chapter 5 Description of the process of provision of data upon request by an external user.
24.6.2011	CDS changes from 1.7.2011 - Suspension of date sending (PDT with C and CM metering type)
24.6.2011	Change of supplier from 1.7.2011 - New reason for standard supplier change
25.7.2011	Overall document revision
30.9.2011	Addition of RMP loping scheme (chapter 7.9)
24.11.2011	Form Metered non-interval data (PDT with C and CM metering type, new input parameter „Selection method“ Registration of PDT (forward change date_from)
1.1.2012	New PDT attributes. Termination of PDT validity in entered period
1.1.2012	Change of supplier from 1.1.2012
1.3.2012	Missing information added to chapter 3.2.8 Reverse change in LP class and selected attributes (customer category and group are changeable to past)
5.3.2012	Correction of message code used in the manual – GBM for Copy of information about a change of supplier in progress
29.3.2012	POF – change of correction invoice identification
4.9.2012	Terms for supply period extension/reduction
26.10.2012	Simlified list of PDT Request for meter readings entering to clearing POF – add number of repair invoice
08.09:2013	Chapter Electronic invoice
25.10.2013	Competency for historical values for SS; Electronic invoice – online request
18.7.2014	Selection of meter reading in clearing MV
29.8.2014	Corrections of typos and claims from OTE

26.11.2014	Minor changes based on OTE request
18.12.2014	Cancel sending a request for continuation of supply Stopping standard change of supplier when a withdrawal, Transmission capacities of customers within grid 007.
20.2.2015	Change of service monitor
10.3.2015	Monthly balancing gas price
26.3.2015	Unification of reason codes in CS OTE
05.06.2015	Unification of reason codes in CS OTE
22.6.2015	Modification change of SS on PDT
28.8.2015	Changes in chapter 2.4 - Handover of messages via web interface
24.9.2015	Add new groups of customers for case of emergency (D1,D2)
22.10.2015	Check during the closures on Reception of planned percentage of losses
25.11.2015	Query on the history of consumption C, CM
28.12.2015	Attribute for withdrawal authorization D, New type change of supplier SZD R3, The procedure for preventing the unauthorized consumption
21.4.2016	Query on the historical data of consumption A, B
28.4.2016	Company transformation
116.6.2016	Network Code on Gas Balancing

Content

Abbreviations

Abbreviation	*Meaning*
BRP	Balance Responsible Party
CDS	Center of data services
CET	Central European time
DS	Distribution system
DSO	Distribution system operator
EAN	Global coding and identification system for goods, services and organizations
EDI	International format for electronic data interchange
GUI	Graphical user interface
HW	Hardware
ID	Identificator
IS OTE	OTE infrastructure
MS	Microsoft
PDT	Point of delivery / transfer
OTE	OTE, a.s.
TSO	Transmission system operator
TS	Transmission system
RDS	Regional distribution system
RE	Regulating energy
RMP	Registered market participant
SDS	Safety delivery standards
SI	System Imbalance
SS	Subject of settlement (BRP)
SSO	Storage system operator
SW	Software
UGS	Underground gas storage
UI	User interface
VTP	Virtual trading point
XML	Format for electronic data interchange (Extensible Markup Language)

1 Purpose of the document

The document describes all activities relevant for external users of the CDS system the description of formats, principles and procedures of communication with the CDS system. The document is to be used as a manual by all external users of the CDS system.

CDS – Centralized data services is a key sub-system of CS OTE used for support of business operations of the gas market participants in context of retail processes – i.e. the processes related to PDT. The principle tasks of CDS are the following:

- simplification of the communication among the participants in the gas market;
- collection and provision of data for invoicing of gas supplies and distribution to gas suppliers;
- management of the supplier change process;

Individual sections of the manual explain processes supported by the CDS system and how external users should use this system.

In a number of places the manual refers to other documentation available to external users at www.ote-cr.cz, especially the following documents:

D1.4.2G XML formats

D1.4.3 Web services interface

2 Basic functions of the CDS system

The CDS system provides the following basic function areas:

Unified code lists – registration of master data

CDS provides for the following as a part of administration of unified code lists:

- Registration of points of delivery and their EIC code identification

Collection of meter data and contractual values

The CDS system provides for the following functions within this function area:

- Collection of meter data
- Collection of data for distribution invoicing

Provision of information upon request of an external user

The CDS system provides for the following functions within this function area:

- Provision of information for invoicing (meter data)
- Provision of information for distribution invoicing
- Provision of data about changes of suppliers at PDT

Administration of change of supplier

This function area fully provides for management of change of supplier workflow and communication with all involved entities.

Application of load profiles

The CDS system provides for the following functions within this function area:

- Calculation of normalised and counted load profiles according to LP methodology
- Generation of estimated profiles for all consumer groups
- Reception and storing of temperature diagrams: actual temperature and normal temperature
- Correction of estimated profiles for residual diagram of the distribution system

Definition of imbalances in LDS networks with PDT of the consumption type with C metering

This function area replaces application of load profiles in local distribution systems and it is used for definition of daily consumption for PDT of the consumption type equipped with non-interval metering and hourly losses in the respective local distribution network.

Processing of actual data for OTE IS

This function area of the CDS provides for processing of actual metering data and their handover to OTE IS. It includes:

- Level 1 aggregation by subject of settlement – aggregation of metered data according to the subject of settlement-PDT relationships
- Processing of data upon announcement of emergency status

Data processing – clearing

This function area of CDS provides mass comparison of the consumption estimate, which entered the settlement of imbalances, with the actual metered values received by DSP and settlement to relevant subjects of settlement.

Processing of claims

The CDS system enables managed and auditable changes of data for the purpose of their correction based on justified claims.

2.1 Communication channels

The CDS system utilises the specialised **KS** module for communication with other systems of participants in the market via standard communication channels and various protocols.

The communication channels and protocols below are used for communication between CS OTE and gas market participants:

- An HTTP(S)/SOAP channel for bidirectional message transmission via the Internet.
- An SMTP channel for bidirectional message transmission via email
- A web interface channel for interactive work with the system via a user interface and web browser.

Document D1.4.3 Web service interface contains a more detailed description of communication channels.

2.2 Message formats

The communication server uses the following message formats:

- XML
  - An OTE-defined standard (see document D1.4.2G_XML Format)
  - Standard based on EDIGAS 4.0 XML (see document D1.4.2G_XML Format see document D1.4.2G_Formáty XML)
- Text messages – intended exclusively for the purpose of communication via SMTP (e-mail); this applies to messages of response type (GASRESPONSE), messages in process of change of supplier (CDSGASMASTERDATA), copies of PDT master data (CDSGASMASTERDATA), copies of claims (CDSCLAIM) and OTE notifications (CDSCLAIM); The format of the subject of non-encrypted e-mails will be the following: <message code> – <message code description> <message number>. The format of the body text will be the following:<attribute>: <value>.

2.3 Security

To provide communication security, the CDS-WAS uses unified PKI infrastructures jointly for the entire CS OTE central system so that access for all users is managed in a global fashion regardless of whether they are CDS or IS OTE users. Both systems use the same access certificate for user authentication, and a signature certificate for digital transaction signatures.

The stand-alone document D14.3 Web Service Interface contains a more detailed description of the security schema.

2.4 Handover of messages via web interface

2.4.1 Basic web interface navigation

2.4.1.1 Gas section

CDS system supports both electricity market and gas market processes – user can change section via buttons at the top of the page. Menus have different color for each area (electricity is blue, gas is orange).

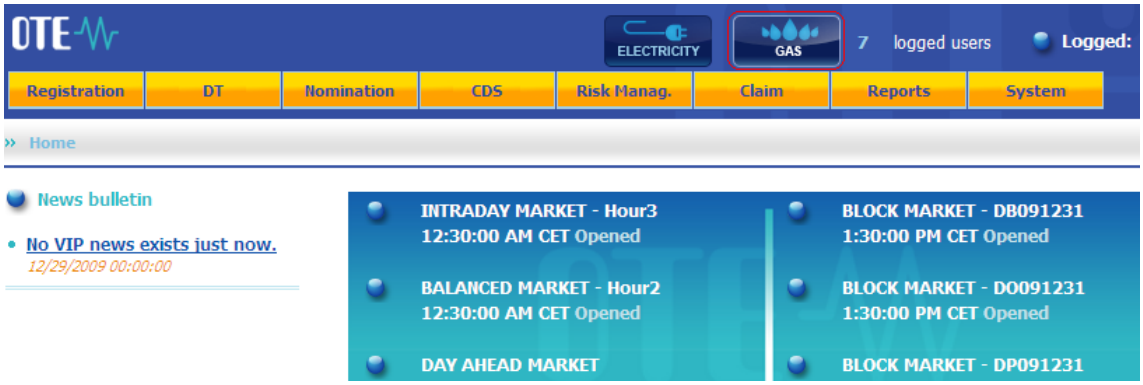


Figure 1 CS OTE Gas

2.4.1.2 Menu structure

Messages can be sent to the CDS system in the CDS menu (except for claims). Items in this menu serve both for the sending of queries and the sending of some types of data.

Figure 2 CDS menu

The menu has two layers:

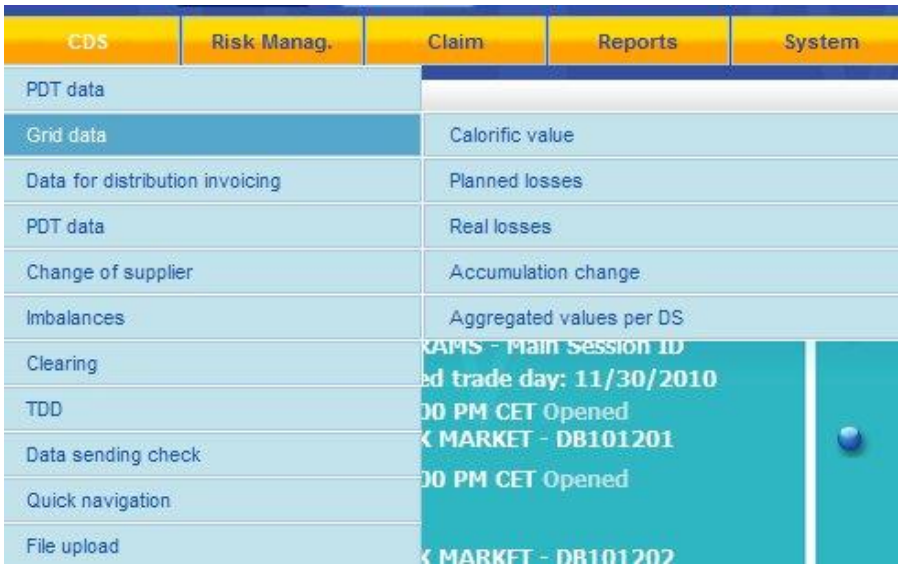
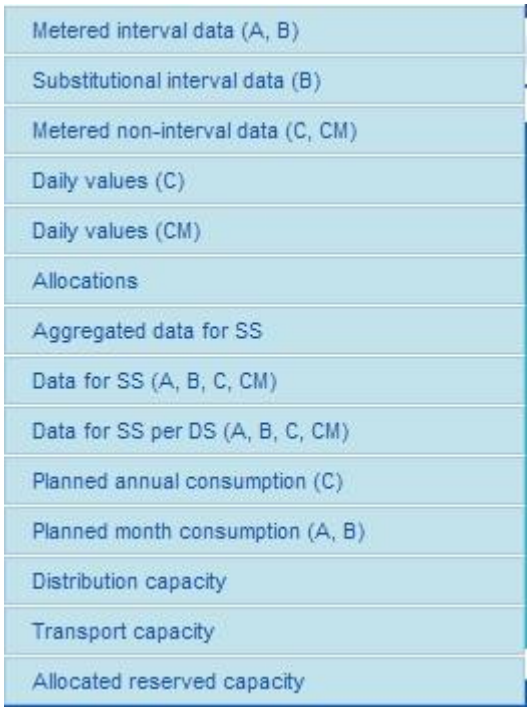


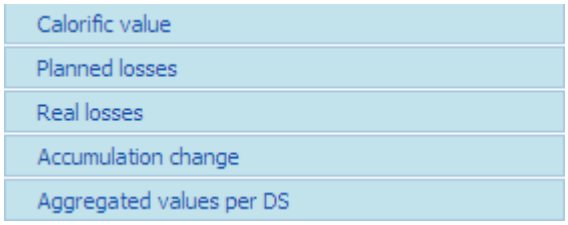
Figure 3 Two-layer structure

The menus are structured as follows:

PDT data



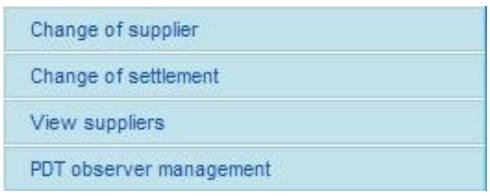
Grid data



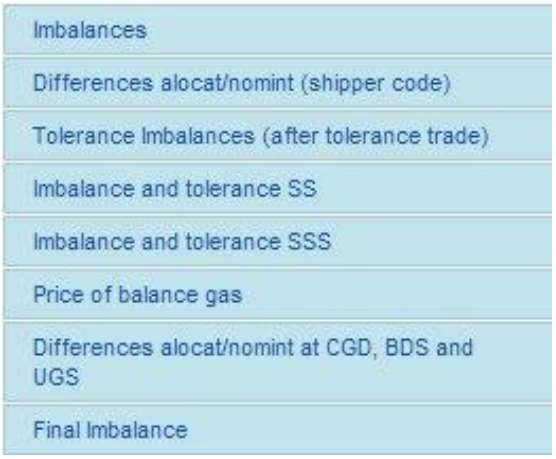
Data for distribution invoicing

PDT

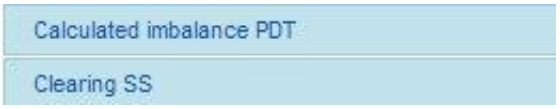
Change of supplier



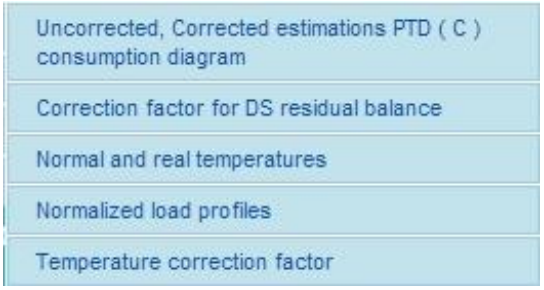
Imbalances



Clearing



LP



Individual items already contain forms for message input/display. Chapter 2.4.1.3 contains more details on form usage.

The CDS menu also provides form for uploading XML files.

Figure 4 File upload

The file is chosen by Browse button and uploaded by Upload button. After successful upload, you can see the file in the table below. The file is sent into CDS after pushing the Send button.

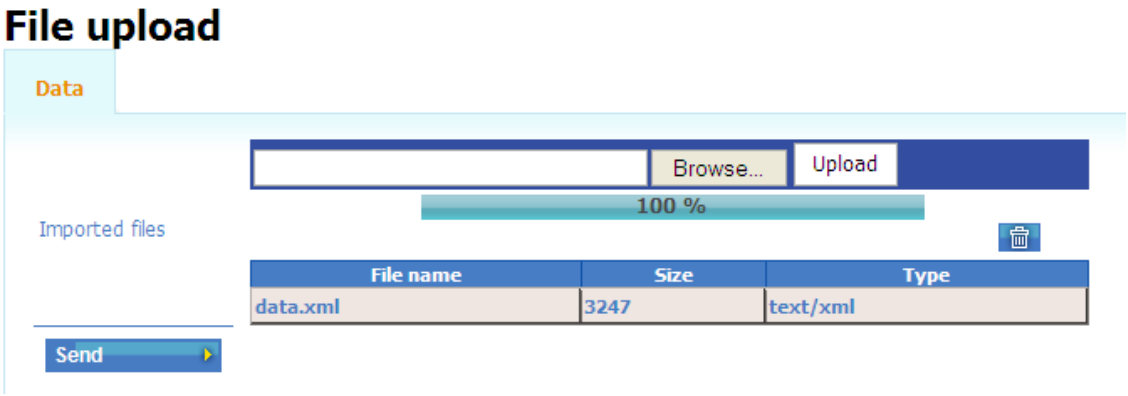


Figure 5 File upload form

2.4.1.3 Using the form

The form consists of two or more tabs. Specific layout depends on whether there is a request for data or entering data in the system, or whether it is a special type of form.

Requests for data

Request parameters are entered at the **Request** tab in **Form** section.

The request can be related to one PDT or to a group of all PDT's meeting the entered selection criteria. In that case, the PDT designation is not filled.

After pushing „**Add**“ button, data are transferred into **Message data** section. The form is restored for adding another PDT.

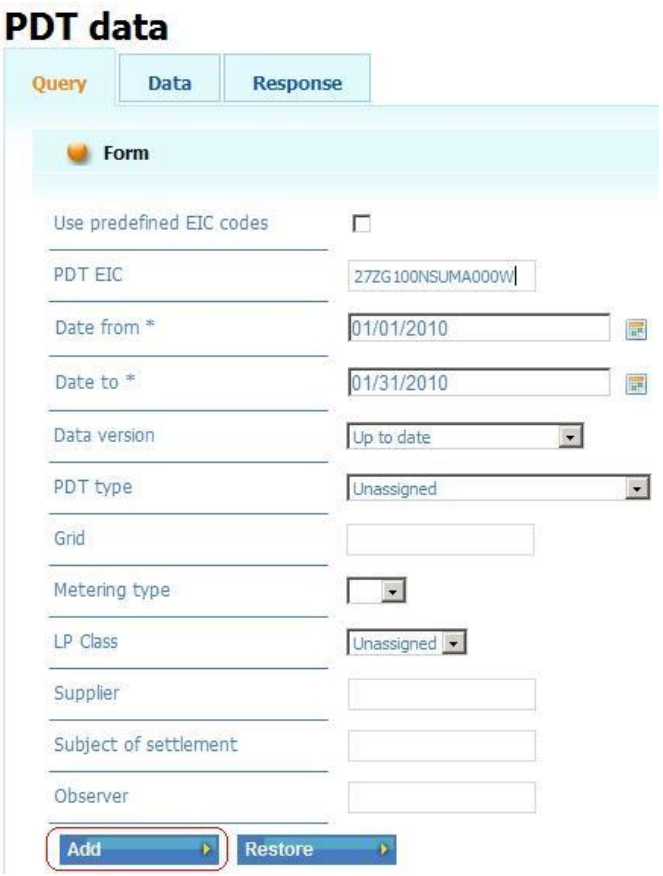


Figure 6 Adding an item

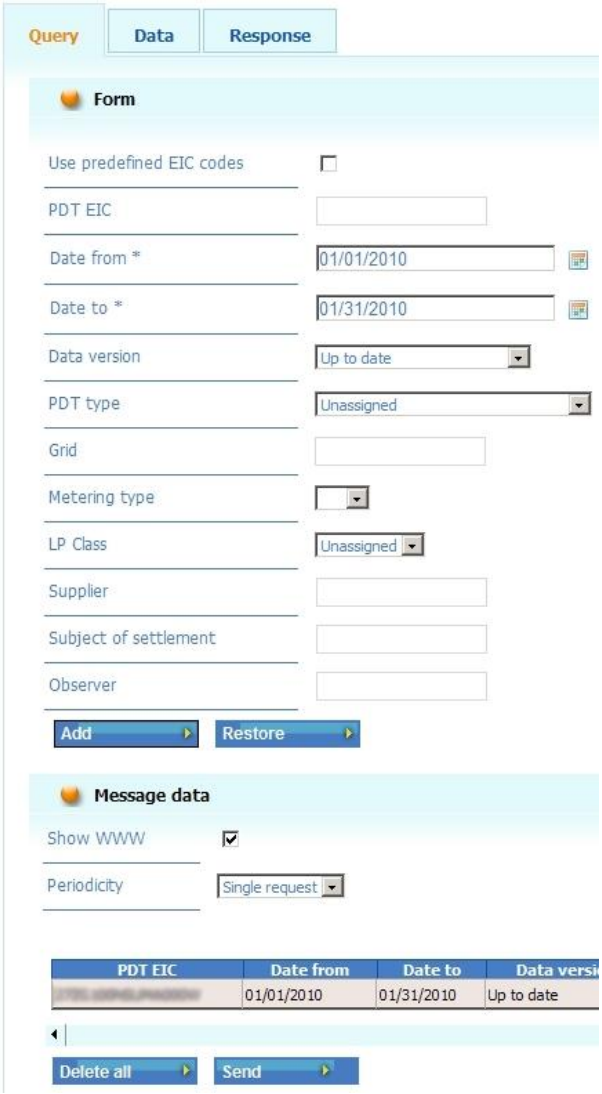


Figure 7 Display of an item in Message data

If other PDTs are added, they are listed in table in section Message data.

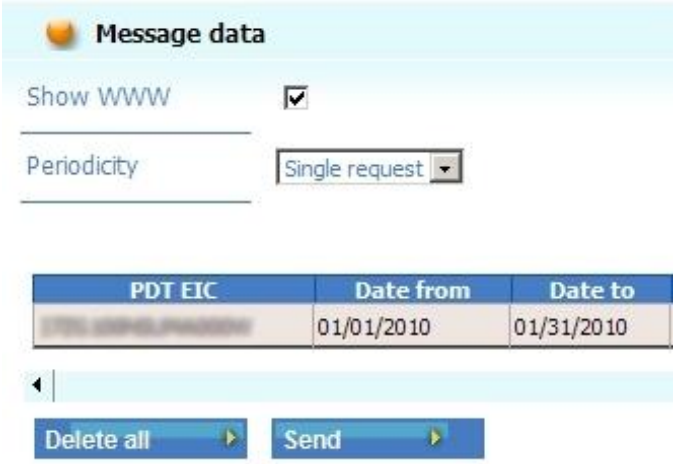


Figure 8 List of items in Message data

It is possible to change items before sending into CDS. After clicking at the item, it is transferred into Form section. The change mode is loaded by **Edit** button. **Save** button transfers the item back to **Message data** section.

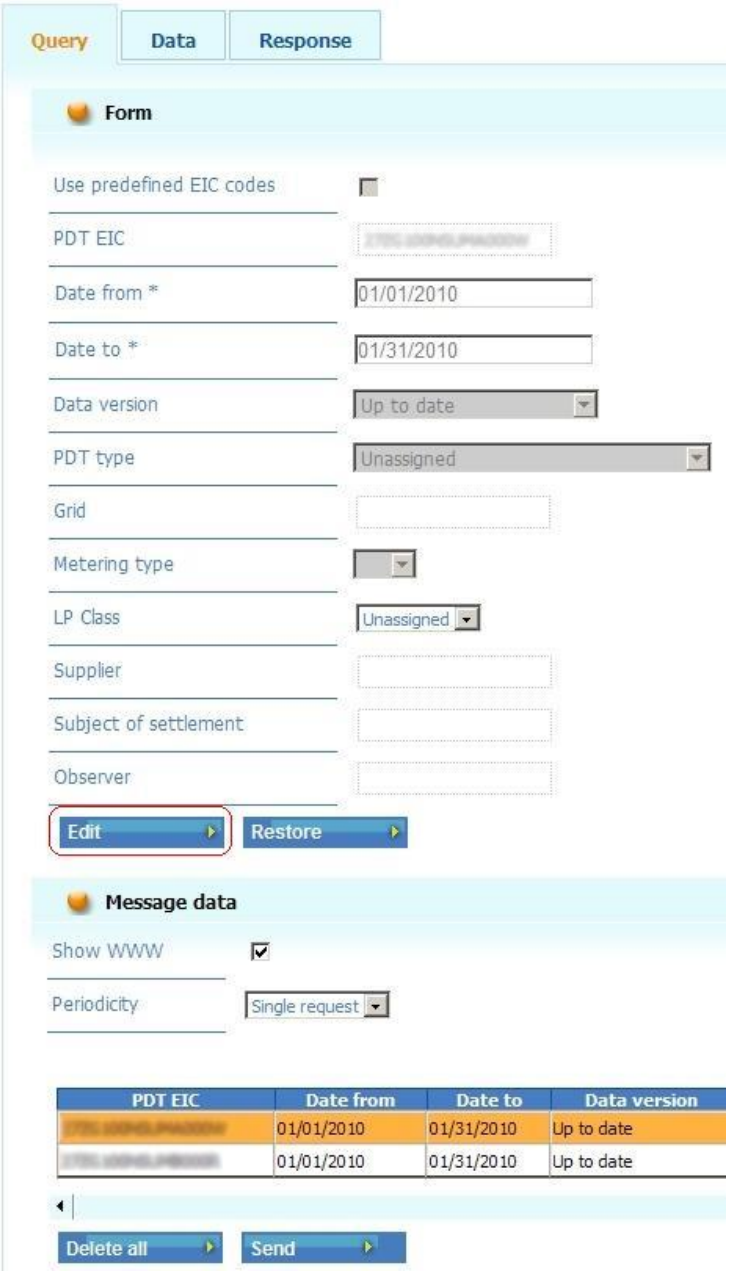


Figure 9 Editadion of a request item

Items can be deleted – one by one via button with symbol:  or whole list via **Delete all** button.

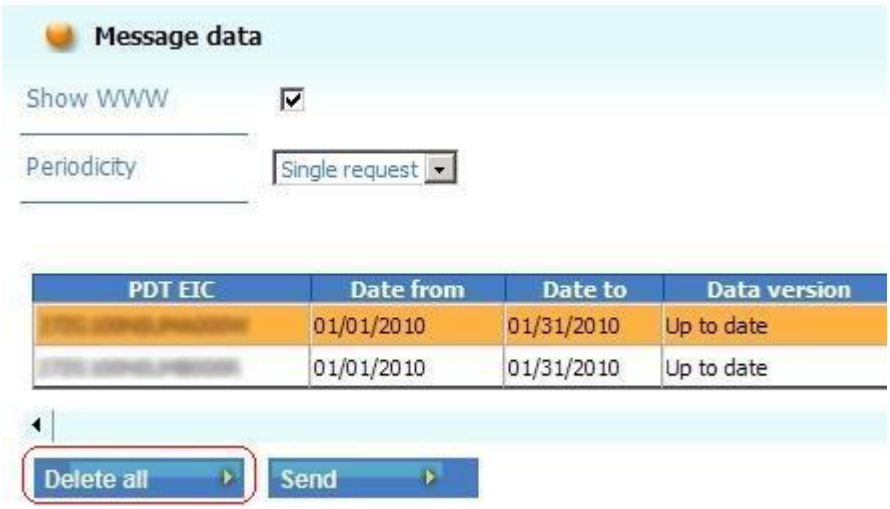


Figure 10 Deleting a request item

With most requests, the user can have the data displayed directly in the browser window. This is done by selecting **Display on www**.

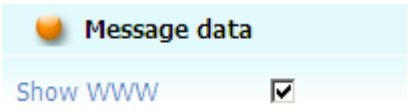


Figure 11 Displaying data online

The **Send** button sends data into CDS.

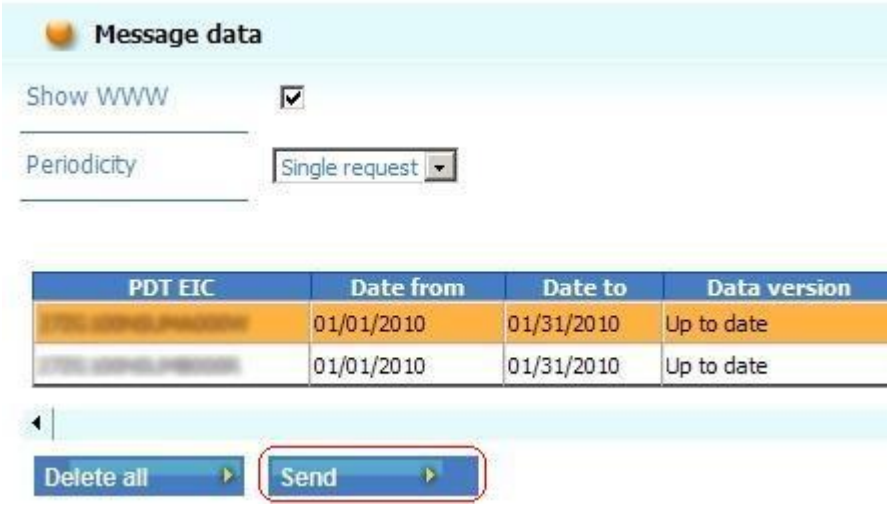


Figure 12 Data sending

After successful sending (if Show WWW is unchecked), a window with confirmation message is displayed.

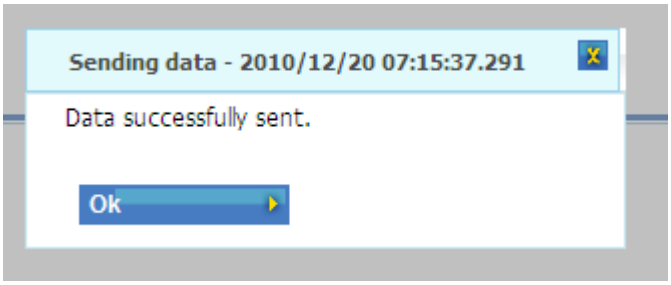


Figure 13 Confirmation of request sending

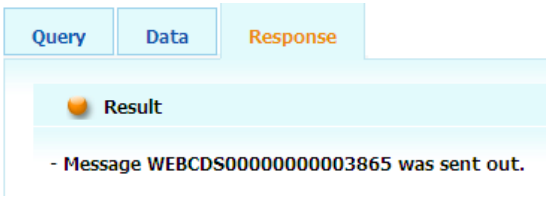


Figure 14 Response tab

The requested data is sent to the user in a message in XML format. If the user selects on-line presentation, the data are displayed in the **Response** tab. In that case, the message in XML format is not sent.

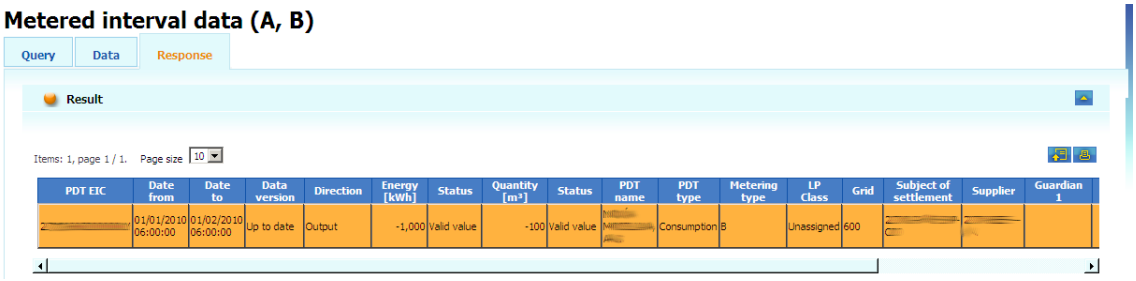


Figure 15 An example of online displayed data

The sent and displayed data differ depending on their nature. The description of the individual requests including the response is provided in chapter 5 – Provision of data upon request by an external user.

Data sending

Data are entered at the **Data** tab, **Form** section.

A detailed description is provided in chapters about the individual types of data.

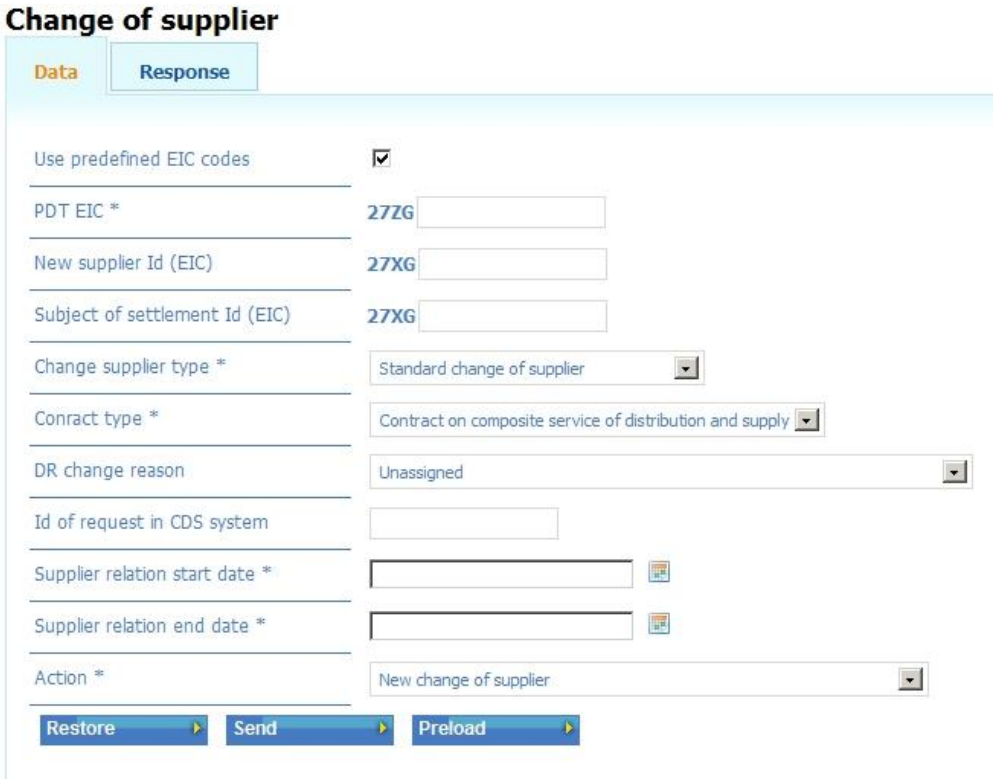


Figure 16 Sending data to CDS -form

The **Response** tab displays the result of data sending.

2.4.2 Station configuration

Requirements and configuration process of clients station can in the OTE portal in the HELP section – Station configuration

2.4.3 Reception of messages from CDS system

The CDS system sends all messages (confirmation of data reception, error reports, output files with the required data, etc.) to a unified e-mail address the respective RMP of the CDS system has registered in the system. The outgoing message is encrypted by the certificate of the strictly defined person of the respective RMP.

Messages from the CDS system are handed over to the external user in the XML or EDI format also according to the selected choice of the external user.

Every RMP may define 2 methods of sending messages from CDS:

- All messages will be sent to 1 e-mail address in 1 selected format (EDI or XML) and they will be encrypted by 1 certificate of the selected person
- RMP may define different sending method in combination for every single message or selected messages (**message=e-mail address * certificate * message format**)

In default, RMP registers 1 e-mail address for sending messages from CDS. A different method of sending may be chosen for selected messages. The messages, for which a different method of sending is not selected, are sent using the default method.

The e-mail client receiving messages must have set the respective certificate and support 128 bit encryption in order to be able to decrypt and verify the incoming message.

The communication server contains list of senders addresses, those are allowed to send a request to the system. The list is periodically updated by the system and it can be modified by operator. It’s a basic protection against spam.

3 Registration of master data

Registration of data into the CDS system is performed by receiving and processing a registration message or by synchronizing data with the Prodis system.

3.1 Rules for creating and assigning EIC

The CDS system does not generate EIC codes aside from internal codes for virtual PDT recalculations. These codes are generated as follows:

4 symbols – EIC prefix (**27ZG**)

3 symbols – grid identification (**OTE** virtual grid)

1 symbol – type of point of delivery (virtual **V**)

7 symbols – generated value from numerical interval of OTE

1 symbol – control sum generated for EIC code

Example of EIC of virtual PDT: **27ZGOTEV0000098K**

3.2 Registration of PDT

The distribution system and local distribution system operator (DSO) or transmission system operator (TSO) performs registration for all PDT which must be registered pursuant to valid legislation. The DSO/TSO is also responsible for updating data in CDS, if any change in the recorded data occurs at the given PDT .

The principles of generation of EIC codes on the side of DSO are stipulated in the document "Rules of unified identification of EIC codes in gas industry" which can be found on www.ote-cr.cz, section **Market participants/Registration and contracts gas/Rules of unified identification of EIC codes in gas industry**.

Several types of PDT are defined in the CDS system. Standard PDT are registered by the applicable TSO or DSO. System or virtual PDT are automatically created by the system. EIC of automatically generated PDT is available at the CDS operator.

3.2.1 Methods of registration

Data on PDT is possible to send to CDS by means of automatic communication in XML format. The registering subject must own a token (or a card) with an electronic certificate for access to EMOI and CDS.

The registration XML message is in the format CDSGASMASTERDATA.

3.2.2 Data registered to PDT

The following table shows a list of parameters that can be registered to PDT. The first and second columns contain the name and code of individual parameters, whereas required data are always indicated in the third column. The fourth column indicates those parameters whose change after registration is not possible. The data in Italic may not be registered and they are assigned in the CDS system via other processes (e.g. change of supplier, service monitoring, etc.).

Name of parameter	Code		
Definite identifier of PDT (EIC)	EXT-UI	✓	×
Date from when PDT is stored	DATE-FROM	✓	
Date until when PDT is valid	DATE-TO		
Name of PDT	UITEXT	✓	
Type of PDT (generation, consumption, virtual sales point,…)	ANLART	✓	×
Type of measuring (A, B, C, CM)	TYPM	✓	
Grid	GRID-ID	✓	×
System operator grid (delivery point)	GRID-ID-PS	✓	×
EIC code of neighbouring PDT (delivery point mirror)	SPDT		
Owner of PDT/PZP operator	PARTNER		
LP class	TDD-CLASS		
Estimate of annual consumption in kW	EST-CONS		
Estimate of annual consumption in m^3	EST-CONS2		
City	CITY		
Postal code	POST-CODE		
Street	STREET		
House number	HOUSE-NUM		
Type of sent POF	POF-TYPE		
Cycle of sending POF (estimated number of meter readings in a year)	POF-FREQ		
First meter reading in the year (expected month of the first meter reading cycle)	MR-FIRST		
PDT distribution capacity (for type of measurement A, B)	DISTR-CAP		
Suspending data sending	MRSEND-SUSP		
DPI disabled	DPI-DISABLE		
Type of source (natural gas, bio-gas,..)	GSOURCE		

Active DPI	DPI-ACTIVE		
Allocation rule for entry	ALLOC-SCH-ENTRY		
Allocation rule for exit	ALLOC-SCH-EXIT		
Summary PDT	PDT-SUM		
Customer category	CATEG-CUST	✓	
Customer group for emergency	CATEG-EMER	✓	
Transmission capacities of customers within grid 007 [kWh]	DISTR-CAP_K		

Table 1: List of PDT parameters

Neighbouring PDT (SPDT) is automatically created within PDT registration. The CDS system will provide for generation of EIC establishment of the point of transfer.

Conditionally required PDT parameters:

Condition	Required parameters
Type of PDT = Generation	Type of source
Type of PDT = Underground tank, mining gas pipeline	Partner
Type of PDT = Limiting point, cross-border gas pipeline or underground tank	Allocation rules

Type of PDT = Manufacture or Consumption Type of measuring = A or B Grid < > 007	Reserved capacity m3
Type of PDT = Manufacture or Consumption Type of measuring = A or B Grid = 007	Reserved capacity kWh
Type of PDT = Generation Type of measuring = C or CM	LP class Estimate of annual consumption in kW

Table 1: Conditionally required parameters

Disallowed combinations of parameters

- PDT with the filled-out parameters concerning LP - LP class, estimate of annual consumption in m^3 must be of the type of consumption with measuring type C.

3.2.3 Reply to PDT registration

The answer to the request for registration is sent, aside from to the DSO operator, also to the subject of settlement of the applicable PDT to the email address that the subject registered at the market operator and has it set in the CDS system.

The CDS system sends as a reply:

- According to the success/lack thereof of PDT registration for each PDT in the original message:
  - XML CDSGASMASTERDATA with control copy of data on PDT from the CDS system in the case of successful PDT registration.
  - XML RESPONSE with codes and description of errors contained in the data on the given PDT.
- Report XML RESPONSE on receipt of request for registering PDT

3.2.4 Data change, extending and shortening PDT validity

Upon registration, it is possible to change the registered data with the exception of the data in Table 1 – List of PDT parameters. Data may only be changed to the future, i.e. as of the next day at the earliest.

Extending and shortening the PDT validity is governed by the same rules as the PDT change with the stipulation that a change of the end of validity is permitted. The change of the begin of validity is allowed, but change to past is forbidden.

3.2.5 Termination of PDT validity

Termination of validity of PDT is detected in the case that the entered end of validity is shorter by one day than the entered beginning date of validity (DATETO = DATEFROM–1).

Termination only occurs if the PDT is truly valid in the system precisely from the date listed as the beginning of validity (DATEFROM). PDT may be terminated as of the current date.

3.2.6 Termination of PDT validity in entered period

Termination of PDT validity is detected in the case GRX messg code. Termination is executed without effect for period out of entered DATEFROM and DATETO.

3.2.7 Renewal of PDT validity

Renewal of PDT validity is determined by the following rules:

- it is performed by a standard message of creation/change of PDT (msg_code GR1)
- no attribute "renewal of validity" is introduced, this shall be recognized by the already existing EIC of PDT, which is terminated prior to the start of validity of the interval in the new message
- permitted modifications of PDT attributes are the same as for the PDT change with the exceptions listed hereunder

3.2.8 Reverse change in LP class and selected attributes

It's possible to change certain PDT attributes retrospectively until the final monthly settlement. If the beginning of validity (DATEFROM) is set to former date than the current one, the system should recognize request for a reverse change of PDT. List of attributes that can be changed retrospectively is different according to measuring type.

a) Measuring type A, B

List of PDT attributes that can be changed retrospectively until the final monthly settlement:

- data sending suspension
- customer category
- frequency of receiving data for grid-usage invoicing
- date of first deduction.

b) Measuring type C, CM

List of PDT attributes that can be changed retrospectively until the final monthly settlement:

- data sending suspension
- customer category
- frequency of receiving data for grid-usage invoicing
- date of first deduction
- annual consumption estimation.

3.2.9 PDT registration / termination via web interface

Registration is done by entering the PDT data as in the case of registration via automatic communication and sending.

Form for PDT data registration (menu CDS – PDT – PDT data, Data tab)

Termination of PDT validity is done by entering the period in separate form and execute as in the case of termination via automatic communication and sending.

Form for PDT data registration (menu CDS – PDT – PDT data, Termination tab)

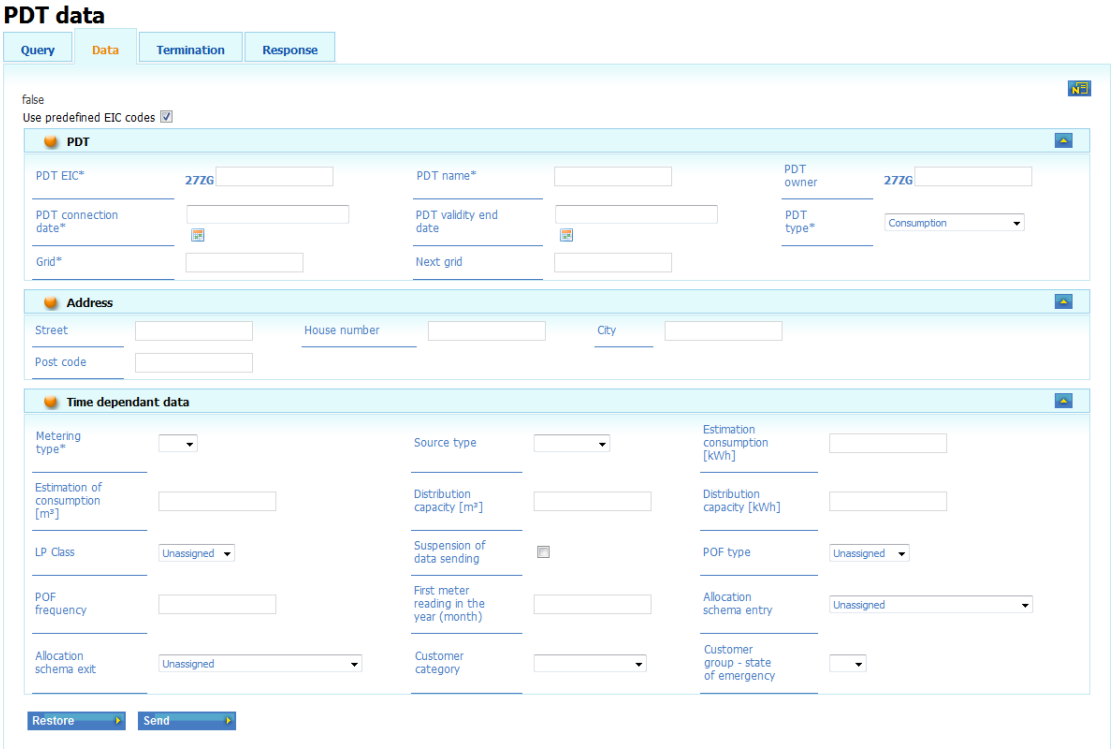


Figure 17 PDT data

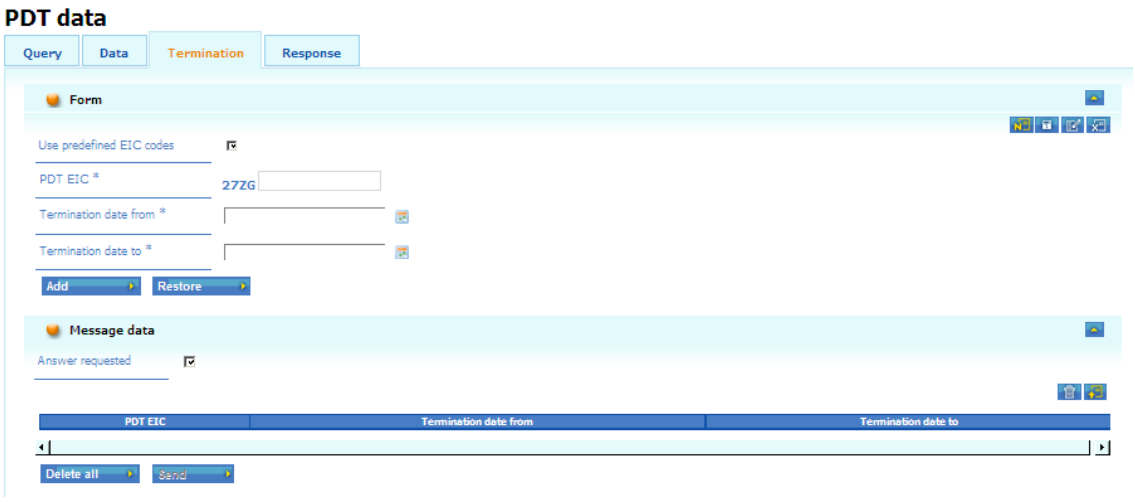


Figure 18 PDT data - termination

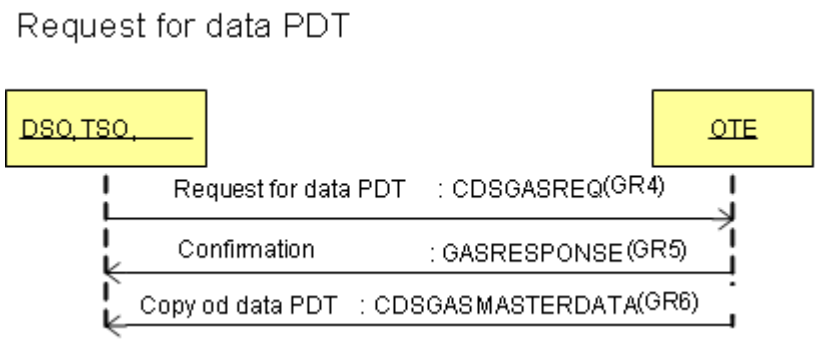
3.2.10 Communication scenarios for PDT data

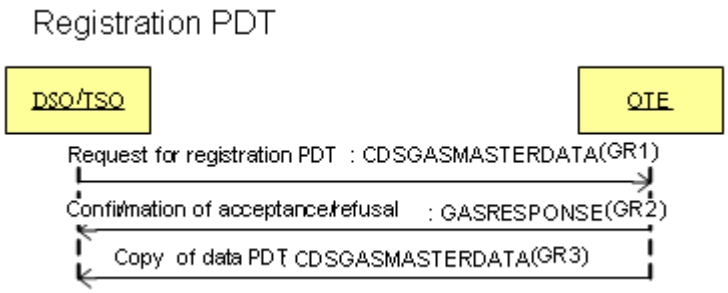
Message types and codes

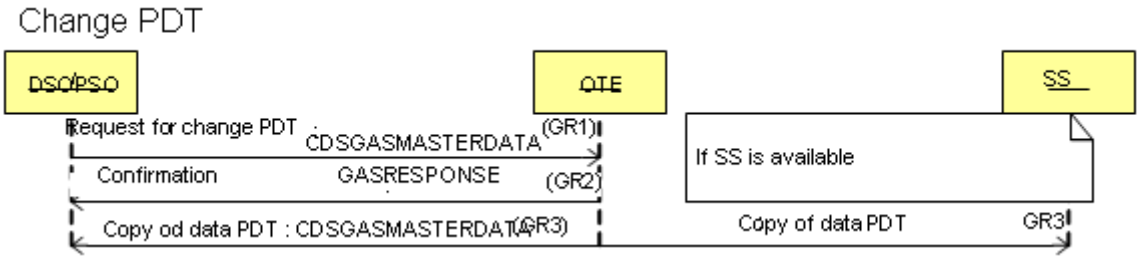
- **GR1** Request for registration / update of PDT
  - XML – format CDSGASMASTERADATA
- **GR2** Confirmation of acceptance/refusal of message with request for registration/update of PDT
  - XML – format CDSGASMASTERADATA
- **GR3** Copy of message with request for registration/update of PDT
  - Same types of messages as GR1
- **GR4** Requirement for PDT data
  - XML – format CDSGASREQ
- **GR2** Confirmation of acceptance/refusal of message with request for PDT data
  - XML – format GASRESPONSE
- **GR6** Copy of message with request for PDT data
- Same types of messages as GR1 and GR3**GRX** Request for termination of PDT validity
  - XML – format CDSGASMASTERADATA
- **GRY** Confirmation of acceptance/refusal of message with request for termination of PDT validity
  - XML – format CDSGASMASTERADATA
- **GRZ** Copy of PDT data as response on GRX
  - Same types of messages as GR1 and GR3
- **GRE** Request for simplified list of PDT

- XML – format CDSGASREQ

- **GRF** Confirmation of acceptance/refusal of message with Request for simplified list of PDT
  - XML – format GASRESPONSE
- **GRG** List of PDT according to service
  - XML – format CDSGASMASTERADATA







Request for PDT master data is the subject of a separate sub-chapter of section 5 – Provision of data upon request of an external user.

3.3 Synchronisation of IS OTE system master data

This chapter is intended for external entities to understand the process of registration of master data of RMP and persons in the IS OTE and CDS systems. It describes the reflection of rights of RMP/persons registered in IS OTE into the rights in the CDS system.

Some CDS master data are updated automatically from the data registered in IS OTE. This includes:

- registration data of RMP
- registration data of external users
- agreements on assignment of responsibility for imbalance

The above registration data from the IS OTE system are synchronised on-line.

3.3.1 Synchronisation of RMP

CDS synchronises all RMP from IS OTE who have been newly registered or their registration has been changed and at the same time they have the attribute Gas RMP set to active in IS OTE. All items of the RMP master record in CDS are updated automatically.

Each RMP in IS OTE with the attribute Gas RMP active is registered as a trading partner in CDS. If the RMP has an activity registered in IS OTE that is subject to synchronisation, it will be established in CDS also as a provider of services related to this activity. RMP rights to sending the individual types of messages to CDS will be derived from such services configured in CDS.

Designation of activity in IS OTE	Description of activity in IS OTE	CDS service	CDS service description
DSO	Distribution system operator – Gas	113	Data provider (DSO/TSO)
DSO	Distribution system operator – Gas	114	SLR
DSO	Distribution system operator – Gas	115	Neighbouring distributor
TSO	Transmission system operator – Gas	101	Primary supplier

TSO	Transmission system operator – Gas	113	Data provider (DSO/TSO)
TSO	Transmission system operator – Gas	114	SLR
TSO	Transmission system operator – Gas	115	Neighbouring distributor
UGS	Storage – Gas	120	Equipment operator
SDP	Access to metered data for gas	101	Primary supplier (net supplier)
SDP	Access to metered data for gas	114	SLR
SSG	Subject of settlement – Gas	101	Primary supplier
SSG	Subject of settlement – Gas	111	Subject of settlement
SSG	Subject of settlement – Gas	114	SLR
SSG	Subject of settlement – Gas	131	Observer 1
SSG	Subject of settlement – Gas	132	Observer 2
SSG	Subject of settlement – Gas	133	Observer 3
SSG	Subject of settlement – Gas	134	Observer 4
SSG	Subject of settlement – Gas	135	Observer 5

Table 1 – Mapping of activities in IS OTE to service types in CDS

3.3.2 Synchronisation of external users

Synchronisation registers in CDS only such users from IS OTE who have at least one activity subject to synchronisation registered in IS OTE. These activities and synchronisation rules correspond to RMP synchronisation; also transmitted is the information whether the user has read rights only, or write as well.

3.3.3 Synchronisation of assignment of responsibility for imbalance

The IS OTE system registers agreements on assignment of responsibility for imbalance from a RMP to another subject of settlement. Multiple agreements may be registered for one RMP; for a trading day, just one such relationship will be designated as primary, while all the other ones will be designated as non-primary. The agreements as well as all changes to them are transferred online to the CDS system, but not to the level of the individual PDT (responsibility for imbalance on the individual PDT's is assumed by the primary subject of settlement of the respective RMP, or a non-primary subject of settlement assigned explicitly to the respective PDT within the process of change of supplier).

4 Sending of metered data, agreed and planned values

Data can be sent to the CDS system either by sending an XML message by means of automatic communication (as defined by the document D1.4.3 Web Services), or by uploading the file via web form.

All data sent to the CDS system are encrypted and electronically signed.

Gasdat, Alocat and POF message formats are used for sending. XML message formats are defined in the document D1.4.2G XML message formats – gas which can be found on www.ote-cr.cz, section **Market participants/Registration and contracts gas/XML message formats**.

4.1 Gasdat message

Gasdat message format is used for sending metered data, agreed and planned values to the CDS system for points of delivery and points of transfer of all types, except allocated metering data (see Alocat message). An overview of types of metered data sent to the CDS system is provided in Table 1 – Overview of products of Gasdat messages. In the overview, there are allowed combinations of product, unit and type of used metering.

Product identifier			Type of metered data
Product	**Unit**	**Typo for used metering**	
QI12	m3	ZCE	Metered values (interval metering) - consumption
QI11	kWh	ZLA	Metered values (interval metering) - production
AI12	m3	ZCE	Metered values (interval metering) – consumption
AI11	kWh	ZLA	Metered values (interval metering) – production
QN12	m3	ZCE	Metered values (non-interval metering) – consumption
QH12	m3	ZCE	Historic values (interval metering) – consumption
AH12	kWh	ZLA	Historic values (interval metering) – production
QH11	m3	ZCE	Historic values (interval metering) – consumption
AH11	kWh	ZLA	Historic values (interval metering) – production
AI12	kWh	ZLA	Metered values (non-interval metering) – consumption
QS10	m3	ZCE	Planned annual consumption
ES10	kWh	ZLA	Planned annual consumption
QS20	m3	ZCE	Planned monthly consumption
ES20	kWh	ZLA	Planned monthly consumption
CT10	kWh/m3	ZNV	Combustible heat

DC10	m3	ZCE	Distribution capacity
TC10	m3	ZCE	Transport capacity
TC20	kWh	ZLA	Transport capacity
CT20	kWh/m3	ZNV	Combustible heat – metered data
QC10	m3	ZCE	Change of accumulation
AC10	kWh	ZLA	Change of accumulation
LP10	%	ZLA	Planned own losses
LR10	kWh	ZLA	Real own losses

Table 2 – Overview of products of Gasdat messages

Values of electricity supplies shall always be sent to the CDS system with a positive sign, while values of consumption with a negative sign.

If m3 (cubic meter) is provided as one of the units for a certain type of data, the information shall be compulsorily sent in such units (see Table 2 – Enabled product combinations in Gasdat messages). In cases the volume is specified in the message only in m3, the related product shall be calculated by the CDS system using the value of combustible heat on a virtual PDT for the network and the calculated value shall be saved with the status value as estimated. In the opposite case, the value from the message shall be saved with the status value as valid.

Only limited combinations of products can be sent in a single message at the same time, the highlighted product being mandatory:

Product identifier		**Type of metered data**
Product 1	**Product 2**	
QI11, QI12	AI11, AI12	Metered values (interval metering) – Entry/Exit*
QH11, QH12	AH11, AH12	Historic values (interval metering) – production / consumption*
QN12	AN12	Metered values (non-interval metering) – consumption
QS10	ES10	Estimated annual consumption
QS20	ES20	Planned monthly consumption
QC10	AC10	Change of accumulation
CT10	CT20	Combustible heat
DC10	-	Distribution capacity
TC10	-	Transport capacity m3
TC20	-	Transport capacity kWh

LP10	-	Planned own losses
LR10	-	Real own losses

Table 3 – Enabled product combinations in Gasdat messages

Note: * In case of sending of metered data for a PDT with interval metering, it is possible to send all values (products) in a single message. Production product – QI11, AI11 – is not allowed for PDT's intended only for consumption.

An XML message includes the following items:

- Designation of the type of documents, i.e. Edigas 87G for all messages
- Unique message identifier in the format GASDATyyyymmddAxxxxx, where:
  - GASDAT is the designation of the type of document;
  - yyyymmdd is the gas day;
  - A is a constant;
  - xxxxxx is the unique message identifier.
- Date and time of message generation, including off-set
- Time interval of the sent data, including off-set
- EIC and the role of data sender
- EIC and the role of data recipient (OTE)
- EIC of point of delivery and transfer
- Product code
- Metering values – time value and volume value including the unit. If a message does not include the status, the value shall be considered as valid; if the combination of status type 03G and status value 20G is provided, the sent value shall be considered as estimated.

Diagram of message processing:

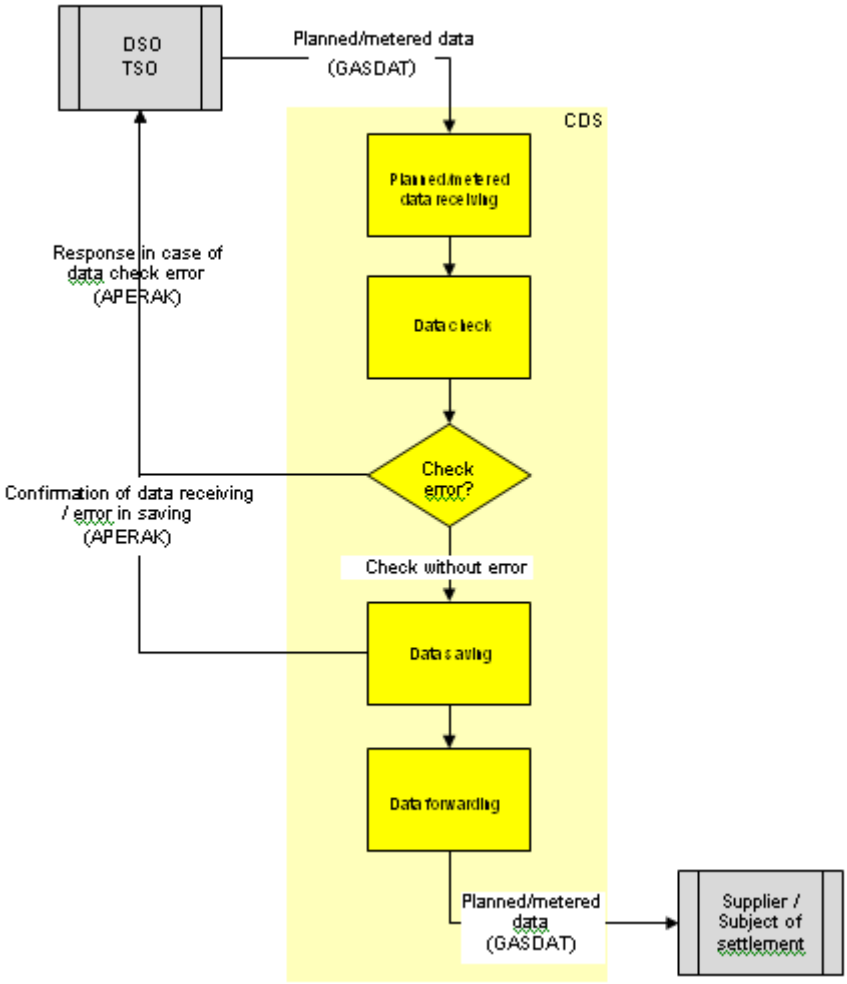


Figure 19 Gasdat processing

Description of processing steps:

1. Data reception

2. Verification of message data

   - Message code – admissibility for the message type
   - Recipient – message recipient shall be OTE gas
   - Verification of existence of the PDT in the CDS system
   - Verification of authorisation – verification of sender and the type of sent data (metered data to be sent by DSO, TSO, etc.)
   - Verification of closure of the trading day – depends on the type of sent data, stipulated by legislation
   - Verification of setting of data sending suspension
   - Verification of setting of status supply

- Verification of type of data – (message code and product ID) against PDT type (PDT type, metering type, …)
- Numericality of values – correct value format (decimal places, signs)
- Verification of unit against product designation – only certain combinations of product, unit and type of metering are allowed
- Enabled product combinations – only certain combinations of products in a message are allowed, see Table 2 - Enabled product combinations in Gasdat messages
- When sending m3 and kWh in one message, there is a check, that for nozero value of m3 is not stated a tero value in kWh

If verification returns an error, a message with error identification in the APERAK format shall be sent.

3. Data saving

- Interval data – saving to profiles of points of delivery
- Non-interval data – saving to tables
- Estimated annual consumption – saving at points of transfer
- Combustible heat – saving at point of transfer
- Planned and actual losses – saving at points of transfer
- Reserved distribution/transfer capacity – saving at points of delivery/transfer

4. Response sending

If the sent data are received and processed correctly, an Aperak shall be sent to the data sender. If the message was received with a reservation, the Aperak shall include a description of the reservation.

5. Sending of data copy

A copy of received data is sent to relevant entities, the subject of settlement and the supplier in case of selected products (QI11, QI12, AI11, AI12, QN12, AN12, QS10, ES10). If the respective entity is not assigned to the PDT for the entire period of data validity, only the respective part shall be sent. The structure of the sent message being identical with that of the input message.

4.1.1 Data from interval metering

Metered data of interval meterings shall be sent every day for metering type A, B. The data shall be sent for the period of gas day, i.e. from 6:00 to 6:00. It is possible to include data for multiple days and multiple PDTs in a single message.

If data for multiple PDTs are sent in 1 file, the data of EIC PDT, the product designation and the profile data shall be repeated. 1 value for each gas day and PDT shall be expected.

The CDS system provides for loading of the file with metered data from interval metering from DSO or TSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

PDT data with metering type B can be received only for days, where is daily settlement completed

PDT data, where shortcomings are identified, shall not be further processed; however, this will not affect processing of other points of delivery and transfer in the file.

If the sent data pass all verifications, the sent profiles shall be saved in the profiles of points of delivery and transfer. The role of the respective profile is determined based on identification of the product and the point of transfer, i.e. production or consumption.

In case of sending data to the PDT of the type TS/DS (DS/DS) point of transfer, the system shall provide for designation of a related (mirror) point of delivery and transfer. The same profile as on the PDT shall be created on the related PDT, but the values shall be of the opposite sign.

When processing of data reception has been completed, an Aperak with reference message identification shall be sent to the sender; the message shall include confirmation of message reception and the status of received data.

If an error has been identified during processing, an Aperak message with a description of the identified shortcomings shall be sent as well.

Having successfully received and saved the data, the system shall automatically distribute the data to the relevant entities. In case of TS/DS (DS/DS), a copy shall be sent to the relevant entities of the mirror PDT.

Data from interval metering may also be sent to CDS via CS OTE web interface – **CDS/PDT data/Metered interval data**, tab Data.

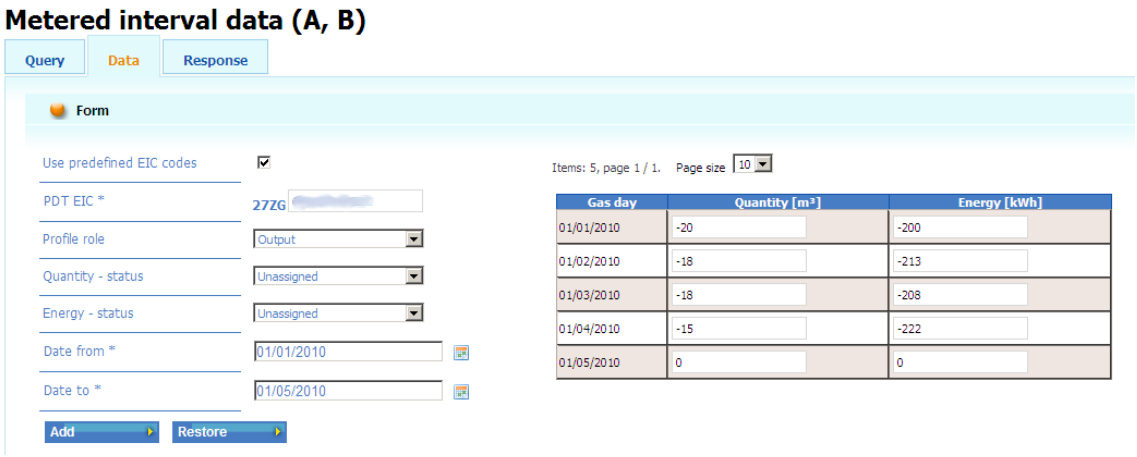


Figure 20 PDT data

4.1.2 Historic data from interval metering

Historical data means data from interval metering for trading days when the PDT was not yet registered in the CDS system. The data are used in the process of change of supplier and for calculations of predicted consumption for verification of financial coverage. The data are always sent by the respective DSO.

Sending of historical data is subject to the same rules as in the case of metered interval data and an analogous method of processing is applied. It is not possible to make a request for these data.

Historical data from interval metering may only be sent in an XML message using AK or file upload from the CS OTE website.

4.1.3 Data from non-interval metering

Metered data of non-interval metering – readings are sent according to the reading cycles per PDT with C metering type and once a month per PDT with CM metering type.

If data for multiple points of delivery and transfer are sent in a single file, the data of EIC of the point of delivery and transfer, the product code and readings shall be repeated.

The time interval provided for a read metering value shall be identical with the entire period for which data are sent, i.e. the from date shall be the first gas day of the respective period, including the time and off-set; and the to date shall be the last gas day of the respective period, including time and off-set. E.g. the data for January 2010 shall be sent with the from date = 2010-01-01T06:00+01:00, and to date = 2010-02-01T06:00+01:00.

The CDS system provides for loading of the file with metered data from non-interval metering from DSO or TSO, formal verification of correctness of the file, processing of the sent data and sending of confirmation of reception of the file together with the result of verifications.

Data of a point of delivery and transfer, where shortcomings are identified, shall not be further processed; however, this will not affect processing of other points of delivery and transfer in the file.

When processing of data reception has been completed, an Aperak message confirming reception of data and the status of received data shall be sent.

If an error has been identified during processing, an Aperak message with a description of the identified shortcomings shall be sent as well.

Having successfully received and saved the data, the system shall automatically distribute the data to the relevant entities.

Data from non-interval metering may also be sent to CDS from the web interface of CS OTE – **CDS/PDT data/Metered non-interval data (C, CM)**, tab Data.

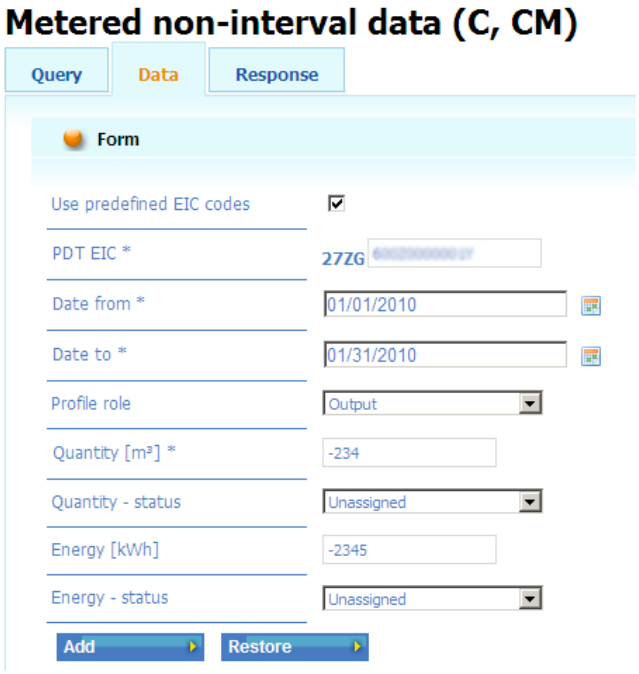


Figure 21 Entering values of non-interval metering

4.1.4 Planned annual consumption

Planned annual consumption shall be sent by a PDT of consumption type with C and CM metering type for the next period defined by the from date. This value is used for the functionality of the LP application. Update of the value, primarily entered at registration of a PDT of consumption type with C, CM type metering shall be sent by a message with QS10 product, optionally also ES10. As in the case of PDT registration, also updating of the planned annual consumption shall be done by the respective DSO. In case of summary values, the estimated annual consumption can be updated retrospectively on a daily basis as in the case of metered data (correction data) until the final monthly settlement is done for the respective trading day.

As in the case of other consumption values, the value of planned annual consumption is sent with a negative sign.

A single message can be used for sending data for multiple PDTs, where the data of EIC of the point of delivery, the profile role code and the value are repeated.

The CDS system provides for uploading the file with planned annual consumption from DSO or TSO, formal verification of correctness of the file, processing of the sent data and sending of confirmation of reception together with the result of the verification.

The PDT data found defective will not be further processed, but this will not influence processing of the other PDT data in the file.

If the sent data pass all controls, the sent values will be saved at the PDT. Validity of the last valid estimate is extended to 31.12.9999, or to the end of the licence, respectively.

At the end of file processing, an Aperak message confirming data reception and the status of the received data will be sent. If defects are identified, an Aperak with a description of the shortcomings will be sent.

Having successfully received and saved the sent data, the system will automatically distribute the data to the relevant entities.

It is possible to send the data from the CS OTE web interface, section **CDS/PDT data/Planned annual consumption (C)**, tab Data**.**

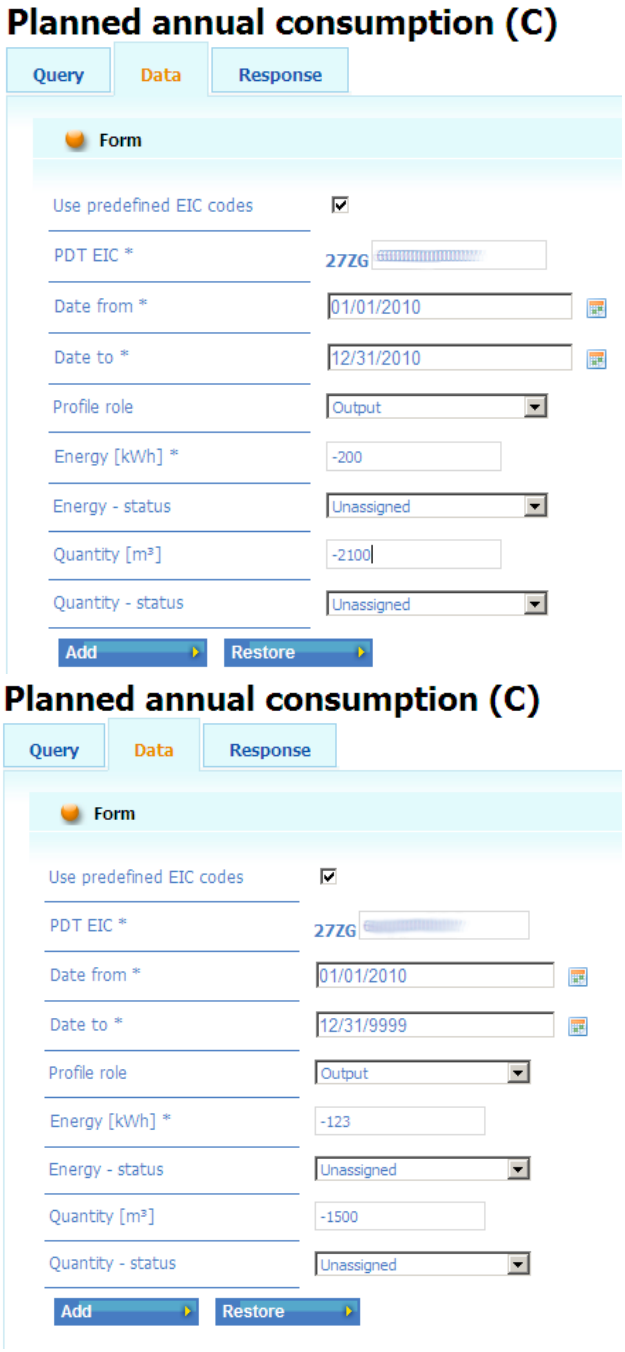


Figure 22 Entering values of planned annual consumption

4.1.5 Planned monthly consumption of PDT with metering type A, B

Products QS20, ES20 (identical meaning as in the case of QS10 and ES10 products – the product QS* is used for sending the planned consumption in m3 and the product ES* for sending electricity units - kWh) are established for reception of the planned monthly consumption of a PDT with metering type A, B..

A value valid according to the data received in the message is saved at the PDT.

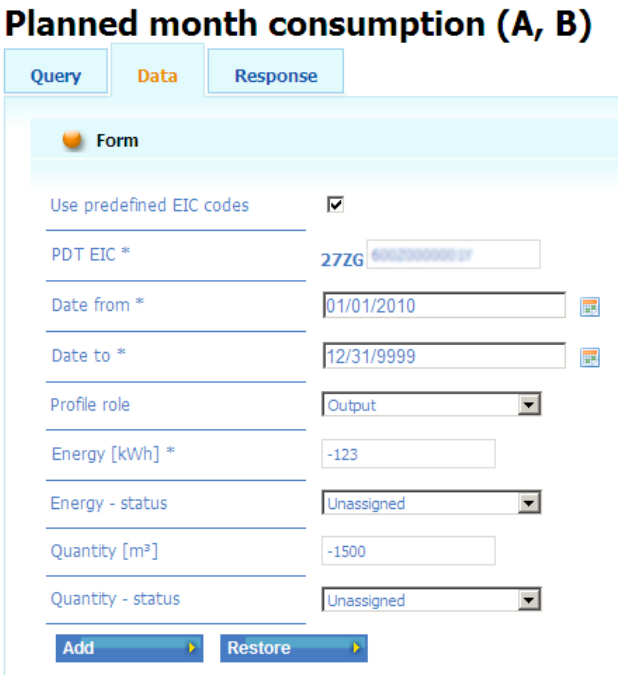


Figure 23 Entering the value of planned monthly consumption (A, B)

4.1.6 Change of accumulation

Change of accumulation is sent to a PDT of the settlement type per grid per gas day. The message is sent by the DSO/TSO assigned to the grid as the operator. The preliminary value of a change of gas accumulation in the grid is sent via the QC10 product, the metered value via the AC10 product. The value is sent either with positive or negative identifier according to the character of the change.

The CDS system provides for uploading of the file with information about the change of accumulation from DSO or TSO, formal verification of correctness of the file, processing of the sent data and sending of confirmation of reception including the result of all verifications.

The PDT data found defective will not be further processed, but this will not influence processing of the other PDT data in the file.

If the sent data pass all controls, the sent values will be saved in the profile of the virtual settlement PDT for the grid.

Processing of the data file is completed by sending an Aperak message confirming reception of data and the status of the received data. If defects are identified, an Aperak with a description of the shortcomings is sent.

These data may be sent from the web interface of CS OTE, section **CDS/Grid data/Change of accumulation**, tab Data**.**

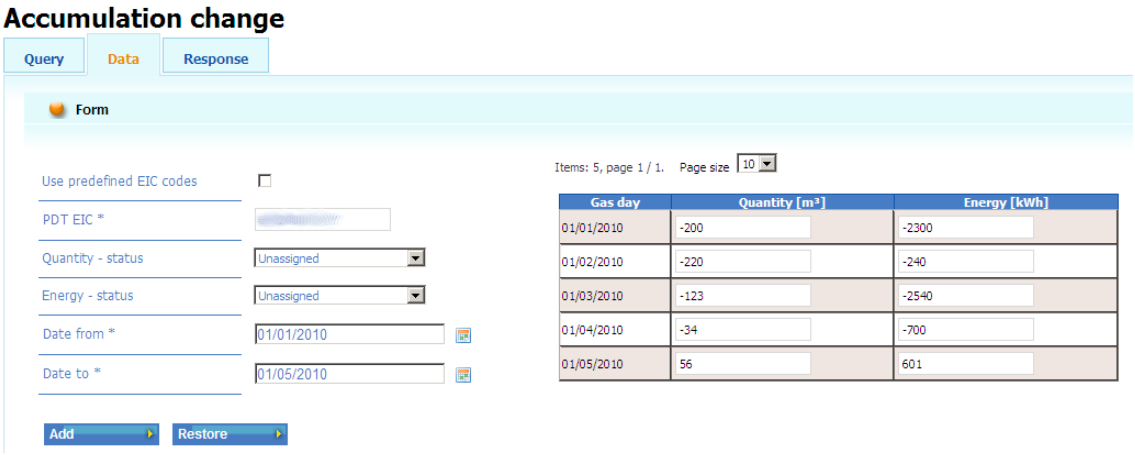


Figure 24 Entering values of change of accumulation

4.1.7 Calorific value

The calorific value is sent at a PDT of the type virtual for the network. The message is sent by DSO/TSO assigned to the network as the operator. The calorific is sent by CT10 product..

The CDS system provides for loading of the file with data about change of accumulation from DSO or TSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

Data of a PDT, where shortcomings are identified, shall not be further processed; however, this will not affect processing of other points of delivery and transfer in the file.

If the sent data pass all verifications, the sent values shall be saved on the respective point of transfer for the network. The calorific value shall be used for calculation of products in kWh (see above).

When processing of the data file has been completed, an Aperak message confirming message reception and the status of the received data shall be sent. If an error has been identified, an Aperak with a description of the shortcomings shall be sent.

It is possible to send these data from the CS OTE web interface, section **CDS/Grid data/Calorific value**, tab Data**.**

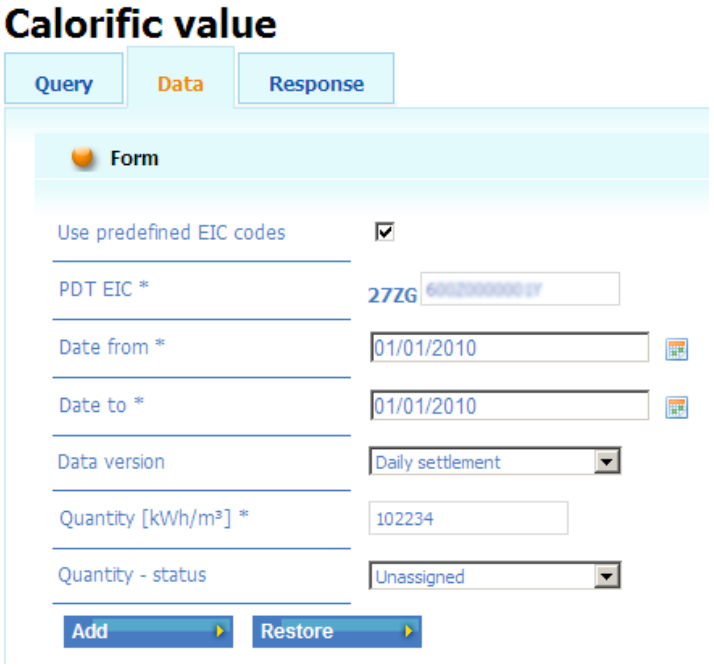


Figure 25 Entering calorific value

4.1.8 Planned and real own losses

The value of planned and actual losses shall be sent by a PDT of the virtual type for the network. The message shall be sent by DSO/TSO. Planned losses are sent for the next period (only into the future) and in the form of percentage, using LP10 product. Planned losses can be sent till 15th day of month 23:59:59. Date from in the interval must be 1st day of month and date to in the interval must be set to the last gas day of the year.

Actual losses are sent retroactively, in kWh, using LR10 product.

The CDS system provides for loading of the file with data of own losses from DSO or TSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

Data of a point of delivery and transfer, where shortcomings are identified, shall not be further processed; however, this will not affect processing of other points of delivery and transfer in the file.

If the sent data pass all verifications, the sent values shall be saved to the respective point of transfer.

When processing of the data file has been completed, an Aperak message confirming data reception and the status of the received data shall be sent. If an error has been identified, an Aperak with a description of the shortcomings shall be sent.

It is possible to send these data from the CS OTE web interface, section **CDS/Grid data/Planned losses** or **Own losses**, tab Data**.**

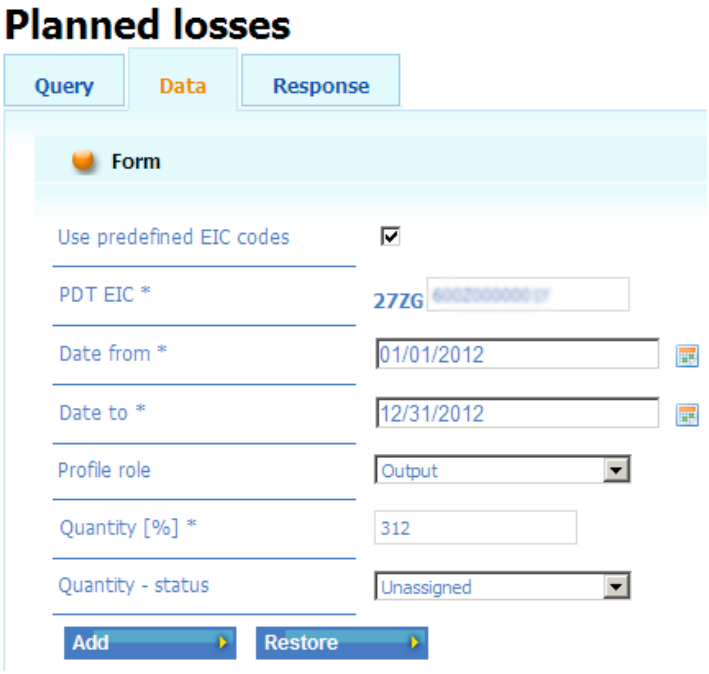


Figure 26 Entering values of losses

4.1.9 Distribution and transfer capacity

The value of distribution or transmission capacity is sent to a consumption PDT of metering type A, B and to a PDT of the type BDS/CGD and SSO. The value of distribution and transfer capacity is sent using DC10 resp. TC10 or TC20 product.

From 1.1.2015 transfer capacity for PDT within grid 007 is sent only in kWh. Transmission capacity is also checked for strange changes in measured values.

The CDS system provides for loading of the file with data about change of distribution or transfer capacity from DSO or TSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

Data of a PDT, where shortcomings are identified, shall not be further processed; however, this will not affect processing of other points of delivery and transfer in the file.

If the sent data pass all verifications, the sent values shall be saved to the respective point of transfer.

When processing of the data file has been completed, an Aperak message confirming data reception and the status of the received data shall be sent. If an error has been identified, an Aperak with a description of the shortcomings shall be sent.

It is possible to send these data from the CS OTE web interface, section **CDS/PDT data/Distribution capacity** or **Transmitted capacity**, tab Data**.**

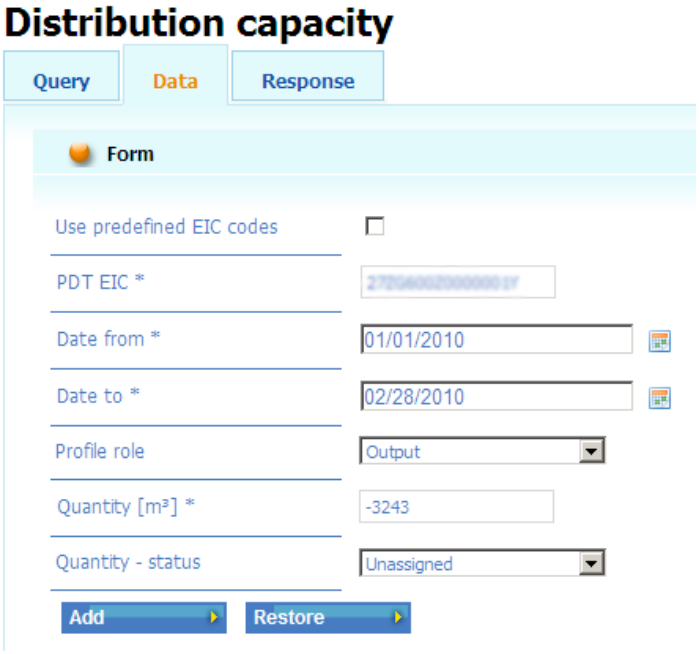


Figure 27 Entering of the value of distribution capacity

4.1.10 Requests for GASDAT data

There are two ways how to send requests for data – via xml message or via web interface.

The data (response to q request) are returned via a Gasdat format message with a specification of a particular product.

4.2 Alocat message

Alocat messages are used for sending to the CDS system the values of allocated metering for points of delivery and transfer designated as points of allocation, i.e. the border point of transfer and distribution systems, the border point of distribution systems, the cross-border gas line and the underground gas storage tank. The values are sent per single subjects of settlement in breakdown by shipper codes. The individual products are differentiated by time and values of time-series and direction fields, see Table 3 – Allocated products.

Product identifier			**Allocated product**
Time-series	**Direction**	**Unit**	
Z01	Z02	m3, kWh	Preliminary / actual allocations – input in the system
	Z03	m3, kWh	Preliminary / actual allocations – output from the system

Z05	Z02	m3, kWh	Allocated reserved capacity – input in the system
	Z03	m3, kWh	Allocated reserved capacity – output from the system

Table 4 – Allocated products

Values of preliminary and real allocations are sent in m3 (cubic meters) and in kWh. In case the volume is provided only in m3 in the message, the CDS system calculates the value in kWh using the value of combustible heat on the virtual PDT for the network. The calculated value is saved with the status value as estimated. In the opposite case, the value send in the message is saved with the status value as valid.

Allocated reserved capacity is sent in m3 or kWh.

All values are sent without a sign, their nature is given by the other attributes of the message. Only a single type of product may be sent in one message.

An XML message includes the following items:

- Designation of the type of document, i.e. 95G for preliminary allocations and 96G for real allocations
- Unique message identifier in the format ALOCATyyyymmddAxxxxx, where:
  - ALOCAT is the designation of the type of document;
  - yyyymmdd is the gas day;
  - A is a constant;
  - xxxxxx is the unique message identifier.
- Date and time of message generation, including off-set
- Time interval of the sent data, including off-set
- EIC and the role of subject of settlement
- EIC and the role of data sender
- EIC and the role of data recipient (OTE)
- EIC of point of delivery and transfer
- Type of sent values
- Shipper codes – internal and external
- Metering values:
  - time value including off-sets;
  - designation of the direction – input or output
  - volume
  - unit
  - allocation rule

Diagram of message processing:

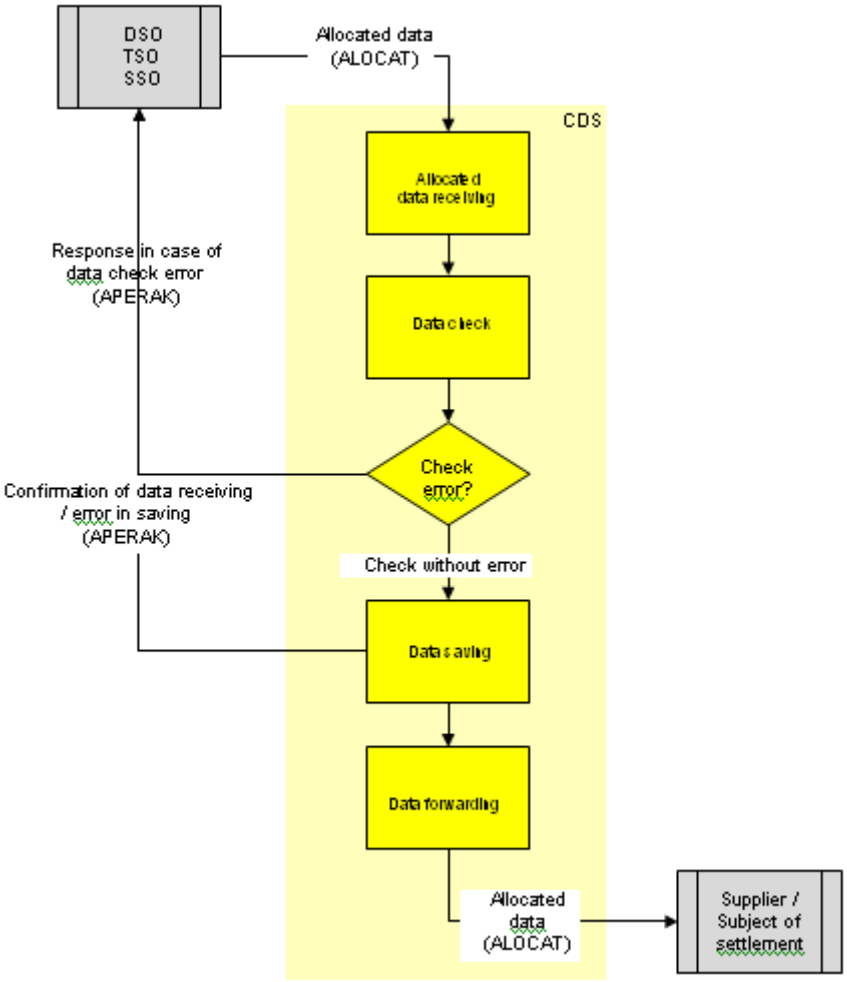


Figure 28 Alocat processing

Description of processing steps:

1. Data reception

2. Verification of message data

   - Message code – admissibility for the message type
   - Recipient – message recipient shall be OTE gas
   - Verification of existence of the PDT in the CDS system
   - Verification of authorisation – verification of sender and the type of sent data (allocations to be sent by DSO, TSO, SSO)

- Verification of registration of shipper codes for the location and subject of settlement
- Verification of closure of the trading day – depends on the type of sent data, stipulated by legislation
- Verification of setting of data sending suspension
- Verification of the allocation rule
- Verification of type of data – derived product against PDT type
- Numericality of values – correct value format (decimal places, signs)
- When sending m3 and kWh in one message, there is a check, that for nozero value of m3 is not stated a tero value in kWh. The check is applied for allocations only.

If verification returns an error, a message with error identification in the APERAK format shall be sent.

3. Data saving

- Preliminary and actual allocations – saving to profiles at the PDT
- Allocated reserved capacity – saving to the database of allocated reserved capacities

4. Response sending

If the sent data are received and processed correctly, an Aperak shall be sent to the data sender. If the message was received with a reservation, the Aperak shall include a description of the reservation.

5. Sending of data copy

After successful processing a copy of data shall be sent to the subject of settlement designated in the message.

4.2.1 Preliminary and real allocations

Data of preliminary and real allocated meterings are sent for every day. The data shall be sent for the period of gas day, i.e. from 6:00 to 6:00. It is possible to include data for multiple days, but only for a single PDT and a single subject of settlement.

The CDS system provides for loading of the file with the values of preliminary and actual allocations from DSO, TSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

Data of a point of delivery and transfer, where shortcomings are identified, shall not be further processed.

If the sent data pass all verifications, the sent profiles shall be saved in the profiles of points of delivery and transfer. The role of the respective profile is determined based on evaluation of the message data.

When processing of data reception has been completed, an Aperak with reference message identification shall be sent to the sender; the message shall include confirmation of message reception and the status of received data.

If an error has been identified during processing, an Aperak message with a description of the identified shortcomings shall be sent as well.

Having successfully received and saved the data, the system shall automatically distribute the data to the respective subject of settlement.

It is possible to send these data from the CS OTE web interface, section **CDS/PDT data/Allocation**, tab Data.

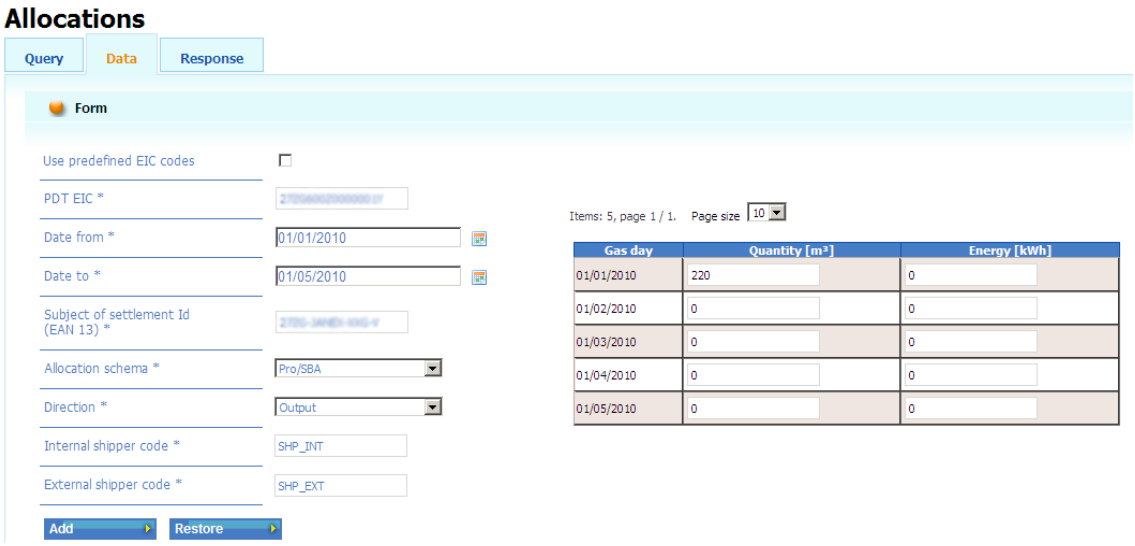


Figure 29 Entering values of allocated metering

4.2.2 Allocated reserved capacity

The data of allocated reserved capacity are sent every day. If the same value applies to multiple gas days, it is possible to enter a longer time interval than one day. It is possible to include data for multiple days in the message, but only for a single PDT and a single subject of settlement.

The CDS system provides for loading of the file with the values of preliminary and actual allocations from DSO, TSO or SSO, formal verification of correctness of the file, processing of sent data and sending of confirmation of file reception together with the result of verification.

Data of a point of delivery and transfer, where shortcomings are identified, shall not be further processed.

If the sent data pass all verifications, the sent profiles shall be saved to the database of allocated reserved capacities. If a record already exists in the validity interval in the CDS system, its validity shall be adjusted according to the recently received interval (reduction, substitution). The CDS system shall retain only the last valid value.

When processing of data reception has been completed, an Aperak with reference message identification shall be sent to the sender; the message shall include confirmation of message reception and the status of received data.

If an error has been identified during processing, an Aperak message with a description of the identified shortcomings shall be sent as well.

Having successfully received and saved the data, the system shall automatically distribute the data to the respective subject of settlement.

There are two ways how to send requests for data – via xml message or via web interface. Most of the requests have these input parameters:

- EIC PDT
- Date from
- Date to
- Data version.

If any differences take place for particular requests, they are mentioned in the table below.

It is possible to send these data from the CS OTE web interface, section **CDS/PDT data/Allocated reserved capacity**, tab Data.

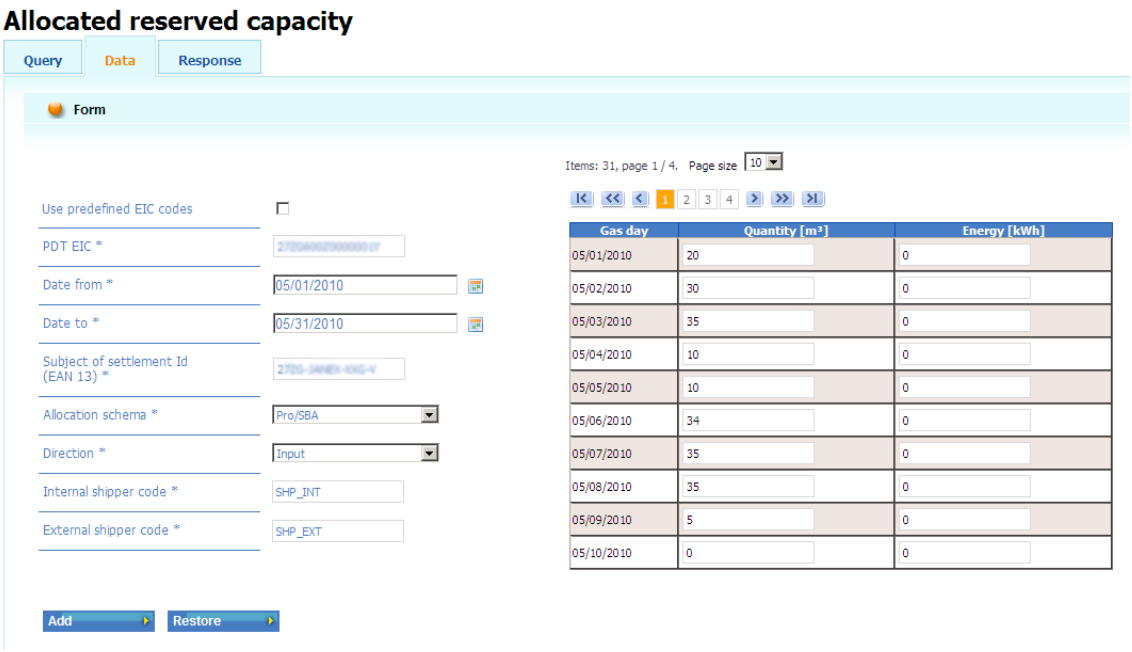


Figure 30 Entering values of allocated reserved capacity

4.2.3 Requests for ALOCAT data

Requests for allocated metering data are described in the respective section of chapter 5 – Provision of data upon request of an external user.

4.3 POF message

POF messages are intended for providing additional data for invoicing of distribution services provided by DSO/TSO to points of transfer in the respective network.

The following message identifiers are used for sending POF messages:

Identifier of			Types of metered data
Message	**Response**	**Copy**	
GP1	GP2	GP6	POF data

Table 5 – POF messages

4.3.1 Data for grid-usage invoicing

Data for grid-usage invoicing (POF) is sent by TSO/DSO for points of delivery and transfer in the region. POF are sent for points of delivery and transfer of the following types:

- A,B – production, consumption, point of delivery, settlement PDT for network
- C, CM - consumption

The file structure is the most complicated of all files used for sending interval and non-interval data to the CDS system. A detailed description of the structure of the file is provided in the document D1.4.2G XML message formats - Gas (only in Czech).

The POF data are sent by reading cycles for each PDT.

A single message can only be used for sending data for a single PDT; however, data for multiple periods can be sent for the one PDT.

The time interval of validity of values is identical to the entire period for which the data are sent, i.e. the from date is the first gas day of the respective period, including time and off-set; and the to date is the last gas day of the respective period, including time and off-set. E.g. data for January 2010 are sent with from date = 2010-01-01T06:00+01:00, and to date = 2010-02-01T06:00+01:00.

Now it’s also possible to process message even if certain PDT is valid to date D+1 (D means the end of billing period of processed POF). The message is send to supplier/subject of settlement which is logged to the PDT to date D+1. So called “historical” (HST) POF message contains only data of appliance and header data. Other facts such as fees or discounts are not send.

Diagram of message processing:

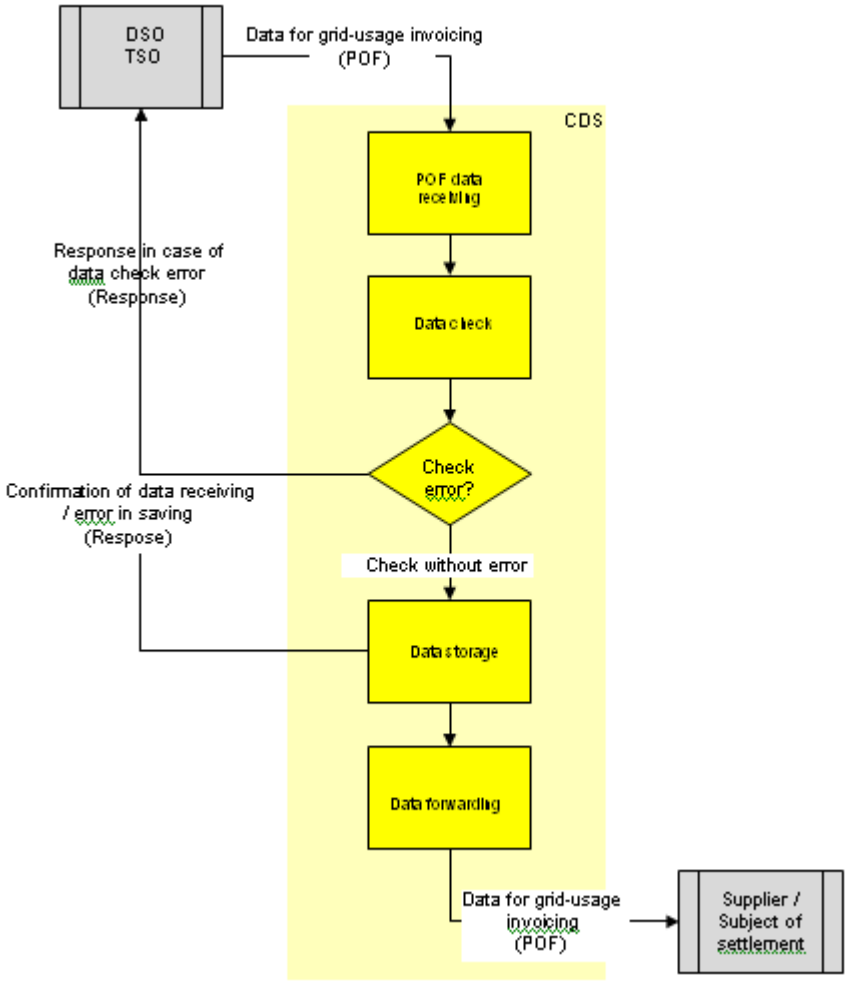


Figure 31 POF processing

Description of processing steps:

1. Data reception

2. Verification of message data

   - Message code – admissibility for the respective message type
   - Recipient – the message recipient shall be OTE gas
   - Verification of existence of the PDT in the system
   - Verification of authorisation – verification of the sender and the type of sent data (POF data to be sent only by DSO, TSO)
   - Verification of closure of trading days
   - Invoice type – one of the following values shall be enabled:

- INV – regular invoicing
- COR – correction invoicing (Replaced with field Reason of Repair)
- EXI – extraordinary invoicing

- CAN – invoicing cancellation
- EOC – contract termination

If verification identifies an error, a message with error identification in the Response format shall be sent.

3. Assignment of unique identifiers

A unique identification number (pofId) shall be assigned to a received message. In case the basic identification information (invoice number, period, supplier, PD, distributor) are identical, the invoice is assigned a version number higher by 1 then the existing number.

4. Data saving

5. In case of a message cancellation, the reference message bears the attribute "Cancelled".

6. Response sending

A message of the Response format is sent to the sender in case of correct reception and processing of sent data. If the message has been received with a reservation, the Aperak shall include a description of such reservation.

7. Sending of copy of the data

Having successfully received and saved the sent data, the system shall automatically distribute the data to the relevant entities and to the message sender. Unlike in case of the input message, the assigned pofId or a version number shall be filled in the sent message.

Process of cancellation of a POF message

DSO does the cancellation using a completely filled POF message with the CAN status, including the invoice number of the message to be cancelled. The CDS system finds the original POF message by the invoice number and the EIC code of the PDT for which the cancellation attribute is set. If the reference message may not be found, the message with the CAN status is rejected.

In the opposite case, the CDS system saves the CAN message in the same way as a POF message with a different status. The number of the version is derived from the version of the reference message. A copy of the message is forwarded to the eligible RMP's.

An example of filling of the basic attributes:

POF ID	Cancelled message	Invoice type	Version	Note
000000000010		INV	1	
000000000011	X	COR	2	
000000000012		CAN	2	Version filled from the cancelled POF
000000000013		COR	3	

Table 6 – Basic POF attributes filling

When correction is to be made, the original invoice type is conserved. Correctiona invoice type is indicated with filling of the correction reason in the corresponding attribute and number of repair invoice.

Example of filling version:

Order of messages	Number of invoice	Number of repair invoice	Correction reason	Invoice type	Version
1.	10001			INV	1
2.	10002	10001	01	INV	1

Table 7 – Filling version in correction invoice

4.3.2 Requests for POF data

Requests for POF data are described in a special sub-chapter of section 5 – Provision of data upon requests of an external user.

4.4 Verification of data sending

Verification of data sending is intended for external users to verify that they have sent to the CDS system the data for all PDT's for which sending is required for the respective trading day by the legislation. Verification may only be launched by the appropriate selection on the CS OTE web portal, section **CDS/Data sending verification**. The selection is active only for service providers in the DSO/TSO role.

The following selections are included in the entry screen:

- Date from – to – entering of the time interval of the request
- Data version – version for daily / monthly settlement

And the individual types of data that may be verified:

- Allocation – allocated metering data
- Allocated reserved capacity

- CM meter readings – readings for PDT's with metering type CM (for monthly settlement only)
- Combustible heat – value of combustible heat per grid
- Metering data
- Planned losses – percent value of planned losses in grid

After a selection of the "Send" button, the data from the CDS system are found and displayed.

- Rezervovaná kapacita (OM)

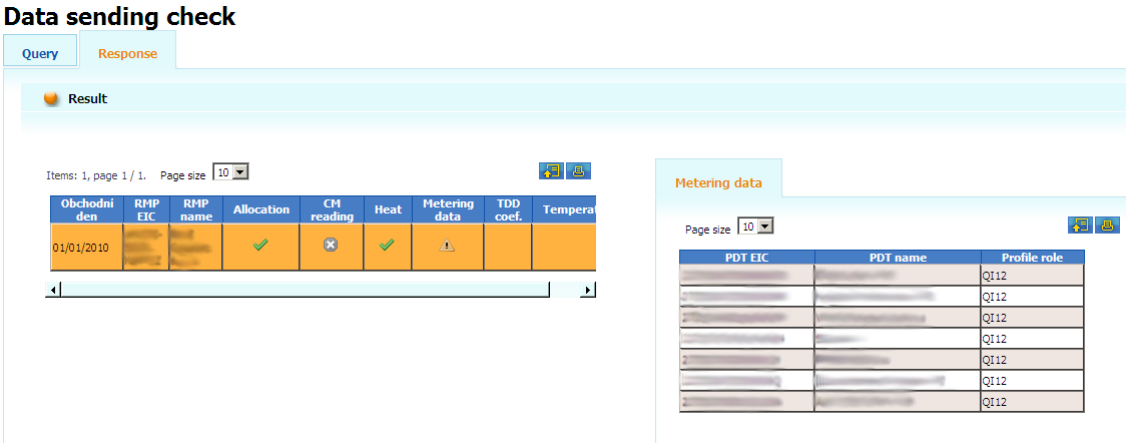


Figure 32 Verification of data sending – list of missing PDT's

There is a separate line for every day. Each line contains the following data:

- Trading day
- EIC designation of the RMP
- Name of RMP
- Status of the individual types of data:

  - sending complete, all data received
  - sending in progress, not all data received
  - sending not in progress, all data missing
  - this type of verification was not requested (by selection in the entry screen)

When a line where data reception is not complete has been clicked, the lists of the missing PDT's are displayed. Presented in detail are the basic identification data for the PDT (EIC, name) and additional information about the missing data. These depend on the type of data:

- Metering data – role of the profile

- Combustible heat – role of the profile
- Allocation – internal, external shipper code, SS
- CM meter reading – time interval for which data are expected
- Planned losses – profile role

5 Description of the process of provision of data upon request by an external user

This group of functions provides for processing of requests for sending data and information from the CDS system. The functionality provides for sending a request by means of automatic communication in XML format, or via the web browser by filling the appropriate form. The response including the requested data and information is sent to the author of request in XML format.

Access to most requests from the web interface is via the CDS menu.

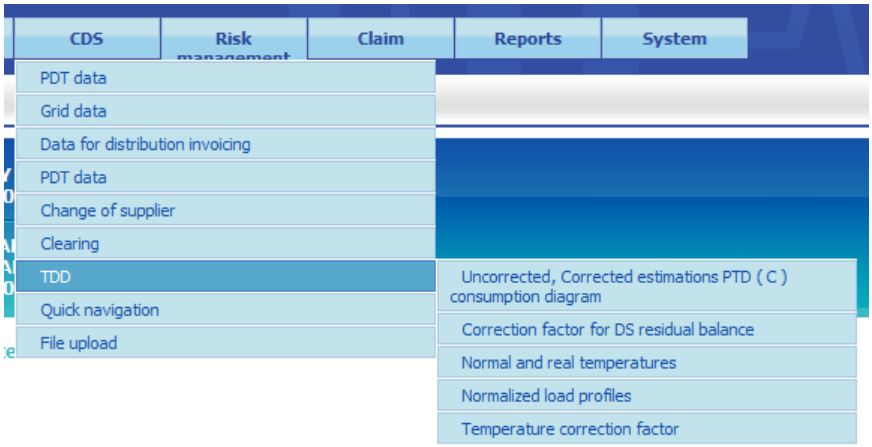


Figure 33 Access to data requests vie the web page

Requests fall into different process areas; therefore, detailed specification of requests is a subject of the respective parts of the documentation, while below you can find a list of the requests and common processing features.

In the form on website there's option to insert a list of PDTs. EIC codes must be separated by semicolon ";" as shown in example below.

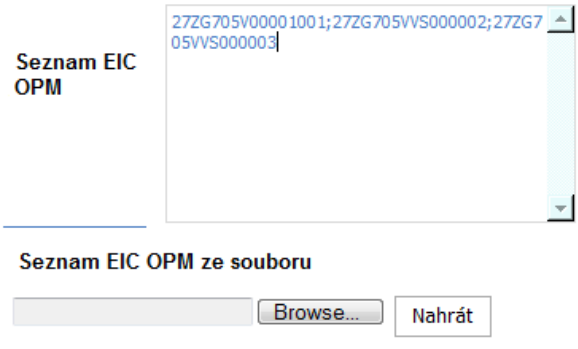


Figure 34 Multiple inserting of EIC codes

5.1 Overview of data requests

Type of request	Identifier	Response identifier
Request for status of change of supplier	GAR	GAS
Request about complaint data	GC4	GC5
Request for OTE messages	GC8	GC9
Request for data of preliminary imbalance	GI1	GI2
Request for data of preliminary difference in allocation	GI3	GI4
Request for data of actual imbalance	GI5	GI6
Request for data of actual difference in allocation	GI7	GI8
Request for off-tolerance imbalances	GI9	GIA
Request for data of final imbalance	GIB	GIC
Request for data of take over preliminary imbalance	GID	GIE
Request for data of take over actual imbalance	GIF	GIG
Request for data of take over final imbalance	GIH	GII
Request for data of final difference in allocation	GIJ	GIK
Request for data of of preliminary daily imbalance NC BAL	GIL	GIM
Request for data of of daily imbalance NC BAL	GIN	GIO
Request for data of of monthly imbalance NC BAL	GIP	GIQ
Request for data of of final monthly imbalance NC BAL	GIR	GIS
Request for data of TSO's Account	GIT	GIU
Request for allocation data	GL1	GL2
Request for data of reserved capacity	GL3	GL4
Request for metered values (interval metering)	GM1	GM2
Request for substitute values (interval metering)	GM3	GM4
Request for change of accumulation	GM5	GM6
Request for metered values (non-interval metering)	GM7	GM8
Request for planned of annual consumption	GM9	GMA
Request for combustible heat	GMB	GMC
Request for distribution capacity	GMD	GME
Request for transport capacity	GMF	GMG
Request for real losses	GMH	GMI
Request for planned own losses	GMJ	GMK
Request for aggregated values for SS	GML	GMM
Request for DS data broken down to A, B, C, CM	GMN	GMO
Request for summary values for SS broken down to A, B, C, CM	GMP	GMO
Request for summary values for SS and the network broken down to A, B, C, CM	GMR	GMS
Request for daily values C	GMT	GMU
Request for daily values CM	GMX	GMY
Request for planned month consumption	GMV	GMW
Request for nomination of the SS of all types*	GN1	GN2
Request for all transport nominations*	GN3	GN4
Request for all distribution nominations for the DSO*	GN5	GN6
Request for all storage nominations for the SSO*	GN7	GN8
Request for shipper code list*	GN9	GNA
Request for distribution invoicing data (POF)	GP4	GP5
Request for PDT data	GR4	GR5
Request for simplified list of PDT	GRE	GRF
Request for data of standard and actual weather conditions (temperatures)	GT1	GT2
Request for LP data	GT3	GT4

Request for data of temperature correlation coefficient	GT5	GT6
Request for residual profile data	GT7	GT8
Request for estimated consumption profile of a PDT group (C, CM)	GT9	GTA
Request for clearing results for PDT	GTB	GTC
Request for meter readings entering to clearing	GTD	GTE

Table 8 Overview of data requests

* Nominations are described in separate user manual

5.2 Request processing management

Each type of request is assigned a unique identifier by the system (see Table 8 Overview of data requests). The CDS system processes the requests based on the identifier. Therefore, the correct value in the file containing the request in XML is very important. If the request is filed via the web form, the respective value is filled automatically depending on the form that has been sent.

Verified during request processing are formal correctness of the message as well as existence of the required data in the system, user's authorisation to send the respective type of request and maximal number of message segmetns.

- Limit for number of message segments (automatic communication)

Messages outgoing via automatic communication have following limits of maximal number of message segments.

XML message format	Area	Segment	Max segment number
GASDAT	Metered data	Measurement	30000
CDSGASMASTERDATA	PDT master data	OPM	19000
CDSGASMASTERDATA	Supplier change	Data	15000

Table 9 – Limits for outgoing messages

For outgoing messages from OTE website are set limits for maximum no of segments in the message.

XML message format	Area	Segment	Max segment number
GASDAT	Metered data	Measurement	30000
CDSGASMASTERDATA	PDT master data	OPM	30000
CDSGASMASTERDATA	Supplier change	Data	15000

Table 10 – Limits for outgoing messages

If the limit is reached, a warning message is sent.

Description of multiply segments:

We are counting header (contain information about sender) like one segment and also GasdatDocument like one segment.

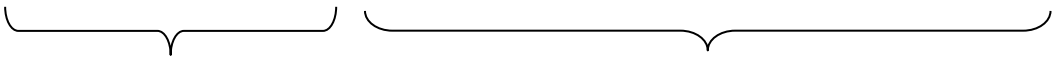
Segments Location, MeterInformation a Measurement are multiple segments and can be repeat itself.

Description of counting segments in message:

Metered data - GASDAT

Example of GASDAT message contain 1 PDT with 1 metered value with profile roles AN12 a QN12 (7 segments in total)

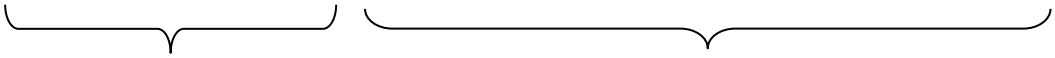
Header + GasdatDocument + (1x Location) + (2x MeterInformation) + (2x Measurement)



Basic segments Multiple segments

Example of GASDAT message contain 1 PDT with 2 metered values with profile roles AN12 a QN12 (9 segments in total)

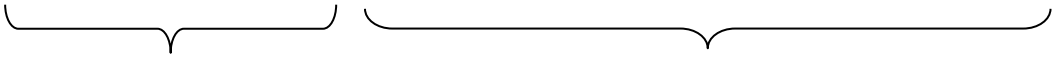
Header + GasdatDocument + (1x Location) + (2x MeterInformation) + (4x Measurement)



Basic segments Multiple segments

Example of GASDAT message contain 2 PDT with 1 metered value with profile roles AN12 a QN12 (12 segments in total)

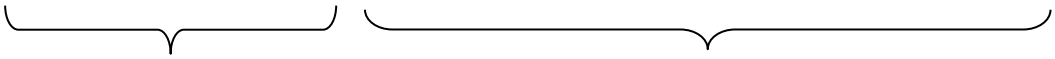
Header + GasdatDocument + (2x Location) + (4x MeterInformation) + (4x Measurement)



Basic segments Multiple segments

Example of GASDAT message contain 5 PDT with 1 metered value with profile roles AN12 a QN12 (17 segments in total)

Header + GasdatDocument + (5x Location) + (5x MeterInformation) + (5x Measurement)

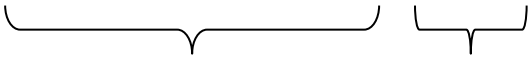


Basic segments Multiple segments

PDT master data - CDSGASMASTERDATA

Example of message CDSGASMASTERDATA contain 1 PDT (3 segments in total)

Header + CDSGASMASTERDATA + (1x PDT)

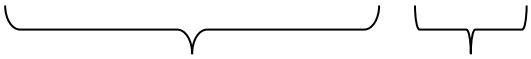


Basic segments Multiple segments

Change of supplier – CDSGASMASTERDATA

Example of message change of supplier contain 1 PDT (3 segments in total)

Header + CDSGASMASTERDATA + (1x Data)



Basic segments Multiple segments

- Limit for number of PTDs in a message

Maximum number of PDTs in GMT message is 3000.

- Length of time period requested

For some requests, data from EDM profile are loaded. For these reuquests there is a limitation for requested time period. When the requested period reached the given number of days, the request is rejected.

This limit is set up for real data and for data in versions. The limit is set up via CDS Gas constants.

Request type	Max number of days
Actual data	548
Data in versions	93

Table 11 – Limits for requested period

Msg code	Description
GM1	Request for metered values (interval metering)
GM3	Request for substitute values (interval metering)
GM5	Request for change of accumulation
GMH	Request for actual own losses
GMN	Inquiry about data for DS broken down to A, B, C, CM
GMP	Inquiry about summary values for SS broken down to A, B, C, CM
GMR	Inquiry about summary values for SS and network broken down to A, B, C, CM
GMT	Request for C metering day values
GMX	Request for CM day values
GT1	Request for data of normal and actual weather conditions (temperatures)
GT2	Confirmation/error in request for data of normal and actual weather conditions (temperatures)
GT3	Request for LP data
GT5	Request for data of temperature correlation coefficient
GT7	Inquiry about residue diagrams
GT9	Inquiry about estimated diagram of consumption of a PDT group (C, CM)

Table 12 – Message codes for requested period limits

5.3 Responses from the system

Based on the entered request criteria, the system sends to the external user a response containing the data in the XML format, or presents the data on-line on the portal (when **Display on WWW** is selected). In case of a defect in the request or its processing, the system sends an error message in the XML format, or displays it on-line on the portal (when **Display on WWW** is selected).

Error messages also have a unique identifier according to the type of request. The link of a reply to the specific messages is apparent from the table Overview of requests for data.

5.4 Periodicity

When entering a request to the system, the external user has the possibility to require periodical sending of data (for some requests). It also has the possibility to cancel periodical sending or enter only one-time data request.

In case of a request filed via web browser, a drop-down box is available for easy entry of request periodicity. Periodicity can be set in the **Query** tab in the **Message Data** section.

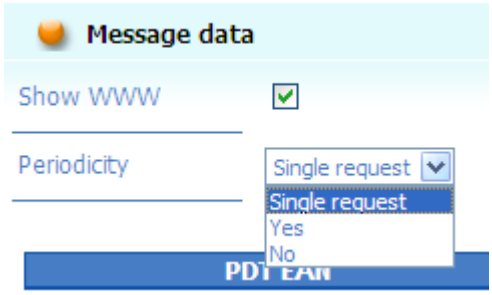


Figure 35 – Entering periodicity in web form

5.4.1 Request for periodical data sending

If the external user wants to set periodic data sending, the periodicity flag must be set to YES. If the external user sends the request by e-mail in the XML format, it is necessary for the respective element to include the periodical sending activation code (attribute Periodic – value 1).

When filing a request from web form, the system directly offers possibilities by providing a description. The value is set to „Yes“. The respective XML file is then filled with value 1.

The system checks the incoming request whether it contains the attribute for periodic data sending.

If yes, the system writes the respective PDT in an internal table containing a set of PDT for which periodical data sending has been requested. The system also processes its own one-time request specified by date from – to in the incoming request.

The system then automatically sends the requested data for the respective PDT. The periodicity of sending is given by the type of request or the type of requested data.

Processing of periodical requests is linked to the process of aggregation, within which the job for processing of periodical requests is planned.

Code	Description	Period	Time of processing
GL1	Request for allocation data	D-1	After aggregation
GM1	Request for metered values (interval metering)	D-1	After aggregation
GM3	Request for substitute values (interval	D-1	After

	metering)		aggregation
GM5	Request for change of accumulation	D-1	After aggregation
GM7	Request for metered values (non-interval metering)	D-1	After aggregation
GM9	Request for planned estimate of annual consumption	D-1	
GMB	Request for combustible heat	D-1	After aggregation
GML	Inquiry about aggregated values at SS	D-1	After aggregation
GMN	Inquiry about data for DS broken down to A, B, C, CM	D-1	After aggregation
GMP	Inquiry about summary values for SS broken down to A, B, C, CM	D-1	After aggregation
GMR	Inquiry about summary values for SS and network broken down to A, B, C, CM	D-1	After aggregation
GMT	Request for C metering day values	D-1	After aggregation
GT1	Request for data of normal and actual weather conditions (temperatures)	D-1	After aggregation
GT3	Request for LP data	D-1	After aggregation
GT5	Request for data of temperature correlation coefficient	D-1	After aggregation
GT7	Inquiry about residue diagrams	D-1	After aggregation
GT9	Inquiry about estimated diagram of consumption of a PDT group (C, CM)	D-1	After aggregation
GP4	Inquiry about data for invoicing of distribution (DGI)	M-1	6th working. day
GR4	Request for PDT data	D	After aggregation

The period From-To entered at sending of a periodical request or its activation, respectively, does enter in processing of the periodical request. The values for the defined period are processed only as a one-time request.

5.4.2 Deactivation of periodical data sending

During deactivation of periodical data sending, the system verifies the attribute of periodicity for setting to NO. If the external user sends the request by e-mail in the format XML, it is necessary that the respective element includes the deactivation code (attribute Periodic – value 0).

In case of entering the request from web form, the system directly offers the possibilities with a description. The value is set to „No“. The respective XML file is then filled with value 0.

At deactivation of periodical data sending, it is necessary to send in the message identical data as at activation of periodicity (type of request, list of PDT). In the opposite case the system sends an error message.

5.4.3 Periodic requests validity

A D date is set in CDS, when validity of all periodic requests expires. Also a time period p is set, which means number of days befor D date, when it is possible to renew the poriodic request. All valid requests sent before D-p date are terminated at D date each year, except of those renewed during the p period – these are valid until D date of the next year.

5.4.4 Web interface for periodic requests

Existing periodic requests can be administrated via web intervace – menu **CDS/Management of periodical queries**. It is possible to view all requests of the participant, filter data, renew the requests and terminate them.

5.4.5 Warning about forthcoming termination of periodic requests

On D-p date, RESPONSE messages with GXA code are sent to all participants. These messages contain general information about termination of all periodic requests send before D-p date and that a renewal is possible to be carried out.

5.4.6 One-time request for data

In case of a request for one-time data sending the system verifies the attribute of periodicity for setting to one-time request (attribute Periodic - X) . If the external user requests one-time data sending, it will receive the data only once.

When filing the request from the web form, the system offers possibilities with a description. The value is set to „One-time request“. The respective XML file is then filled with value X.

5.5 Authorisation

Authorisation of an external user is dictated by the type of service the respective RMP provides at the respective PDT. In case it does not provide any service on the PDT, it shall not have access to data from such PDT.

5.6 Description of requests

The below section provides a description of the individual requests according to the structure in the CDS Menu on the OTE portal. The description of the individual types of data is provided in the respective chapters.

5.6.1 PDT data

The Menu item PDT data contains requests for metering data sent to a specific PDT or a group of PDT’s. Provided for each request is an overview of products that can be acquired by making the request. The requests have the following criteria:

- PDT EIC – designation of point of delivery / transfer
- Date from – to – entering of the request period
- Data version – version of data with regard to calculation of settlement of imbalances.
- Supplier – RMP assigned to the PDT as the primary supplier
- Subject of settlement – RMP assigned as the subject of settlement
- Supervisor – RMP assigned as the supervisor on any position
- Observer – RMP assigned as the observer

a) Metered interval data (A, B) - GM1

Request used for acquiring preliminary, or metered values of consumption and production from multiple types of PDT:

- consumption and production of a PDT type production and consumption;

- input to / output from the system for a PDT type point of transfer of DS/TS

- own losses of a settlement PDT per grid

- sum of corrected planed consumptions of C, CM for virtual PDT's for a SS and for a SS and grid

Product	Description
QI11	Metered quantity – production (interval metering)
QI12	Metered quantity – consumption (interval metering)
AI11	Energy produced (interval metering)
AI12	Energy consumed (interval metering)

Table 13 – Metered interval data (A, B)

Available on the CDS website, section **CDS/PDT data/Metered interval (A, B).**

b) Substitute interval data (B) - GM3

The request is used for acquiring substitute data from a PDT of the consumption type with metering type B that were used for aggregation instead of the metering data which were not available during the run. The values are determined by calculation within the aggregation process.

Product	Description
AI91	Substitute values – Energy produced (from metered values)

AI92	Substitute values – Energy consumed (from metered values)

Table 14 – Substitute interval data (B)

Available on the CDS website, section CDS/PDT data/Substitute interval data (B).

c) Metered non-interval data (C, CM) - GM7

The request is used for acquiring metered data from non-interval metering meter readings, from a PDT of the consumption type with metering type C, CM. In case of a PDT with metering type CM, the data are used for monthly and final monthly settlement. In case of a PDT with metering type C, they are used within the clearing process. The new input parameter is added to form and request ‘ Selection method a nd choices:

1 Consumption interval

2 Reading date (select data with meter reading exists in requsted period)

Product	Description
QN12	Metered quantity – consumption (non-interval metering)
AN12	Energy consumed (non-interval metering)

Table 15 – Metered non-interval data (C, CM)

Available on the CDS website, section **CDS/PDT data/Metered non-interval data (C, CM).**

d) Daily values (C) - GMT

The request is used for acquiring values of daily consumption values of data for a PDT with non-interval metering C that were used for settlement of imbalances. If actual metering data from reading were available during the run, the value determined from the reading is returned. Otherwise the value determined from the planned consumption is returned.

Product	Description
AD92	Value determined from planned annual consumption (correction to temperature and ZD)
AI92	Substitute values – Energy consumed (from metered values)

Table 16 – Daily values (C)

From 1.7.2016 will not be set virtual metering type CM in request for daily data C.

Available on the CDS website, section **CDS/PDT data/Daily values (C)**.

e) Daily values (CM) - GMX

The request is used for acquiring values of daily consumption values of data for a PDT with non-interval metering CM that were used for settlement of imbalances. If actual metering data from reading were available during the run, the value determined from the reading is returned. Otherwise the value determined from the planned consumption is returned.

Product	Description
AD92	Value determined from planned annual consumption (correction to temperature and ZD)
AI92	Substitute values – Energy consumed (from metered values)

Table 17 – Daily values (CM)

For new registered PDT with metering type CM will not be created profiles AI92 from 1.7.2016. Request from business day 1.7.2016 will be determinate daily value on the basis of planned annual consumption

Available on the CDS website, section **CDS/PDT data/Daily values (CM)**.

f) Allocation - GL1

The request is used for acquiring preliminary and metered values of allocated reading. The data are acquired from a PDT of the type allocation point, i.e. type BDS/CGD, UGS. When the request for allocation data is made, it is not possible to use additional criteria for limiting the search by the service provider.

Time-series	Direction	Description
Z01	Z02	Preliminary / metered allocations – input in the system
	Z03	Preliminary / metered allocations – output from the system

Table 18 - Allocations

Available on the CDS website, section **CDS/PDT data/Allocations**.

g) Aggregated data for SS - GML

The request is used for acquiring aggregated metering data per subject of settlement and all PDT's for which the respective subject has assumed responsibility for imbalance. The values are determined by calculation within the process of aggregation. They are stored in the CDS system on PDT of the virtual type for a SS. The data are divided to consumption and production.

Product	Description
A81	Aggregated values for SS – production
A82	Aggregated values for SS – consumption

Table 19 – Aggregated data for SS

Available on the CDS website, section **CDS/PDT data/Aggregated data for SS**.

h) Data for SS (A, B, C, CM) - GMP

The request is used for acquiring aggregated data for a subject of settlement and all PDT's for which the respective subject has assumed responsibility for imbalance in breakdown by metering type and direction (consumption/production, input/output). The values are determined by calculation within the aggregation process. They are stored in the CDS system on PDT of the virtual type for a SS.

Product	Description
ASA1	Aggregated metered value, metering A, production
ASA2	Aggregated metered value, metering A, consumption
ASB1	Aggregated metered value, metering B, production
ASB2	Aggregated metered value, metering B, consumption
ASC2	Aggregated metered value, metering C, consumption
ASD2	Aggregated metered value, metering CM, consumption
AI12	Value of losses in the DS

Table 20 - Data for SS (A, B, C, CM)

Available on the CDS website, section **CDS/PDT data/Data for SS (A, B, C, CM)**.

i) Data for SS and grid (A, B, C, CM) - GMR

The request is used for acquiring aggregated data for a subject of settlement and all DT's in the specific grid for which the respective subject has assumed responsibility for imbalance. The data are provided in a breakdown per metering type and direction (consumption/production, input/output). The values are determined by calculation within the aggregation process. The are stored in the CDS system on PDT of the virtual type for a SS and a grid.

Product	Description
ASA1	Aggregated metered value, metering A, production

ASA2	Aggregated metered value, metering A, consumption
ASB1	Aggregated metered value, metering B, production
ASB2	Aggregated metered value, metering B, consumption
ASC2	Aggregated metered value, metering C, consumption
ASD2	Aggregated metered value, metering CM, consumption

Table 21 - Data for SS and grid (A, B, C, CM)

Available on the CDS website, section CDS/PDT data/Data for SS and grid (A, B, C, CM).

j) Planned annual consumption (C) - GM9

The request is sued for acquiring values of planned annual consumption for a PDT type consumption with non-interval metering (C, CM). The value is used within settlement of imbalances for determination of the consumption of the individual applications of the LP methodology for PDT's with metering type C in all versions and for PDT's with metering type CM in the daily version. The value is also used in the clearing process.

Product	Description
ES10	Planned estimate of annual consumption
QS10	Planned estimate of annual consumption (in m3)

Table 22 – Planned annual consumption (C)

Available on the CDS website, section **CDS/PDT data/Planned annual consumption (C).**

k) Planned monthly consumption (A, B) - GMV

The request is used for calculation of substitute values of consumption PDT's with metering type B in the aggregation process.

Product	Description
ES20	Planned estimate of monthly consumption
QS20	Planned estimate of monthly consumption (v m3)

Table 23 – Planned monthly consumption (A, B)

l) Distribution capacity - GMD

The request is used for acquiring the value of distribution capacity for a PDT of the consumption type with interval metering type A, B. The value is used for calculation of prediction and tolerance.

Product	Description
DC10	Distribution capacity

Table 24 – Distribution capacity

Available on the CDS website, section **CDS/PDT data/Distribution capacity**.

m) Transmission capacity - GMF

The request is used for acquiring the value of transmission capacity for a PDT of the type BDS/CDG and UGS. The value is used for calculation of prediction and tolerance.

Product	Description
TC10	Transmission capacity m3
TC20	Transmission capacity kWh

Table 25 – Transmission capacity

Available on the CDS website, section CDS/PDT data/Distribution capacity.

n) Allocated reserved capacity - GL3

The request is used for acquiring the value of allocated reserved capacity for a PDT of the type allocation point, i.e. BDS/CDG, UGS. The value is used for calculation of prediction and tolerance.

Time-series	Direction	Description
Z05	Z02	Allocated reserved capacity – input in the system
	Z03	Allocated reserved capacity – output from the system

Table 26 - Allocation

Available on the CDS website, section **CDS/PDT data/Allocated reserved capacity**.

o) History of consumption (A, B) – GO5

Request used for acquiring metered values of consumption and production from PDT, for the period, where the RMP is not assigned to the PDT with active service, but he is there now or in the future. Explicit specification of PDT EIC code is required.

Product	Description
QI11	Metered quantity – production (interval metering)
QI12	Metered quantity – consumption (interval metering)
AI11	Energy produced (interval metering)
AI12	Energy consumed (interval metering)

Table 27 – Historical data of consumption data (A, B)

Available on the CDS website, section **CDS/PDT data/History of consumption (A, B).**

5.6.2 Data for grid

The Menu item Data for grid includes requests for metering data sent to a PDT of the settlement type for grid or in summary for all PDT's of the respective grid. Provided for each request is a list of products that may be acquired by making that request. The selection criteria of the requests are the following:

- PDT EIC – designation of a point of delivery / transfer
- Date from – to – entering of the request period
- Data version – version of the data with regard to execution of the calculation and settlement of imbalances.
- Supplier – RMP assigned as the primary supplier to a PDT
- Subject of settlement – RMP assigned as the subject of settlement
- Supervisor – RMP assigned as a supervisor at any position

a) Combustible heat - GMB

The request is used for acquiring the mean value of combustible heat for the distribution / transmission system used for re-calculation of preliminary data to metered data within aggregation. The value is stored at the PDT of the type settlement for grid.

Product	Description
CT10	Combustible heat – preliminary value
CT20	Combustible heat – metered value

Table 28 – Combustible heat

Available on the CDS website, section **CDS/Data for grid/Combustible heat.**

b) Planned losses - GMJ

The request is used for acquiring the percentage of the anticipated losses in a distribution / transmission system. The value is stored on the settlement PDT for the grid. The resulting value of losses used for calculation of imbalances is determined as a percentage of the total consumption of the system.

Product	Description
LP10	Planned own losses

Table 29 – Planned losses

Available on the CDS website, section **CDS/Data for grid/Planned losses.**

c) Metered losses - GMH

The request is used for acquiring the actual value of losses of a distribution / transmission system. The value is stored on the settlement DPT for the grid.

Product	Description
LR10	Metered own losses

Table 30 – Transmission capacity

Available on the CDS website, section **CDS/Data for grid/Metered losses.**

d) Change of accumulation - GM5

The request is used for acquiring the change in the quantity of gas in a distribution / transmission system. The value is stored on the settlement PDT for grid.

Product	Description
AC10	Change of accumulation
QC10	Change of accumulation (m3)

Table 31 – Change of accumulation

Available on the CDS website, section **CDS/Data for grid/Change of accumulation**.

e) Aggregated values for DS - GMN

The request is used for acquiring aggregated metering data for a distribution / transmission system in summary for all PDT's. The data are provided in a breakdown by metering type and direction (consumption/production, input/output). Data for production / consumption PDT's and points of handover are provided separately. The values are determined by calculation within the aggregation process. The values are stored on the PDT type settlement for a grid.

Product	Description
ASA4	Aggregated metered value of consumption, metering A, consumption
ASB4	Aggregated metered value of consumption, metering B, consumption
ASC4	Aggregated metered value of consumption, metering C, consumption
ASD4	Aggregated metered value of consumption, metering CM, consumption
A3A1	Aggregated metered value of supply, metering A, points of handover
A3B1	Aggregated metered value of supply, metering B, points of handover
A3A2	Aggregated metered value of consumption, metering A, points of handover
A3B2	Aggregated metered value of consumption, metering B, points of handover
ASA1	Aggregated metered value, metering A, production
ASA2	Aggregated metered value, metering A, consumption
ASB1	Aggregated metered value, metering B, production
ASB2	Aggregated metered value, metering B, consumption
ASC2	Aggregated metered value, metering C, consumption
ASD2	Aggregated metered value, metering CM, consumption
ASE1	Allocation on input
ASE2	Allocation on output
A82	Aggregated value of consumption in DS

Table 32 – Aggregated values for DS

Available on the CDS website, section **CDS/Data for grid/Aggregated values for DS**.

5.6.3 Data for distribution invoicing

The Menu item Data for distribution invoicing is used for acquiring data sent by a POF message. The following selection criteria may be used for making a request:

- PDT EIC – designation of a point of delivery / transfer
- POF ID – unique identifier of a POF message, assigned by OTE
- Date from – to – period of data validity
- Acquisition date and time from – to – period of reception of a message by the CDS system
- Data version – 99 – the last received version

  – 00 – all received versions
- Net
- Measuring type
- LP Class
- Supplier
- Subject of settlement
- Supervisor
- Observer.

- *Request for electronic invoice*

Request for electronic invoice can be accessed in menu CDS -> Electronic invoice – Electronic invoice data. The request is sent by automatic communication.

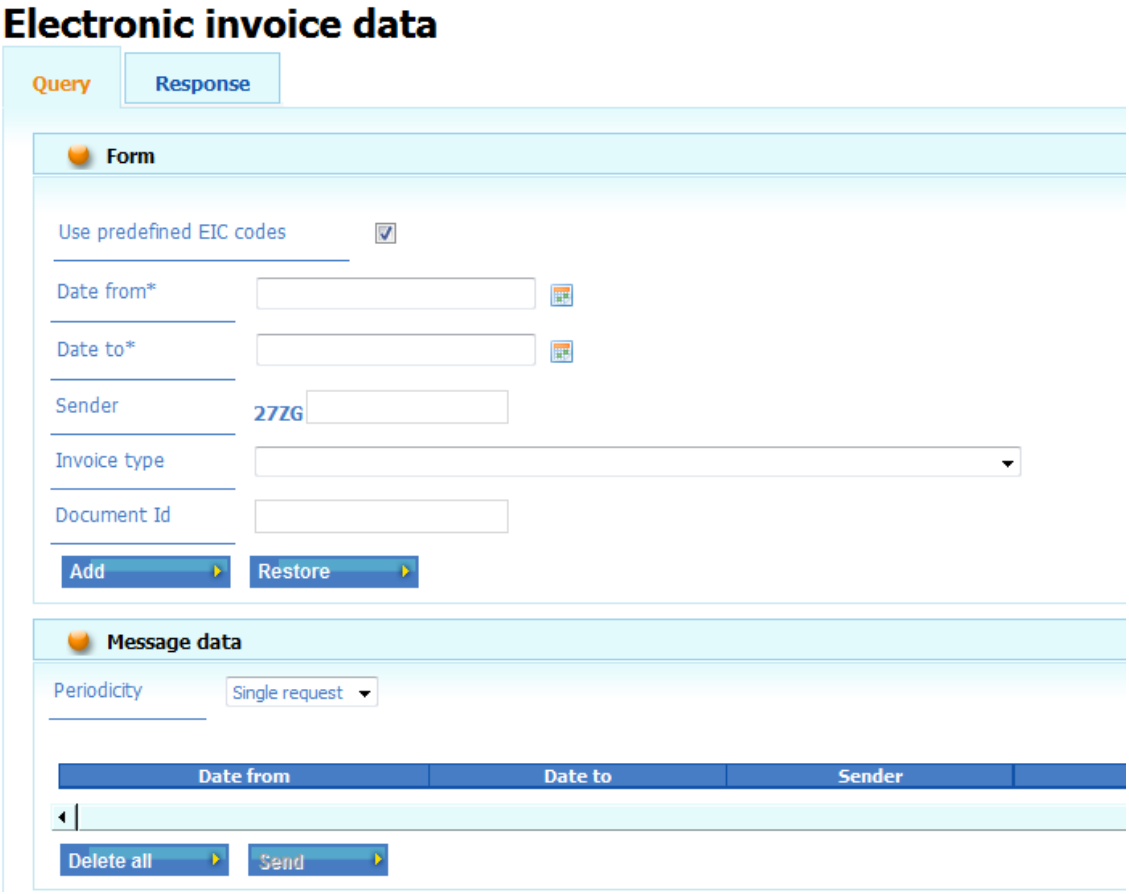


Figure 41 Displaying of request for electronic invoice data

The request is used for acquiring data for distribution invoicing per PDT of the consumption type with interval and non-interval metering. Date and time of reception of a message with invoicing data by the CDS system is an additional criterion.

The returned reply includes data for distribution invoicing as received by CDS. The description of the individual items is provided in the document D1.4.2G – XML message format – gas.

Available on the CDS website, section **CDS/Data for distribution invoicing/ Data for distribution invoicing**. The reply to the entered criteria is a list with header items of a message with distribution invoicing data (simplified list).

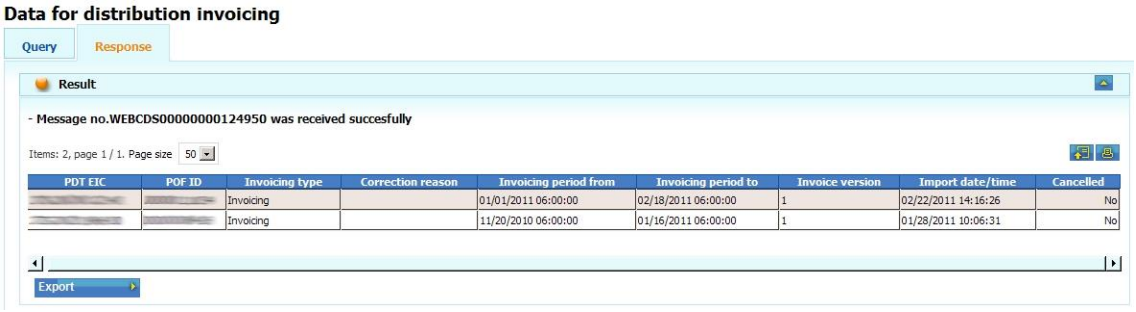


Figure 36 Displaying of a list with POF header data

Data may be exported to Excel. It is possible to export either an individual POF or a retrieved list (only the records displayed on the page are exported, the limit being 50 records). Every POF is exported to a separate tab of the xls file.

When a record in the list is clicked, the other data of the POF message are retrieved. Each group of data is displayed in a separate tab.

Figure 37 Displaying details of POF items

5.6.4 PDT

The Menu item PDT is used for acquiring data about PDT master data and the assigned services.

a) PDT data - GR4

The menu item is used for entering a request for PDT master data. The following selection criteria may be used for making a request:

- PDT EIC – designation of a point of delivery / transfer
- Date from – to – entering a period of the request

- PDT type
- Grid – numeric designation of a grid
- Metering type
- LP class – numeric designation of the LP class
- Supplier – RMP assigned as the primary supplier to PDT
- Subject of settlement – RMP assigned as the subject of settlement
- Supervisor – RMP assigned as a supervisor at any position\
- Observer – RMP assigned as observer

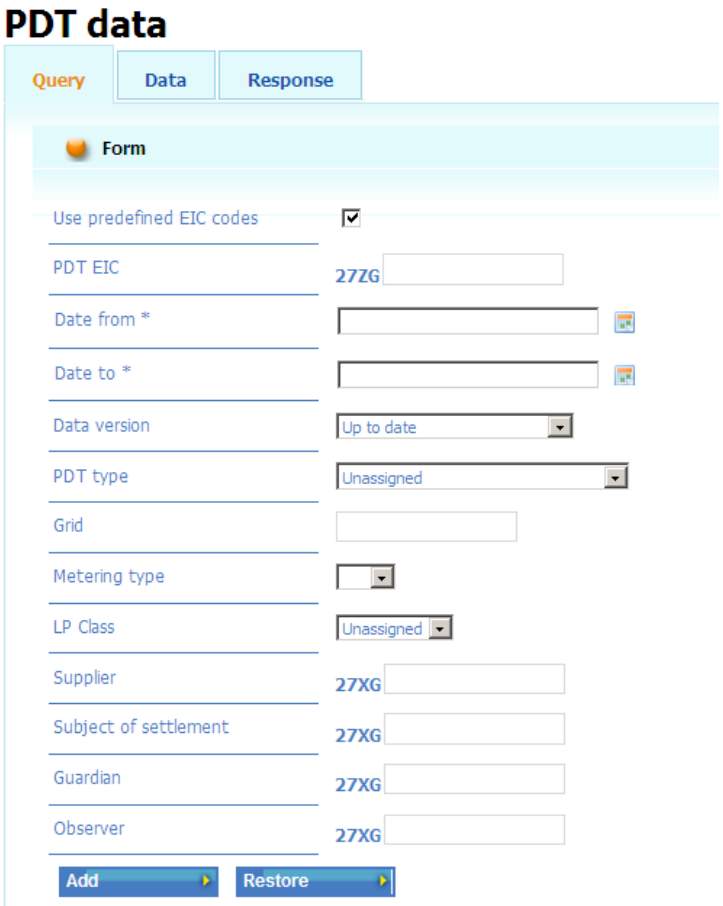


Figure 38 Entering a request for PDT master data

The request may be made specifically, i.e. by entering the EIC designation of the PDT, or generally when all PDT's meeting the criteria are retrieved.

Selected services and their providers are displayed for the retrieved PDT's in addition to the data about the point of delivery/transfer.

Attribute	Meaning
ps-dod	Primary supplier
ps-sz	Subject of settlement
ps-poz-1	Supervisor on position 1
ps-poz-2	Supervisor on position 2
ps-poz-3	Supervisor on position 3
ps-poz-4	Supervisor on position 4
ps-poz-5	Supervisor on position 5
ps-obs	Observer

Table 33 – Meaning of attributes of retrieved PDT's

If some attributes of a PDT (e.g. LP class, primary supplier, etc.) are changed during the period of the request and the attributes meet the entered conditions, the output message consists of multiple segments for the PD with appropriate time differentiation.

If attributes of the PDT are not changed in the end points of the interval of the request, then the interval will be extended to the closest date of a change of the PDT attributes in both directions. This means that if a request is made for PDT data that remain unchanged during the entire validity period, the reply will include the entire interval of PDT validity regardless of the interval of the request.

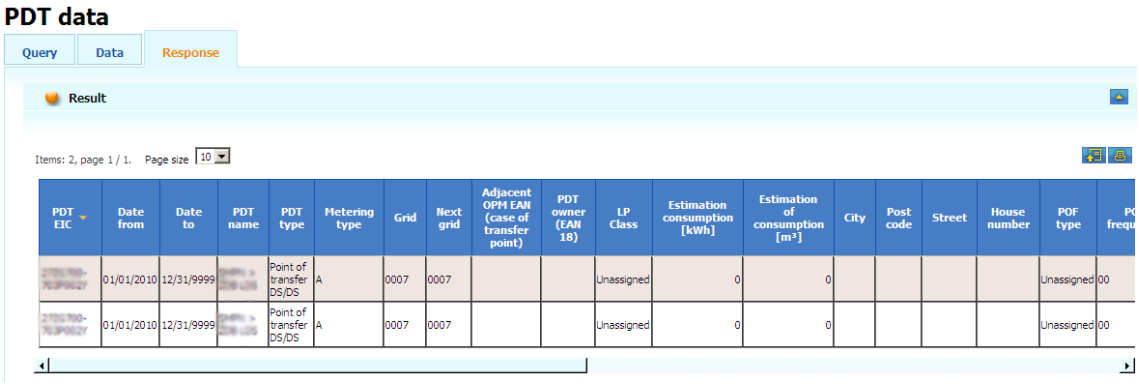


Figure 39 Displaying of PDT master data

a) Request for simplified list of PDT – GRE

The menu item is used for entering a request for simplified list of PDT. The following selection criteria may be used for making a request:

- PDT EIC
- Date from
- Date to
- Supplier – RMP assigned as the primary supplier to PDT
- Subject of settlement – RMP assigned as the subject of settlement
- Net
- Type of service (sender)

- Service code of service provider
- Provider (EIC code)

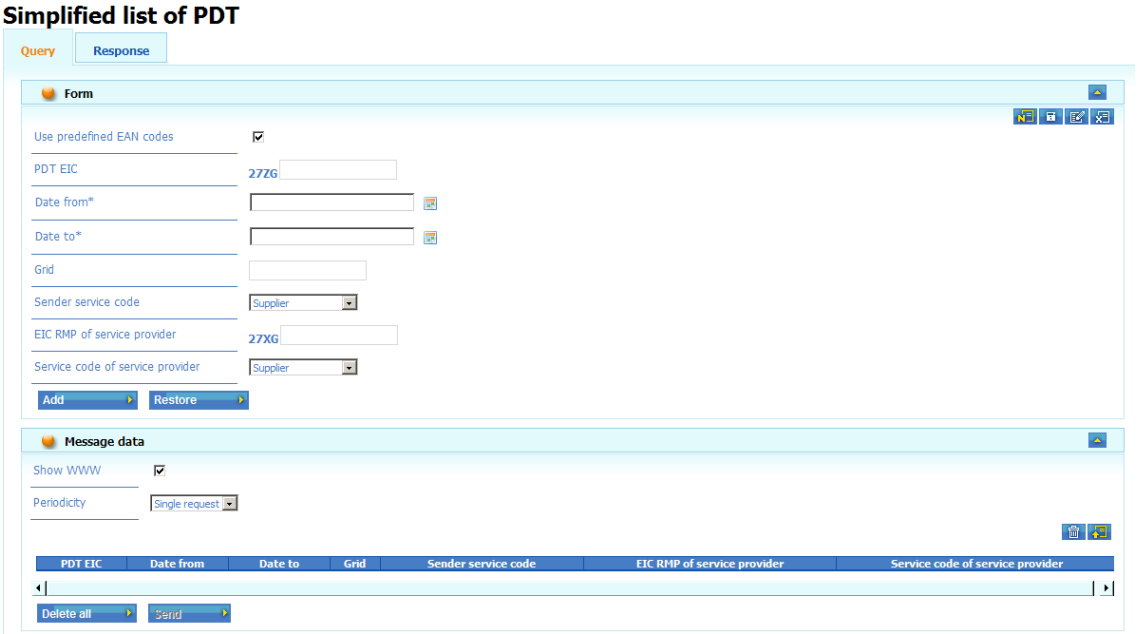


Figure 40 – Entering a request for simplified list of PDT

5.6.5 Change of supplier

Menu item Change of supplier is used for acquiring data about past or in-progress changes of the process of a change of supplier of all types. The following search criteria may be used when making a request:

- PDT identification (EIC 16) – Unique PDT identifier
- Date from – defines the beginning of the period for which the user requires the respective data.
- Date to – defines the end of period for which the user requires the respective data
- Date and time of acquisition from – beginning of the time interval in which the request for a change of supplier was sent to the system
- Date and time of acquisition to – end of the time interval in which the request for a change of supplier was sent to the system

a) List of changes of supplier - GAR

The request is used for acquiring a list from the journal of changes of supplier. When the input criteria have been entered, all relevant processes of a change of supplier are retrieved, including presentation of the available data and designation of actions already executed within the process of a change of supplier.

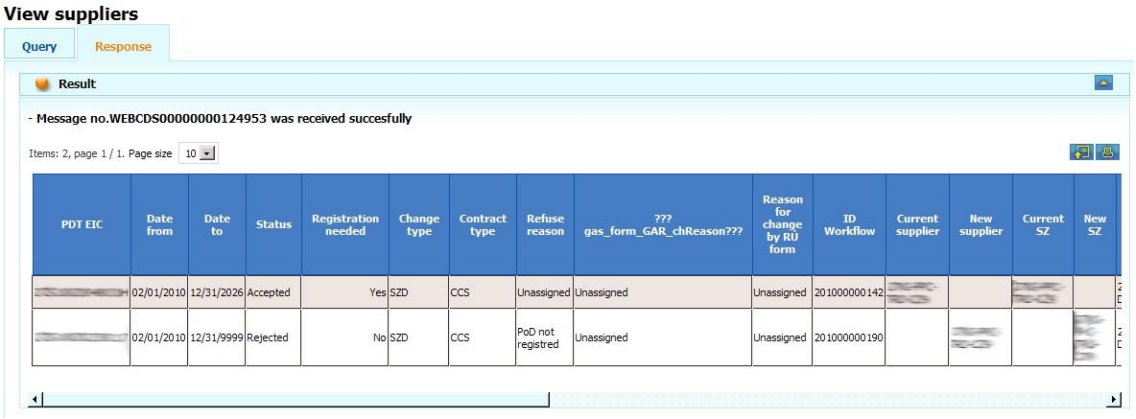


Figure 41 Presentation of a list of changes of supplier

Upon clicking on an item of the list, all actions already executed are displayed, including details, which were executed within the respective process of a change of supplier.

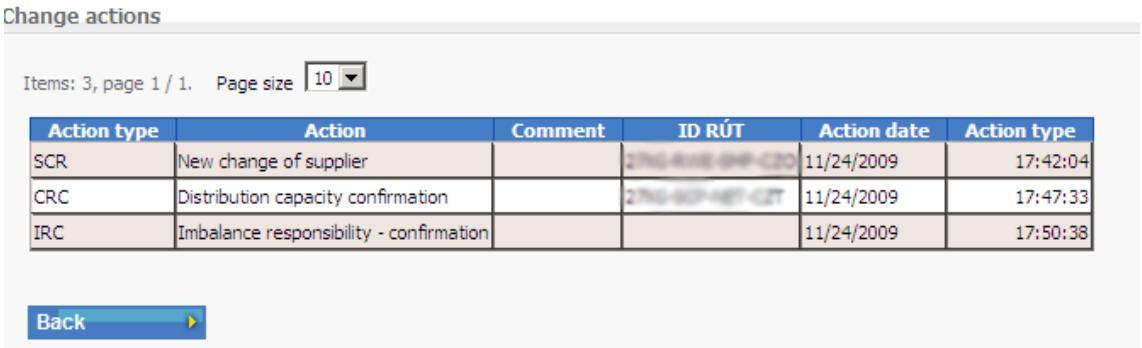


Figure 42 Presentation of executed actions

5.6.6 Imbalances

The Menu item Imbalances is used for acquiring data from executed aggregation and settlement of imbalances. Provided for each request are the types of imbalances that may be acquired by making the request. The following search criteria may be used when making a request:

- PDT EIC – designation of a point of delivery / transfer
- Date from – to – entering the period of the request
- Data version – version of the data with regard to execution of the calculation and settlement of imbalances.

- Imbalances SSS – requests for imbalances for SSS with information about imbalances SS (moving responsibily to SSS)

a) Imbalances

The request is used for acquiring the value of imbalance per SS and the value of system imbalance. The values are retrieved from a PDT type virtual for SS. For example following type of imbalances are returned on request code GI1 or GID:

Imbalance	Description
PINP	Preliminary input imbalance of SS
POUT	Preliminary output imbalance of SS
PIMB	Preliminary total imbalance of SS
PIMR	Preliminary total imbalance of SS own
PSYS	Preliminary system imbalance
POTI	Preliminary off-tolerance imbalances
PTOR	Preliminary tolerance of SS own
PTOL	Preliminary tolerance of SS

Table 34 – SS imbalances

Available on the CDS website, section **CDS/Imbalances/Imbalances**.

b) Difference of allocations and nominations by ship. code

The request is used for acquiring the value of imbalance for SS for PDT with breakdown by shipper codes. The values are retrieved from a PDT type BDS/CGD and UGS. For example following type of imbalances are returned on request code GI3:

Imbalance	Description
PDIT	Preliminary difference of allocations and nominations on BDS, CGD on input
PDIS	Preliminary difference of allocations and nominations on VUGS on input
PDOT	Preliminary difference of allocations and nominations on BDs, CGD on output
PDOS	Preliminary difference of allocations and nominations on VUGS on output

Table 35 – Difference of allocations and nominations by ship. codes

c) Off-tolerance deviations per trade with UT – code GI9

The request is used for acquiring the value of off-tolerance deviation for SS after inclusion of trading in unused tolerance. The values are retrieved from a PDT of virtual type for SS.

Imbalance	Description
DOTT	Off-tolerance deviation of SS after inclusion of trading in unused tolerance

Table 36 – Off-tolerance deviation per trade with UT

5.6.7 Imbalances NC BAL (Network Code of Gas Balancing)

The Menu item "Imbalances NC BAL" is used for acquiring data from executed aggregation and settlement of imbalances by NC BAL. Provided for each request are the types of imbalances that may be acquired by making the request. The following search criteria may be used when making a request:

- PDT EIC – designation of a point of delivery / transfer
- Date from – to – entering the period of the request
- Data version – version of the data with regard to execution of the calculation and settlement of imbalances.

AK – Imbalances

Make the requests for data of imbalances according version:

Data version	Message code
Preliminary daily settlement	GIL
Daily settlement	GIN
Month's settlement	GIP
Final month's settlement	GIR

Type of imbalances in response (IMBNOT message):

Type (imbalance)	Description	Message code
PSYS	Daily system imbalance	GIL
PIMB	BRP imbalance (Balance Responsible	GIL

	Party)	
PIMR	BRP imbalance own	GIL
PFLX	The allocated flexibility value	GIL
PFAA	Preliminary allocations of the use of flexibility	GIL
PBUA	Preliminary value of the imbalance account	GIL
PBAA	Preliminary value of the Daily Imbalance Quantity	GIL
PFNP	Unused positive flexibility	GIL
PFNM	Unused negative flexibility	GIL
PFAB	Allocations of the use of flexibility	GIN
PBUB	Value of the imbalance account	GIN
PBAB	Value of the Daily Imbalance Quantity	GIN
PBPB	Amount of the Daily Imbalance Quantity	GIN
PCC2	Applicable Price for the positive the Daily Imbalance Quantity	GIN
PCC1	Applicable Price for the negative the Daily Imbalance Quantity	GIN
DSYS	Monthly system imbalance	GIP
DIMB	Monthly BRP imbalance (Balance Responsible Party)	GIP
DIMR	Monthly BRP imbalance own	GIP
DBAB	Difference between monthly and daily	GIP

	imbalance	
DBPB	Amount of Difference between monthly and daily imbalance	GIP
DOE0	Price Index OTE	GIP
ESYS	Final monthly system imbalance	GIR
EIMB	Final monthly BRP imbalance (Balance Responsible Party)	GIR
EIMR	Final monthly BRP imbalance own	GIR
EBAB	Difference between final monthly and monthly imbalance	GIR
EBPB	Amount of Difference between final monthly and monthly imbalance	GIR
EOE0	Price Index OTE	GIR

AK – Differences between allocations and nominations (actual requests without changes)

Make the requests for data of informative imbalances according version:

Data version	Message code
Daily settlement	GI3
Month‘s settlement	GI7
Final month‘s settlement	GIJ

Type of imbalances in response (IMBNOT message):

Type (imbalance)	Description	Message code
PDIT	Daily difference of allocations and nominations on BDS, CGD on input	GI3

PDIS	Daily difference of allocations and nominations on VUGS on input	GI3
PDOT	Daily difference of allocations and nominations on BDs, CGD on output	GI3
PDOS	Daily difference of allocations and nominations on VUGS on output	GI3
DDIT	Monthly difference of allocations and nominations on BDS, CGD on input	GI7
DDIS	Monthly difference of allocations and nominations on VUGS on input	GI7
DDOT	Monthly difference of allocations and nominations on BDs, CGD on output	GI7
DDOS	Monthly difference of allocations and nominations on VUGS on output	GI7
EDIT	Final monthly difference of allocations and nominations on BDS, CGD on input	GIJ
EDIS	Final monthly difference of allocations and nominations on VUGS on input	GIJ
EDOT	Final monthly difference of allocations and nominations on BDs, CGD on output	GIJ

EDOS	Final monthly difference of allocations and nominations on VUGS on output	GIJ

Actual menu “Imbalances” provides the access to historical data of imbalances.

5.6.8 Clearing

The Menu item clearing is used for acquiring data about the clearing process. The following selection criteria may be used when making a request:

- PDT EIC – designation of a point of delivery / transfer
- Date from – to – entering the request period
- Data version – version of the data with regard to execution of calculation and settlement of imbalances.
- Supplier – RMP assigned as the primary supplier to the PDT
- Subject of settlement – RMP assigned as the subject of settlement
- Supervisor – RMP assigned as a supervisor at any position

a) Calculated imbalances of PDT - GTB

The request is used for acquiring the values of differences in consumption determined within the process of clearing for a PDT. This means a difference between the metered consumption and the consumption determined from the planned annual consumption by application of the LP methodology. After clearing, the values are available for all PDT’s with metering type C, CM.

Product	Description
CL11	Clearing – Positive imbalance of PDT
CL12	Clearing – Negative imbalance of PDT
CL10	Clearing – Daily value of subtraction
CL20	Clearing – Daily estimate value entering into clearing imbalances

Table 37 – Calculated imbalances of PDT

Available on the CDS website, section **CDS/Clearing/Calculated imbalances of PDT**.

b) Real metered non-interval data – GTD

Request for meter readings entered to clearing

Product	Description
QN12	Metered quantity – consumption (non-interval metering)
AN12	Energy consumed (non-interval metering)

Tabulka 38 - Metered non-interval data (C, CM)

5.6.9 LP

The Menu item LP contains requests for input and output data from application of the LP methodology in aggregation. Application of the LP methodology is described in a separate chapter 6 – Application of load profiles.

a) Non-corr. Corr. Estimates of diag. consumption of PDT (C) - GT9

The request is used for acquiring values of the amount of planned consumption of PDT with metering type C, CM in breakdown by LP classes. The data are available as a sum for distribution / transmission system and within the grid breakdown per SS. The estimate sums are non-corrected, and corrected to actual temperature. This type is stored on the PDT type settlement for grid for the sum of diagrams for all PDT's of the grid and virtual for SS and grid with a limitation to a specific SS.

Product	Description
SK9y	Group LP non-corrected for TO 9, LP y
SN9y	Group LP non-corrected for TO 9, LP y

Table 39 – Non-corr. Corr. Estimates of diag. consumption of PDT (C)

Available on the CDS website, section **CDS/LP/Non-corr. Corr. Estimates of diag. consumption of PDT (C)**.

b) Correction coefficient for residual balance of DS - GT7

The request is used for acquiring the values of correction coefficient and values of residual diagram of a distribution / transmission system. The correction coefficient is calculated within the aggregation process and it is used for the budget of the residual diagram of the individual PDT's with non-interval metering. The values are stored on a PDT of the type settlement for grid.

When the input criteria have been entered, all PDT's of the type settlement for grid and virtual for SS and grid meeting the input conditions are retrieved. The requested data are retrieved from those PDT's.

Product	Description
J42	Residual diagram for DS – consumption
J50	Diagram of behaviour of correction coefficient for residual balance of DS

Table 40 – Correction coefficient for residual balance of DS

Available on the CDS website, section **CDS/LP/Correction coefficient for residual balance of DS**.

c) Normal and actual temperatures - GT1

The request is used for acquiring values of actual and normal temperature. The value is used for re-calculation of normalised LP diagrams. The only request criterion is the time interval of the request. Temperature values are stored on the virtual PDT for LP coefficient.

Product	Description
TA9y	Actual weather conditions (temperatures) – actual, for TO 9 class LP y
TB9y	Actual weather conditions (temperatures) – normal, for TO 9 class LP y

Table 41 – Normal and actual temperatures

Available on the CDS website, section CDS/LP/Normal and actual temperatures.

d) Normalised LP diagrams - GT3

The request is used for acquiring values of normalised LP diagrams and values of LP diagrams re-calculated to actual temperature. The values are used within aggregation for re-calculation of planned annual consumption for a PDT with non-interval metering. LP class is an additional criterion of a request, it is not possible to specify the version in the request. The values of LP diagrams are saved on the PDT of the virtual type for the LP coefficient in a breakdown per LP classes.

Product	Description
DN9y	Normalised values of LP for TO 9, LP y
DK9y	RecalculatedNormalised values of LP for TO 9, LP y

Table 42 – Normalised LP diagrams

Available on the CDS website, section **CDS/LP/Normalised diagrams**.

e) Temperature correction coefficient - GT5

The request is used for acquiring values of temperature correction coefficient used for recalculation of normalised LP diagrams. LP class is an additional criterion of a request, it is not possible to specify the version in the request. The values of the coefficient are saved on a PDT of the virtual type for the LP coefficient in a breakdown by LP classes.

When the input criteria have been entered, the virtual PDT for LP coefficient are retrieved and the required data are uploaded.

Product	Description
JK9y	Temperature correction coefficient for TO 9, LP class y

Table 43 – Temperature correction coefficient

Available on the CDS website, section **CDS/LP/ Temperature correction coefficient**.

5.6.10 SDS Providing of historical values

5.6.10.1SDS period records in CDS gas

In CDS gas system are tables for recording parameters for providing SDS data: Dial for Kind of Period and Period Definition.

Dial for kind of period contains fields: Kind of Period, Language and Description.

Period Definition contains fields:

Field	Description
Determination Year	Year for which is determined period for SDS
Kind of Period	Kind of period for SDS
From	Beginning of interval
To	End of interval

If specification of kind of period is used while processing SDS requirement then will be used the record called Year for certain kind of period with highest value.

5.6.10.2 Processing method

a) Competency for historical values

Access to historical values has RMP, which is at certain PDT assigned with service “101” or “111”. Historical values are available before validity of service “101” or “111” and during the interval of validity of this service. Participant won’t have right to access the data after expiration of service “101” or “111”.

Participant has right to access data before assigning and during the period of service. Output report with PDT data doesn’t contain facts about services assigned to this PDT.

b) Selection of relevant PDT

For processing are chosen PDT, which has in specified interval kind of metering A, B or these PDT has been newly registered with kind of metering A, B (in specified period exists their usage history; to the beginning of validity PDT in CDS system, which follows the specified interval, they have kind of metering A, B).

c) Data search

In specified interval is found kind of metering registered at PDT.

- Launching of metered interval data A, B

Data of PDT which has in specified interval kind of metering A, B or they’re newly registered with this kind of metering after beginning of specified interval, are launched from records of metered data in CDS gas.

Real values: in the interval where PDT exists, are data launched from EDM profile and displayed with profile role AI12.

Historical values: if DSP sent history of metering before validity of PDT, data are displayed with profile role AH12.

- Launching of scheduled usage C, CM

Data of PDT which has in specified interval kind of metering C, CM, are launched from records of scheduled usage in CDS gas.

Scheduled usage: in the interval where PDT exists, are data launched from facts of PD and displayed with role ES10.

5.6.10.3Accessibility of data to participants

5.6.10.3.1 Automatic communication

- PDT data for SDS

Selection criteria in this case are same as in query for PDT data. Attribute PDT kind is limited to value 1002, attribute Group of customers for case of emergency is limited to values C, C1, C2, D, D1, D2, F, attribute Month report is used for selection of month for which are data for SDS collected. Additional attributes of service providers are not used, except for Primary supplier.

The result of query is list of PDT, for which is participant authorized for the first day of selected monthwith service 101 – Primary supplier or 111 - Subject of Settlement. Output report is similar as in case of query for PDT Data.

- History of metered interval data A, B

Period is limited by constant which was set to 31 days.

The result of query are data of metering of PDT, for which has participant right during the specified interval (including PDT, where participant is in role 101 – Primary supplier in the future).

5.6.10.3.2 Website CS OTE

New section Data for BSD was added to menu CDS gas so that data for SDS calculation can be obtained.

- PDT Data for SDS

Selection is used for obtaining master data of PDT. Form is the same as form for query for PDT Data with following limitations:

Kind of PDT – selection is limited to PDT 1002 – usage.

Group of customers for case of emergency – selection is limited to values C, C1, D, D1, D2, F.

The result of query is list of PDT, for which has participant right during the specified interval.

- History of metering interval data A, B

The result of query are data of metering of PDT, for which has participant right during the specified interval (including PDT, where participant is in role 101 – Primary supplier in the future). For PDT where customer has the right only for historical values from SDS point of view, master data aren’t displayed.

- History of consumption C, CM

The result of query are daily values of PDT with group D2, for which has participant right during the specified interval (including PDT, where participant is in role 101 – Primary supplier in the future).

6 Application of load profiles (LP)

The purpose of this chapter is to facilitate understanding of the LP application functionality for external entities and it is also dedicated to the area of input and output data (messages) regarding external entities in this area.

6.1 Principles of data processing in application of load profiles

Processes of the LP application are used for calculation of input data for the subject of settlement for **consumption PDT with type C metering** for aggregation for the subject of settlement handed over for settlement of imbalances.

Load profiles are used for estimate of a probable time line of consumption of the group of end customers, whose points of delivery are equipped with non-interval metering of type C.

Estimate of consumption time line is intended for assessment and settlement of imbalances by the market operator.

The group of end customers is defined by:

- Assignment to LP class (the class defines the curve)
- Assignment to the distribution network
- Assignment to a certain temperature area (only area 1 for gas in the Czech Republic)
- The group has a common subject of settlement

The processes of calculation of the values (profiles of daily values) are a part of the standard process of values of metering on SS aggregation in the CDS system. This means that if a consumption PDT with type C metering is installed in a network, the process of values of metering on aggregation after launch automatically runs aggregation for the network including the calculations regarding the functionality of the LP application.

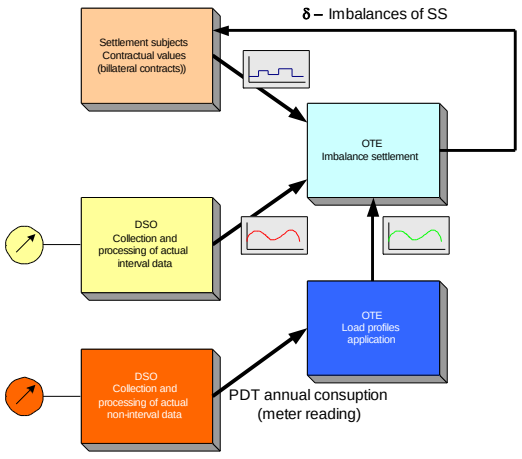


Figure 43 – Settlement of imbalances by market operator

6.2 LP application input data

Input data for functional area of the LP application is composed of 2 groups of data:

1. basic setting in CDS system
2. master and dynamic input data from external users of the CDS system.

Basic setting of the CDS system is composed of:

- definition of one or multiple temperature areas; currently 1 temperature area for gas – Czech Republic,
- definition of LP classes,
- entering of factors for calculation of losses in DS.
- input coefficients of the LP methodology for the purpose of estimate of consumption

Master and movement entry data from external users of the CDS system are made of:

- registration data of PDT consumption with type C metering
- estimate of annual consumption
- reading of actual consumption

Standard and actual climate conditions in the form of standardised and actual average daily temperatures are also entered in the calculation.

6.2.1 Basic settings of the LP application

Definition of LP classes

12 LP classes are defined within the system.

Profiles for storing load profiles are defined for every combination of a temperature area (currently only 1) and an LP class in the system.

Entering loss percentage for calculation of losses in DS

Loss percentage for calculation of losses in the grid is registered for each network registered in the CDS system. The definition of the loss percentage for calculation of losses is also time dependent and different values of the elements may be freely defined for each individual network. The respective operator of the distribution grid shall be responsible maintenance of the value of DS loss percentage.

6.2.2 Input information of the LP application and their processing

The basic input information for LP application consists of information about a specific PDT (PDT registration data, planned annual consumption, actual consumption metering) and input information regarding the LP application (LP, normalised and actual temperature). The information regarding a specific PDT is always sent to the system by distribution system operator (DSO) in a standard way and the reception of the data is described in the chapters about PDT registration and reception of metering data.

The so-called standardised and re-calculated load profiles are determined by the CDS system according to the LP methodology using input coefficients, standardised and actual climate conditions (temperatures.

6.3 Generation of estimated profiles for all user groups

This function is a part of calculation of metering data for SS aggregation. Based on the value of estimate of the annual consumption for PDT type consumption with type C metering and LP values for LP class of the respective PDT, this function generates a profile with estimate of consumption for the consumer group of the respective subject of settlement.

A group of consumers is understood as all PDT with C type metering, who have identical subject of settlement, are located in a single distribution network and are assigned to identical class ***t*** LP (they have identical load profile).

For every SS within a DSO, on identification of at least one supplier relationship for PDT type consumption with type C metering within the DSO generates a virtual PDT (type 1007). PDT 1007 is created with validity D – 20 days, facts on PDT and services will be created with validity from D. This PDT will be ready for validity reverse assignment and it will modify facts and services on PDT.

Virtual PDT 1007 have following profiles:

- Actual consumption (role of profile AI12 – actual values consumption)
- ***n*** × estimate of consumption for the given class of LP on day D-1 – estimates of consumption for the SS, DSO, area and class of LP are stored here without correction for climate and residual balance (roles of profiles SNxy – non-corrected estimate of consumption for the group of users, x=temperature area, y=LP class, the roles of profiles SN91-SN98, SN99, SN9A, SN9B, SN9C).
- ***n*** × corrected estimate of consumption for the area and LP class - on D+n (where n is greater to 1 or equal) – estimates of consumption for the RMP, DSO, area and LP class after climate correction and residual balance are stored here (roles of profiles SKxy – estimate of consumption for group of consumers after correction, x=temperature area, y=LP class, roles of profiles SK91-SK98, SK99, SK9A, SK9B, SK9C).are defined in the CDS system). After generation, the profiles are summed up in the above profile with role AI12 on the given PDT, which enters the process of aggregation per subject of settlement.

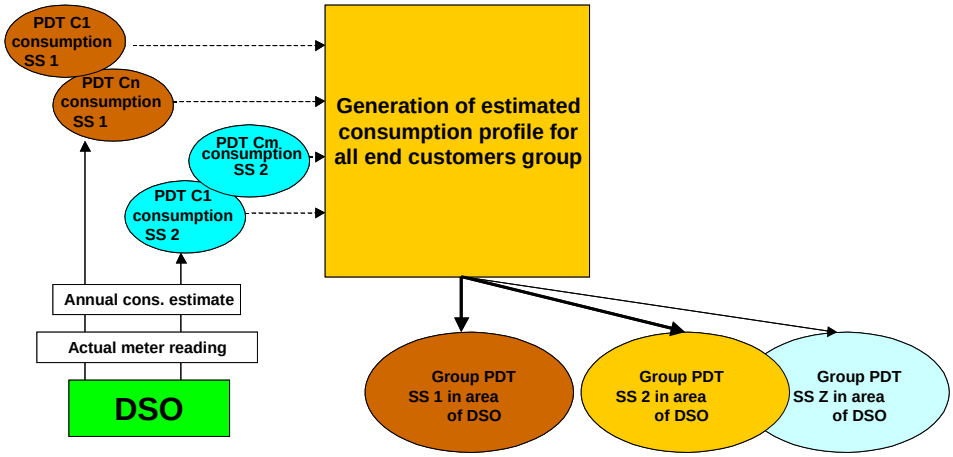


Figure 44 - Scheme of data flow for generation of consumption estimate

The function runs the following steps of calculation:

1. Calculation of total (summary) estimated annual consumption for every group of consumers based on the stored values of the estimate of annual consumption for all PDT forming a group of consumers.

The calculation does the summary of values of estimated annual consumption per PDT within the given group of consumers valid as of the respective day. It also uses the summary to calculate the value of estimate of daily consumption for the group. The calculation is done within daily processing on D1 after closing of reception of planned annual consumption at PDT.

The function verifies whether LP class and temperature area are defined for all the respective PDT and whether the value of estimate of annual consumption is stored.

Planned annual consumption for the group of end customers is defined separately for every day; the values valid for the processed day are entered in the calculation. This time distinction is necessary for the change of PDT properties initiated by a change of supplier, change of consumption / tariff, etc.

Total planned annual consumption $\boldsymbol{O^C}$ for group of end customers is calculated according to the formula:

$$O^C_{l,m,t,r} = \sum_{i=1}^{n} O^C_{i,l,m,t,r}$$

where:

$O^C_{i,l,m,t,r}$ … planned annual consumption of ***i***-th end customer with type C metering C,

$O^C_{l,m,t,r}$ …planned annual consumption of the group of ***n*** end customers with type C metering, belonging to ***l***-th distribution system, to ***m***-*th* area (distinction of climate conditions), to ***t*** class of LP, to ***r*** RMP supplier

2. Calculation of profiles for every group of consumers using the value of total estimated daily consumption of the group and load profile μ_t.

Estimate of daily consumption for the group of end customers is defined for every gas day ***d*** of the evaluated day based on planned annual consumption using re-calculated load profile.

$$O_{ild} = O_{ilR}^{PRS} \times TDD_{pdR},$$

where

O_{ilR}^{PRS} **is the planned annual consumption of a customer with C type metering,**

TDD_{pdR} **is the recalculated load profile for the respective gas day *d* of the calendar year *R* and the given LP class *p*.**

6.4 Correction of estimated profiles to residual profile of the distribution network

The residual profile of the network is calculated according to the following formula:

$$ZD_l = P_{PSl} + V_l + P_{DSIl} + P_{HPSIl} - P_{DSOl} - P_{HPSOl} - O_{Al} - O_{Bl} - O_{Cl} - VS_l - Z_l - ZA_l$$

The input data for calculation of the residual diagram are loaded from the PDT of the respective type and the role of the profile:

- volume of gas supplied at points of transfer from the transmission system

P_{PSl} is the volume of gas supplied at points of transfer to *l-th* distribution network from the transmission system per gas day. volume of gas from gas producers to the distribution system per gas day

- quantity of gas from gas production plants to the distribution system per gas day

V_l is the volume of gas supplied by gas produces in *l-th* distribution system per gas day,

The sum of values of AI11 roles from PDT type 1001 (as of 1.1.2011 from the role AL11 PDT type 1011)

- volume of gas supplied from other distribution systems per gas day

P_{DSIl} is the volume of gas supplied to *l-th* distribution system from other distribution systems per gas day,

The sum of values of AI11 roles from PDT type 1023

- volume of gas supplied from the points of transfer of cross-border gas ducts of the distribution system

P_{HPSIl} is the volume of gas supplied to *l-th* distribution network from points of transfer of cross-border gas ducts per gas day,

Sum of values of allocation on input from PDT type 1022, 1024

- volume of gas supplied to another distribution system from the distribution system

  P_{DSOl} is the volume of gas supplied to another distribution system from *l-th* distribution system per gas day

  The sum of values of AI12 roles from PDT type 1023

- volume of gas supplied to points of transfer of cross-border gas ducts

  P_{HPSOl} is the volume of gas supplied to points of transfer of cross-border gas ducts of *l-th* distribution system per gas day,

Sum of values of allocation on output from PDT type 1022, 1024

- sum of metered consumption of PDT with type CM metering

  O_{CMl} is the sum of metered consumption at customer points of delivery with type C metering read monthly, broken down according to the respective load profile in *l-th* distribution system per gas day according to the last formula of this attachment (**O_{CMl}** equals 0 for the purpose of determination of preliminary values of consumption),

  Equal to zero for the purpose of determination of preliminary values.

  For calculation using metered data:

  i. The sum of values of consumption registered for PDT type 1002
  ii. Value breakdown according to LP

  The sum of metered consumption at customer point of delivery read monthly, broken down according to the respective load profile in l-th distribution system per gas day **O_{CMl}** shall be determined according to the following formula

  $$O_{ild}^{CM} = O_{il}^{MS} \times \frac{TDD_{pdR}}{\sum_{t \in M} TDD_{ptR}} ,$$

  - **where**
  - $\sum_{t \in M} TDD_{ptR}$ **is the sum of values of recalculated load profile valid for the calendar year *R* for LP class *p* for all gas days of the gas month *M*,**
  - O_{il}^{MS} **is the metered consumption of gas per gas month *M* at the point of delivery *i* of the distribution system *l* with metering type C read monthly.**

- sum of metered consumption of PDT with type A metering

  O_{Al} is the sum of metered consumption at customer points of delivery with type A metering in *l-th* distribution system per gas day,

The sum of values of roles AI12 from PDT type 1002 and 1001 and the metering type A (as of 1.1.2011, the PDT type 1001 is replaced with type 1011 and data are uploaded from role AL12)

- sum of metered consumption of PDT with metering type B

Sum of values of roles AI12 from PDT type 1002 and 1001 and metering type B (as of 1.1.2011, the PDT type 1001 is replaced with type 1011 and data are uploaded from role AL12)

If the metered data are not available, the calculated substitute values shall be used

O_{Bl} is the sum of metered consumption at customer points of delivery with type B metering in *l-th* distribution system per gas day (values pursuant to Section 46, Item 7 of the decree are used as a substitution of the metered values for the purpose of determination of the preliminary value of imbalances during a gas month when the metered values for metering type B are not available),

- change of accumulation
  ZA_i is the change of accumulation in *l-th* distribution system per gas day (with a positive sign in case of accumulation increase, with a negative sign in case of accumulation decrease).

  Loading of values from AC10 role of virtual PDT for the network (type 1005)

- Losses
  VS_{PDl} is the own consumption in *l-th* distribution system per gas day

  Calculated based on percentage of planned losses

  Losses in the DS shall be calculated as percentage of planned losses of the total volume of gas entering the respective distribution system (from the transmission system, from overflow from other distribution system, from producers, from cross-border gas ducts).

  The calculated residual profile will be stored on the virtual PDT for the network (PDT type 1005)

Determination of corrected profile of residual balance of DS

- Standard distribution system

  1. Determination of daily consumption of a customer with type C metering (according to estimate of annual consumption)

     Daily consumption of a customer's point of delivery with type C metering (with the exception of C read monthly in case of determination of metered values of consumption) in the distribution network per gas day shall be calculated from the volume of its planned annual consumption and the relative value of type p of re-calculated load profile TDD_{pl} for the respective gas day:

$$O_{il} = O_{RSil} \times TDD_{pl}$$

2. Correction to residual balance

   Such calculated value of consumption of customer's i-th point of delivery of the customer with type C metering (with the exception of C read monthly in case of determination of metered values of consumption) in *l-th* distribution network shall be corrected to the value of participation in the residual profile ZD_l in *l-th* distribution system per gas day relatively to the "weight" of consumption with type C metering, so that its value O_{ilk} after the correction is

$$O_{ilK} = O_{il} \times k_l$$

   where

   k_l is the correction coefficient applied to the respective gas day and the respective distribution network, determined according to the formula

$$k_l = \frac{ZD_l}{\sum_{i=1}^{I} O_{il}}$$

   where

   $\sum_{i=1}^{I} O_{il}$ is the sum of all consumptions with type C metering (with the exception of customer points of delivery with type C metering read monthly for determination of metered values of gas consumption) in l-th distribution system per gas day, calculated using load profiles.

3. Data storage

   The calculated data are stored on the virtual PDT for the individual LP classes and subject of settlement in the respective network

- Distribution system where all PD are read monthly

  The principle of residual profile is used for determination of preliminary values of consumption in case of distribution systems where all type C meterings are read monthly. Determination of metered values of consumption will be based on the metered monthly consumption of type C metering broken down for the respective gas month to consumption on individual gas days according to the respective load profile. The difference between the total value of gas supply and the total value of gas consumption shall include the losses and own consumption of the distribution system operator.

Correction of estimate of daily consumption for the groups of end customers for residual balance of the distribution system

Correction of estimate of daily consumption for residual balance of the distribution system shall be determined for every group of end customers and for every day ***d*** :

$$^{*}o_{l,m,t,r}^{C,d} = o_{l,m,t,r}^{C,d,\vartheta} * k_{l}^{d}$$

where:

$o_{l,m,t,r}^{C,d,\vartheta}$ …estimate of daily consumption of the group of end customers with type C metering, corrected to temperature ϑ, on day ***d***, belonging to ***l***-th distribution system, to ***m***-*th* area, to ***t*** class of LP, to ***r*** supplier RMP

$^{*}o_{l,m,t,r}^{C,d}$ … estimate of daily consumption of the group of end customers with type C metering, corrected for residual balance of ***l***-th distribution system on day ***d***

k_{l}^{d} … correction element of the correction for residual balance of ***l***-th distribution system, valid for day ***d***

Result of calculation – time line of values (profile of consumption of groups of points of delivery of end customers with type C metering) – is stored in profiles at PDT of the respective subject of settlement within DS – PDT type 1007 (roles of profiles SK91-SK99).

Calculation of estimate of the total daily consumption for group of end customers of the respective subject of settlement

Group of end customers is defined by assignment of PDT to ***l*** distribution system, to ***m*** area (distinction of climate conditions), to ***t*** class of LP, to ***r*** supplier RMP.

$$O_{r}^{C,d} = \sum_{m=1}^{u}\sum_{t=1}^{v}\sum_{l=1}^{w} {}^{*}o_{l,m,t,r}^{C,d}$$

where:

$^{*}o_{l,m,t,r}^{C,d}$ … estimate of hourly consumption of the group of end customers with type C metering, corrected for residual balance of ***l***-th distribution system on day ***d***

$O_{r}^{C,d}$ … estimate of hourly consumption of all end customers with type C metering, belonging to ***r***-th supplier on day ***d***

Result of calculation (time line of values) will be handed over for further processing in the process of aggregation and re-allocation. At the same time, it will be stored to the profile at PDT type 4 of the given SS.

6.5 Handover of LP data to participants

Market participants have access to outputs from the CDS LP application in the form of data available via an external interface (in the XML-EDIGAS-GASDAT format); selected overall values are available on the publicly accessible website of OTE, a.s.

7 Change in supplier

The Gas Market Rules define 3 types of change of supplier supported by the CDS system, concerning:

- Standard change of supplier
- Fast change of supplier

7.1 Standard change of supplier

The following figure presents the diagram of the process of the standard change of supplier and individual communications scenarios within the framework of this process:

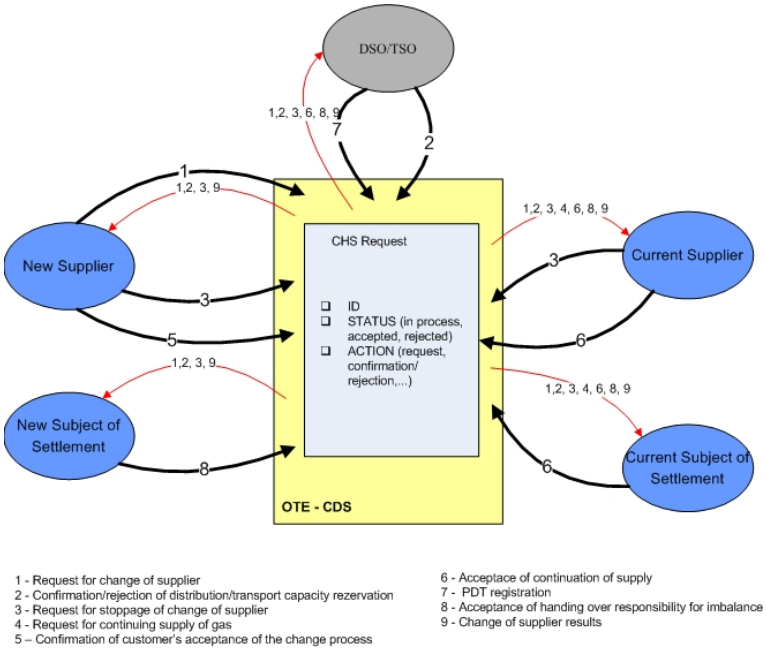


Figure 1. - Diagram of process of standard change of supplier

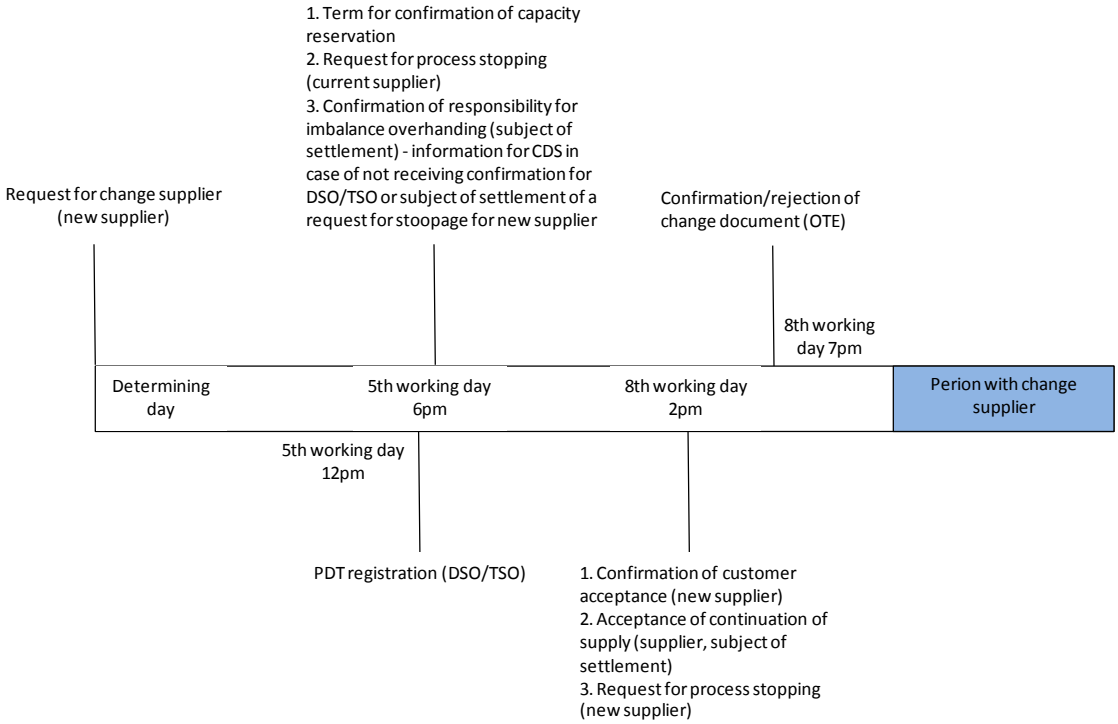


Figure 45 - Chronological diagram of process of standard change of supplier

7.1.1 Scenario 1: Request for a change of supplier

Within the framework of a standard change of supplier, it is possible to perform a change of supplier each day of calendar month, at the earliest 4 months prior to commencement of validity

of the change of supplier and by no later than 10 calendar days prior to commencement of supply, by 10:00 with reasons S1, S2, S3. For reasons R1, R2, R3 is it no later than 10:00 D-1W, D is for date of the request for change of supplier, W is for working day.

Důvod	Popis	Termíny
S1	Change gas supplier to another gas supplier	Standard
S2	Change gas supplier from supplier of last instance	Standard
S3	Change gas supplier with change customer in the point of delivery	Standard
R1	Launch of deliveries to point of delivery of newly connected customer	Shortened
R2	Launch of deliveries to the point of delivery after unauthorized consumption and/or unauthorized gas distribution	Shortened
R3	Begin supply with prevent unauthorized consumption	Shortened

Request SZD R3 is allowed from the day when is not on PDS supplier and SS and supply point is mark with attribute may occur unauthorized consumption. On PDT can´t exist following change of supplier. The latest term of accept request is till 10:00 10th working day, from that is not on PDT supplier and SS and supply point is mark with attribute may occur unauthorized consumption. All following actions on change of supplier can by latest send to 6 PM D-1W (D and P is working day).

The report shall contain the following information:

- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- ID of a new PDT supplier (EIC16)
- Role of a new supplier (201)
- ID of a new subject of settlement (EIC16)
- Role of a new subject of settlement (211)
- Date of beginning of supplier relation
- Date of termination of supplier relation
- Status – Status of change document, text 3 symbols (it is verified whether the provided status is set to the value ANP=in process).

- Type of change of supplier (SZD)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Attribute for withdrawal authorization by Energy Act (only for SZD)
- Type of event (SCR)
- Type of reason
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document in the CDS system. Confirming message is generated in the CDS system after performance of all checks.

The system enables acceptance of the change requirement to PDT even in the case that this PDT is not registered in the given moment. Registration of the master record shall be performed by the applicable DSO/TSO upon receipt of a copy of the request for a change of supplier, which shall contain the attribute reg-PDT-needed = X. By means of this attribute, DSO/TSO shall be informed on the necessity for registration of PDT, which must be performed within 3 working days 6 p.m. after receipt of the request for a change of supplier.

After successful performance of basic checks that verify the completeness of sent data in the change document, the document is stored in the CDS system database, and it shall be assigned a definite ID (ID Workflow). This ID is further used by the CDS system as a pairing number upon receipt of further messages (GA4, GAB, GA8, GAE, GAH) based on individual communications scenarios.

Attribute for withdrawal authorization	Description
M	Outside business office (The customer has the right to terminate the contract according to § 11 paragraph. 2 EZ)
P	In the usual business office (The customer has no right of withdrawal pursuant to § 11 paragraph. 2 EZ)
D	Distance method (The customer has the right to terminate the contract according to § 11a paragraph. 2 EZ)

Table 44 – Values of attribute for withdrawal authorization by Energy Act (only for SZD)

After performing further checks on data content (check of authorization, check of the existence of a supplier in the system, check of locking the supplier in PRODIS, check of deadlines for sending a change request, etc.), a copy of a request for change of supplier is sent to all applicable subjects (Existing supplier, Existing SS, DSO/TSO, new supplier, new SS). In the case that a primary supplier for PDT does not exist, the copy is sent to the supplier of last instance applicable to the given grid and its subject of settlement.

Who	Description	Who	Description

101	Existing supplier	101	Existing supplier
101	Existing supplier	111	Existing SS
101	Existing supplier	113	Distributor
111	Existing SS	101	Existing supplier
111	Existing SS	111	Existing SS
111	Existing SS	113	Distributor
113	Distributor	101	Existing supplier
113	Distributor	113	Distributor
113	Distributor	201	New supplier
201	New supplier	113	Distributor
201	New supplier	201	New supplier
201	New supplier	211	New SS
211	New SS	113	Distributor
211	New SS	201	New supplier
211	New SS	211	New SS

Table 45 – Additional verifications

In the process of a request for a change of supplier, messages are sent/received with identifiers are (MSG code) by the CDS server:

Code	Description	IN/OUT	Type of message
GA1	Request for a change of supplier	IN	CDSGASMASTERDATA
GA2	Confirmation of acceptance/ refusal of a request for a change of supplier (in the event that an answer is not requested)	OUT	GASRESPONSE
GA3	Copy of request for a change of supplier	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 46 – Messages of Change of Supplier

Relevant events for the given scenario:

Event	Description
SCR	Request for a change of supplier

Table 47 – Action of request for a change of supplier

7.1.2 Relating scenarios after receipt of request for a standard change of supplier

Upon acceptance of a request for a standard change of supplier, the following communications scenarios are relevant:

a) Scenario 2: Confirmation/refusal of reservation of distribution or transport capacity

b) Scenario 3: Request for stoppage of a change of supplier

c) Scenario 4: Confirmation of the consent of the customer with a change of supplier in the event of a request for stoppage of this process on the part of the existing supplier

d) Scenario 5: Confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement

e) Scenario 6: Consent with assigning responsibility for imbalance for the given PDT

Input messages sent into the CDS system within the framework of these communications scenarios contain:

- ID of request in the CDS system – Workflow number in the CDS system under which the circulation of the change document in the CDS system is controlled
- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- Date of beginning of supplier relation
- Date of termination of supplier relation
- Type of change of supplier (SZD)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Type of action based on individual scenarios
- Action reason based od individual scenarios
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document.

Confirming message is generated in the CDS system after performance of all checks.

The CDS system performs basic checks of completeness of sent data in the statement towards the change document from the applicable RMP (check whether there is filled in the attribute of type of contract, type of change of supplier, PDT, period and whether they are in line with attributes sent in the request for a change of supplier). Pairing is performed through ID workflow in the CDS system). For individual reports a check is performed of the time barrier based on conditions in image no. *3*. The system performs further checks as to whether one event is listed in the message and it is of a permitted type for the given scenario, and also to see whether the event has already been performed. After performing all input checks the given event is stored in the CDS system.

Some actions have to be accompanied with action reason, according to the following table:

Action type	Description	Action reason
CRD	Refusal of reservation of distribution/transport capacity	AR1 – No application for distribution capacity reservation/contract concluding in term AR2 – Requirements for application for distribution capacity reservation/contract concluding were not met AR3 – Insufficient finance management AR4 – No application for connection contract in term AR9 – Incorrect contract type
CSR	Request for stopping a change of supplier on the part of an existing supplier	AR6 – Contract not terminated AR7 – Written determination of customer ARE - Withdrawal of a change of supplier according to § 11a paragraph 2 Energy Act
CSC	Confirmation of the consent of the customer with a change of supplier	AR7 - Written determination of customer

Table 48 – Action reasons in change of supplier

7.1.2.1 Scenario 2: Confirmation/refusal of reservation of distribution or transport capacity

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GA4	Message on the option of reservation of distribution or transport capacity	IN	CDSGASMASTERDATA
GA5	Confirmation of acceptance /refusal of the message on the option of reservation of distribution or transport capacity	OUT	GASRESPONSE
GA6	Copy of message on the option of reservation of distribution or transport capacity	OUT	CDSGASMASTERDATA
GA7	Request for continuation of gas supplies at the point of delivery	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 49 – Messages of confirmation/rejection of change of supplier

GA4 message may not be received, if the PDT is not registered in the CDS system.

One of these following events is relevant and a check is performed to see whether one of these events has already been performed:

Event	Description
CRC	Confirmation of reservation of distribution/transport capacity
CRD	Refusal of reservation of distribution/transport capacity

Table 50 – Actions of confirmation/refusal of change of supplier

DSO's statement on the reserved capacity may be sent repeatedly; as regards assessment of a change of supplier, the last received statement will be considered valid.

From 1.1.2015 in the case of acceptance of a CRD event the message GA7 Request for continuing gas supplies at the delivery point is not sent from the CDS system to the existing supplier and the existing subject of settlement.

Participating parties for sending copy:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement

- DSO/TSO

7.1.2.2 Scenario 3: Request for stoppage of a change of supplier

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GA8	Request for stopping the process of change of supplier	IN	CDSGASMASTERDATA
GA9	Confirmation of acceptance/ refusal of the message with a request for stopping the process of a change of supplier	OUT	GASRESPONSE
GAA	Copy of message with request for stopping the process of change of supplier	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 51 – Messages of stoppage of change of supplier

One of the following events is relevant, either the existing or new supplier is authorized for the given event (this is checked within the framework of the process and a check is also performed to see if the event has already been performed).

Event	Description
CSR	Request for stopping a change of supplier on the part of an existing supplier
CNR	Request for withdrawal of a change of supplier on the part of a new supplier

Table 52 – Actions of stoppage of change of supplier

When a GA8 message with CNR action (Request for withdrawal of a change of supplier by the new supplier) is being processed, the change of supplier is automatically terminated with the ANN status and the reason of rejection 07 “Withdrawal of a change of supplier by the new supplier”; in addition to a copy of the application for withdrawal of the change of supplier, processing will also include an evaluation of the process of change of supplier GAK with the status ANN and reason 07.

When a GA8 message with CSR action (Request for withdrawal of a change of supplier by the existing supplier) is being processed, the change of supplier is automatically terminated with the ANN status and the reason of rejection 08 “Withdrawal of a change of supplier according to § 11a paragraph 2 Energy Act”; in addition to a copy of the application for withdrawal of the

change of supplier, processing will also include an evaluation of the process of change of supplier GAK with the status ANN and reason 08. Existing supplier will continue.

From 1.1.2015 in the case of acceptance of a CNR event the message GA7 Request for continuing gas supplies at the delivery point is not sent from the CDS system to the existing supplier and the existing subject of settlement.

7.1.2.3 Scenario 4: Confirmation of the consent of the customer with a change of supplier in the event of a request for stoppage of this process on the part of the existing supplier

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GAE	Confirmation of the consent of the customer with a change of supplier	IN	CDSGASMASTERDATA
GAF	Confirmation of acceptance /refusal of the message with confirmation of customer consent with the change of supplier	OUT	GASRESPONSE
GAG	Copy of confirmation of customer consent with a change of supplier	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 53 – Messages of confirmation of the consent of the customer

The following event is relevant (shall be checked to see if it has already been performed):

Event	Description
CSC	Confirmation of the consent of the customer with a change of supplier

Table 54 – Actions of confirmation of the consent of the customer

Participating parties for sending copy:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

7.1.2.4 Scenario 5: Confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GAH	Confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement	IN	CDSGASMASTERDATA
GAI	Confirmation of acceptance/ refusal of the message by confirming/refusing continuation of the supply of gas at the point of delivery	OUT	GASRESPONSE
GAJ	Copy of confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 55 – Messages of confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement

The following events are relevant (it will be checked to see if any of them have already been performed always from the applicable pair – supplier or SS):

Event	Description
CSS	Confirmation of gas supplies by the existing supplier
CSD	Refusal of continuation of gas supplies by the existing supplier
ISS	Confirmation of continuation of gas supplies by the existing subject of settlement
ISD	Refusal of continuation of gas supplies by the existing subject of settlement

Table 56 – Actions of confirmation/refusal of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement

Participating parties for sending copy:

- Existing supplier
- Existing subject of settlement
- DSO/TSO

7.1.2.5 Scenario 6: Consent with assigning responsibility for imbalance for the given PDT

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GAB	Confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	IN	CDSGASMASTERDATA
GAC	Confirmation of acceptance/ refusal with confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	OUT	GASRESPONSE
GAD	Copy of confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	OUT	CDSGASMASTERDATA
GA7	Request for continuation of gas supplies at the point of delivery	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 57 – Messages of Confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery

One of these following events is relevant and a check is performed to see whether one of them has already been performed:

Event	Description
IRC	Consent to assignment of responsibility for an imbalance
IRD	Refusal of assignment of responsibility for an imbalance

Table 58 – Messages of Confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery

Subject of settlement is allowed to send his statement repeatedly, the last received statement is considered as valid in the process of supplier change evaluation.

Participating parties for sending copy:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

7.1.3 Assessment of change of supplier:

In order for a change of supplier to occur in the CDS system, the following actions must be recorded in the system regarding the request:

- Request for a change of supplier
- Confirmation of reservation of transport capacity
- Consent to assignment of responsibility for an imbalance
- Registration of PDT for the given period must be performed
- A request for stopping a change of supplier on the part of a new supplier must not exist
- If there exists a request for stopping a change of supplier on the part of the existing supplier, there must exist confirmation of customer consent with a change of supplier

ANP status designates a request for a change of supplier in progress (i.e. not closed). If any of the aforementioned conditions are not fulfilled, the request for performing a change of supplier is assessed as unsuccessful (ANN status), if the event is successful, aside from the setting of the status of the request to ANY, further setting shall be performed of the applicable services at PDT (setting of this new supplier and new subject of settlement at PDT).

Within the framework of assessing the change of supplier, a GAK message is sent to all involved subjects with the respective rights:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

Code	Description	IN/OUT	Type of message
GAK	Results of judging the request for a change of supplier	OUT	CDSGASMASTERDATA

GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 59 – Messages of assessment of change of supplier

7.2 Fast change of supplier

The process of a fast change of supplier occurs in the event of learning of insufficient financial security of the market participant, which shall fulfil the role of supplier or subject of settlement for the affected PDT

7.2.1 Scenario 1: Request for a fast change of supplier

The report shall contain the following information:

- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- ID of a new PDT supplier (EIC16)
- Role of a new supplier (201)
- ID of a new subject of settlement (EIC16)
- Role of a new subject of settlement (211)
- Date of beginning of supplier relation
- Date of termination of supplier relation
- Status – Status of change document, text 3 symbols (ANP = in process).
- Type of change of supplier (RZD)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Type of event (SCR)
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document. A confirmation message is generated in the CDS system after performance of all checks.

After successful performance of basic checks that verify the completeness of sent data in the change document, the document is stored in the CDS system database, and it shall be assigned a definite ID (ID Workflow). This ID is further used by the CDS system as a pairing number upon receipt of further messages (GA4, GAB) based on individual communications scenarios.

After performing further checks on data content (check of authorization, check of the existence of a supplier in the system, check of locking the supplier in PRODIS, check of deadlines for

sending a change request, etc.), sending of the copy of a request for change in supplier is sent to all applicable subjects (DSO/TSO, new supplier, new SS).

In the process of a request for a change of supplier, messages are sent/received with identifiers (MSG code) by the CDS system:

Code	Description	IN/OUT	Type of message
GA1	Request for a change of supplier	IN	CDSGASMASTERDATA
GA2	Confirmation of acceptance/ refusal of a request for a change of supplier (in the event that an answer is not requested)	OUT	GASRESPONSE
GA3	Copy of request for a change of supplier	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 60 – Messages of fast change of supplier

Relevant events for the given scenario:

Event	Description
SCR	Request for a change of supplier

Table 61 – Actions of fast change of supplier

7.2.2 Relating scenarios after receipt of request for a fast change in supplier

Upon acceptance of a request for a fast change of supplier, the following communications scenarios are relevant:

a) Scenario 2: Confirmation/refusal of reservation of distribution or transport capacity

b) Scenario 3: Consent with assigning responsibility for imbalance for the given PDT

Input messages sent into the CDS system within the framework of these communications scenarios contain:

- ID of request in the CDS system – Workflow number in the CDS system under which circulation of the change document is controlled in the CDS system
- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns

- Date of beginning of supplier relation
- Date of termination of supplier relation
- Type of change of supplier (RZD)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Type of event based on individual scenarios
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document. A confirmation message is generated in the CDS system after performance of all checks.

The CDS system performs basic checks of completeness of sent data in the statement towards the change document from the applicable RMP (a check whether there is filled in the attribute of type of contract, type of change of supplier, PDT, period and whether they are in line with attributes sent in the request for a change of supplier) - pairing is performed through ID workflow in the CDS system). The system performs a check to see if one event is listed in the message and it is a permitted type for the given scenario, and also a check to see if the event has already been performed. After performing all input checks the given event is stored in the CDS system.

7.2.2.1 Scenario 2: Confirmation/refusal of reservation of distribution or transport capacity

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS server:

Code	Description	IN/OUT	Type of message
GA4	Message on the option of reservation of distribution or transport capacity	IN	CDSGASMASTERDATA
GA5	Confirmation of acceptance /refusal of the message on the option of reservation of distribution or transport capacity	OUT	GASRESPONSE
GA6	Copy of message on the option of reservation of distribution or transport capacity	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 62 – Messages of confirmation/refusal of reservation of distribution or transport capacity

One of these following events is relevant and a check is performed to see whether one of these events has already been performed:

Event	Description
CRC	Confirmation of reservation of transport capacity
CRD	Refusal of reservation of transport capacity

Table 63 – Actions of confirmation/refusal of reservation of distribution or transport capacity

Participating parties for sending copy:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

7.2.2.2 Scenario 3: Consent with assigning responsibility for imbalance for the given PDT

Within the framework of this scenario messages with identifiers (MSG code) are received/sent by the CDS system:

Code	Description	IN/OUT	Type of message
GAB	Confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	IN	CDSGASMASTERDATA
GAC	Confirmation of acceptance/ refusal with confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	OUT	GASRESPONSE
GAD	Copy of confirmation/refusal of assignment of responsibility for imbalance for the given point of delivery	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 64 – Messages of consent with assigning responsibility for imbalance for the given PDT

One of these following events is relevant and a check is performed to see whether one of them has already been performed:

Event	Description
IRC	Consent to assignment of responsibility for an imbalance
IRD	Refusal of assignment of responsibility for an imbalance

Table 65 – Actions of consent with assigning responsibility for imbalance for the given PDT

Participating parties for sending copy:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

7.2.3 Assessment of change of supplier:

ANP status designates a request for a change of supplier in progress (i.e. not closed). If the pair of events CRC and IRC is not accepted within the established deadline, the request for performing a change of supplier is assessed as unsuccessful (ANN status), if the opposite case, aside from the setting of the status of the request for ANY, further setting shall be performed of the applicable services at PDT (setting of this new supplier and new subject of settlement at PDT).

Within the framework of assessing the change of supplier, a GAK message is sent to all involved subjects:

- New supplier
- New subject of settlement
- Existing supplier
- Existing subject of settlement
- DSO/TSO

Code	Description	IN/OUT	Type of message
GAK	Results of judging the request for a change of supplier	OUT	CDSGASMASTERDATA
GBM	Copy of information about a change of supplier in progress	OUT	CDSGASMASTERDATA

Table 66 – Messages of assessment of change of supplier

The process of evaluation of the change of supplier is launched in case of a standard change of supplier with reasons S1, S2 or S3 at 7.00 p.m. on 8th working day after sending of the proposal for the change of supplier (standard evaluation), in case of reasons R1, R2 and R3 the

evaluation is launched automatically after receiving the second of subject of settlemet and DSO statements.

7.3 Extension/reduction/reverse assignment of supply

The process of extension/reduction of supply is used for modification of time validity of provision of the service to a PDT by the primary supplier. It is executed via two communication scenarios – Request for extension/reduction of supply by the existing supplier and Consent with acceptance of responsibility for imbalance in case of extension/reduction of supply (the latter scenario is to be applied only in cases when the SS differs from the primary supplier).

Extension can be carried out up to the end of the last day of supply at the PDT.

Reduction can be carried out up to 10 calendar days before the end of current supply at PDT.

7.3.1 Request for extension/reduction of supply

The existing supplier will send a GBA message to the OTE system with a request for reduction/extension of supply containing the following information:

- PDT EIC
- Type of change of supplier (a new type of extension/reduction of supply to PDT)
- Reason for extension/reduction
- New supplier (must be identical with the existing supplier to the PDT; this will be verified by the OTE system)
- New subject of settlement (must be identical with the existing SS on PDT; this will be verified by the system)
- From
- To (the OTE system will verify that there is just one supplier and SS on the PDT, the one requesting extension/reduction of supply)
- Action of request for extension/reduction of supply and also SS approval, as appropriate (if the supplier is the SS at the same time)

Důvod	Popis
Z1	Reduction of suply - standard
ZA	Reduction of suply - withdrawal according to § 11a paragraph 2, 3 and 5 Energy Act
Z2	Reduction of suply - withdrawal according to § 11a paragraph 2, 3 and 5 Energy Act
P1	Extension of suply - standard
P2	Extension of suply - withdrawal according to § 11a paragraph 2 Energy Act

Table 67 – Reason for extension/reduction of suply

Within this scenario, the CDS server receives/sends messages with the identifier (MSG code) to external users:

Code	Description	IN/OUT	Message type
GBA	Request for extension/reduction of the supply by the existing supplier	IN	CDSGASMASTERDATA
GBB	Confirmation of acceptance/rejection of the message with application for extension/reduction of supply by the existing supplier	OUT	GASRESPONSE
GBC	Copy of the request for extension/reduction of supply by the existing supplier	OUT	CDSGASMASTERDATA

Table 68 – Messages for extension/reduction of supply

Relevant actions for the given scenario:

Action	Description
VAR	Request for extension/reduction of supply
IVC	Consent with assignment of responsibility for imbalance in case of extension/reduction of supply

Table 69 – Actions in case of extension/reduction of supply

7.3.2 Reduction of suply

Deadlines for sending the request for suply reduction are dependent on:

- Z1 – 10:00 tenth working day before expecting date of suply termination
- ZA, Z2 – D-1W, 00:00 from date of efficiency withdrawal

Where D determines the effective date of change of supplier and K is a calendar day.

In case of ZA, check for whether the supplier assigned attribute to PDT meaning the customers option of withdrawal from the contract in accordance with § 11a paragraph 2 of Energy ACT.

Reduction with ZA reason mean full annulation of change of suplier and is send by the date, since the change is valid (filled dates are FROM and TO correspond to dates of start and end date of deliveries to the relevant supplier).

In the report of the evaluation (GAK) SVA ZA OTE system state dates from and to which the deletion of deliveries made.

FROM and TO dates filling in reduction of suply request:

- Annulment (ZA)
  FROM = start date of suply by supplier on PDT in CDS
  TO = end date of suplier validity on PDT in CDS

- Reduction (Z1, Z2)
  Datum od = Datum do = Required end of validity of suplier on PDT

Current suplier, who have been suplying into PDT in D-1 day(where D is day of suplier change) is infromed by OTE about ZA reduction based on Gas Market Rules

SS is silend durring the process of reducing supplies. Request is immediately approved or rejected in adopting phase.

7.3.3 Extension of suply

Extension of suply dates

Event	Reason	DAY	HOUR
Send request	P1, P2	D-1K	23:00
SS expresion	P1, P2	D-1K	23:30
Evaluation	P1, P2	D-1K	23:45

Table 70 – Term for extension of suply

D is the first day from PDT is not suplied by suplier. K is callendar day

SS expresson is required for suply extension. Request for suply extension going to be accpeted or denied at the moment of SS expresion, but latest 23:45 D-1K.

Withing the application taking with P1 reason will be done following check. During the extension period, there is no other suplier assigned to PDT. If yes, application will be denied with reason and date of PDT other suplier assignment.

Application for extension with P2 reason can be send by suplier even during the period of other suplier validity, if these were set to PDT with atribute M or D. Customer has a right to widraw from contract by § 11a paragraph 2 of Energy Act. Vice versa, if PDT is with P atribute,

customer does not have this right and application will be denied with reason and date of PDT other suplier assignment.

Suply estension with P2 reason can be send only for SZD of S1 and S2 type. It is not possible to send suply extension with P2 reason, if PD was accepted change of suplier with S3, R1, R2, R3 for extended period.

P2 can be send also from dominant to PDT, on which change od suplier is realize from dominant to other suplier

7.3.4 Reverse assignment of accepted change od supplier

There can be send any reverse change of supplier to system OTE. Reverse assignment of accepted change od supplier is generated by service monitor and it create change od supplier type SVA with reason H1.

Type	Reason	Description
SVA	H1	Reverse assignment of validity beginning change of supplier

Table 71 – Type of reverse assignment

Necessary conditions for reverse assignment of accepted change of supplier.

On PDT must be se attribute may occur unauthorized consumption. Must exist accepted change of supplier with start date = actual date. Start date of change of supplier must by latest next day after D+10W (D is date from in attribute may occur unauthorized consumption - HNO). If this change of supplier exist, then will be generate new change of supplier SVA H1. Attributes will be set as follows:

CHS_TYPE = SVA

CHS_REASON = H1

START_DATE = date from attribute HNO

END_DATE = START_DATE accepted change of supplier

ID_WORKFLOW = will be generate unique ID

REF_ ID_WORKFLOW = ID_WORKFLOW original accepted change of supplier

Action type (TYPE) SCR id replaced VAR, action type IRC is replaced IVC

Other attributes are taken from original accepted change of supplier

When SVA H1 is accept, attribute of may occur unauthorized consumption is cancel on PDT. About this are send information messages with code GRH to all of interested participants.

7.3.5 Consent with acceptance of responsibility for imbalance

If the SS is different from the supplier, an approval of acceptance of responsibility for imbalance via a GBD message will be required.

Within this scenario, the CDS server receives/sends messages with identifiers (MSG code) to external users:

Code	Description	IN/OUT	Message type
GBD	Consent with acceptance of responsibility for imbalance in case of extension/reduction of supply	IN	CDSGASMASTERDATA
GBE	Confirmation of acceptance/rejection of the message with the consent with acceptance of responsibility for imbalance in case of extension/reduction of supply	OUT	GASRESPONSE
GBF	Copy of consent with acceptance of responsibility for imbalance in case of extension/reduction of supply	OUT	CDSGASMASTERDATA

Table 72 – Messages for acceptance of responsibility for imbalance

Relevant actions for the scenario:

Action	Description
IVD	Rejection of assignment of responsibility for imbalance in case of extension/reduction of supply
IVC	Consent with assignment of responsibility for imbalance in case of extension/reduction of supply

Table 73 – Actions for extension/reduction of supply

7.4 Change in the subject of settlement

In case the supplier/SS has registered assignment of responsibility to multiple RMP's in the PRODIS registration module, it is possible to change the subject of settlement of the PDT via the process of a change of the subject of settlement.

The process of a change of subject of settlement at PDT is implemented by two communications scenarios – request for change of subject of settlement at PDT and confirmation of this change on the part of the new subject of settlement.

a) Request for change of subject of settlement assigned to point of delivery

The request is compiled in a similar manner as in the case of a new request for a change of supplier.

The report shall contain the following information:

- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- ID of a new subject of settlement (EIC16)
- Role of a new subject of settlement (211)
- Date of beginning of supplier relation
- Date of termination of supplier relation
- Status – Status of change document, text 3 symbols (ANP = in process).
- Type of change of supplier (SIC)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Type of event (IRP – proposal for a change of subject of settlement)
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document. A confirmation message is generated in the CDS system after performance of all checks.

After successful performance of basic checks that verify the completeness of sent data in the change document, the document is stored in the CDS system database, and it shall be assigned a definite ID (ID Workflow). This ID is further used by the CDS system as a pairing number upon receipt of confirmation of a change of subject of settlement on the part of the subject of settlement (GAO).

After performing further checks on the content and logical accuracy, a copy is sent of the request for a change of supplier to all involved subjects (Existing supplier, Existing SS, new SS).

Within the framework of this scenario messages with identifiers (MSG code) are received/sent to external users by the CDS server:

Code	Description	IN/OUT	Type of message
GAL	Request for a change in subject of settlement at PDT	IN	MASTERDATA (IDOC Z2_CHS)
GAM	Sending confirmation of acceptance/refusal of request for a change in subject of settlement	OUT	RESPONSE
GAN	Copy of request for change in subject of settlement	OUT	MASTERDATA (IDOC Z2_CHS)

Table 74 – Messages for request for change of subject of settlement assigned to point of delivery

b) Confirmation of a change in the subject of settlement by the new subject of settlement

The statement received on acceptance/refusal of changes contains:

- ID of request in the CDS system – Workflow number in the CDS system under which circulation of the change document is controlled in the CDS system
- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- Date of beginning of supplier relation
- Date of termination of supplier relation
- Type of change of supplier (SIC)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- Type of event (IRC – acceptance, IRD – refusal)
- Commentary
- Request for reply – attribute is filled out if sender of change document wants to obtain confirmation on receipt of the change document. A confirmation message is generated in the CDS system after performance of all checks

Within the framework of this scenario messages with identifiers (MSG code) are received/sent to external users by the CDS server:

Code	Description	IN/OUT	Type of message
GAO	Acceptance/refusal of request for change of subject of settlement by the subject of settlement	IN	CDSGASMASTERDATA
GAP	Sending confirmation of acceptance/refusal of message	OUT	GASRESPONSE

GAQ	Copy of acceptance/refusal of request for change of subject of settlement by the subject of settlement	OUT	CDSGASMASTERDATA

Table 75 – Messages for confirmation of a change in the subject of settlement by the new subject of settlemen

One of these following events is relevant:

Event	Description
IRC	Consent to assignment of responsibility for an imbalance
IRD	Refusal of assignment of responsibility for an imbalance

Table 76 – Actions for confirmation of a change in the subject of settlement by the new subject of settlemen

Since the only confirmation of the process of a change of supplier is confirmation by the subject of settlement, within the framework of receipt of the message, setting is automatically performed of the status of the request as accepted or refused, based on the event listed in the approval. In the event of approval of the request an update occurs to the services for PDT in the CDS system.

When subject of settlement which is already assigned to PDT asks for change of subject of settlement, time control applies. Subject of settlement can send request and confirmation of responsibility for an imbalance latest 10 working days before the last day of service of subject of settlement till midnight (for example subject of settlement wants to shorten the service till 15th October, this is the last day of his service, so he has last chance to do it till 1st October midnight).

7.5 Assignment of an observer to a PDT

a) PDT without nominations

CDS includes the service 119 - Observer. According to PTP, only SS is authorised to assign an observer. In case of PDT type point of handover between systems, the limitation will be extended to DSO/TSO. A registered market participant may be assigned as an observer, if it has access to metered data in Prodis. An observer may be assigned according to the following key:

PDT type	Assigned by (service)	Assigned (service)
1001 – Combined	Subject of settlement (111)	Observer (119)
1002 – Consumption	Subject of settlement (111)	Observer (119)
1004 – Summary of SZ	Subject of settlement	Observer (119)

	(111)	
1007 – Summary of SZ and grid	Subject of settlement (111)	Observer (119)
1023 – PH DS/DS	DSO (113)	Observer (119)
1025 – PH TS/DS	DSO / TSO (113)	Observer (119)

Table 77 – Options of assignment of an observer

After assignment of a RMP in the observer role, all data stored on the respective PDT made available to the SS (or DSO/TSO), which are not accessible to all participants, are made available to the RMP in the observer role. The observer will be eligible to make a request for data using the same method as the SS (or DSO/TSO, respectively). The setting for the observer will grant him the rights for the following message codes:

Message code	Description
GM1	Request for metered values (interval metering)
GM3	Request for substitute values (interval metering)
GM7	Request for metered values (non-interval metering)
GM9	Request for planned annual consumption
GMD	Request for distribution capacity
GMF	Request for transmission capacity
GMT	Request for daily values from non-interval
GBJ	Request for data about assigned observers
GP4	Request for data for distribution invoicing (POF)
GMV	Request for planned monthly consumption
GML	Request for aggregate value of SZ
GMP	Summary value of SZ dividing into A, B, C, CM
GMR	Summary value of SZ and grid dividing into A, B, C, CM

Table 78 – Message codes available to an observer

The communication scenario consists of the following steps:

1. Making a request

SS (or DSO/TSO for PDT type 1023,1025) makes a request for assignment of another RMP as an observer in CDS. The request must include the EIC of the PDT, the EIC of the assigned RMP and the period the assignment is requested for.

2. Processing of the request

Having received the request, CDS will verify the data of the message. Verified items include sender's right for assignment and the service registered for the assigned RMP. If the verification is successful, the RMP is assigned to the PDT with service 119 - Observer.

The scope of assignment may be changed or cancelled. In case of cancellation of the assignment, the observer for the PDT is presented as an empty value.

A confirmation or a Response with the identified shortcomings will be sent to the Sender.

3. Sending of a copy

When a request has been successfully processed, a copy will be sent to all involved entities.

In case of a change of the subject of settlement for the PDT, the observer service will be terminated (if it exists).

Msg_code	Description	I/O	Format
GBG	Request for assignment of an observer to a PDT	IN	CDSGASMASTERDATA
GBH	Acceptance / error in a request for assignment of an observer to a PDT	OUT	GASRESPONSE
GBI	Information about assignment of an observer to a PDT	OUT	CDSGASMASTERDATA
GBJ	Request for data about assigned observers	IN	CDSGASREQ
GBK	Confirmation / error in a request for data about assigned observers	OUT	GASRESPONSE
GBL	Data about assigned observers	OUT	CDSGASMASTERDATA

Table 79 – Codes of messages for observer assignment

Means of communication:

- *Via AK*

Communication via AK uses the CDSGASMASTERDATA, GASRESPONSE and CDSGASREQ formats.

- *Via the web interface*

A request may be made via the web form available in the menu of CDS->Change of supplier->Observer management on PDT. The web interface enables making a request for filing of a new assignment or a change of the existing one, and a request for an overview of the individual assignments.

b) PDT with nominations

It's also possible to add an observer to PDT where nominations are set. Right to set an observer to PDT with nominations has SofS, which has shipper codes for this PDT. The observer is set

by OTE as there's no user interface for SofS. Observer can be added to specific shipper code during its validity period. As an observer can serve only participant who has assigned role as Observer (service no 119) in CDS System.

PDT type	Service assigned by	Service assigned
1011 – Mining pipeline	SofS (111)	Observer (119)
1022 – Underground gas storage	SofS (111)	Observer (119)
1024 – Border point	SofS (111)	Observer (119)
1027 – PDT consumption+nomination of transmission	SofS (111)	Observer (119)

Table 80 – Options for assigning observer

Transaction SM30 serves for maintaining assignments and allows:

- Creation of new records

When creating new record you need to specify all necessary fields mentioned above. It's not allowed to create more records with same attributes and same date with beginning of service.

- Changes of existing records

In existing records you can change only date with end of service, deletion of existing records is also possible.

After assigning RMP as an observer, RMP has access to certain data on PDT. Observer has right for these messages:

Msg code	Description
GL1	Allocation data query
GL3	Reserved capacity query

Table 81 – Msg codes observer can use

7.6 Rules for assigning services to PDT

In the event of fulfilment of all conditions for a change of supplier regardless of its type, the following conditions are valid for assigning/deleting services of a new supplier and a new subject of settlement to PDT:

The following image shows an example of cancelling/retaining validity of affected suppliers (also valid analogically for subject of settlement).

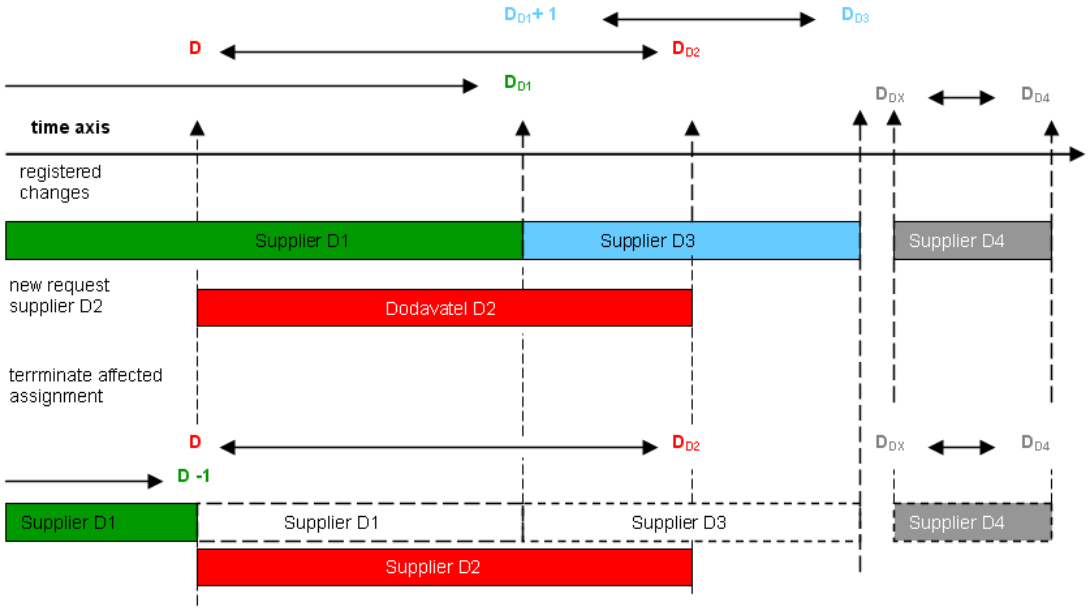


Figure 46 - Example of cancellation of validity of affected suppliers

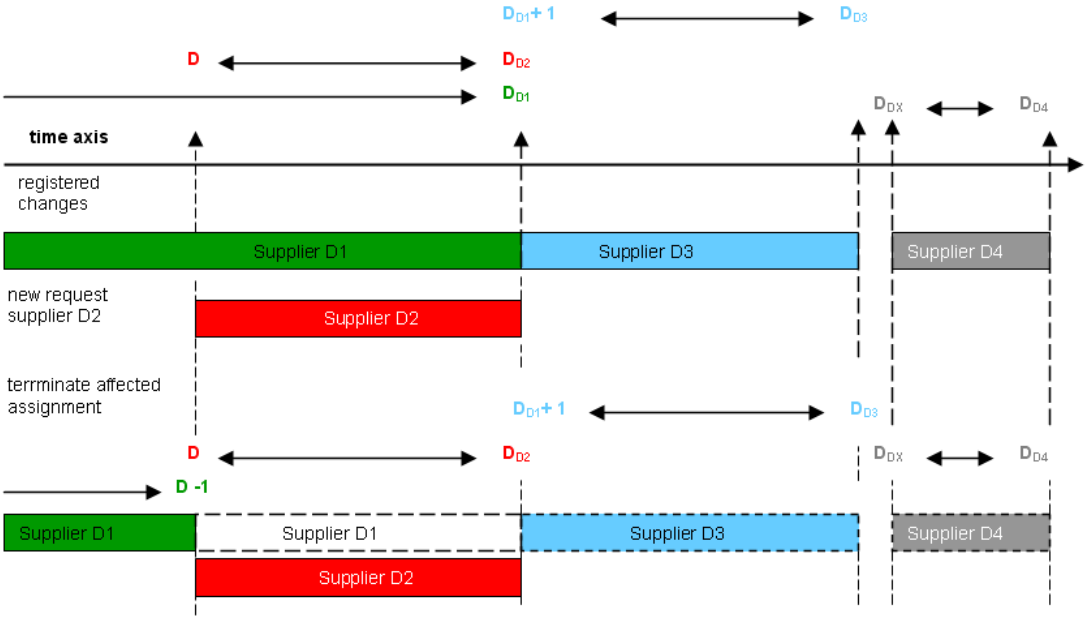


Figure 47 - Example of retaining the following suppliers

7.7 Record of changes of supplier

This concerns a communications scenario for a question on the statement of the status of the change of supplier, by which gas market participants can secure the current status of the process of a change of supplier at the applicable PDT. Information returns on events that were accepted within the framework of change of supplier.

The communications scenario is implemented with the help of these messages received/sent from the CDS system:

Code	Description	IN/OUT	Type of message
GAR	Request for sending status of change of supplier	IN	CDSGASREQ
GAS	Confirmation/error in request for an extract from the log on a change of supplier	OUT	GASRESPONSE
GAT	Results of judging the request for a change of supplier	OUT	CDSGASMASTERDATA

Table 82 – Messages of record of change of supplier

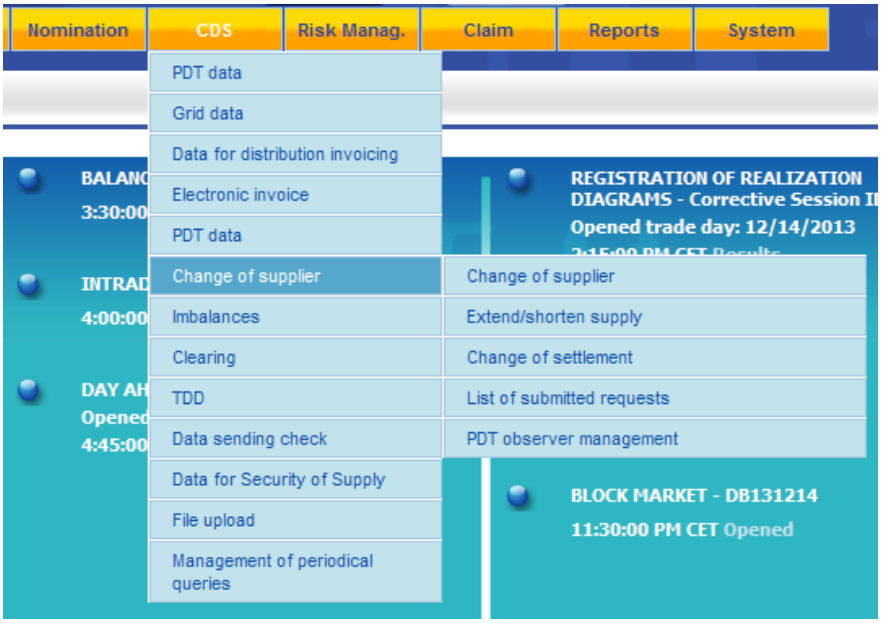
7.8 Interfaces for the process of change of supplier

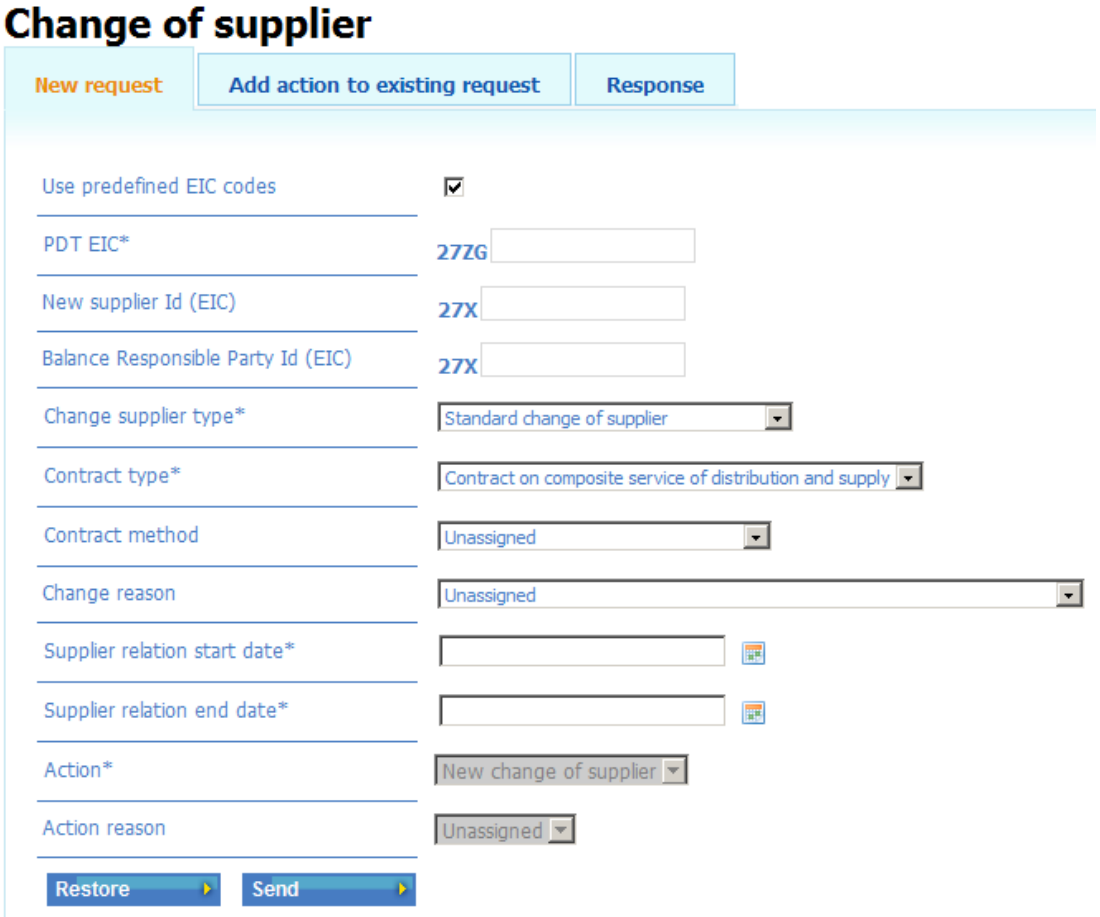
7.8.1 Reports in XML format sent to the CDS system by means of automatic communications

Detailed information on the structure of XML messages and examples are listed in the current version of the document D1.4.2G XML format.

7.8.2 Process of change of supplier by means of WEB interface

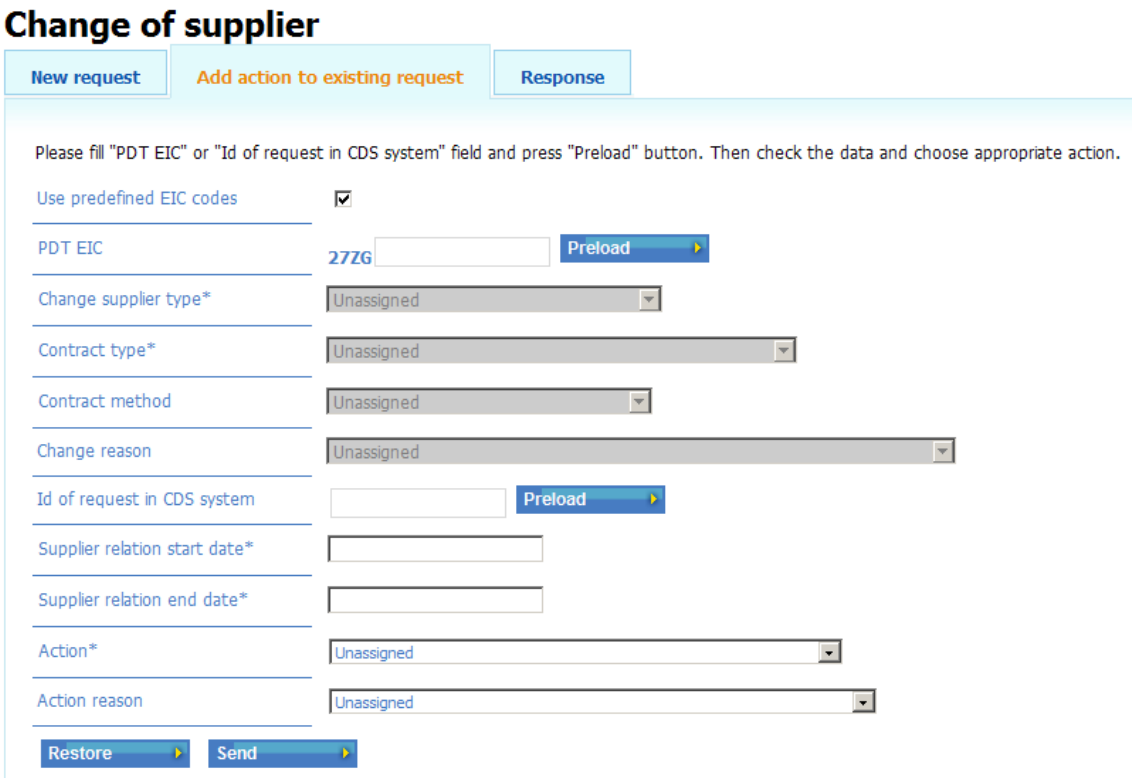
Communications in the course of the process of change of supplier by means of a WEB interface are asynchronous; the actual compilation of requests introduced by means of a WEB interface is the same as upon compiling message sent in XML format on the communications server. Through the Web interface it is possible to send to the CDS system all requests for a change of supplier for individual types of change of supplier including all following events.


Nomination
CDS
Risk Manag.
Claim
Reports
System
PDT data
Grid data
Data for distribution invoicing
Electronic invoice
PDT data
Change of supplier
Imbalances
Clearing
TDD
Data sending check
Data for Security of Supply
File upload
Management of periodical queries
Change of supplier
Extend/shorten supply
Change of settlement
List of submitted requests
PDT observer management
REGISTRATION OF REALIZATION DIAGRAMS - Corrective Session I
Opened trade day: 12/14/2013
BLOCK MARKET - DB131214
11:30:00 PM CET Opened


Change of supplier
New request
Add action to existing request
Response
Use predefined EIC codes
PDT EIC*
27ZG
New supplier Id (EIC)
27X
Balance Responsible Party Id (EIC)
27X
Change supplier type*
Standard change of supplier
Contract type*
Contract on composite service of distribution and supply
Contract method
Unassigned
Change reason
Unassigned
Supplier relation start date*
Supplier relation end date*
Action*
New change of supplier
Action reason
Unassigned
Restore
Send

The form for change of supplier contains

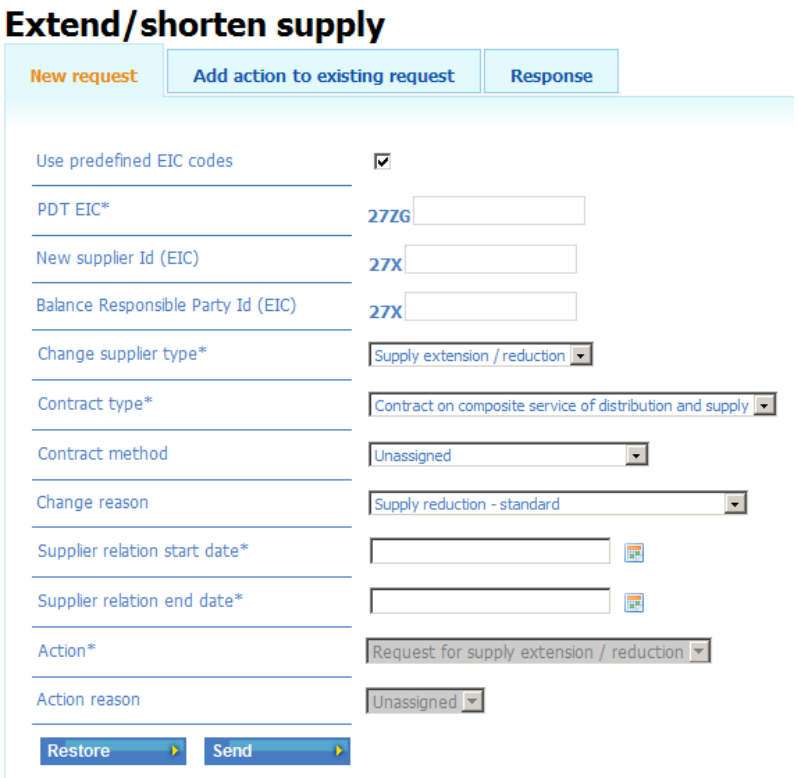
- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- ID of a new supplier (EIC16)
- ID of a new subject of settlement (EIC16)
- Date of beginning of supplier relation
- Date of termination of supplier relation – Date of end of validity of a new supplier at PDT
- Type of change of supplier (Standard change of supplier, Fast change of supplier, Change in supplier in the form of registering a change of data)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- The reason for the change of supplier in form of a change of reg. data (relevant only in the case of a change of supplier in the form of a change of reg. data)
- Action (code list of actions sent within the framework of a change of supplier)
- Action reason



The form for change of supplier – Add action to existing request contains

- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- Type of change of supplier
- Type of contract
- The reason for the change of supplier in form of a change of reg. data (relevant only in the case of a change of supplier in the form of a change of reg. data)
- ID of request in the CDS system – Workflow number in the CDS system under which circulation of the change document is controlled in the CDS system
- Date of beginning of supplier relation
- Date of termination of supplier relation – Date of end of validity of a new supplier at PDT
- Action (code list of actions sent within the framework of a change of supplier)
- Action reason

Unlike standard forms, this one includes the Pre-fill button. If the user enters the ID of a request in the CDS system (workflow ID) or the PDT EAN and clicks the Pre-fill button, the system will automatically fill all of the mandatory attributes of the request. If the user enters the EAN of the PDT for which there are multiple requests with ANP status in CDS, the system will return the message that the selection is not unambiguous and that the workflow ID must be added.



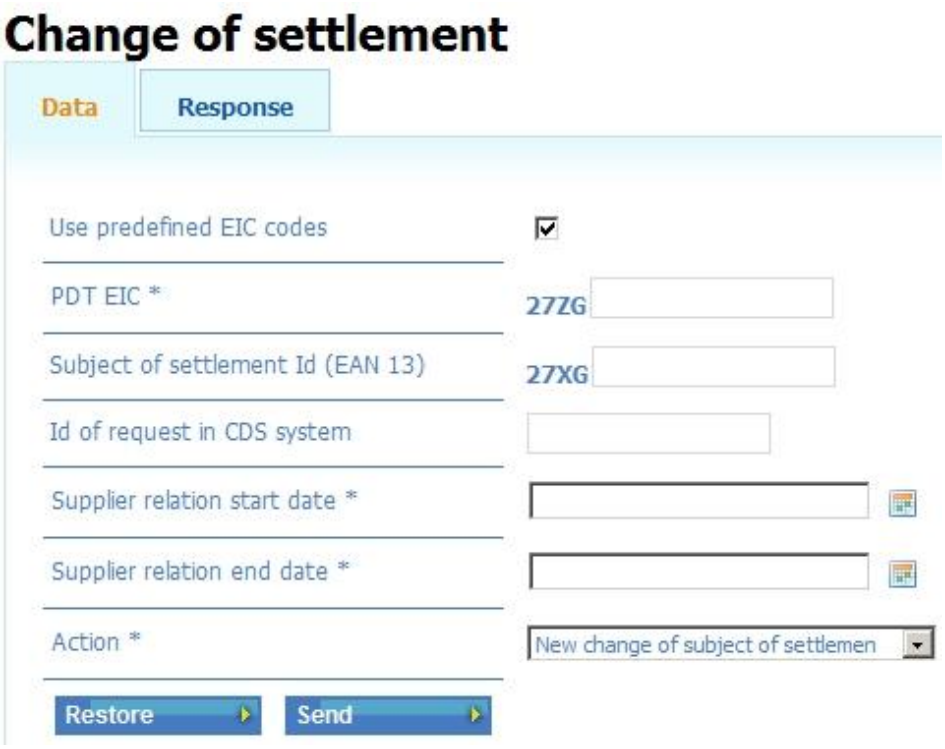
The form for extend/shorten supply contains

- Identification of PDT (EIC 16) – Definite PDT identifier whose change the supply concerns
- ID of a new supplier (EIC16)
- ID of a new subject of settlement (EIC16)
- Date of beginning of supplier relation
- Date of termination of supplier relation – Date of end of validity of a new supplier at PDT
- Type of change of supplier (Supply extension/reduction)
- Type of contract (CCS – Contract on Comprehensive Gas Supply Services, CSU – Gas Supply Contract)
- The reason for the change of supplier in form of a change of reg. data (relevant only in the case of a change of supplier in the form of a change of reg. data)
- Action (code list of actions sent within the framework of a change of supplier)
- Action reason

7.8.3 Securing the process of change of subject of settlement by means of WEB interfaces

The form for issuing request for change of subject of settlement contains:

- Identification of PDT (EIC 16) – Definite PDT identifier whose change of the subject of settlement concerns
- ID of new subject of settlement (EIC16) – EIC code assigned to subject of settlement.
- Date from – Date of beginning of validity of assigning the subject of settlement to PDT
- Until date – Date of termination of validity of assigning the subject of settlement to PDT ("Until date" is interpreted by the system as the last hour of day D-1. Therefore if the sender wants to achieve termination of assigning SS for example 31.12.2010 inclusive, it is necessary to enter the termination date as 1.1.2011)
- Event (IRP – proposal for change of subject of settlement, IRC – approval of responsibility for imbalance, IRD – refusal of responsibility for imbalance)



7.8.4 Question on record of changes of supplier by means of WEB interface

Description of the request for a List of change of supplier is provided in chapter 5 – Provision of data upon request of an external user.

7.9 Locking of RMP and unconfirmed standard change of supplier

7.9.1 Locking of RMP

The process takes place in the CDS system in the following steps:

a) At 5.30 p.m. on the day D-4 (where D is the day as of which the RMP does not have adequate financial coverage), the operator of the CDS system locks the RMP in PRODIS as of the decisive day D. Subsequently, the information is sent that the RMP does not have adequate financial coverage for the supplies to customer points of delivery. (GAU message)

   The message is sent to the points of delivery meeting the following criteria:

   - the locked RMP is the supplier to the PDT as of the decisive day D – in this case the infotext contains the information that supply is not provided for

- the locked RMP is the subject of settlement or an observer for the PDT as of the decisive day D and at the same time, it is not the supplier to the PDT – in this case, the infotext contains the information that acceptance of responsibility for imbalance is not secured for the PDT)

The message is sent to the market participants in the roles of supplier, subject of settlement, supervisor, and data provider with regard to the respective PDT. There is a check during sending this message and all following messages in the process, if the supply by the last resort supply is relevant for the particular PDT. If not, the message is sent with dpi-disabled attribute.

b) At 7.00 a.m. on day D-3, it is verified whether the RMP has adequate financial coverage; if not, the system operator will utilise the ZG_DPI to send the information about non-provision for supply or non-acceptance of responsibility for imbalance for the PDT as of D day.

The message is sent to the points of delivery meeting the following criteria:

- the locked RMP is the supplier to the PDT as of the decisive day D (in this case the infotext contains the information that supply is not provided for and the message code is GAV)

- the locked RMP is the subject of settlement or an observer for the PDT as of the decisive day D and at the same time, it is not the supplier to the PDT (in this case, the infotext contains the information that acceptance of responsibility for imbalance is not secured for the PDT and the message code is GAW).

The message is sent to the market participants in the roles of supplier, subject of settlement, supervisor, and data provider with regard to the respective PDT.

In case of locking of the SZ or the supervisor, the supplier has time until 2.00 p.m. on day D-3 to change the subject of settlement of the PDT using the existing tools.

c) At 2.00 p.m. on day D-3, a message about non-securing of assignment of responsibility for the PDT is sent (unless the supplier managed to change the subject of settlement), the message code being GAX. The message is sent to the market participants in the roles of supplier, subject of settlement, supervisor, and data provider with regard to the respective PDT.

It is possible to make a fast change of the supplier to the PDT until D-1 12.00 p.m. using the process of fast change of supplier.

d) On D-1 at 12.10 p.m., the supply is activated by the supplier of last resort, or the PDT is terminated in the CDS system, which means the following actions:

SLR activation – SLR registered for the respective grid will be set as the primary supplier to the PDT; a SS will be added to the PDT; the attribute of supply by the supplier of last resort will be set as well as sending of the MASTERDATA message (in the format of a copy of the PDT master data) with the code GR7 to the existing supplier,

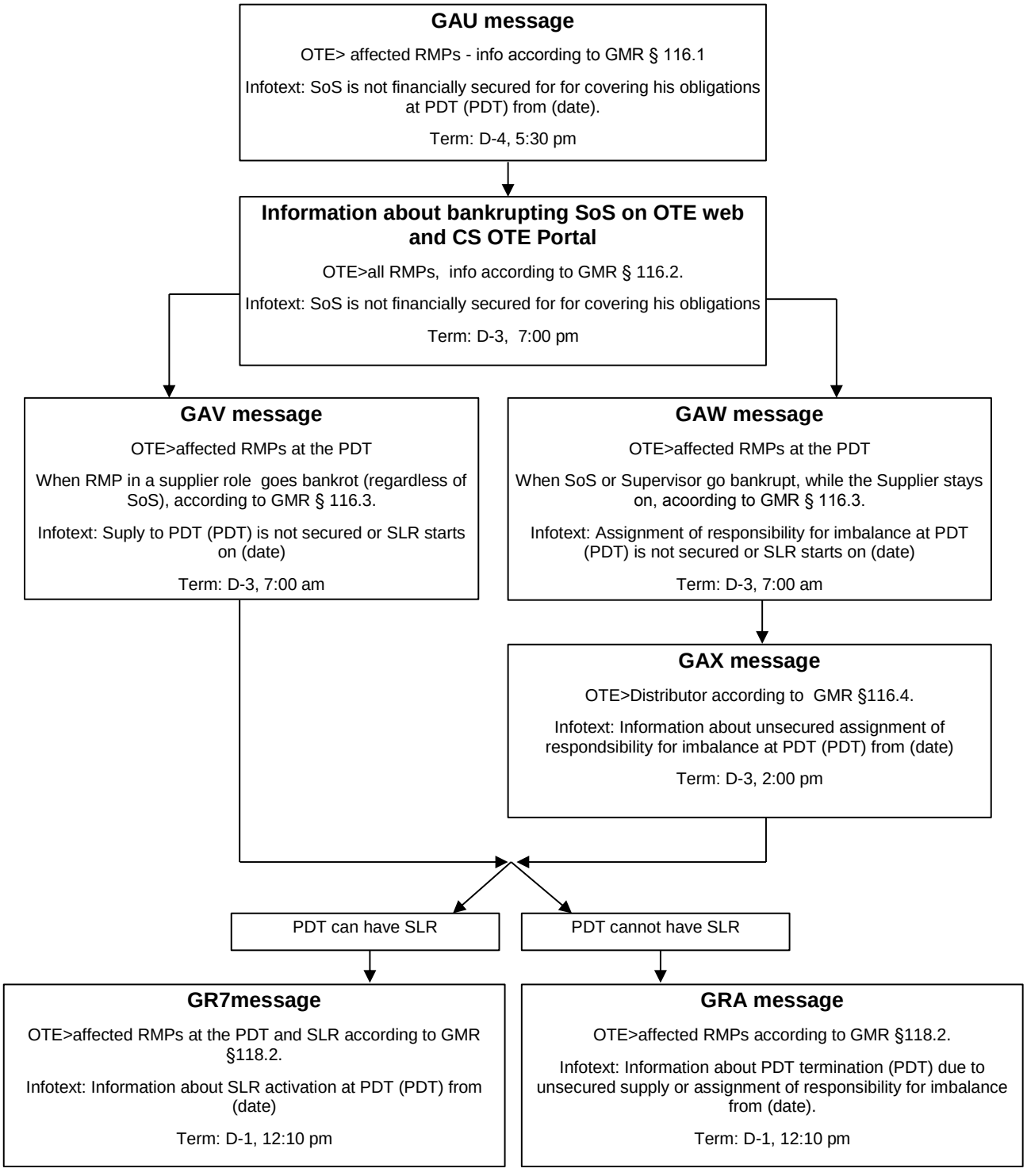
the existing SS, supervisor, data provider and SLR; the message contains the information about SLR activation in CDS.

Termination of PDT – sending of the MASTERDATA message (in the format of a copy of the PDT master data) with the code GRA to the existing supplier, the existing SS, supervisor, data provider; the message contains the information about PDT termination in CDS. Registration of PDT in the CDS system is terminated.

Messages about PDT temination have identification of termination reason at the begining of the infotext. Termination reasons applicable for messages sent in the RMP loping process are: 02 – RMP locking at OTE a 03 – RMP locking based on DSO request.

The following scheme depicts possible process ways.

D ... first day without supply for PDT or without subject of settlement responsible for an imbalance.


GAU message
OTE> affected RMPs - info according to GMR § 116.1
Infotext: SoS is not financially secured for for covering his obligations at PDT (PDT) from (date).
Term: D-4, 5:30 pm
Information about bankrupting SoS on OTE web and CS OTE Portal
OTE>all RMPs, info according to GMR § 116.2.
Infotext: SoS is not financially secured for for covering his obligations
Term: D-3, 7:00 pm
GAV message
OTE>affected RMPs at the PDT
When RMP in a supplier role goes bankrot (regardless of SoS), according to GMR § 116.3.
Infotext: Suply to PDT (PDT) is not secured or SLR starts on (date)
Term: D-3, 7:00 am
GAW message
OTE>affected RMPs at the PDT
When SoS or Supervisor go bankrupt, while the Supplier stays on, acoording to GMR § 116.3.
Infotext: Assignment of responsibility for imbalance at PDT (PDT) is not secured or SLR starts on (date)
Term: D-3, 7:00 am
GAX message
OTE>Distributor according to GMR §116.4.
Infotext: Information about unsecured assignment of respondsibility for imbalance at PDT (PDT) from (date)
Term: D-3, 2:00 pm
PDT can have SLR
PDT cannot have SLR
GR7message
OTE>affected RMPs at the PDT and SLR according to GMR §118.2.
Infotext: Information about SLR activation at PDT (PDT) from (date)
Term: D-1, 12:10 pm
GRA message
OTE>affected RMPs according to GMR §118.2.
Infotext: Information about PDT termination (PDT) due to unsecured supply or assignment of responsibility for imbalance from (date).
Term: D-1, 12:10 pm

7.9.2 Non-confirmed standard change of supplier

a) On D-2P (where D is the day when supply to the PDT is not provided for and P is a working day), OTE will send the message on non-provision of supply due to incomplete change of supplier – message GAV

There is room for a fast change of supplier until D-1 12.00 p.m.

On D-1 at 12.10 p.m., the PDT is terminated using the transaction ZG_DPI (as in the previous chapter, item d.)

Messages about PDT temination have identification of termination reason at the begining of the infotext. Termination reason applicable for messages sent in the process of non-confirmed standard change of supplier is: 01 Non-confirmed change of supplier with non-provision of supply

7.9.3 Service monitor

Service monitor is a tool for detecting and monitoring important changes on PDT services. This service monitor provides identification these states on PDT:

- PDT without primary supplier
- PDT without subject of settlement
- End of PDT registration in CDS
- Change to last SS
- Forthcomming unauthorized consumption
- Unauthorized consumption
- Generating SVA H1, cancel attribute HNO/NEO

Program for the service monitor is parametrisable and the settings is in the following table.

Date from	Change type	Action type	Periodicity type	Number of days	Date to
1.1.2014	End of PS	Warning	K	30-	31.12.9999
1.1.2014	End of PS	Change	K	1	31.12.9999
1.1.2014	End of SS	Warning	K	30-	31.12.9999
1.1.2014	End of SS	Change	K	1	31.12.9999
1.1.2014	End of PDT	Warning	K	30-	31.12.9999
1.1.2014	Change SS	Warning	K	30-	31.12.9999

Table 83 – Service monitor settings

Change type	Description
End of SS	End of subject of settlement
End PD	End of primary supplier
End OPM	End of PDT
Change SS	Return to previous SS (change of SS for fixed period)

Table 84 – Service monitor – change type

Periodicity type	Description
P	Working days
K	Calendar days

Table 85 – Service monitor – periodicity type

Action type	Description
Warning	Sending message
Change	End of PDT and send message

Table 86 – Service monitor – action type

Description of actions:

1. **Warning – Sending message**
   Sending message end of supply to ending supply providers (primary supplier, subject of settlement, DSO) in format CDSGASMASTERDATA (PDT master data) with message code GR9. Change type (message reason) is in the information text field.

   Sending message about setting/change attribute of may occur unauthorized consumption/unauthorized consumption in format CDSGASMASTERDATA with code GRH (attribute STATUS_SUPP – HNO/NEO) to all of interested participants (current supplier, current SS, PDS/PPS, new supplier and new SS which has got accepted change of supplier in interval interruption D to D+10W). Description of change is in the info text

2. **Change – End of PDT and send message**
   End of PDT to date of the end primary supplier supplement and send message with information of ending supplement to all of ending supply providers (DSO, primary supplier, subject of settlement) in format CDSGASMASTERDATA (PDT master data) with message code GR8. Change type (message reason) is in the information text field.

Sending messages

All send message are type MASTERDATA with message code GR8/GR9. It contains copy of PDT data in change date and attribute info-text fill with message from next table.

Messages contains in info-text first 3 characters code xyz that consist like this:

- *x* = change type:
  - 1 = end of primary supplier,
  - 2 = end of subject of settlement,
  - 3 = end of PDT,
  - 4 = change to previous SS
  - 5 = forthcomming unauthorized consumption
  - 6 = unauthorized consumption
  - 7 = cancel attribute HNO/NEO
- *y* = action:
  - 0 = warning,
  - 1 = change;
- *z* = PDT type:
  - 0 = Consumption type + other.

Událost	**Akce**	**Druh OPM**	**Zpráva**
End PS	Message GR9	Consumption type + other	100-On <*date*> is not PS on PDT.
	Interruption GR8	Consumption type + other	110-PDT is interrupted <*from*> – <*to*> (end of PS).
End SS	Message GR9	Consumption type + other	200-On <*date*> is not SS on PDT <*EIC*>.
	Interruption GR8	Consumption type + other	210-PDT is interrupted <*from*> – <*to*> (end of SS)
End OPM	Message GR9	Consumption type + other	300-On <*date*> ending validity of PDT <*EIC*>.
Change SS	Message GR9	Consumption type + other	400-On <*date*> will be on PDT <*EIC*> assigned previous SS<*EIC*>.
Forthcomming unauthorized consumption	Message GRH	Consumption type + other	500-On <*from*> – <*to*> f*orthcomming unauthorized consumption*
Unauthorized consumption	Message GRH	Consumption type + other	600-On <*from*> – <*to*> *unauthorized consumption*
Cancel attribute HNO/NEO	Message GRH	Consumption type + other	700-On <*from*> – <*to*> cancel attribute HNO/NEO

7.10 Mass change supplier or SST according to company transformation

New supplier or SST send request for mass change of supplier or mass change of SST in connection with the conversion of a company in accordance with § 121 PTP with module claim

on OTE portal – new type of claim: “Company transformation – mass change PDT” – message type CDSCLAIM.

Transmitting company use claim module for expression (agreement) with mass change of supplier or SST. After processing agreement in CS OTE will be

From CS OTE will be send for each EAN OPM messages with type MASTERDATA with code 193 – Processed mass change of supplier/SST (company transformation) for all concerned suppliers, SST and data providers after processing agreement. If will be only change of SST, copy of message for data provider does not contain value of field “ps-sz”.

If is changing only supplier, only SST or both will be in output message 193 clearly determined by fill attributes ps-dod, ps-sz. For example if will change only supplier, in message 193 will be only attribute ps-dod. If is change of SST copy of message for data provider will not contain field ps-sz (this field will be in message empty). Data provider can recognize when is empty field ”ps-sz” that it is only change of SST.

8 Description of the process Evaluation and Settlement of Imbalances

The functional area Evaluation and Settlement of Imbalances is realised by the **Imbalances module** implemented in the CDS system. Evaluation is done on daily basis (preliminary imbalances), monthly basis (actual imbalances) and final monthly basis (complaints), depending on the nature of the individual types of imbalances.

The process of evaluation and settlement of imbalances includes:

- evaluation and settlement of imbalances
- evaluation and settlement of tolerances

The results of evaluation of imbalances are sent to the individual SS. The EDIGAZ format version 4.0 (via XML), **IMBNOT** message is used for communication of all types of imbalances between OTE and SS/TSO/DSO/SSO.

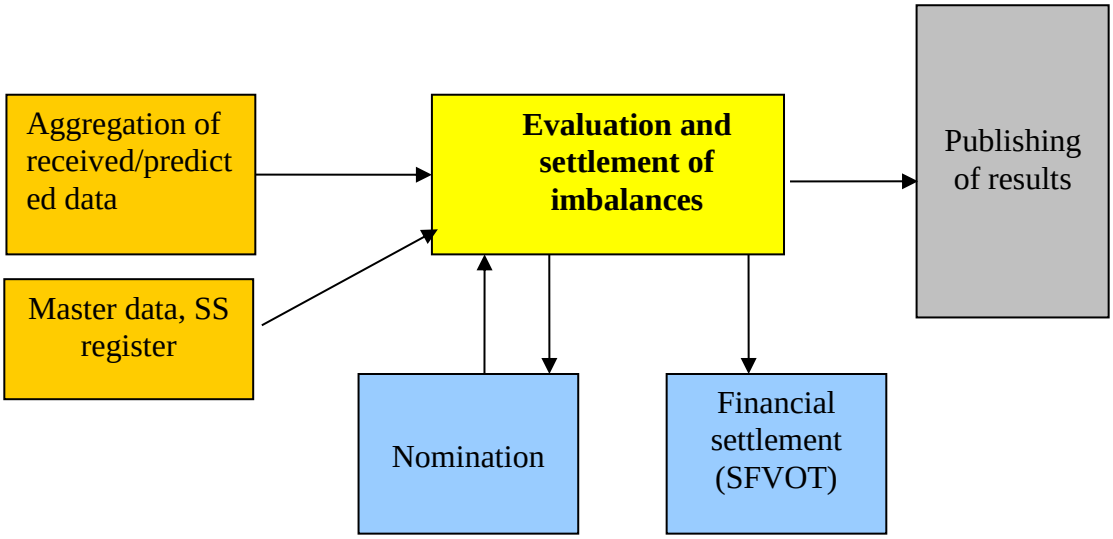


Figure 48 Process of evaluation and settlement of imbalances

Evaluation and settlement of imbalances is done by the operator. Imbalances determined by the operator are sent to the individual SS responsible for the imbalance; the SS shall then provide for balancing of the imbalance by nomination of in-kind reconciliation. Financial reconciliation (cash collection/payment for balancing gas) shall take place in case of absence of nomination of in-kind balance.

8.1 Evaluation and settlement of imbalances

Evaluation and settlement of imbalances is done on daily, monthly and quarterly basis. This also dictates segmentation of the imbalance process to:

- preliminary imbalances (daily settlement)
- actual imbalances and imbalances above the toleration limit (monthly settlement)
- final imbalances (final monthly settlement)

Imbalances are then used for determining the system imbalance. The imbalance above the tolerance limit (off-tolerance deviation) and the unused tolerance of the subject of settlement are then evaluated towards the direction of the system imbalance.

8.2 Description of communication scenarios

The EDIGAS format version 4.0 (via XML), **IMBNOT** message is used for communication of all types of imbalances between OTE and SS/TSO/DSO/SSO. The following information is sent:

- system imbalance
- SS imbalance own
- SS imbalance
- SS imbalance outside tolerance
- difference between allocations and nominations at BDS, CGD and UGS
- unused tolerance
- SS tolerance own
- SS tolerance

8.2.1 Communication scenarios for imbalances

The XML structure of an IMBNOT message for sending imbalance results

Message header Structure of IMBNOT message

- Message header – segment **IMBNOT_IMBALANCENOTICE**

Unique message ID – according to EDIG@S specification (e.g. IMBNOT20091116A00076)

Document type – 14G constant

Date and time of message filing

Validity of data in the message

Identification of sender and recipient

- PDT and type of imbalance - segment **IMBNOT_CON_POINT_DETAIL**

EIC code of PDT

Type of imbalance

imbalance, system imbalance, imbalance outside tolerance

difference between allocations and nominations at BDS, CGD and UGS

tolerance, unused tolerance

Shipper code for sending differences between allocations and nominations (for CGD, BDS and UGS)

- Value of sent imbalance – segment **IMBNOT_QTY_INFORMATION**

Trading day for which the imbalance is sent - Amount of imbalance

- Direction of imbalance

- Unit

Types of imbalances sent in an IMBNOT message

a) Preliminary

Imb. type	Description	Request code
PINP	Preliminary input imbalance of SS	GI1/GID
POUT	Preliminary output imbalance of SS	GI1/GID
PIMB	Preliminary total imbalance of SS	GI1/GID
PIMR	Preliminary total own imbalance of SS	GI1/GID
PSYS	Preliminary system imbalance	GI1/GID
POTI	Preliminary off-tolerance imbalance of SS	GI1/GID
PTOR	Preliminary tolerance SS own	GI1/GID
PTOL	Preliminary tolerance SS	GI1/GID
PDIT	Preliminary difference of allocations and nominations on BDS, CGD on input	GI3
PDIS	Preliminary difference of allocations and nominations on VUGS on input	GI3
PDOT	Preliminary difference of allocations and nominations on BDS, CGD on output	GI3
PDOS	Preliminary difference of allocations and nominations on VUGS on output	GI3

Table 87 – Preliminary imbalances – IMBNOT message

b) Metered

Imb. type	Description	Request code
DINP	Metered input imbalance of SS	GI5, GIF
DOUT	Metered output imbalance of SS	GI5, GIF
DIMB	Metered total imbalance of SS	GI5, GIF
DIMR	Metered total imbalance of SS own	GI5, GIF
DSYS	Metered system imbalance	GI5, GIF
DOTI	Off-tolerance deviation of SS	GI5, GIF
DTOR	Metered tolerance SS own	GI5, GIF
DTOL	Metered tolerance SS	GI5, GIF
UTOL	Unused tolerance of SS	GI5, GIF
DDIT	Metered difference of allocations and nominations on BDS, CGD on input	GI7

DDIS	Metered difference of allocations and nominations on VUGS on input	GI7
DDOT	Metered difference of allocations and nominations on BDS, CGD on output	GI7
DDOS	Metered difference of allocations and nominations on VUGS on output	GI7
DOTT	Off-tolerance deviation of SS after inclusion of trading in unused tolerance	GI9

Table 88 – Metered imbalances – IMBNOT message

c) Final

Imb. type	Description	Request code
EINP	Final metered input imbalance of SS	GIB, GIH
EOUT	Final metered output imbalance of SS	GIB, GIH
EIMB	Final metered total imbalance of SS	GIB, GIH
EIMR	Final metered total imbalance of SS own	GIB, GIH
EOTI	Final metered off-tolerance deviation of SS	GIB, GIH
ESYS	Final system imbalance	GIB, GIH
ETOR	Final tolerance SS own	GIB, GIH
ETOL	Final tolerance SS	GIB, GIH
EDIT	Final difference of allocations and nominations on BDS, CGD on input	GIJ
EDIS	Final difference of allocations and nominations on VUGS on input	GIJ
EDOT	Final difference of allocations and nominations on BDS, CGD on output	GIJ
EDOS	Final difference of allocations and nominations on VUGS on output	GIJ

Table 89 – Final imbalances – IMBNOT message

8.3 WEB interface for imbalance results (CS OTE)

The CS OTE application enables the user the request the results of evaluation and settlement of imbalances. The functions for requests for imbalance data are the following:

- generation and sending of a request for imbalance data
- imbalance result reports

The functions are included in the CDS menu, submenu Imbalances:

- Imbalances
- Differences of allocations and nominations by shipper code
- Off-tolerance deviations after trading in UT
- Imbalances and tolerances of SS
- Imbalances and tolerances of SSS
- Per unit prices (balance gas)
- Difference of allocations and nominations on BDS, CGD and UGS
- Imbalances of ZMV

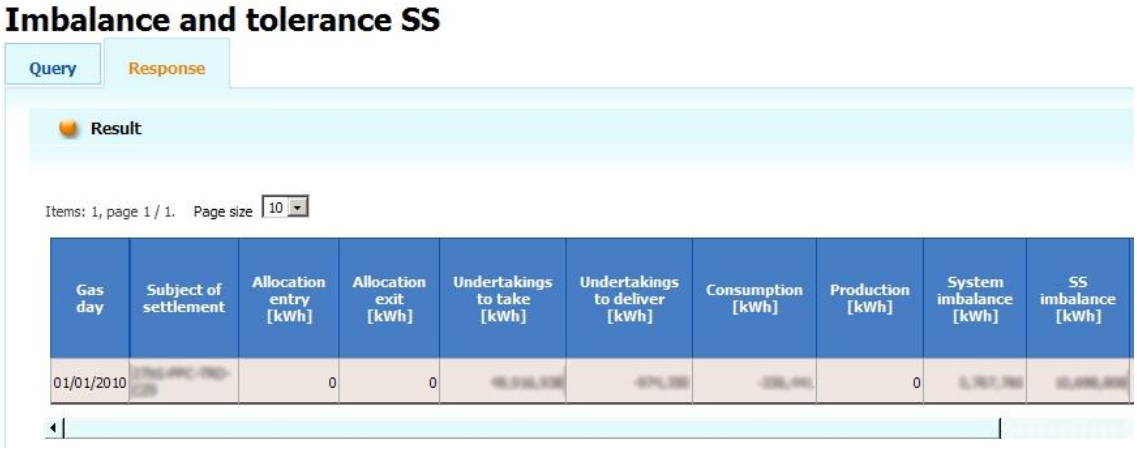
The first three options are used for generation of a request for imbalance results. The description is provided in chapter 5 – Provision of data upon request of external user.

The other options represent data **reports**. Entered in these forms is only the settlement version and the period for which the data is to be displayed. The resulting report may be exported to different format (PDF, Excel, TXT, XML).

Report on Imbalances and tolerances of SS

The report displays imbalances and tolerances on SS in breakdown to the individual components. It contains the following data:

- Gas day
- EIC of the subject of settlement
- Inputs for calculation of imbalances – allocation on input and output, obligation to supply and take, production and consumption
- Components of imbalance – total, off-tolerance, for settlement
- System imbalance
- Tolerance of SS
- Imbalance settlement data
- Data about trading in unused tolerance



Report on Imbalances and tolerances of SSS

The report displays imbalances and tolerances for the SSS (super subject of settlement) in breakdown to individual elements. The provided values include data for the SS and for the SS for which the logged-in SS has accepted a responsibility for imbalance. The report includes the following data:

- Trading day
- Designation of SS and SSS

- Imbalance of SS and SSS
- Tolerance of SS and SSS
- System imbalance

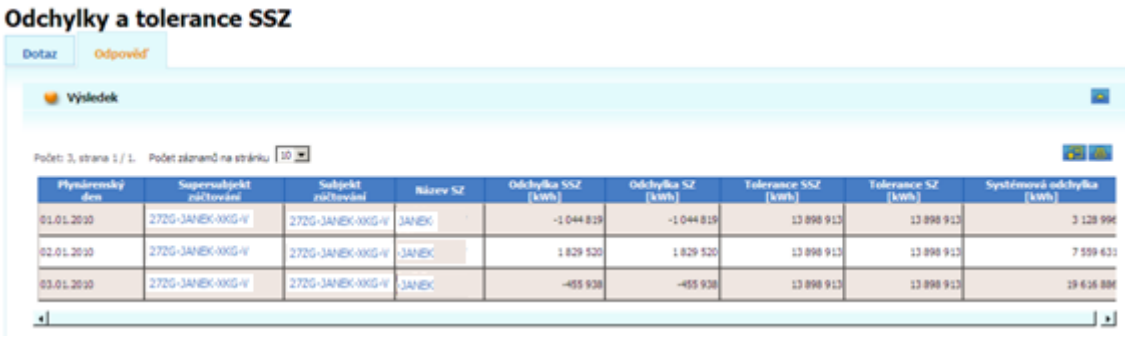


Figure 49 Report on imbalances and tolerances of SSS

Report on per unit prices (balance gas)

This displays the prices of balance gas in CZK for the required period (basic price, price for excess gas, price for missing gas) and monthly balancing gas price.

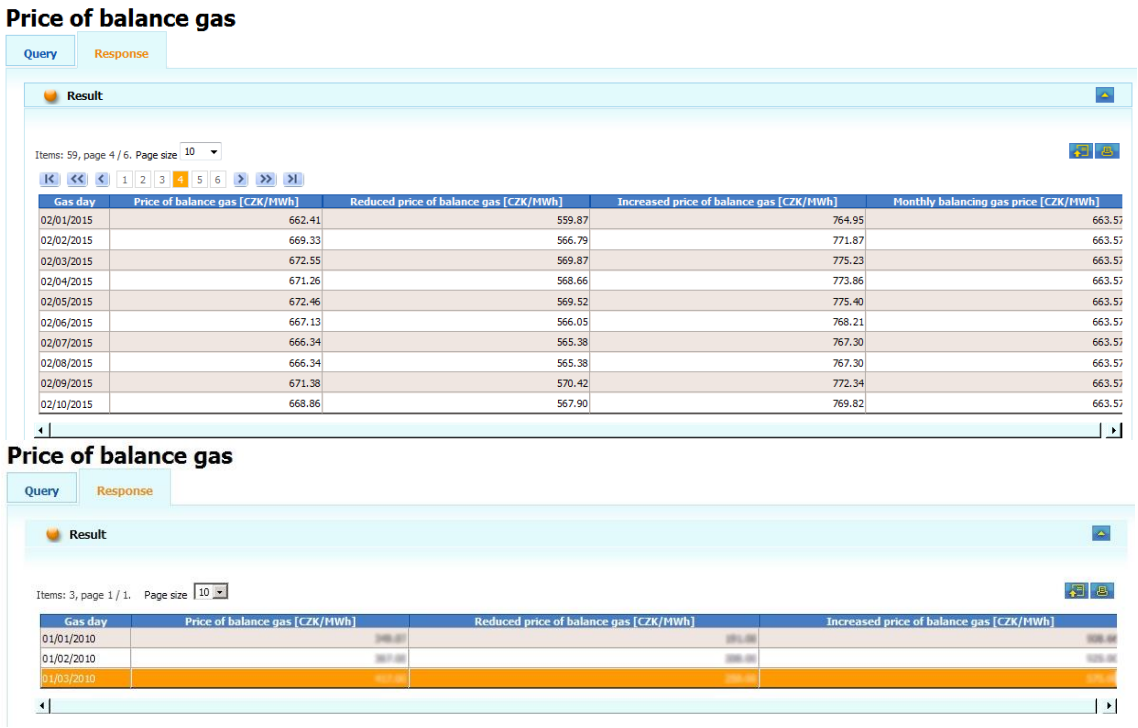


Figure 50 Price of banalce gas

Report on Difference of allocations and nominations on BDS, CGD and UGS

Differences of allocations and nomination at special points are also evaluated per individual shipper codes within settlement of imbalances. The evaluation applies to border delivery stations (nominations and allocations of transfer "T"), cross-border gas ducts (nominations and allocations of distribution "D") and underground gas storages (nominations and allocations of storage "S"). The following data are displayed:

- Gas day
- Subject of settlement (EIC)
- PDT (EIC)
- Shipper code of counterparty internal
- Shipper code of counterparty external
- Allocation of T, D, S Entry
- Allocation of T, D, S Exit
- Nomination of T, D, S Entry
- Nomination of T, D, S Exit
- Difference of allocations and nominations entry
- Difference of allocations and nominations exit
- Allocation Scheme Entry
- Allocation Scheme Exit

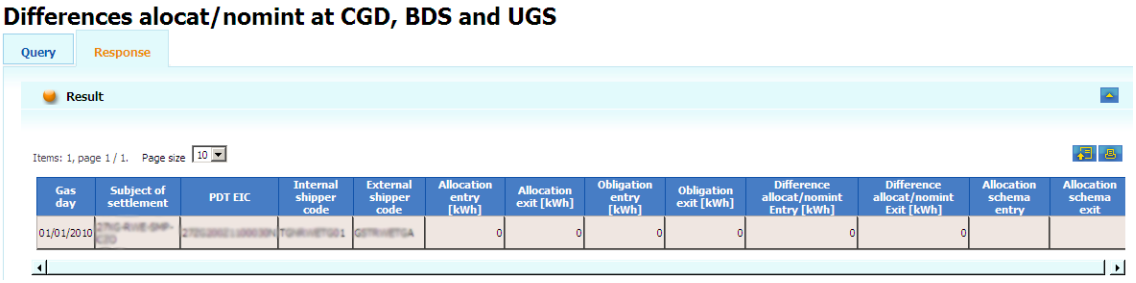


Figure 51 Report on Difference of allocations and nominations of BDS, CGD and UGS

Final Imbalances

The report includes the following data:

- Gas day
- RMP ID (EIC)

- Name of provider
- System imbalance [kWh]
- Preliminary imbalance of SS [kWh]
- Metered imbalance of SS [kWh]
- Final imbalance of SS [kWh]
- Difference of FI - MI [kWh]
- Price of BG [CZK/kWh]
- Amount for final imbalance of SS [CZK]
- Tolerance of SS [kWh]
- Off-tolerance deviation of SS [kWh]
- Price for off-tolerance deviation [CZK/MWh]
- Amount for off-tolerance deviation [CZK]

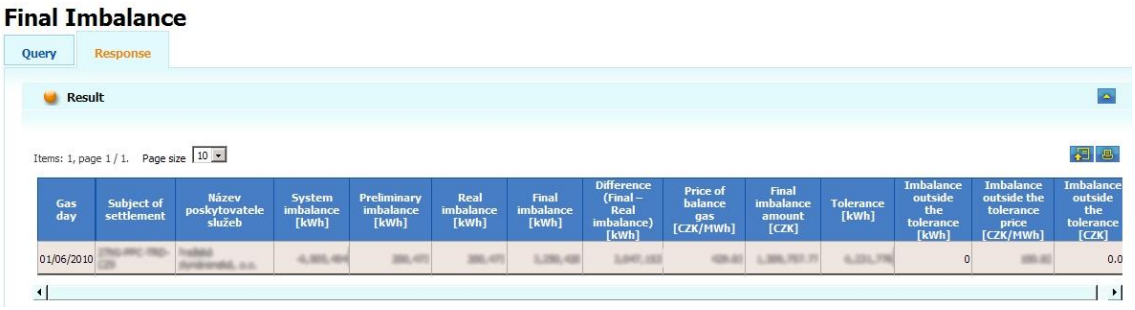


Figure 52 Final Imbalance

9 Evaluation and Settlement of Imbalances after 1.7.2016 (NC BAL)

9.1 Description of the process Evaluation and Settlement of Imbalances after 1.7.2016 (NC BAL)

Start evaluation of imbalances NC BAL means changes in the process of evaluation and settlement of imbalances. The basic points of imbalance evaluation:

- Evaluation of imbalances, determining the applicable price
- Evaluation imbalance quantity (preliminary daily and daily)
- Unused Flexibility Market
- Evaluation imbalance quantity (monthly and final monthly)

The results of evaluation of imbalances are sent to the individual BRD. The EDIGAS format version 4.0 (via XML), **IMBNOT** message is used for communication of all types of imbalances between OTE and BRP/TSO/DSO/SSO.

9.1.1 Communication scenarios for imbalances (NC BAL)

The EDIGAS format version 4.0 (via XML), **IMBNOT** message is used for communication of all types of imbalances between OTE and BRD/TSO/DSO/SSO. The following information is sent:

- Imbalance (system, BRP, BRP own)
- Flexibility (evaluated, allocated, unused)
- difference between allocations and nominations at BDS, CGD and UGS
- Imbalance Quantity
- Unit prices
- Imbalance Account

The XML structure of an IMBNOT message for sending imbalance results

Message header Structure of IMBNOT message

- Message header – segment **IMBNOT_IMBALANCENOTICE**

Unique message ID – according to EDIG@S specification

Document type – 14G constant

Date and time of message filing

Validity of data in the message

Identification of sender and recipient

- PDT and type of imbalance - segment **IMBNOT_CON_POINT_DETAIL**

EIC code of PDT

Type of imbalance

imbalance, system imbalance, imbalance outside tolerance

difference between allocations and nominations at BDS, CGD and UGS

tolerance, unused tolerance

Shipper code for sending differences between allocations and nominations (for CGD, BDS and UGS)

- Value of sent imbalance – segment **IMBNOT_QTY_INFORMATION**

- Trading day for which the imbalance is sent

- Amount of imbalance

- Direction of imbalance

- Unit

- Value of sent imbalance – segment **IMBNOT_PRICE_DEVIATION**

- Trading day for which the imbalance is sent

- Unit price

- Currency

- Unit

Types of imbalances sent in IMBNOT message (NC BAL)

a) Preliminary daily

Type (imbalance)	Description	Message code
PSYS	Daily system imbalance	GIL
PIMB	BRP imbalance (Balance Responsible Party)	GIL
PIMR	BRP imbalance own	GIL
PFLX	The allocated flexibility value	GIL
PFAA	Preliminary allocations of the use of flexibility	GIL
PBUA	Preliminary value of the imbalance account	GIL
PBAA	Preliminary value of the Daily Imbalance	GIL

	Quantity	
PFNP	Unused positive flexibility	GIL

b) Daily

Type (imbalance)	Description	Message code
PFAB	Allocations of the use of flexibility	GIN
PBUB	Value of the imbalance account	GIN
PBAB	Value of the Daily Imbalance Quantity	GIN
PBPB	Amount of the Daily Imbalance Quantity	GIN
PCC2	Applicable Price for the positive the Daily Imbalance Quantity	GIN
PCC1	Applicable Price for the negative the Daily Imbalance Quantity	GIN

c) Monthly

Type (imbalance)	Description	Message code
DSYS	Monthly system imbalance	GIP
DIMB	Monthly BRP imbalance (Balance Responsible Party)	GIP
DIMR	Monthly BRP imbalance own	GIP
DBAB	Difference between monthly and daily imbalance	GIP
DBPB	Amount of Difference	GIP

	between monthly and daily imbalance	
DOE0	Price Index OTE	GIP

d) **Final monthly**

Type (imbalance)	Description	Message code
ESYS	Final monthly system imbalance	GIR
EIMB	Final monthly BRP imbalance (Balance Responsible Party)	GIR
EIMR	Final monthly BRP imbalance own	GIR
EBAB	Difference between final monthly and monthly imbalance	GIR
EBPB	Amount of Difference between final monthly and monthly imbalance	GIR
EOE0	Price Index OTE	GIR

9.2 WEB interface for imbalance results (CS OTE)

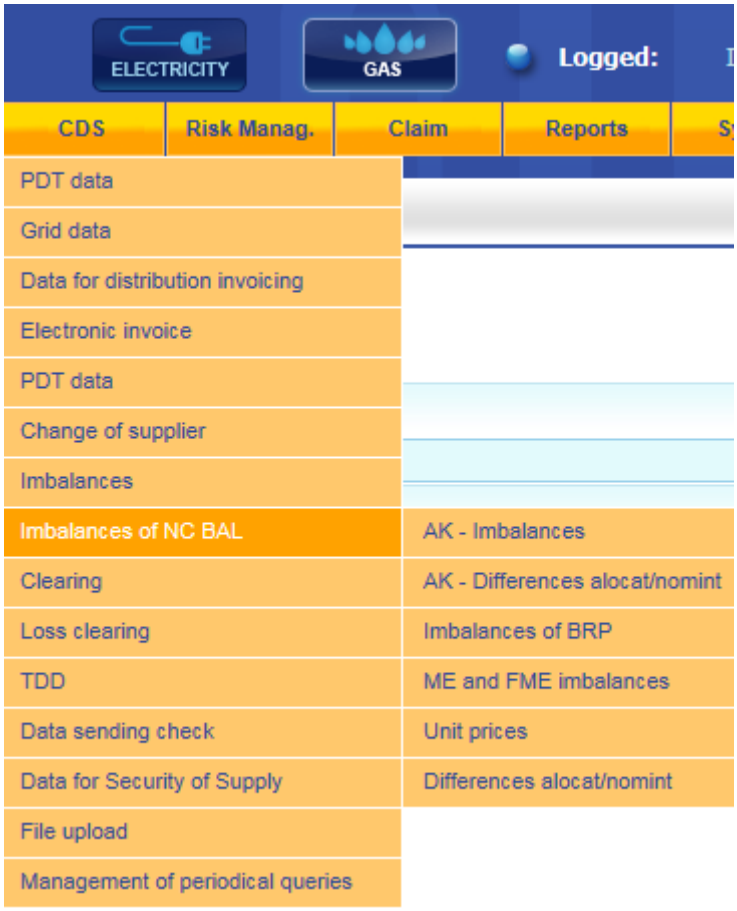
The CS OTE application enables the user the request the results of evaluation and settlement of imbalances. The functions for requests for imbalance data are the following:

- generation and sending of a request for imbalance data
- imbalance result reports

The functions are included in the CDS menu, submenu Imbalances of NC BAL:

- AK – Imbalances
- AK - Differences allocat/nomint
- Imbalances of BRP

- ME and FME imbalances
- Unit prices
- Differences allocat/nomint



The first two options are used for generation of a request for imbalance results. The description is provided in chapter 5 – Provision of data upon request of external user.

The other options represent data **reports**. Entered in these forms is only the settlement version and the period for which the data is to be displayed. The resulting report may be exported to different format (PDF, Excel, TXT, XML).

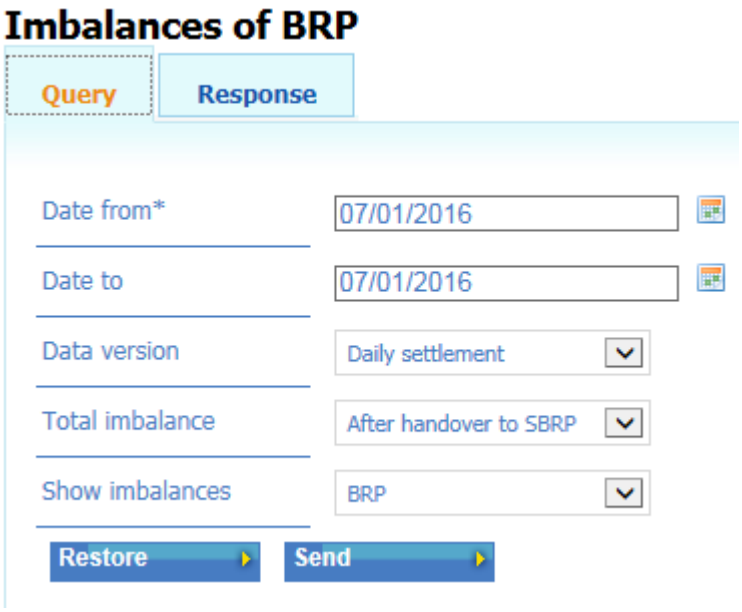
Report Imbalances of BRP

The report displays imbalances, flexibility and imbalance quantity.

Input parameters:

- Total imbalance: columns with label “before / after handover” display data according relation BRP-SBRP

- Show imbalances: whether report data SBRP or SBRP+BRP

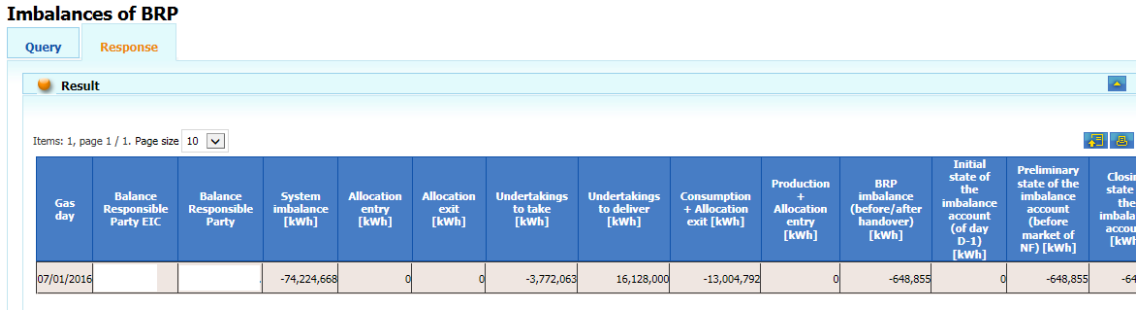


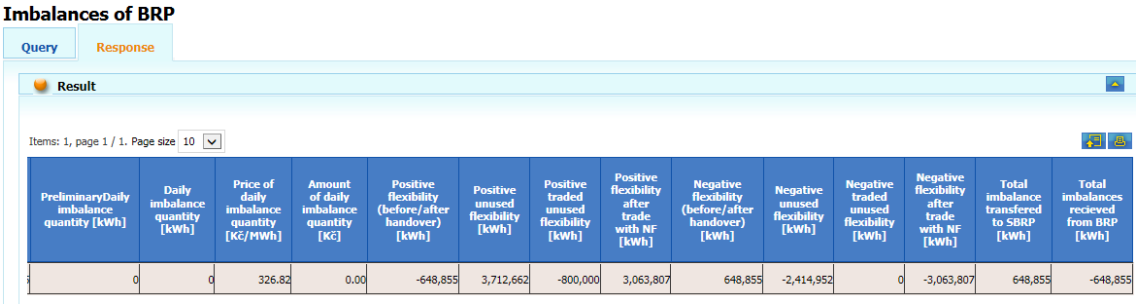
Report contains the following data for all versions:

- Gas day
- EIC of the subject of settlement
- Inputs for calculation of imbalances – allocation on input and output, obligation to supply and take, production and consumption
- Imbalance of BRP

Report contains the following data for daily version extra columns:

- Value of the imbalance account (Preliminary, Closing)
- Imbalance Quantity (Preliminary daily, daily)
- Price for imbalance quantity
- Amount for imbalance quantity
- Positive flexibility (before and after Unused Flexibility Market, unused, traded)
- Negative flexibility (before and after Unused Flexibility Market, unused, traded)



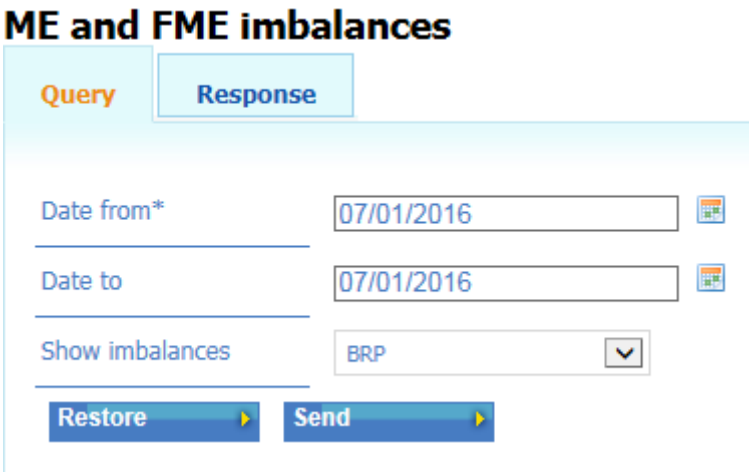


Report ME and FME imbalances

The report displays imbalances and imbalance quantity across version.

Input parameters:

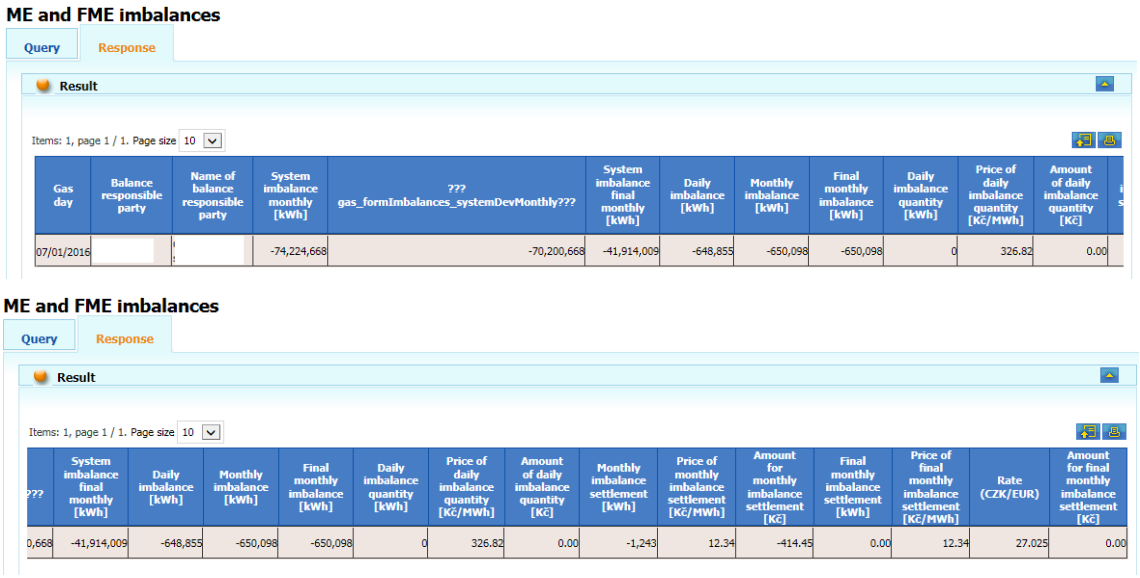
- Show imbalances: whether report data SBRP or SBRP+BRP



Report contains the following data:

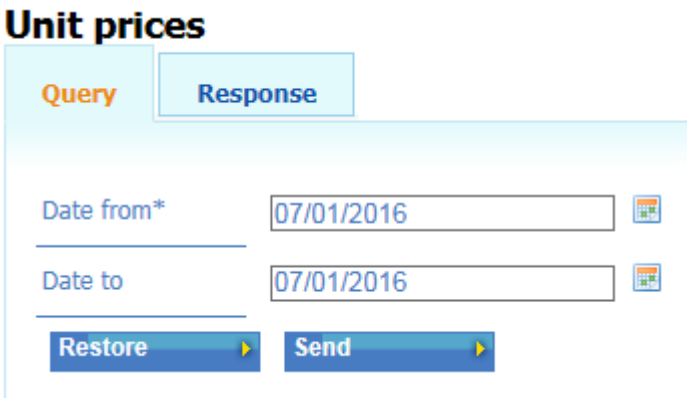
- Gas day

- EIC of the subject of settlement
- System imbalance (daily, monthly, final monthly)
- Imbalance of BRP (daily, monthly, final monthly)
- Imbalance quantity (daily, monthly, final monthly)
- Amount imbalance quantity (daily, monthly, final monthly)
- Unit price (daily, monthly and final monthly)



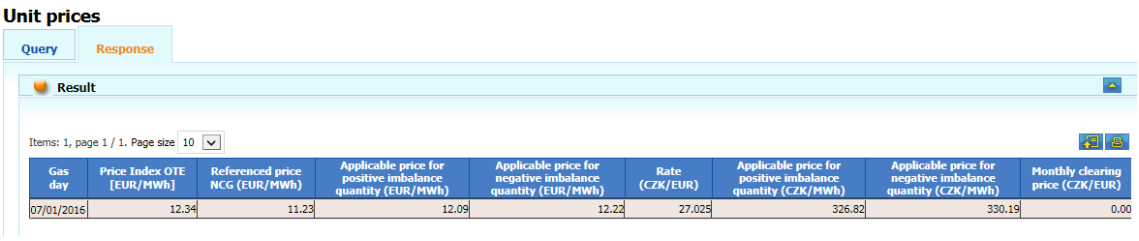
Report Unit prices

The report displays unit prices for entered period.



Report contains the following data:

- Gas day
- Price Index OTE
- Referenced price NCG
- Applicable price for positive imbalance (EUR, CZK)
- Applicable price for negative imbalance (EUR, CZK)
- Rate
- Monthly clearing price



Gas day	Price Index OTE [EUR/MWh]	Referenced price NCG (EUR/MWh)	Applicable price for positive imbalance quantity (EUR/MWh)	Applicable price for negative imbalance quantity (EUR/MWh)	Rate (CZK/EUR)	Applicable price for positive imbalance quantity (CZK/MWh)	Applicable price for negative imbalance quantity (CZK/MWh)	Monthly clearing price (CZK/EUR)
07/01/2016	12.34	11.23	12.09	12.22	27.025	326.82	330.19	0.00

Report on Difference of allocations and nominations on BDS, CGD and UGS

Differences of allocations and nomination at special points are also evaluated per individual shipper codes within settlement of imbalances. The evaluation applies to border delivery stations (nominations and allocations of transfer "T"), cross-border gas ducts (nominations and allocations of distribution "D") and underground gas storages (nominations and allocations of storage "S"). The following data are displayed:

- Gas day
- Subject of settlement (EIC)
- PDT (EIC)
- Shipper code of counterparty internal
- Shipper code of counterparty external
- Allocation of T, D, S Entry
- Allocation of T, D, S Exit
- Nomination of T, D, S Entry
- Nomination of T, D, S Exit
- Difference of allocations and nominations entry
- Difference of allocations and nominations exit

- Allocation Scheme Entry
- Allocation Scheme Exit

Differences alocat/nomint at CGD, BDS and UGS

Query | Response

Result

Items: 1, page 1 / 1. Page size 10

Gas day	Subject of settlement	PDT EIC	Internal shipper code	External shipper code	Allocation entry [kWh]	Allocation exit [kWh]	Obligation entry [kWh]	Obligation exit [kWh]	Difference allocat/nomint Entry [kWh]	Difference allocat/nomint Exit [kWh]	Allocation schema entry	Allocation schema exit
01/01/2010	[redacted]	[redacted]	[redacted]	[redacted]	0	0	0	0	0	0		

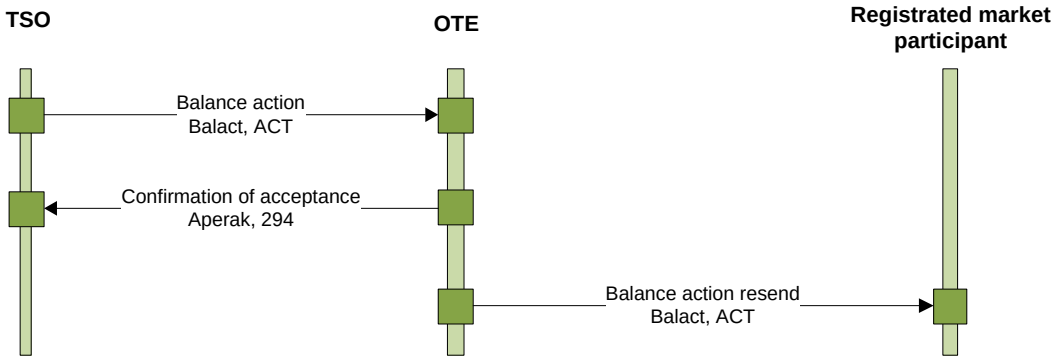
9.3 TSO's account and balancing action

TSO's account serves to the TSO for monitoring system status. The account is changing due to financial settlement of daily imbalance quantities of the balance responsible parties or due to the balance action realization, that is executed by TSO.

When the balance action has the form of the gas purchase or sale on organized market, any of market marticipant can react on the bid. This is not the case, when the balance action has the form of balancing service.

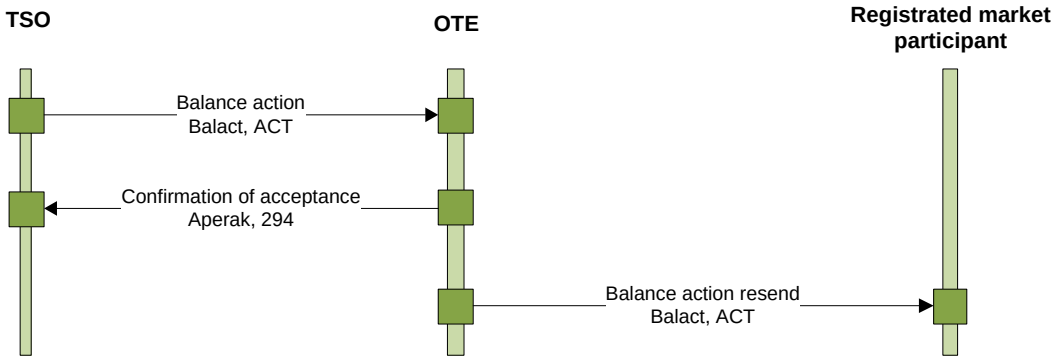
See the communication scenario bellow:

A. Balance actin preparation



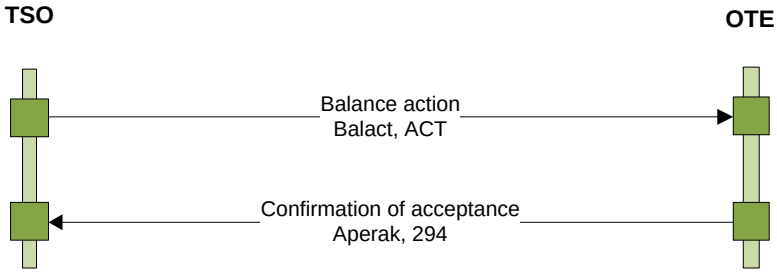
In case of preparation, the message carriing balanace action data is sent from the TSO to the markte operator, where it is stored. After that the information is sent to all BRPs in the form of Edigas 4.0 message and is published on the OTE bulletin.

B. Cancel of balance action preparation



In case of preparation cancel, the message carriing balanace action data is sent from the TSO to the markte operator, where it is stored. After that the information is sent to all BRPs in the form of Edigas 4.0 message and is published on the OTE bulletin.

C. Balance action realisation



In case of preparation, the message carriing balanace action data is sent from the TSO to the markte operator, where it is stored and published on the OTE public web.

10 Metered data processing

This chapter provides basic information about the system area of the CDS which provides for aggregation of preliminary and metered data for the individual suppliers to registered authorised customers (level 1 aggregation) and their forwarding to IS OTE. It is used for better information of external entities about calculations in the CDS system and available outputs of the calculations.

Diagram of aggregation is presented by the below figure:

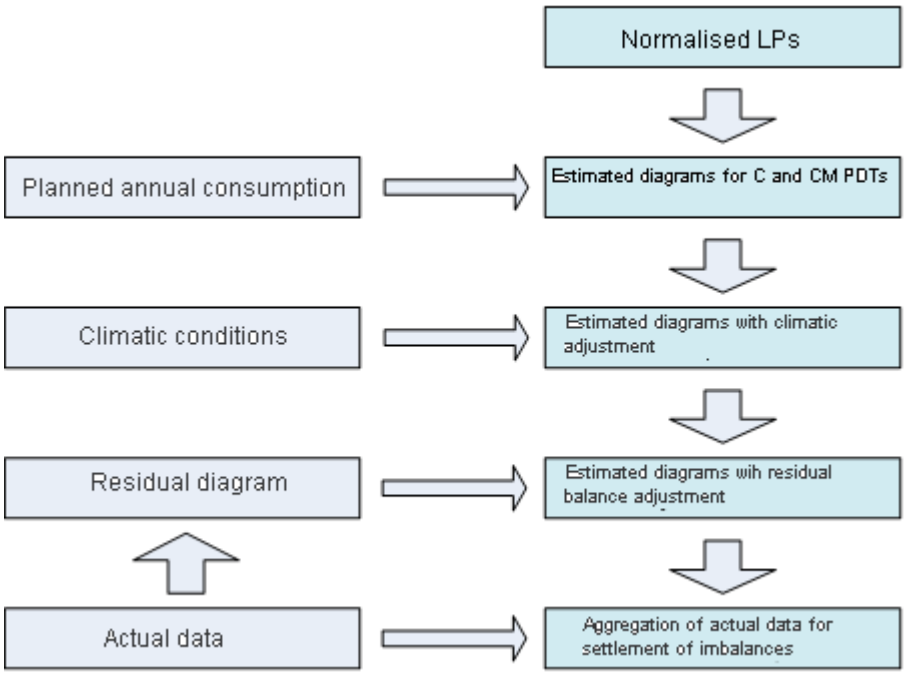


Figure 53 – Diagram of the aggregation process

The following versions of the aggregated data are calculated in the CDS system:

- **Daily version**
  Preliminary metering data sent on daily basis are processed within daily aggregation. The calculation will work with the values in kWh; if the data is not available in kWh, they will be calculated using the value of combustible heat per the respective DS/TS and day.

- **Monthly version**
  Metered data sent for the previous month on the daily basis are processed within monthly aggregation. Calculation works with values in kWh.

- **Final monthly version**
  Metered data including correction data sent for the previous month on the daily basis are processed within final monthly aggregation. Calculation works with values in kWh.

Each run of aggregation works with the data versions valid as of the moment of beginning of the calculation.

Calculation of tolerance for SS:

Calculation of aggregation includes calculation of tolerances for the individual SS according to the formula provided in Attachment 5 to the Decree no. 365/2009 Coll. Tolerance is calculated on the level of the individual PDT's and it is re-distributed according to the SS responsible for imbalance for the respective PDT.

10.1 Input data for aggregation

The below section presents an overview of the individual types of data entered in aggregation. The data are divided by the types of PDT's to which the data are sent via a Gasdat or Alocat message.

Calculation of aggregation works with actual metering data. If they are not available, calculation for a PDT with interval metering uses preliminary data multiplied by the value of combustible heat for the grid and gas day for the purpose of calculation. Combustible heat is sent to the CDS system via a Gasdat message and the product CT 10, CT 20, see chapter 4.1.6 – Combustible heat.

Calculation for a PDT with non-interval metering uses anticipated consumption values calculated from the value of planned annual consumption by application of LP methodology.

Input data differ according to the type of PDT and the metering type:

PDT of the Production type (1001):

M. type	Product	Description
A, B	QI11/AI11	Production – interval metering
A, B	QI12/AI12	Consumption – interval metering
B	AI91/AI92	Substitute values – Production / consumption (from metered values)

Table 90 – Input data for aggregation - Production (1001)

For trading days beginning January 1, 2011, the PDT type 1001 is replaced with PDT 1011 and the data are uploaded from the allocated profiles.

M. type	Product	Description
A	QL11/AL11	Allocation of production
A	QL12/AL12	Allocation of consumption

Table 91 – Input data for aggregation - Production (1011)

PDT of the Consumption type (1002):

M. type	Product	Description
A, B	QI12/AI12	Consumption – interval metering
B	AI91/AI92	Substitute values – Production / consumption (from metered values)
C, CM	ES10	Planned annual consumption
CM	AN12	Consumed energy (non-interval metering)

Table 92 – Input data for aggregation - Consumption (1002)

PDT of the type Virtual PDT for grid (1005):

M. type	Product	Description
non-def.	QC10/AC10	Change of accumulation
non-def.	LP10/LR10	Preliminary / metered losses

Table 93 – Input data for aggregation - Grid (1005)

PDT of the type Point of transfer for DS/TS (1023) and Point of transfer TS/DS (1025):

M. type	Product	Description
A, B	QI11/AI11	Input in the system
A, B	QI12/AI12	Output from the system

Table 94 – Input data for aggregation – Point of transfer

PDT of the type Underground gas storage (1022) and Border point (BDS, CGD) (1024):

M. type	Product	Description
A, B	Z01, Z02	Allocation of production – input in the system (kWh)

A, B	Z01, Z03	Allocation of consumption – output from the system

Table 95 – Input data for aggregation – Underground gas storage, border point

* - In case of allocations, the product is not designated with a unique identifier; a combination of Time-series and Direction data is used (see chapter Reception of metered data, Alocat message).

PDT of the type Virtual PDT of LP (1099):

M. type	Product	Description
non-def.	DN9y	LP values for TO 9, LP class y
non-def.	JK9y	Correction coefficient for temperature for TO 9, LP class y
non-def.	DK9y	Re-calculated LP values for TO 9, LP class y

Table 96 – Input data for aggregation - LP (1099)

Note: for LP classes, the value of y is in the range of 1-9, while for classes 10-12 the value range is a-c

Application of the LP methodology uses coefficients stored on virtual PDT of LP (1099). A separate virtual PDT where calculation coefficients are stored is generated for each LP class in the CDS system.

Determination of substitute values

If neither metered, nor preliminary values are available for a PDT with metering type B, the values are determined by an alternative method. The calculation algorithm is defined by the Decree no. 365/2009 Coll., Section 46, Item 7. If the history is not sufficient, the substitute value is determined as zero.

Virtual type of metering CM

If a PDT with non-interval metering is registered in the CDS system and non-interval metering data (meter reading) for one calendar month are sent for such PDT, the PDT will be evaluated as a PDT with virtual metering type CM. In that case, all steps of aggregation are the same as in the case of a PDT with the registered metering type CM.

From July 1, 2016 will not be performed determination of virtual type of metering CM. PDT will be further process as a metering type C.

From July 1, 2016 will be PDT with metering type CM calculated on a monthly and final monthly version as PDT with metering type C.

10.2 Output data of aggregation

Data from the individual PDT's are aggregated on virtual PDT's on the levels for SS, for the grid and total for SS. The individual components of aggregated data may be acquired using requests specified in chapter 5 – Provision of data upon request of an external user.

10.2.1 Aggregation for SS and grid

Aggregation for SS and grid works with all PDT's of the respective grid that have been assigned (either explicitly or implicitly) a SS. A virtual PDT for SS and grid (PDT type 1007) on which aggregated data are stored is generated for every SS that has at least one PDT in the grid. Overview of data is presented by the below table:

Product	Description
A81	Aggregated values – production (for SS)
A82	Aggregated values – consumption (for SS)
ASA1	Aggregated metered value, supplier, metering A, production
ASA2	Aggregated metered value, supplier, metering A, consumption
ASA4	Aggregated metered value, supplier, metering A, consumption of production plants
ASB1	Aggregated metered value, supplier, metering B, production
ASB2	Aggregated metered value, supplier, metering B, consumption
ASB4	Aggregated metered value, supplier, metering B, consumption of production plants
ASC1	Aggregated metered value, supplier, metering C, production
ASC2	Aggregated metered value, supplier, metering C, consumption
ASC4	Aggregated metered value, supplier, metering C, consumption of production plants
ASD2	Aggregated metered value, supplier, metering CM, consumption
ASD4	Aggregated metered value, supplier, metering CM, consumption of production plants
ASE1	Allocation on input
ASE2	Allocation on output
SN9y	Group LP non-corrected for TO 9, LP class y, supplier and grid
SK9y	Group LP corrected for TO 9, LP class y, supplier and grid

Table 97 – Aggregation for SS and grid

10.2.2 Aggregation for grid

Aggregation for grid works with all PDT's of the respective grid that have assigned a SS. A virtual PDT for grid (PDT type 1005) on which aggregated data are stored is generated for every grid in the respective grid. Overview of data is presented by the below table:

Product	Description
ASA1	Aggregated metered value, grid, metering A, production
ASA2	Aggregated metered value, grid, metering A, consumption

ASA4	Aggregated metered value, grid, metering A, consumption of production plants
ASB1	Aggregated metered value, grid, metering B, production
ASB2	Aggregated metered value, grid, metering B, consumption
ASB4	Aggregated metered value, grid, metering B, consumption of production plants
ASC1	Aggregated metered value, grid, metering C, production
ASC2	Aggregated metered value, grid, metering C, consumption
ASC4	Aggregated metered value, grid, metering C, consumption of production plants
ASD2	Aggregated metered value, grid, metering CM, consumption
ASD4	Aggregated metered value, grid, metering CM, consumption of production plants
ASE1	Allocation on input
ASE2	Allocation on output
A3A1	Aggregated metered value, supplier, metering A, production of points of handover
A3A2	Aggregated metered value, supplier, metering A, consumption of points of handover
A3B1	Aggregated metered value, supplier, metering B, production of points of handover
A3B2	Aggregated metered value, supplier, metering B, consumption of points of handover
A3C1	Aggregated metered value, supplier, metering C, production of points of handover
A3C2	Aggregated metered value, supplier, metering C, consumption of points of handover
AI12	Own losses
LP10	Planned losses
SN9y	Group LP non-corrected for TO 9, LP class y and grid
SK9y	Group LP corrected for TO 9, LP class y and grid
J42	Calculated residual profile of DS – consumption
J50	Correction coefficient for residual balance of DS
A82	Aggregated values – consumption (for DS)

Table 98 – Aggregation grid

Determination of losses in DS:

The procedure of determination of losses in a DS differs according to the type of the grid:

LP – in a grid where the LP methodology is to be applied, losses are determined as a percentage of inputs in the DS.

LDS – in a grid where there are no PDT's with non-interval metering, losses are determined as the difference between inputs and outputs (consumption) in the DS.

Calculation of residual diagram:

The procedure of determination of the residual diagram and its distribution between PDT's with non-interval metering using the LP methodology is described in chapter 6 – Application of load profiles (LP).

10.2.3 Aggregation for SS

The aggregation for SS works with all PDT's with assigned SS. A virtual PDT of the type virtual for SS (PDT type 1004) on which aggregated data for all PDT's of all grids to which the SS is assigned is generated for each SS. Overview of data is presented by the below table:

Product	Description
A81	Aggregated values – production (for SS)
A82	Aggregated values – consumption (for SS)
ASA1	Aggregated metered value, grid, metering A, production
ASA2	Aggregated metered value, grid, metering A, consumption
ASA4	Aggregated metered value, grid, metering A, consumption of production plants
ASB1	Aggregated metered value, grid, metering B, production
ASB2	Aggregated metered value, grid, metering B, consumption
ASB4	Aggregated metered value, grid, metering B, consumption of production plants
ASC1	Aggregated metered value, grid, metering C, production
ASC2	Aggregated metered value, grid, metering C, consumption
ASC4	Aggregated metered value, grid, metering C, consumption of production plants
ASD2	Aggregated metered value, grid, metering CM, consumption
ASD4	Aggregated metered value, grid, metering CM, consumption of production plants
ASE1	Allocation on input
ASE2	Allocation on output
AI12	Own losses
SN9y	Group LP non-corrected for TO 9, LP class y and grid
SK9y	Group LP corrected for TO 9, LP class y and grid

Table 99 – Aggregation of SS

11 Clearing

The clearing process provides for en masse retroactive comparison of the value of planned annual consumption entered in the settlement of imbalances based on the planned annual consumption and application of the LP methodology, and of the metered value of reading sent to the PDT.

11.1 Management of data processing within clearing

Processing of data within the clearing process is done within the CDS system in a single step only and data processing is launched manually by the personnel of OTE. It's possible to launch Clearing in two versions: monthly version (11) and final monthly version (21).

11.2 Description of the clearing data processing

The calculation in version 11 is done for all PDT's with metering type C consumption, for which meter reading with the date within the respective month has been received and were not cleared yet and which were not assessed as PDT's with the virtual metering type CM according to the rules stipulated in the decree.The calculation in version 21 is done for all PDT's with metering type C consumption, for which meter reading with the date within the respective month has been received or some days before has been received and were not cleared yet and which were not assessed as PDT's with the virtual metering type CM according to the rules stipulated in the decree. Clearing will not process meter readings which has set attribute may occur unauthorized consumption/unauthorized consumption with the date of meter readings on PDT. Calculation could be done both in monthly version which can be proceeded only upon completion of monthly settlement and final monthly version which can be proceeded only upon final monthly settlement for retrospective month.

11.2.1 Calculation of differences for PDT

The meter reading period is divided by intervals of validity of the clearing prices. A separate calculation of the difference between the value from settlement of imbalances and the determined proportional part of the reading is carried out for each interval.

The value of the difference with a positive identifier means that the consumption registered for the respective PDT by aggregation was higher than the metered value. A negative value means that the metered consumption of the PDT was higher than determined by aggregation using the LP methodology.

From July 1, 2016 will be read meter readings from PDT with metering type CM. After read of all meter readings will be excluded PDT meter readings with meter type CM, VCM which have metering date before 1st of July 2016.

11.2.2 Aggregation of differences for SS

Aggregation on the level of the individual SS is done after calculation of differences for the individual PDT's and the individual intervals of validity of the clearing price. Aggregation is done separately for positive and negative differences.

a) Aggregation of positive / negative differences for SS responsible for imbalance on a PDT

Aggregation of differences is done for the individual SS using the following formula:

$$\Delta_{SZ} = \sum \Delta_{OPM\ SZ}$$

Where:

Δ_{SZ} - total difference of SS for the period of the interval of validity of the unified clearing price

$\Delta_{OPM\ SZ}$ - difference of PDT on which the SS accepts responsibility for imbalance

b) Aggregation of positive / negative imbalances for SS responsible for imbalance for the grid

Aggregation of differences is done for the individual SS using the following formula:

$$\Delta_{SZ} = \sum \Delta_{OPM\ SZ} - \sum \Delta_{OPM\ sit}$$

Where:

Δ_{SZ} - total difference of SS for the period of the interval of validity of the unified clearing price

$\Delta_{OPM\ SZ}$ - difference of PDT on which the SS accepts responsibility for imbalance

$\Delta_{OPM\ sit}$ - difference of PDT's in the network for which the SS accepts responsibility for imbalance

(note: differences for the PDT's are accounted for with the opposite identifier, see the formula)

11.2.3 Requests for clearing results

The individual values of differences may be acquired using requests for the respective Gasdat message, see chapter 4.1.9 – Requests for Gasdat data. The individual elements are represented by the following products in the output report:

- CL11 - Clearing – positive imbalance of PDT

This represents an excess of the anticipated consumption registered for the PDT during aggregation due to application of the LP methodology against metered values. This value will be deducted for the SS responsible for imbalance on the PDT and added with the opposite identifier to the SS responsible for imbalance of the grid.

- CL12 - Clearing – negative imbalance of PDT

This represents a lack of the anticipated consumption registered for the PDT during aggregation due to application of the LP methodology against metered values. This value will be added to the SS responsible for imbalance on the PDT and deducted with the opposite identifier from the SS responsible for imbalance of the grid.

12 Claims

12.1 Workflow of claims proceedings in CS OTE

12.1.1 Basic principles of claim processing

The claims module supports entering of claim into the system by the means of following communication channels:

- Web interface
- Automated communication – by the message in the CDSGASCLAIM format
- Entering through the interface for the OTE users

The defined structure of the claim consists of the following parts:

- Submitter – participant who submitted the claim. Claim can be submitted also by the market operator.
- Solver – participant who is assigned to solve the claim. This can be the market operator (in general), certain technical OTE department or other market participant.
- Text – text describing the problem, purpose of the claim
- Status – status which describes the actual processing of the claim
- Reference to the objects – reference to the various types of objects, for example a message or a PDT

(See below the chapter Structure of claim)

If the participant is submitting a claim via automatic communication system, he can directly enter a different market participant as the concerned party. This method can be used in the case when the participant directly identifies, that the problem is on the side of other participant and the Market operator would solve the claim just by assigning it to this participant. An example of this situation is a problem with data for grid usage invoicing sent by a distributor. In this case the supplier can enter the DSO directly as a solver. The CS OTE automatically hands the claim over to the DSO. The DSO will then reply to the claim by means of the system.

On any action or change of a claim, a copy of the claim is sent to the submitter, the solver and OTE.

The claim goes through various statuses during its processing. The system enables transition between statuses according to the given phase diagram- see below the chapter Claim status.

12.1.2 Overview of communication scenarios

As a part of automated communication for the claim proceedings, following communication scenarios are supported:

- Entering of claim
- Request for claims

Following message codes are used in the above mentioned scenarios:

Claim data

Message	Msg code
Entering / actualization of claim	GC1
Acceptance/error in sent claim	GC2
Copy of claim	GC3

Table 100 – Claim data

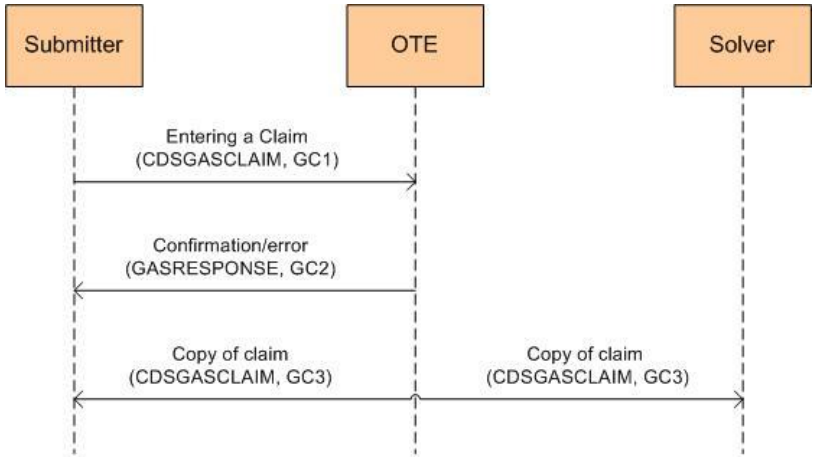


Figure 54 - Entering and actualization of claim scenario

Request for claims

Message	Msg code
Request for claims	GC4
Acceptance/error in request of claim	GC5
Copy of claim	GC6

Table 101 – Request for claims

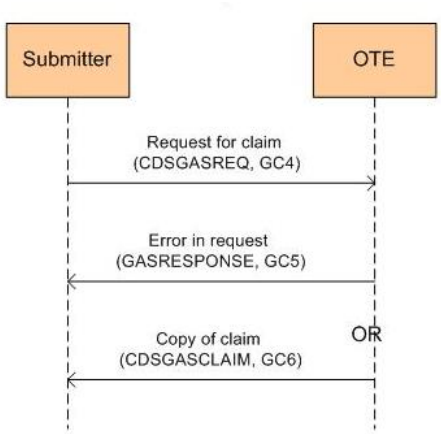


Figure 55 - Scenario – request for claims

Data of claims are handed over by a XML structure CDSGASCLAIM.

Request for claims are supported by the CDSGASREQ structure. The structure is enhanced by new items for specification of request for claims. It is possible to send the request for a specific claim number as well as to specify the request according to the claim method (public, private, for processing claims) or the claim status.

Response data is supported by the GASRESPONSE message.

Please find detailed information about the XML structures in the document D1.4.2G XML formats published on the OTE web site.

12.1.3 Claim status

The claim has following statuses during his life cycle:

Status	Meaning	Description
NEW	New	After a claim is entered into the system by the submitter.
PROC	In processing	The claim is accepted for solving by the solver and is in processing.
AUTA	Author action	The solver asked for additional information from submitter. The proceedings wait for the action of the submitter.
CLOSED	Closed	The claim is closed – solved by the solver. The solver may close the claim assigned to him directly in one step or at first he can accept the claim for solving and then close it in a following step.
CONF	Confirmed	The submitter confirmed that the provided solution or rejection is accepted. The submitter may also confirm a new claim entered by him (if he does not require solution any more).
REJ	Rejected	The solver rejected to solve the claim.
OBS	Obsolete	Claims will obtain this status when they do not change for a long time

Table 102 – Claim status

The claim status changes automatically based on the performed action. The status cannot be entered directly by the communication participant.

When changing the claim, the participant performs one of the allowed actions. Stating the action is mandatory when performing any change of the claim. On the other hand, when entering a new claim, it is not allowed to state any action.

Action	Meaning	Description
MODIFY	Modify	Change of some claim attributes. It is allowed to change only following attributes: - Attribute stating whether the claim is public or private. - Addition of a reference to another object. - Addition of an attachment The claim stays in the same status. The only exception is

		the status “Author action”. In this case the action “Modify” transfers the claim back to the Solver (to status “In processing”)
REPLY	Reply	Addition of a reply text into the claim. The action does not change the status of the claim.
ACCEPT	Accept the claim for processing	The solver accepts the claim for solving and works on the solution. The claim is in the status “In processing”.
CLOSE	Close	The solver closes the processing of the claim.
CONFIRM	Confirm	The submitter confirms provided solution or rejection. The submitter may also perform this action on the new claim when not requiring any solution.
REJECT	Reject	The solver rejects to accept the claim for solving.
ASSIGN	Assign solver	This action can be carried out only by OTE when assigning the solver to the claim.

Table 103 – Claim actions

A text description or a reaction can be added when entering any action.

The claim life cycle is represented by the following state diagram.

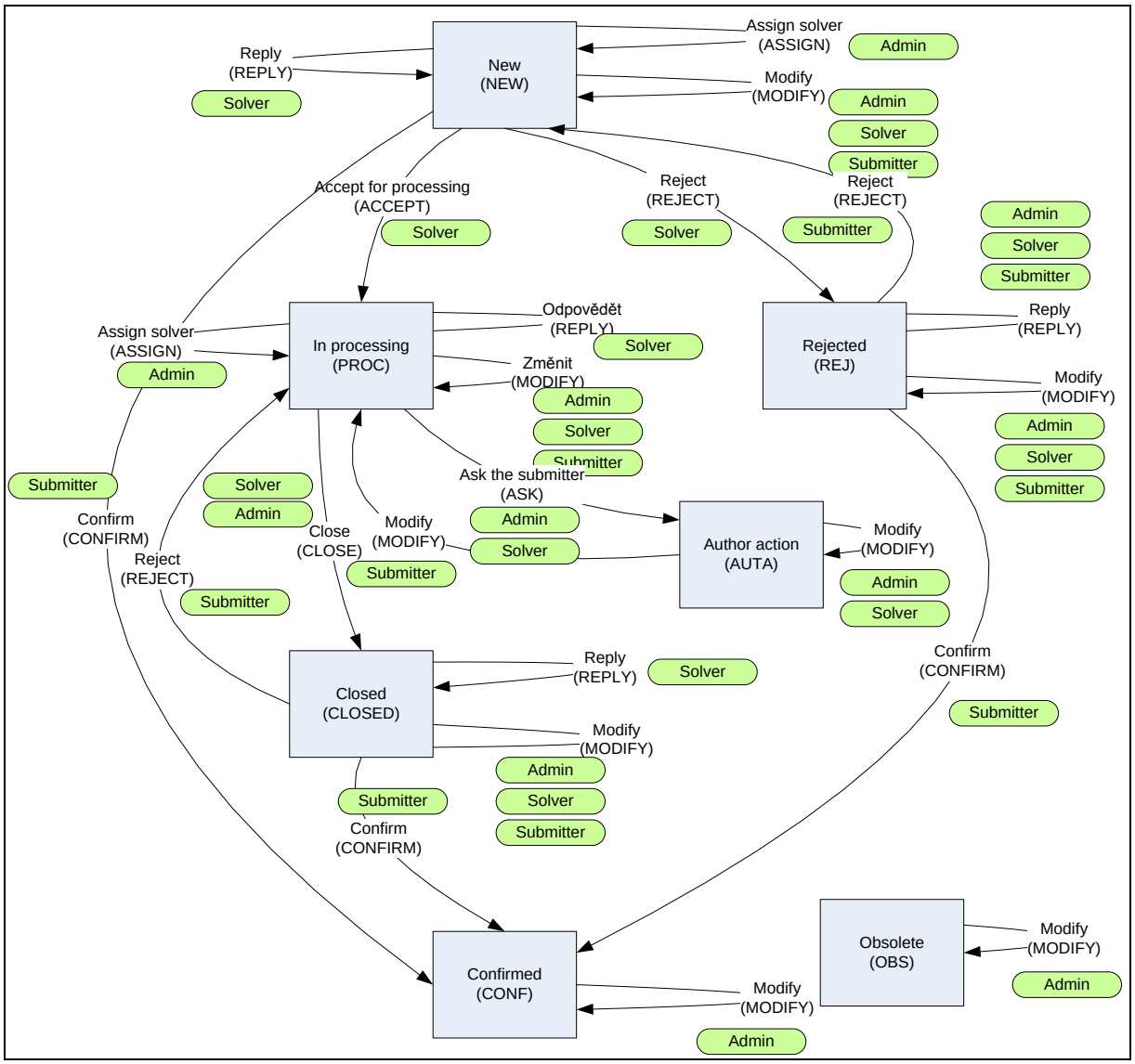


Figure 56 - The claim life cycle

12.1.4 Claim structure

The claim has the structure described in following tables.

Header of claim

Field	Description
Claim id	Id assigned by CS OTE
Claim type	The claim type according to its content. It is chosen from the given types-list.
Activity	Specifies the activity more closely – i.e. whether it is the claim, request for change, request for information or an OTE message.
Solver	The participant assigned to claim processing.
Submitter	The participant who entered the claim.

Date and time of entrance	Date and time of claim entrance
Attribute of public claim	States whether the claim is public (and as such it is displayed to all other participants) or private.
Status	The claim status (see the chapter 10.1.3. Claim status)
Subject	Short text – claim subject.
Category of the data	Category of claimed data – data or results – this attribute is relevant only for some processes related to organized trading. It is only informative attribute with no direct impact on the claims proceedings.

Table 104 – Claim header

Claim text

Field	Description
Text	Text describing the claim.

Table 105 – Claim text

Referenced objects

Field	Description
Object type	Type of the referenced object – e.g. PDT, message id, block market product id, date of trading session
Object key	Id of referenced object (e.g. EIC)

Table 106 – Refferenced objects

There may be several referenced objects in one claim.

Attachments

Field	Description
File name	Name of the attached file
File type	Type of the attached file (doc, txt, jpg etc.)
Attachment – file	The content of the file. In automated communication message the file must be Base64 encrypted.

Table 107 – Claim - attechements

There may be several attachments in one claim

Actions

Field	Description
Action type	Action performed on the claim – see 10.1.3. Claim status
Action id	The order of the action in the claim.
Date and time	Date and time of the action
Text	Text of addition added by the participant who performs the action. (e.g. reply, question, provided solution)

Table 108 – Claim - actions

12.1.5 Web interface

The web interface can be used for claim submission, editing and viewing. As opposed to most of the functionalities described in this document, the claim forms are not available via the CDS menu, but via a stand-alone **Claims** menu.

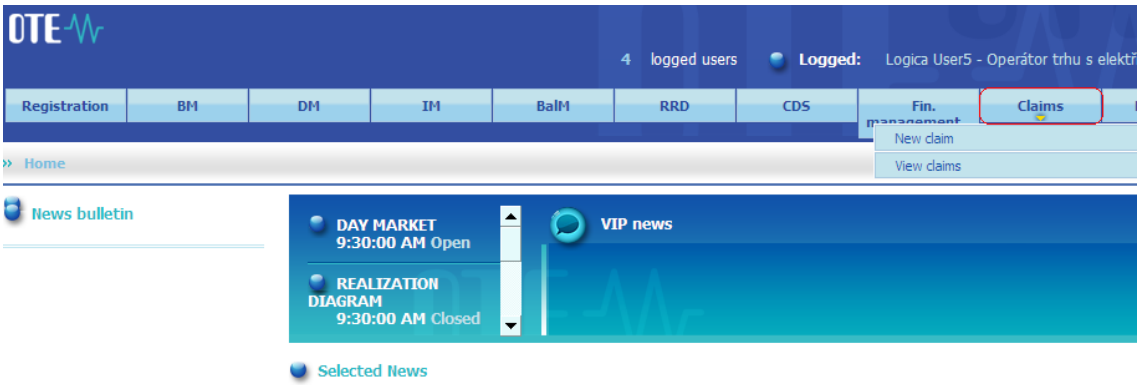


Figure 57 Claims Menu

New claims are submitted via a form accessible via the **Claims/New Claim** menu item.

12.1.5.1 Claim input

For the input of the claim the “New claim” tab is used.

The claim is submitted in the Data tab.

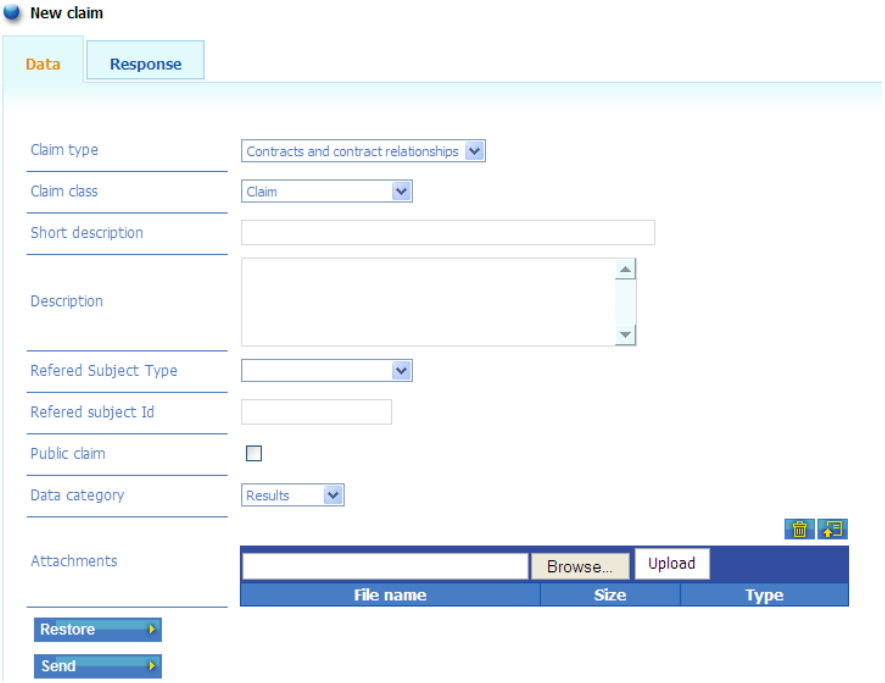


Figure 58 - Entering a new claim

On the screen the following items can be filled: Claim type, Claim kind, Short description (mandatory), Description, Reference object type, Reference object ID, Public claim, Data category, Attachment.

The claim will be submitted by the “Send ” button.

12.1.5.2 Overview of claims

Existing claims can be displayed via the **Claim/View Claims** menu item. The user enters selection parameters in the **Query** tab.

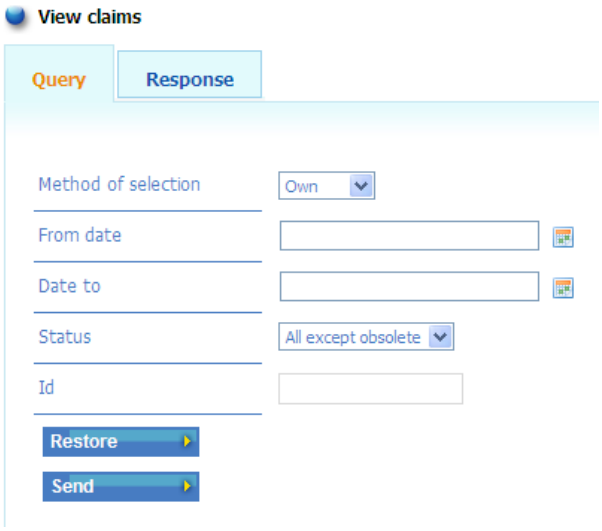


Figure 59 - Input of parameters for the list of claims

For getting a list of claims the parameters must be selected on the first screen:

- Selection method:
  - Own – claim where the participant is the submitter
  - Public – all claims marked as public (even from other participants)
  - Pending – claims where the participants is solver
- Data from – to – date of the claim entering
- State – selection according to the actual claim status
- ID – direct selection of the concrete claim

The request is sent by pressing the "Send" button.

A list of claims according to the selected parameters will be displayed in the **Reply** tab.

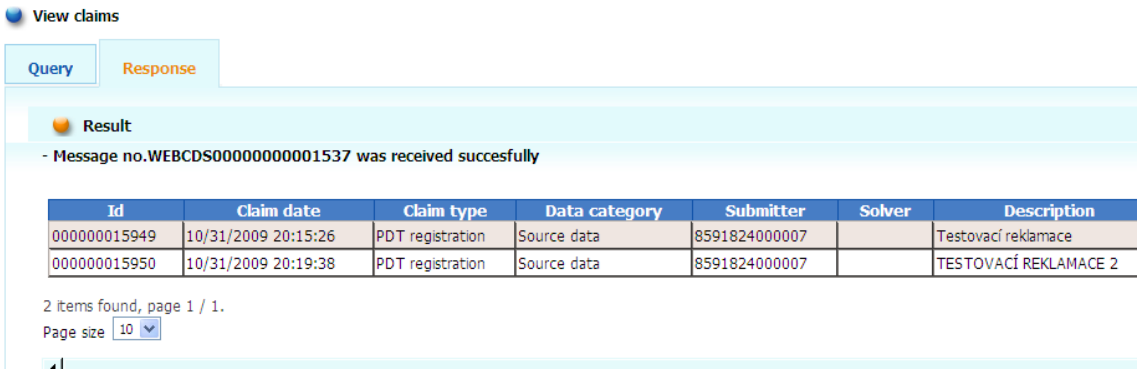


Figure 60 – List of claims

To display the details of a specific claim, just highlight the row with the given claim by clicking on it, and then click on Detail.

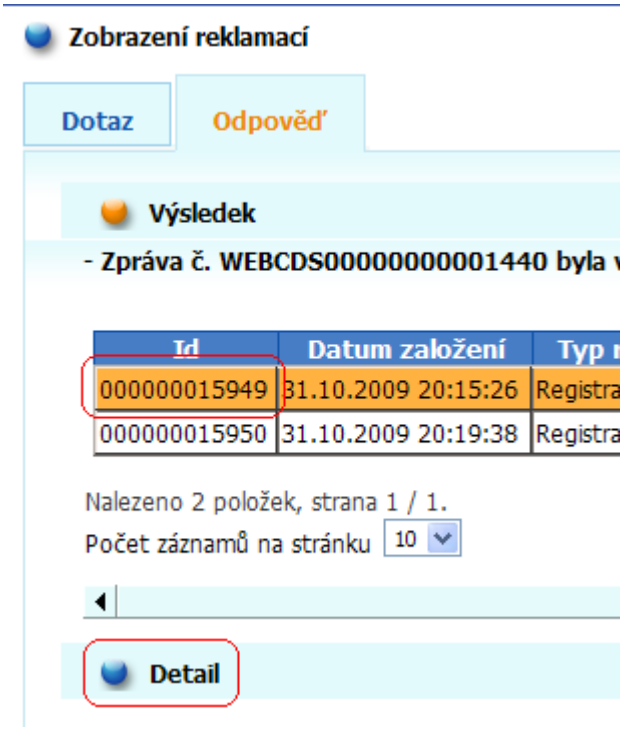


Figure 61 Display of claim details

.

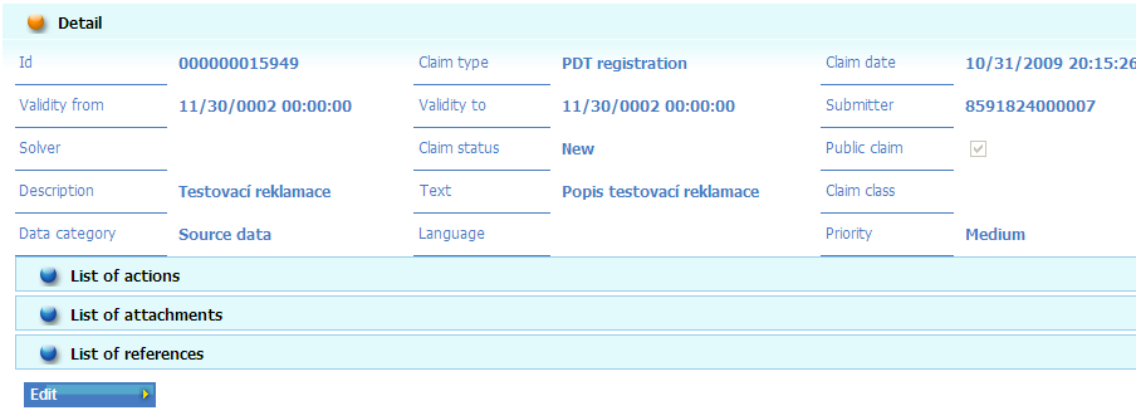


Figure 62 Claim detail

12.1.5.3 Change of claim and performing an action

A claim can be modified by clicking on the "Edit" button once details have been displayed.

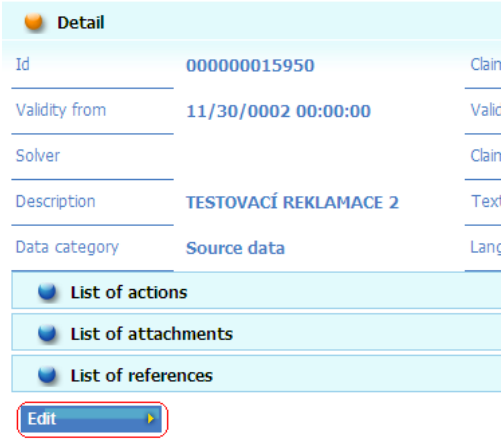


Figure 63 Claim editing

Only some of the attributes can be changed in the displayed claim.

When changing any items, the action which is actually performed must be set . For example, if we only want to make a change to a specific attribute, we use the action “Modify”. If we at the same time want to transit the claim to the following status, we select the respective action.

Example:

The participant entered a claim.

Then the participant decided to make a modification –to change it from public to private. He thus changes the public claim flag to private, sets the action to "Modify" and submits the change.

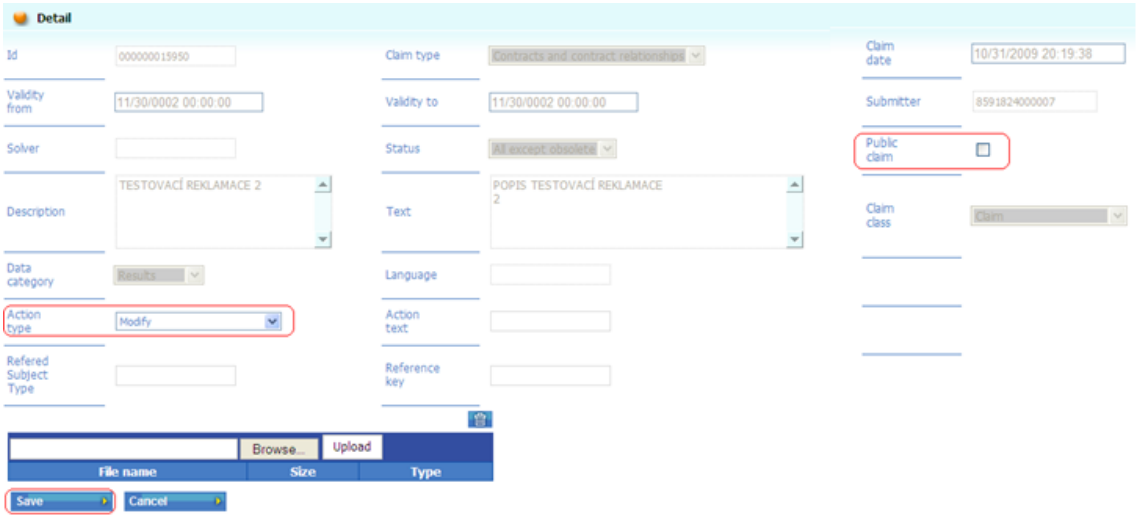


Figure 64 - Claim modification

12.2 Broadcasting of OTE announcements

The functionality of OTE messages (message-board) serves for the broadcasting of the Market participant announcements to the market participants.

The announcement entered by OTE is handed over to the participants by following communication channels:

- It is displayed in the message history page in the WebSIOM part
- It is handed over through automated communication (in the CDSGASCLAIM format)

Data notice boards are displayed on the intro screen following login to CS OTE.

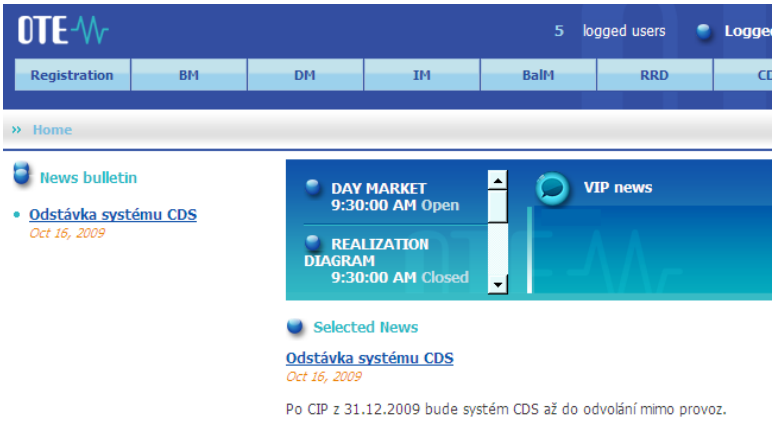


Figure 65 OTE notice board

12.2.1 Communication scenarios

Following scenarios are used for the OTE messages broadcasting:

- Sending of OTE messages
- Request for OTE messages

Sending of OTE messages

Message	Msg code
Sending of OTE message	GC7

Request for OTE messages

Message	Msg code
Request for OTE messages (data of the message board)	GC8
Reception / error in the request data	GC9
Copy of OTE message	GCA

Table 109 – Messages of request for OTE messages

OTE messages are sent in the CDSGASCLAIM format.
Requests are sent by the CDSGASREQ format.
Responses are sent by the GASRESPONSE format.

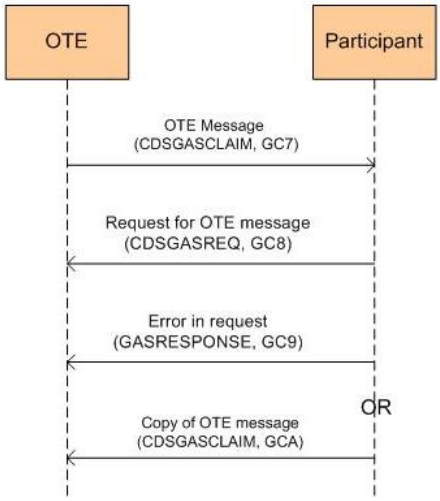


Figure 66 - Communication scenario for the OTE messages

The detailed information about the structure of the XML messages can be found in the document D.1.4.2G XML formats.

13 Rules of sending data in the CDS system

13.1 Schedule of closing of reception of the types of data from external users

Deadlines for data sending into CDS are given by Czech law (ERO notice about gas market rules) and by OTE business terms.

13.2 Substitute solution of sending data to CDS

In case of internal problems of an external entity when sending data (non-availability of all communication channels of the CDS system e.g. due to outage of the intranet of the external entity, etc.) it is possible to send data in alternative ways as in the case of OTE IS. The following sections describe problem solution for external entities for data sending.

13.2.1 Non-functional standard communication channels

13.2.1.1 Substitute connection for standard communication with CDS

The entity should have a back-up Internet connection (mobile or other dial-up connection).

In such a case, the following must be provided for:

- www access – for access to OTE market with HW certificate
- e-mail services – necessary in case the entity sends metered or other data to the CDS system. The entity must also set its e-mail client (MS Outlook or Outlook Express) to support signing and encryption of messages sent to the CDS system (standard setting of the client for reception and sending messages via POP3 and SMTP of the Internet provider) .

If the entity has available information or a file with substitute data, it can send it directly to the CDS system in the XML format, or via selected forms described in the respective chapters, or using e-mail communication.

In case of access only via OTE market, the entity can send the data by means provided for particular area:

- XML file upload
- Via web form

Entering data via web form is recommended only in case of limited number of PDTs.

Data files are not available

In case no files with substitute data are not available and it is not possible to deliver them to CDS operator, it is necessary to proceed as follows:

- DSO prepares a XML file with substiutional data. It should prepare 3 representative files for each month (quarter) – with substitutional data (for weekday, sat, sun). These files must be prepared for the case of breakdown of data collection. It is also possible to send these data at the beginning of each month as a backup for entering by OTE operator.

- In case of a breakdown of data collection but working communication DSO adjust the file with current dates and sends them into CDS.

14 Electronic invoice

Formta CDSGASINVOICE is used for gas electronic invoice. The messages in this format are used for

- Sending of invoice and budget billing request for regulated services that are sent by the distributor to gas supplier through CDS
- Invoice for OTE Services sent from OTE to registred market participants

Due to need of transferring of electronic invoice delivery notification the new scenarion is introduced: „sending of electronic invoice delivery notification“

14.1 Communication and security principles

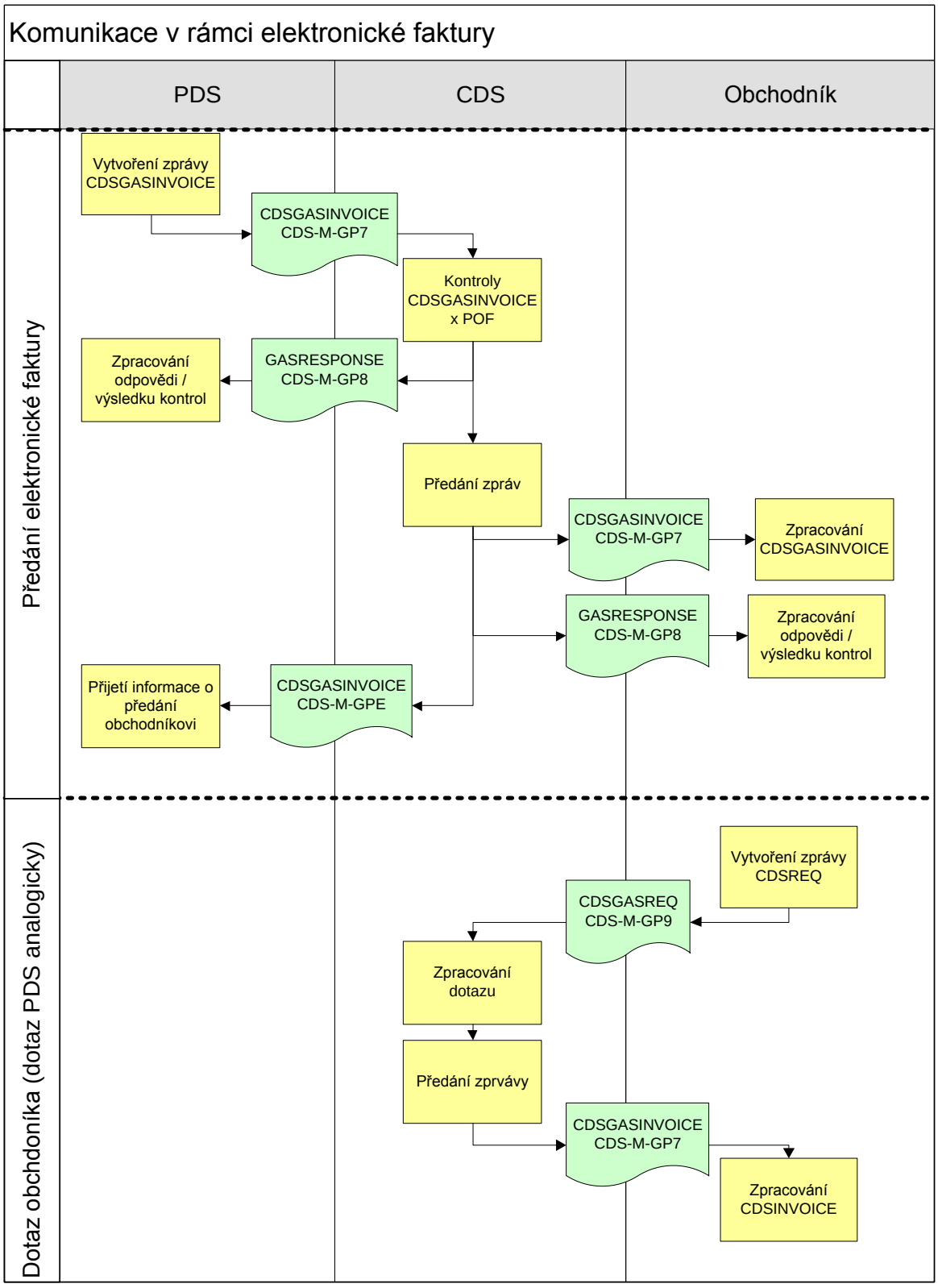
14.1.1 Data Exchange principles

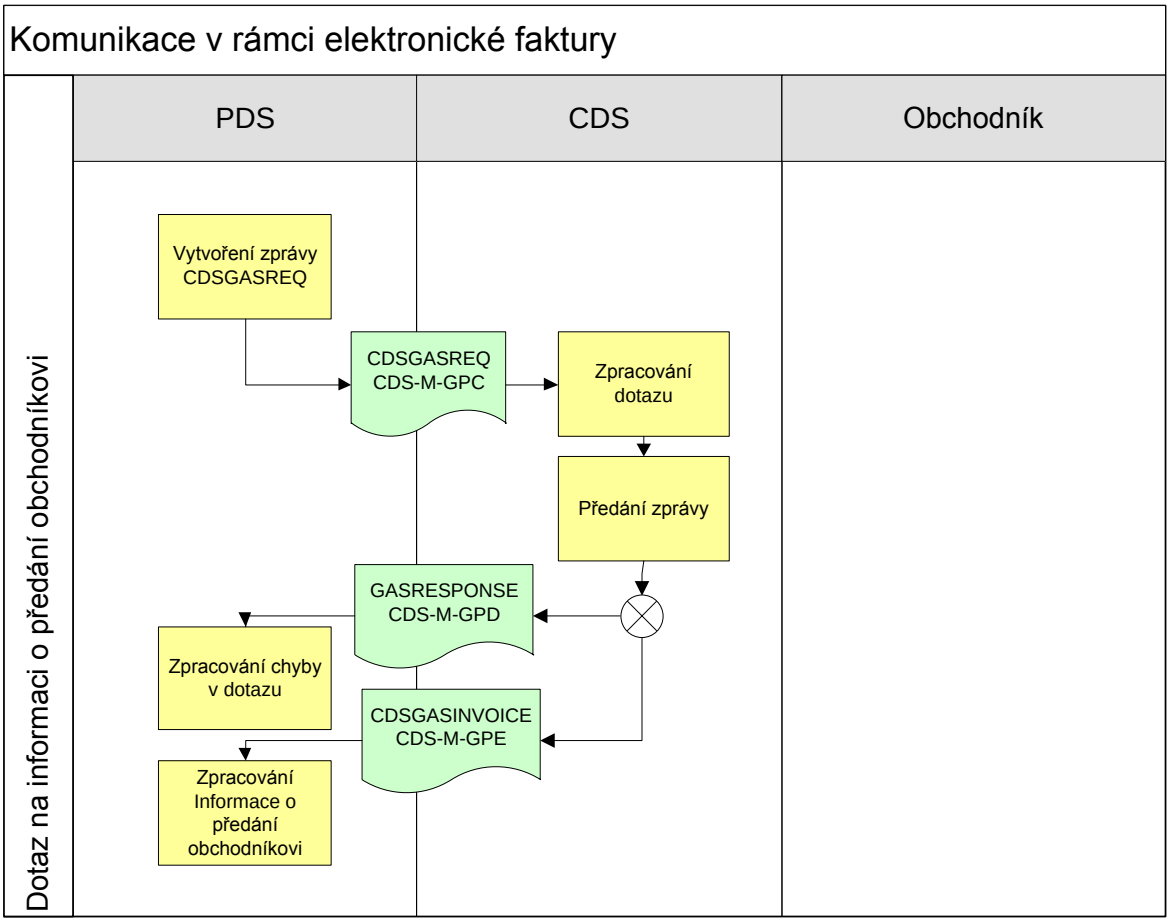
Data exchange of electronic invoice is ensured by the bellow described scheme.

During the tranfer is the electronic invoice message not altered by the CDS any way, in all cases it is transferred in the original form, in which it was sent by the DSO, including the electronic signature of the sender. This principle is valid for hte automated data transfer when the electronic invoice is sent as well as in the response to the request for electronic invoice.

During transfer of the electronic invoice and corresponding messages following msg codes are used:

Msg code	Description	Source	Target
GP7	Electronic invoice	DSO CDS	CDS RMP
GP8	Confimation of recept / error in the electronic invoice message	CDS	DSO RMP
GP9	Request for electronic invoice	DSO RMP	CDS
GPA	Error in request of electronic invoice	CDS	PDS RMP
GPB	Electronic (XML) invoice of OTE Elektronická (XML) faktura OTE	OTE	RMP
GPC	Request for electronic invoice delivery notification	DSO	OTE
GPD	Error in request for electronic invoice delivery notification	OTE	DSO
GPE	Electronic invoice delivery notification	OTE	DSO


Komunikace v rámci elektronické faktury
PDS
CDS
Obchodník
Předání elektronické faktury
Vytvoření zprávy CDSGASINVOICE
CDSGASINVOICE CDS-M-GP7
Kontroly CDSGASINVOICE x POF
Zpracování odpovědi / výsledku kontrol
GASRESPONSE CDS-M-GP8
Předání zpráv
CDSGASINVOICE CDS-M-GP7
Zpracování CDSGASINVOICE
GASRESPONSE CDS-M-GP8
Zpracování odpovědi / výsledku kontrol
Přijetí informace o předání obchodníkovi
CDSGASINVOICE CDS-M-GPE
Dotaz obchdoníka (dotaz PDS analogicky)
Vytvoření zprávy CDSREQ
CDSGASREQ CDS-M-GP9
Zpracování dotazu
Předání zprvávy
CDSGASINVOICE CDS-M-GP7
Zpracování CDSINVOICE



14.1.2 Filling of attributes of message header

In the message header, there are attributes filled by the following principle:

Element	Meaning	Filling in CDSGASINVOICE
SenderIdentification	Sender	Always the issuer of the invoice ie. DSO or OTE in case of invoice for OTE services
ReceiverIdentification	Receiver	Receiver of invoice – gas supplier
DataProvider	Data provider	Always OTE

This filling of the header attributes is retained during all transfers of CDSGASINVOICE message – it meanes in the cases of sending from DSO to CDS, CDS to supplier as well as response to the participant‘s request.

The reason for this principle is the requirement to retain the original of message filling sent by PDS, including the DSO electronic signature.

Electronic invoice delivery notification

Tax point date for the correction of credit note is driven by the date of delivery. (See the § 42 par. 3 par. b) Czech VAT act)

The OTE conditions say that the delivery of the document is in this case given the hand over of the data from the CS OTE to the communication interface of the participant (ie. The web service interface or email). For this reason the DSO is informed by the message, that is sent from CS OTE after the sending of the message to the communication channel of the supplier. For this notification the CDSINVOICE message is used, where new element on the top level is created and that containes:

- Doc-id (document id)
- Doc-type (document type)
- Doc-atn (number of the attachment in case the message is divided)
- Doc-ver (Document version)
- Delivery date

DocumentEnvelope element is not used in this case.

14.1.3 Electronic signature

The fundamental requirement for the tranfer fot he CDSGASINVOICE messages by the CDS is the preservation for the electronic signature of the original sender (distributor). In the end this means that the message handed over on the output from CDS to supplier is identical in its content, signed by the original signature of the DSO.

At the same time the messages from CDS are signed by the OTE electronic signature as usual.

Principles of electronic signature in CDSGASINVOICE:

- All messages CDSGASINVOICE must be signed by sender's XML signature (sender = DSP) – according to the rules by W3C (http://www.w3.org/TR/xmldsig-core/). Afterwards the messages are converted as any other messages in CDS or analogously without standard signature.
  Use of XML signature enables the message to be converted by HTTPS/SOAP as well by SMTP (e-mail).
-
- Electronic invoice in XML (CDSINVOICE) format has to be accompanied by electronic label created with specail certificate (according to the act no. 227/2000 about electronic signature, as amended by act no. 226/2000, act no. 517/2002, act no. 517/2002 and act no. 440/2004 – for this reason it's not possible to use certificate created by certification authority OTECA). The whole process is necessary because of tax-relevancy and law deductibility of invoice. Other principles of signing remains the same as with any other messages that are sent to CS OTE.

CDSGASINVOICE message with electronic signature is handed over according to following rules:

1. Participant (DSP) creates the message and signs it with XML signature.
2. Participant (DSP) may also sign the message with electronic signature in format PKCS#7 as any other message (so finally the message is signed twice) – this step isn't mandatory, it's enough if the message is signed with XML signature as described in step 1.
3. Participant sends the message to CDS.
4. Message is received in CDS, electronic signature is checked as well as sender's certificate and XML signature.
5. Communication server CDS controls syntax of the message, in case there was discovered mistake in previous steps, server sends warning.
6. If all the controls were successful, communication server forwards the message to application server for following processing.
7. Application server CDS processes the data (executes all the necessary controls) and sends the result back to communication server.
8. Communication server forwards the message to receiver (message includes XML signature), signs it with certificate for electronic signature for OTE and if necessary, encrypts it (in case it's being sent by SMTP). The message is sent to defined address by chosen communication channel.

13. 2 Structure of electronic invoice

13.2.1 Basic features

Message CDSGASINVOICE is designed so it covers all types of documents that are being forwarded between DSP and trader or between OTE and RMPs.

Examples of elementary documents included in CDSGASINVOICE are showed in following table.

Dokument oc-type	Document Type	Note
A01	Aggregated invoice – cover sheet	Aggregated document. Either are attached sectional documents for each PDT or there are blocks specifying PDT items. Could be tax-relevant or not.
A02	Aggregated deposit – cover sheet	
B01	Aggregated invoice – sectional document – proper MODOM	Document is part of unit of documents, where one of them is aggregated and the rest consists of sectional documents. In case aggregated document is tax-relevant, then sectional document isn't and vice versa.
B02	Aggregated invoice – sectional document – proper VOSO	
B03	–Aggregated invoice – sectional document – special MODOM	
B04	Aggregated invoice – sectional document – special VOSO	
B05	Aggregated invoice – sectional document – credit note MODOM	
B06	Aggregated invoice – sectional document – credit note VOSO	

Dokument oc-type	Document Type	Note
B07	Aggregated invoice – sectional document – debit note MODOM	
B08	Aggregated invoice – sectional document – debit note VOSO	
B09	Aggregated invoice – sectional document – final MODOM	
B10	Aggregated invoice – sectional document – final VOSO	
B11	–Aggregated prescription of deposits – sectional document MODOM	
B12	–Aggregated prescription of deposits – sectional document VOSO	
C01	Individual invoice – proper MODOM	Individual document
C02	Individual invoice – proper VOSO	
C03	Individual invoice – special MODOM	
C04	Individual invoice – special VOSO	
C05	Individual invoice – credit note MODOM	
C06	Individual invoice – credit note VOSO	
C07	Individual invoice – debit note MODOM	
C08	Individual invoice – debit note VOSO	
C09	Individual invoice – final MODOM	
C10	Individual invoice – final invoice VOSO	
C11	Individual prescription of deposits MO	
C12	Individual prescription of deposits VOSO	
D01	Incoming payment – cover sheet	Document for incoming payment, tax-relevant
E01	Invoice for services supplied by OTE	Tax-relevant document
E02	Credit note for services supplied by OTE	
E03	Debit note for services supplied by OTE	

Table 3: Types of documentsFollowing rules are applied for the message:

- Documents belonging to the same unit can be sent as:
  a) One message (in case there's not many documents)
  b) Divided into more messages – main document is sent as separate message including number of attachments, other documents are sent in packages as a part of next messages. Recommended size of one message is 5MB (approximately 500-900 sectional documents).
- Documents belonging to the same unit within one message are grouped in element called ***DocumentEnvelope***.
- Type of document is described in attribute ***doc_type*** in XML element Document.
- Each type of document must content information if it's tax-relevant or not (***Document tax-relevancy***).
- In case of tax-relevant document attribute ***Document doc-id*** serves also as no of document for tax purposes. Doc-id attribute is filled without leading zero.

- It's also distinguished if it's main or sectional document (***Document doc-level***).
- If it's main document, attribute ***Document doc-atn*** contains number of attachments, if it's sectional document, it contains serial number of attachment. Sectional documents must be numbered from 1 to n. If the whole unit of documents is sent together in one message, attribute is blanko r contains 0.
- Attribute ***Document doc-ver*** tells document version. If message with same ***doc-id*** is received, it's necessary that new message is distinguished with ***doc-ver***, otherwise it's rejected.

Attribute reference id (message type GP7 – delivery) contains msg-id of message with invoice, to which it's related.

14.1.4 Document structure

Each document has following structure:

Element	Description
DocHeader	**Document header contains identification of participants (supplier and subscriber), data (invoicing period, due-date, etc.), data for payment identification (variable symbol), links to other documents (for example in case of storno link to contract), it's possible to insert text in form of note.**
DocDetail	**Document detail consists of document items or blocks with billing data for PDT, it's possible to insert text in form of note.**
DocSummary	**Document summary contains total amounts, tax-relevancy etc. It's possible to insert text in form of note.**

Table 4: Document structure

- Header and document detail are mandatory for each document.
- Document summary isn't mandatory – depends on document type – for example it must be included in invoice, but not in prescription of deposits.

14.1.5 Document header

Document header contains following elements:

Element	Description
Party	**Participant detail – mainly subscriber and supplier, could be also receiver (in case differs from supplier). For distinction serves attribute Party role.** **Element DocHeader/Party isn't mandatory. In application level it will be implemen only if document is tax-relevant (Tax relevancy="YTN").**
DocDates	**Data included in document:** **Due-date** **Tax-point date** **Doc-issue date** **All these items are set as non-mandatory, because they can be used in different wa according to type of document.** Invoicing period start Invoicing period end

Element	Description
	Note Invoicing period doesn't have to be included , if it's contained in block with billing data PDT. DOC_HEADER and DOC_DATES are non-mandatory at doc-type B11 and B12. Element DocHeader in XSD template is set as non-mandatory. If document type isn't B11 or B12 and element DocDates is empty, then is sent error message (invoice is still accepted/forwarded).
PaymentInf	**Details for processing of incoming payment – variable, constant, specific symbol, w payment.** code name note P SIPO N direct debit H not specified B bank transfer A payslip 'A' way of payment (overpayment) code name note U bank transfer S payslip 'B'
RefDocume t	**Link to related document:** Invoice – for example in case of storno Order Contract – no of contract It's possible to mention link to no of item within linked document. It's also possible to link to more documents. Will contain non-mandatory attribute „doc-issue date" – document issue date.
DocHeaderNote	Note – text – level of document header.

Table 5: Document header

14.1.6 Document detail

In document detail are document items – for example billing items or prescriptions of deposits.
In case 2 items are linked to billing of PDT, these items are listed in block PDT.

Document detail consists of:

Element	Description
ListOfItems	**List of items – items which are not related to data of PDT.** These might be: Billing items consisting of more than one PDT. Items for services which aren't related to specific PDT.

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td></td><td>This block doesnt’t have to be used, if all the items are listed at PDT – for example in invoice for one PDT.

In case of prescription of deposits – if it’s valid for the whole document (e.g. in invoice which contains more PDT and one total presciption of deposits) – these are items of prescription (due-date, amount, invoicing period,…).

These items can be used: (items-category)
<table>
<tr><td>Type</td><td>Description</td></tr>
<tr><td>INV</td><td>Invoice items</td></tr>
<tr><td>BBP</td><td>Prescription of deposits</td></tr>
<tr><td>BBA</td><td>Billed deposits</td></tr>
<tr><td>BBT</td><td>Item of tax document in incoming payment</td></tr>
</table>
List of items may contain (sub)total of all amounts.

Element ListOfItems is non-mandatory.
If document type isn’t B11 or B12 and element ListOfItems is empty, then is sent error (invoice is still accepted/forwarded).</td></tr>
<tr><td>ListOfPDTBlocks</td><td>List of PDT blocks – this list specifies data/items related to PDT, to billing o deposits related to PDT.

Element PDTBlock contains:
PDT Identification – attributes of element PDT Block
Address details – element Address
List of billing items PDT – element ListOfBillingItems
Owner/Subscriber details - element Party
Note - PDTBlockNote</td></tr>
<tr><td>DocDetailNote</td><td>Note – text – level of document detail..</td></tr>
</table>

Table 6: Document detail

PDT details and billing items of PDT are contained in block PDT – PDTblock. Here can be listed more lists of items. On this level it’s allowed to mention except billing items also prescription of deposits or list of billed deposits.

14.1.7 Document Summary

Element DocSummary contains document summary data, consists of these elements:

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>ListOfSumItems</td><td>List of summary items – tax recapitulation. Here can be specified more lis summary items – such as summary of billed items or billed deposits. Type of determined by attribut items category.
<table>
<tr><td>Type</td><td>Description</td></tr>
<tr><td>INV</td><td>Invoice items</td></tr>
<tr><td>BBP</td><td>Prescription of deposits</td></tr>
</table></td></tr>
</table>

Element	Description
	BBA – Billed deposits BBT – Item of tax document in incoming payment Each list contains except items also subtotal (SubTotal).
DocumentTotal	**Total amount – total amount with possibility of tax enumeration.** Multiple repetitions are allowed (maxOccurs unbounded).
Payment summary	**Summary payment (summary of financial compensation) – contains total inv value (*TotalInvoicedValue*), prepaid deposits (*PrepaidAmount*) and an (*TotalAmountPayable*).**
DocSummaryNote	**Note – text – level of document summary.**

Table 7: Document summary

14.1.8 Attachment

This element is used for information attached to electronic invoice which is sent by OTE to registered market participants – invoice for services supplied by OTE. It's not used in aggregated invoice.

In invoice for gas is included attribute GasTax – tax for gas (similar in invoice for electricity – attribute ElectricityTax).

14.2 Description of selected elements

14.2.1 Party - Data of Partner

Elements of Data of Partner are as followed:

Element	Description
PartyID	Basic identification details of partner – ID, tax ID, etc.
BankAccount	Bank Account. Non-mandatory for document receiver. Also non-mandatory att SWIFT code.
NameAddress	Name of partner, address details.
Communication	Contact details – email, www, etc.
Contact	People to be contacted – listed in document.
ReferencePartyID	More identification details of partner: partner ID, etc.

Table 8: Data of Partner

14.2.2 Item – Data of document item

Element has these attributes:

Atribut	Description
item-type	Item type - at the moment at this level is identified only type G01 – Regulated ser This type is used also for prescription of deposits, billed deposits and items of tax docu for incoming invoices.
doc-number	No of tax document – is mentioned in case prescription of deposits is issued, where

	prescription itself(=item) is tax document.

Table 9: Element Item

Data of item are divided into following elements:

Element	Description
BaseItemDetail	Detail of item base – contains subject of item – description, volume, unit of measure. Unit of messure can be repeated – in case of item „distributed gas volume“ it will elements.
PricingDetail	Detail of item valuation – contains price per unit, tax items, total amount per item.
PaymentInfo	Information for payment identification – variable, constant, specific symbol, is use purpose of prescription of deposits.
ItemDates	Data related to item: due-date - due date, used for prescription of deposits payment-date – payment date, used for billed deposits billing-period-from – start of billing period billing-period-to – end of billing period - used for specification of billing period, for example in prescription of deposits

Table 10: Elements of Data of item

14.2.3 BillingItem – Billing item of PDT

Element BillingItem has following attributes:

Atribut	Description
item-type	Item type – identifies item types. Use of these types of items - billed regulated servic supposed. For gas are used these items:

Item-type	Meaning
GG001	Daily reserved fixed capacity
GG002	Daily reserved fixed capacity (unsteady)
GG003	Daily reserved fixed capacity - monthly
GG004	Daily reserved fixed capacity – for indefinite period
GG005	Daily reserved fixed capacity – historical maximum
GG006	Daily reserved interruptible capacity
GG007	Daily reserved interruptible capacity - monthly
GG008	Distributed volume of gas
GG009	Correction of consumption
GG010	Reimbursement of costs incurred by discover and enumeration of unauthorized consumption
GG011	Consumpted gas
GG012	Fee for special billing

	GG013	Fee for special reading
	GG014	Fee for services supplied by OTE
	GG015	Contravention of daily reserved capacity
	GG016	Discount - floods
	GG017	Discount - interruption
	GG018	Constant monthly income for available capacity
	GG019	Deposit

Table 11: Element Billing Item

Element	Description
BaseItemDetail	Detail of item base – contains subject of item – description, volume,
PricingDetail	Detail of item valuation – contains price per unit, tax items, total amount per item. items won't be filled in if tax is enumerated as a total.).
ItemDates	Data related to item:due-date - due date, used for prescription of deposits payment-date – payment date, used for billed deposits billing-period-from – start of billing period billing-period-to – end of billing period - used for specification of billing period, for example in prescription of deposits

Table 12: BillingItem – sectional elements

14.2.4 SumItem - Data of document summary

Element item consists of attributes:

Attribute	Description
item-type	Item type - at the moment at this level is identified only type G01 – Regulated ser This type is used also for prescription of deposits, billed deposits and items of tax docu for incoming invoices.

Table 13: Element SumItem

Elements of data of item:

Element	Description
BaseItemDetail	Detail of base of item – consists subject of item (sometimes also volume or unit of me – usually not relevant)
SumItemPrice	Price – amount without tax (*NetValue*), tax (*Tax*), amount with tax (*GrossValue*)

Table 14: SumItem – sectional elements

14.2.5 PDT Block – block of information related to PDT

Attributes of PDT Block:

Attribute	Description
PDT-id	ID PDT (EIC)
Premise-id	ID of place of consumption, non-mandatory
Rate	Rate – non-mandatory
TDD-class	TDD Class
Cons-band	Consumption for purpose of zone classification
DGI-id	No of document of sectional invoice

Table 13: Element PDT Block

Element PDT Block also includes:

- Address details – element Address
- List of billing items of PDT – element ListOfBillingItems
- Data of owner/subscriber – element PartyData
- Note – PDTBlockNote

It's allowed to list repeatedly element ListOfBillingItems – each block will be marked as different category (items category).

For billing items is used category INV, for billed prepaid deposits category BBA. In case of billed prepaid deposits for PDT it's possible to state value of total deposit for PDT within ListOfBillingItemsSubTotal (element BillingItem won't be shown).

14.3 Controls of electronic invoice in CDS

While processing electronic invoice in CDS, following controls are applied:

1. Control of document uniqueness

   If message with same attributes DOC-TYPE/DOC-ID/DOC-VER/DOC-ATN is repeatedly received, it will be rejected.

2. Control of completness

   When receiving each message, control if list of all attachments related to main document is complete, is applied. In both cases is generated RESPONSE message, which is sent to sender and to receiver as well.

3. Control of completness of list of PDT in electronic invoice in comparison to received DGI of PDT

   In messages CDSGASINVOICE are checked blocks of PDT (in XML *ListOfPDTBlocks*) in comparison to received DGI messages. Control result in information, if each OPM in electronic invoice has DGI message with identifier of no of document of sectional invoice (CDSGASPOF – head/attributes/number).

4. Control of billed amount for each OPM in comparison to DGI

For each PDT block for selected items is applied control of total billed amounts (*BillingItem PricingDetail NetValue value*) in comparison to amounts in relevant DGI message.

5. Control, if element Party isn't empty in case the document is tax relevant (Tax relevancy = „YTN").

Controls of CDSGASINVOICE in comparison to DGI

			Control of amount			Control of value	
Item (BillingItem / item-type)	**Descreption**	**DGI**	**Control**	**Field CDSGASINVOICE**	**Field CDSGASPOF**	**Control**	**Field CDSGASINVOICE**
NA	No of invoice	A, B, C, CM				X	ListOfPDTBlocks / PDTBlock / DGI-id
NA	PDT	A, B, C, CM				X	ListOfPDTBlocks / PDTBlock / PDT-id
NA	Billing period from	A, B, C, CM				X	DocHeader / DocDates / invoicing-period-start
NA	Billing period to	A, B, C, CM				X	DocHeader / DocDates / invoicing-period-end
NA	Net Value	A, B, C, CM	X	ListOfBillingItemsSubTotal / ItemNetValue / value	head / priceTotal		
NA	Gross Value	A, B, C, CM	X	ListOfBillingItemsSubTotal / ItemGrossValue / value	head / priceTotalDph		

..

14.4 Hand over of checks results by the GASRESPONSE

In case no fault in above checks the sender (DSO) and the receiver (supplier) will receive from CDS_

- GASRESPONSE msg code GP8, reason type Received without objection (*Reason type = A03*).

In case of fault in the above checks the sender and receiver will receive from CDS:

- GASRESPONSE s msg code GP8, reason type Received with objection (*Reason type = A04*). For every PDT for which the fault was identified ther will b eone element Reason id. PDT ID will be filled in OPM-id attribute (*Reason OPM-id*).

14.5 Request for electronic invoice

Request for electronic invoice is sent by the CDSGASREQ, msg code GP9. For specificatin of the request the following attributes can be used in Location element:

Attribute	Description
inv-sender	Sender of the invoice (EAN 13)
inv-type	Document type – seeks thte document by CDSGASINVOICE / DocumentEnvelope / Document / doc-type
inv-doc-id	Document number – seeks the document doklad by the CDSGASINVOICE / DocumentEnvelope / Document / doc-id

The request returns all the received documents in versions.

14.6 OTE Electronic XML invoice

The tax documents for the gas sent by OTE are sent to participants in the CDSGASINVOICE format. Structure and the content of the invoice is same as in the past, when the CDSINVOICE was used.

Appendix I List of messages and their codes in CDS system

Msg_code	Description	Message format	Input/ Output	Source	Destination
GA1	Request for change of supplier	CDSGASMASTERDATA	Input	RMP	CDS
GA2	Confirmation of acceptance/rejection of a request for change of supplier (if a response is not required, then only in case it is required)	GASRESPONSE	Output	CDS	RMP
GA3	Copy of a request for a change of supplier	CDSGASMASTERDATA	Output	CDS	RMP
GA4	Message about possible reservation of distribution or transport capacity	CDSGASMASTERDATA	Input	TSO / DSO	CDS
GA5	Confirmation of acceptance/rejection of a message about possible reservation of distribution or transport capacity	GASRESPONSE	Output	CDS	DSO/TSO
GA6	Copy of a message about possible reservation of distribution or transport capacity	CDSGASMASTERDATA	Output	CDS	SS, TSO/DSO
GA7	Request for continuation of gas supplies at the point of delivery	CDSGASMASTERDATA	Output	CDS	Supp, SS
GA8	Request for suspension of the change of supplier process	CDSGASMASTERDATA	Input	Supp.	CDS
GA9	Confirmation of acceptance/rejection of a message with a request for suspension of the change of supplier process	GASRESPONSE	Output	CDS	Supp.
GAA	Copy of a message with a request for suspension of the change of supplier process	CDSGASMASTERDATA	Output	CDS	Supp, SS

GAB	Confirmation/rejection of assignment of responsibility for imbalance for the point of delivery	CDSGASMASTERDATA	Input	SS	CDS
GAC	Confirmation of acceptance/rejection of a message with confirmation/rejection of assignment of responsibility for imbalance for the point of delivery	GASRESPONSE	Output	CDS	SS
GAD	Copy of confirmation/rejection of assignment of responsibility for imbalance for the point of delivery	CDSGASMASTERDATA	Output	CDS	TSO / DSO, SS, Supp.
GAE	Confirmation of customer's consent with change of supplier	CDSGASMASTERDATA	Input	Supp.	CDS
GAF	Confirmation of acceptance/rejection of a message with confirmation of customer's consent with change of supplier	GASRESPONSE	Output	CDS	TSO / DSO, SS, Supp.
GAG	Copy of confirmation of customer's consent with change of supplier	CDSGASMASTERDATA	Output	CDS	Supp.
GAH	Confirmation/rejection of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement	CDSGASMASTERDATA	Input	SS, Supp.	CDS
GAI	Confirmation of acceptance/rejection of a message with confirmation/rejection of continuation of gas supplies at the point of delivery	GASRESPONSE	Output	CDS	SS, Supp.
GAJ	Copy of confirmation/rejection	CDSGASMASTERDATA	Output	CDS	TSO / DSO, SS,

	of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement				Supp.
GAK	Results of evaluation of request for change of supplier	CDSGASMASTERDATA	Output	CDS	TSO / DSO, SS, Supp.
GAL	Request for change of subject of settlement at a PDT	CDSGASMASTERDATA	Input	SS, Supp.	CDS
GAM	Sending of confirmation of acceptance/rejection of request for change of subject of settlement	GASRESPONSE	Output	CDS	SS, Supp.
GAN	Copy of a request for change of subject of settlement	CDSGASMASTERDATA	Output	CDS	SS, Supp.
GAO	Approval/rejection of request for change of subject of settlement by the subject of settlement	CDSGASMASTERDATA	Input	SS	CDS
GAP	Sending of confirmation of acceptance/rejection of a message with request for change of subject of settlement by the subject of settlement	GASRESPONSE	Output	CDS	SS
GAQ	Copy of approval/rejection of request for change of subject of settlement by the subject of settlement	CDSGASMASTERDATA	Output	CDS	SS
GAR	Request for sending the status of change of supplier	CDSGASREQ	Input	RMP	CDS
GAS	Confirmation/error in request for statement from the journal of change of supplier	GASRESPONSE	Output	CDS	RMP
GAT	Statement from the journal of change of supplier	CDSGASMASTERDATA	Output	CDS	RMP

GAU	Information about insufficient funding of RMP at PDT	CDSGASMASTERDATA	Output	CDS	RMP
GAV	Information about unsecured supply due to unfinished change of supplier	CDSGASMASTERDATA	Output	CDS	RMP
GAW	Information about unsecured supply or imbalace resp. transfer at PDT	CDSGASMASTERDATA	Output	CDS	RMP
GAX	Information about unsecured imb. resp. transfer at PDT	CDSGASMASTERDATA	Output	CDS	RMP
GAZ	Information about RMP locking at a PDT	CDSGASMASTERDATA	Output	CDS	RMP
GB1	Request for registration of imbalance responsibility transfer	CDSGASMASTERDATA	Input	RMP	CDS
GB2	Confirmation of / Error in request for registration of imbalance responsibility transfer receiving	GASRESPONSE	Output	CDS	RMP
GB3	Information about registration of imbalance responsibility transfer	CDSGASMASTERDATA	Output	CDS	RMP, SofS
GB4	Approbation / Refusal of imbalance responsibility transfer	CDSGASMASTERDATA	Input	SOFS	CDS
GB5	Confirmation of / Error in approbation / refusal of imbalance responsibility transfer receivnig	GASRESPONSE	Output	CDS	SofS
GB6	Request for imbalance responsibility transfer	CDSGASREQ	Input	RMP	CDS
GB7	Confirmation of / Error in request for imbalance responsibility transfer receiving	GASRESPONSE	Output	CDS	RMP
GB8	Information about imbalance responsibility transfer (on request 455)	CDSGASMASTERDATA	Output	CDS	RMP

GBA	Request for extension / reduction of supply by current supplier	CDSGASMASTERDATA	Input	RMP	CDS
GBB	Confirmation of / Error in request for extension / reduction of supply by current supplier	GASRESPONSE	Output	CDS	RMP
GBC	Copy of the request for extension / reduction of supply by current supplier	CDSGASMASTERDATA	Output	CDS	RMP
GBD	Approbation with imb. resp. transfer within supply extension / reduction	CDSGASMASTERDATA	Input	Supp.	CDS
GBE	Confirmation of / Error in approbation with imb. resp. transfer within supply extension / reduction	GASRESPONSE	Output	CDS	Supp.
GBF	Copy of the approbation with imb. resp. transfer within supply extension / reduction	CDSGASMASTERDATA	Output	CDS	RMP
GBG	Request for assigning an observer to PDT	CDSGASMASTERDATA	Input	SofS, DSO/TSO	CDS
GBH	Error in / Confirmation of request for assigning an observer to PDT receiving	GASRESPONSE	Output	CDS	RMP
GBI	Information about observer assignement to PDT	CDSGASMASTERDATA	Output	CDS	RMP
GBJ	Request for assigned observers data	CDSGASREQ	Input	RMP	CDS
GBK	Error in / confirmation of assigned observers request receiving	GASRESPONSE	Output	CDS	RMP
GBL	Assigned observers data	CDSGASMASTERDATA	Output	CDS	RMP
GBM	Copy of the change of supplier progress information	CDSGASMASTERDATA	Output	CDS	RMP
GC1	Entering/updating of information	GASCLAIM	Input	RMP	CDS
GC2	Acceptance/error of sent claim	GASRESPONSE	Output	CDS	RMP

GC3	Copy of claim	GASCLAIM	Output	CDS	RMP
GC4	Inquiry about claim data	CDSGASREQ	Input	RMP	CDS
GC5	Acceptance/error in inquiry about claim data	GASRESPONSE	Output	CDS	RMP
GC6	Copy of claim	GASCLAIM	Output	CDS	RMP
GC7	OTE messages	GASCLAIM	Output	CDS	RMP
GC8	Inquiry about OTE messages	CDSGASREQ	Input	RMP	CDS
GC9	Confirmation/error in inquiry about OTE messages	GASRESPONSE	Output	CDS	RMP
GCA	Copy of OTE messages	GASCLAIM	Output	CDS	RMP
GD1	Bid creation / Bid replacement / Nomination creation (DMG)	ISOTEDATA	Input	RMP	IS OTE
GD2	Bid creation / Bid replacement / Nomination creation - error / confirmation (DMG)	RESPONSE	Output	IS OTE	RMP
GD3	Bid creation / Bid replacement / Nomination creation - Copy of data (DMG)	ISOTEDATA	Output	IS OTE	RMP
GD4	Bid cancelation (DMG)	ISOTEDATA	Input	RMP	IS OTE
GD5	Bid cancelation - error / confirmation (DMG)	RESPONSE	Output	IS OTE	RMP
GD6	Bid cancelation - Copy of data (DMG)	ISOTEDATA	Output	IS OTE	RMP
GD7	Own bid data - State detection (DMG)	ISOTEREQ	Input	RMP	IS OTE
GD8	Own bid data - State detection - error / confirmation (DMG)	RESPONSE	Output	IS OTE	RMP
GD9	Own bid data - Copy of data (DMG)	ISOTEDATA	Output	IS OTE	RMP
GDA	Trading results nominations sending (DMG)	ISOTEDATA	Output	IS OTE	RMP

GDD	Request - DM marginal prices (DMG)	ISOTEREQ	Input	RMP	IS OTE
GDE	Request - DM marginal prices - error / confirmation (DMG)	RESPONSE	Output	IS OTE	RMP
GDF	Request - DM marginal prices - Data copy (DMG)	ISOTEDATA	Output	IS OTE	RMP
GF1	Invoicing base data - request	SFVOTGASREQ	Input	RMP	CDS
GF2	Invoicing base data	SFVOTGASBILLING	Output	CDS	RMP
GF3	Invoicing base data - error/confirmation	GASRESPONSE	Output	CDS	RMP
GF4	OTE Invoicing base data - request	SFVOTGASREQ	Input	RMP	CDS
GF5	OTE Invoicing base data	SFVOTGASBILLING	Output	CDS	RMP
GF6	OTE invoicing base data - error/confirmation	GASRESPONSE	Output	CDS	RMP
GF7	Payments and refunds overview - request	SFVOTGASREQ	Input	RMP	CDS
GF8	Payments and refunds overview	SFVOTGASCLAIM	Output	CDS	RMP
GF9	Payments and refunds overview - error/confirmation	GASRESPONSE	Output	CDS	RMP
GFA	OTE Payments and refunds overview - request	SFVOTGASREQ	Input	RMP	CDS
GFB	OTE Payments and refunds overview	SFVOTGASCLAIM	Output	CDS	RMP
GFC	OTE payments and refunds overview - error/confirmation	GASRESPONSE	Output	CDS	RMP
GFD	LP differences settlement - request	SFVOTGASREQ	Input	RMP	CDS
GFE	LP differences settlement	SFVOTGASTDD	Output	CDS	RMP
GFF	Payments and refunds overview - error/confirmation	GASRESPONSE	Output	CDS	RMP
GFG	OTE LP differences settlement - request	SFVOTGASREQ	Input	RMP	CDS
GFH	OTE LP differences settlement	SFVOTGASTDD	Output	CDS	RMP

GFI	OTE LP differences settlement - error/confirmation	GASRESPONSE	Output	CDS	RMP
GFJ	Invoicing base data - summary	SFVOTGASREQ	Input	RMP	CDS
GFK	Invoicing base data - summary	SFVOTGASBILLINGSUM	Output	CDS	RMP
GFL	Invoicing base data - summary - confirmation / error	GASRESPONSE	Output	CDS	RMP
GFM	OTE Invoicing base data - summary	SFVOTGASREQ	Input	RMP	CDS
GFN	OTE Invoicing base data - summary	SFVOTGASBILLINGSUM	Output	CDS	RMP
GFO	OTE invoicing base data - summary - confirmation / error	GASRESPONSE	Output	CDS	RMP
GFP	Claim overview - summary	SFVOTGASREQ	Input	RMP	CDS
GFQ	Claim overview - summary	SFVOTGASCLAIMSUM	Output	CDS	RMP
GFR	Claim overview - summary - confirmation / error	GASRESPONSE	Output	CDS	RMP
GFS	OTE claim overview - summary	SFVOTGASREQ	Input	RMP	CDS
GFT	OTE claim overview - summary	SFVOTGASCLAIMSUM	Output	CDS	RMP
GFU	OTE Claim overview - summary - confirmation / error	GASRESPONSE	Output	CDS	RMP
GI1	Request for data of preliminary imbalance	CDSEDIGASREQ	Input	SS	CDS
GI2	Confirmation of / Error in request for data of preliminary imbalance	GASRESPONSE	Output	CDS	SS
GI3	Request for preliminary difference in allocations	CDSEDIGASREQ	Input	SS	CDS
GI4	Confirmation of / Error in request for preliminary difference in allocations	GASRESPONSE	Output	CDS	SS
GI5	Request for data of actual imbalance	CDSEDIGASREQ	Input	SS	CDS
GI6	Confirmation of / Error in request for data of actual imbalance	GASRESPONSE	Output	CDS	SS

GI7	Request for actual difference in allocations	CDSEDIGASREQ	Input	SS	CDS
GI8	Confirmation of / Error in request for actual difference in allocations	GASRESPONSE	Output	CDS	SS
GI9	Request for off-tolerance deviations after inclusion of trading with unused tolerance	CDSEDIGASREQ	Input	SS	CDS
GIA	Confirmation of / Error in request for off-tolerance deviations	GASRESPONSE	Output	CDS	SS
GIB	Request for closing imbalances	CDSEDIGASREQ	Input	SofS	CDS
GIC	Confirmation of / Error in request for closing imbalances	GASRESPONSE	Output	CDS	SofS
GID	Request for assumed preliminary imbalances	CDSEDIGASREQ	Input	SofS	CDS
GIE	Confirmation of / Error in request for assumed preliminary imbalances	GASRESPONSE	Output	CDS	SofS
GIF	Request for assumed closing imbalances	CDSEDIGASREQ	Input	SofS	CDS
GIG	Confirmation of / Error in request for assumed real metered imbalances	GASRESPONSE	Output	CDS	SofS
GIH	Request for assumed real metered imbalances	CDSEDIGASREQ	Input	SofS	CDS
GII	Confirmation of / Error in request for assumed closing imbalances	GASRESPONSE	Output	CDS	SofS
GIJ	Request for closing allocation imbalances	CDSEDIGASREQ	Input	SofS	CDS
GIK	Confirmation of / Error in request for closing allocation imbalances	GASRESPONSE	Output	CDS	SofS
GL1	Request for allocation data	CDSEDIGASREQ	Input	RMP	CDS
GL2	Confirmation/error in request for allocation data	GASRESPONSE	Output	CDS	RMP

GL3	Requets for data of reserved capacity	CDSEDIGASREQ	Input	RMP	CDS
GL4	Confirmation/error in request for data of reserved capacity	GASRESPONSE	Output	CDS	RMP
GM1	Request for metered values (interval metering)	CDSEDIGASREQ	Input	RMP	CDS
GM2	Confirmation/error in request for metered values (interval metering)	GASRESPONSE	Output	CDS	RMP
GM3	Request for substitute values (interval metering)	CDSEDIGASREQ	Input	RMP	CDS
GM4	Confirmation/error in request for substitute values (interval metering)	GASRESPONSE	Output	CDS	RMP
GM5	Request for change of accumulation	CDSEDIGASREQ	Input	RMP	CDS
GM6	Confirmation/error in request for change of accumulation	GASRESPONSE	Output	CDS	RMP
GM7	Request for metered values (non-interval metering)	CDSEDIGASREQ	Input	RMP	CDS
GM8	Confirmation/error in request for metered values (non-interval metering)	GASRESPONSE	Output	CDS	RMP
GM9	Request for planned estimate of annual consumption	CDSEDIGASREQ	Input	RMP	CDS
GMA	Confirmation/error in request for planned estimate of annual consumption	GASRESPONSE	Output	CDS	RMP
GMB	Request for combustible heat	CDSEDIGASREQ	Input	RMP	CDS
GMC	Confirmation/error in request for combustible heat	GASRESPONSE	Output	CDS	RMP
GMD	Request for distribution capacity	CDSEDIGASREQ	Input	RMP	CDS
GME	Confirmation/error in request for distribution capacity	GASRESPONSE	Output	CDS	RMP

GMF	Request for transport capacity	CDSEDIGASREQ	Input	RMP	CDS
GMG	Confirmation/error in request for transport capacity	GASRESPONSE	Output	CDS	RMP
GMH	Request for actual own losses	CDSEDIGASREQ	Input	RMP	CDS
GMI	Confirmation/error in request for actual own losses	GASRESPONSE	Output	CDS	RMP
GMJ	Request for planned own losses	CDSEDIGASREQ	Input	RMP	CDS
GMK	Confirmation/error in request for planned own losses	GASRESPONSE	Output	CDS	RMP
GML	Inquiry about aggregated values at SS	CDSEDIGASREQ	Input	RMP	CDS
GMM	Confirmation/error in inquiry about aggregated values at SS	GASRESPONSE	Output	CDS	RMP
GMN	Inquiry about data for DS broken down to A, B, C, CM	CDSEDIGASREQ	Input	RMP	CDS
GMO	Confirmation/error in inquiry about data for DS broken down to A, B, C, CM	GASRESPONSE	Output	CDS	RMP
GMP	Inquiry about summary values for SS broken down to A, B, C, CM	CDSEDIGASREQ	Input	RMP	CDS
GMQ	Confirmation/error in inquiry about summary values for SS broken down to A, B, C, CM	GASRESPONSE	Output	CDS	RMP
GMR	Inquiry about summary values for SS and network broken down to A, B, C, CM	CDSEDIGASREQ	Input	RMP	CDS
GMS	Confirmation/error in inquiry about summary values for SS and network broken down to A, B, C, CM	GASRESPONSE	Output	CDS	RMP
GMT	Request for C metering day values	CDSEDIGASREQ	Input	RMP	CDS
GMU	Confirmation of / Error in request C metering	GASRESPONSE	Output	CDS	RMP

	day values				
GMV	Request for planned month consumption	CDSEDIGASREQ	Input	RMP	CDS
GMW	Confirmation of / Error in request for planned month consumption	GASRESPONSE	Output	CDS	RMP
GMX	Request for CM day values	CDSEDIGASREQ	Input	RMP	CDS
GMY	Confirmation of / Error in request CM day values	GASRESPONSE	Output	CDS	RMP
GN1	Inquiry about nominations of the SS of all types	CDSEDIGASREQ	Input	SS	CDS
GN2	Confirmation/error in inquiry about nominations of the SS	GASRESPONSE	Output	CDS	SS
GN3	Inquiry about all nominations of transport	CDSEDIGASREQ	Input	TSO	CDS
GN4	Confirmation/error in inquiry about all nominations of transport	GASRESPONSE	Output	CDS	TSO
GN5	Inquiry about all nominations of distribution for the DSO	CDSEDIGASREQ	Input	DSO	CDS
GN6	Confirmation/error in inquiry about all nominations of distribution for the DSO	GASRESPONSE	Output	CDS	DSO
GN7	Inquiry about all nominations of storage for the SSO	CDSEDIGASREQ	Input	SSO	CDS
GN8	Confirmation/error in inquiry about all nominations of storage for the SSO	GASRESPONSE	Output	CDS	SSO
GN9	Inquiry about shipper code list	CDSEDIGASREQ	Input	DSO / TSO	CDS
GNA	Confirmation/error in inquiry about shipper code list	GASRESPONSE	Output	CDS	TSO / DSO
GP1	DGI data for invoicing of distribution	CDSGASPOF	Input	DSO	OTE

GP2	Confirmation of acceptance/error in a message with data for invoicing of distribution (DGI)	GASRESPONSE	Output	CDS	DSO
GP4	Inquiry about data for invoicing of distribution (DGI)	CDSGASREQ	Input	RMP	CDS
GP5	Response in case of error in verification of message with data for invoicing of distribution (DGI)	GASRESPONSE	Output	CDS	RMP
GP6	Message with data for invoicing of distribution (DGI)	CDSGASPOF	Output	CDS	RMP
GP7	Electronic invoice	CDSGASINVOICE	Input	DSO	RMP
GP8	Confirmation of acceptance / error in a message of electronic invoice	GASRESPONSE	Output	CDS	DSO
GP9	Request for electronic invoice	CDSGASREQ	Input	RMP	CDS
GPA	Error in request for electronic invoice	GASRESPONSE	Output	CDS	PDS
GPB	Electronic (XML) invoice OTE	CDSGASINVOICE	Output	CDS	RMP
GPC	Request electronic invoice delivery notification	CDSGASREQ	Input	RMP	CDS
GPD	Error in request for electronic invoice delivery notification	GASRESPONSE	Output	CDS	DSO/RMP
GPE	Electronic invoice delivery notification	CDSGASINVOICE	Output	CDS	DSO
GR1	Request for registration/update of PDT	CDSGASMASTERDATA	Input	TSO / DSO	CDS
GR2	Confirmation of acceptance/rejection of a message with request for registration/update of PDT	GASRESPONSE	Output	CDS	DSO / TSO
GR3	Copy of a message with request for	CDSGASMASTERDATA	Output	CDS	DSO / TSO

	registration/update of PDT				
GR4	Request for PDT data	CDSGASREQ	Input	PS	CDS
GR5	Confirmation of acceptance/rejection of a message with request for PDT data	GASRESPONSE	Output	CDS	PS
GR6	Copy of a message with request for PDT data	CDSGASMASTERDATA	Output	CDS	PS
GR7	Information about DPI activation	CDSGASMASTERDATA	Output	CDS	RMP
GR8	Information about PDT termination	CDSGASMASTERDATA	Output	CDS	RMP
GR9	Information about PDT changes	CDSGASMASTERDATA	Output	CDS	RMP
GRE	Request for simplified list of PDT	CDSGASMASTERDATA	Input	RMP	CDS
GRF	of acceptance/refusal of message with Request for simplified list of PDT	GASRESPONSE	Output	CDS	
GRG	List of PDT according to service	CDSGASMASTERDATA	Output	CDS	
GRX	Request for termination of PDT validity	CDSGASMASTERDATA	Input	TSO / DSO	CDS
GRY	Confirmation of acceptance/refusal of message with request for termination of PDT validity	GASRESPONSE	Output	CDS	DSO / TSO
GRZ	Copy of PDT data as response on GRX	CDSGASMASTERDATA	Output	CDS	DSO / TSO
GRA	Information about PDT termination because of supply unprovision or imb. resp. transfer	CDSGASMASTERDATA	Output	CDS	RMP
GSD	Request - Day settlement (DMG)	ISOTEREQ	Input	RMP	IS OTE
GSE	Request - Day settlement - error / confirmation (DMG)	RESPONSE	Output	IS OTE	RMP
GSF	Request - Day settlement - Data copy (DMG)	ISOTEDATA	Output	IS OTE	RMP

GT1	Request for data of normal and actual weather conditions (temperatures)	CDSEDIGASREQ	Input	RMP	CDS
GT2	Confirmation/error in request for data of normal and actual weather conditions (temperatures)	GASRESPONSE	Output	CDS	RMP
GT3	Request for LP data	CDSEDIGASREQ	Input	RMP	CDS
GT4	Confirmation/error in request for LP data	GASRESPONSE	Output	CDS	RMP
GT5	Request for data of temperature correlation coefficient	CDSEDIGASREQ	Input	RMP	CDS
GT6	Confirmation/error in request for data of temperature correlation coefficient	GASRESPONSE	Output	CDS	RMP
GT7	Inquiry about residue diagrams	CDSEDIGASREQ	Input	RMP	CDS
GT8	Confirmation/error in inquiry about residue diagrams	GASRESPONSE	Output	CDS	RMP
GT9	Inquiry about estimated diagram of consumption of a PDT group (C, CM)	CDSEDIGASREQ	Input	RMP	CDS
GTA	Confirmation/error in inquiry about estimated diagram of consumption of a PDT group (C, CM)	GASRESPONSE	Output	CDS	RMP
GTB	Request for Calculated imbalances of PDT	CDSEDIGASREQ	Input	RMP	CDS
GTC	Confirmation/error in request for Calculated imbalances of PDT	GASRESPONSE	Output	CDS	RMP
GTD	Request for PDT entered to clearing	CDSEDIGASREQ	Input	RMP	CDS
GTE	Confirmation/error in request for PDT entered to clearing	GASRESPONSE	Output	CDS	RMP
GTP	Message for sending of predicted and metered average daily temperature	CDSEDIGASREQ	Vstup	RMP	CDS

GTQ	Confirmation of / Error in receiving message for sending of predicted and metered average daily temperature	GASRESPONSE	Výstup	CDS	RMP
GV1	Order place / replace (IDMG)	ISOTEDATA	Input	RMP	IS OTE
GV2	Order place / replace - error / confirmation (IDMG)	RESPONSE	Output	IS OTE	RMP
GV3	Copy of order data - place (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GV4	Order annulation (IDMG)	ISOTEDATA	Input	RMP	IS OTE
GV5	Order annulation - error / confirmation (IDMG)	RESPONSE	Output	IS OTE	RMP
GV6	Copy of order data - annulation (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GV7	One´s own order data - state request (IDMG)	ISOTEREQ	Input	RMP	IS OTE
GV8	One´s own order data - state request - error / confirmation (IDMG)	RESPONSE	Output	IS OTE	RMP
GV9	Copy of order data - one´s own order (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GVA	Trading results nomination sending (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GVB	Trading results nomination sending (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GVC	Trade request - one´s own (IDMG)	ISOTEREQ	Input	RMP	IS OTE
GVD	Trade request - one´s own - error / confirmation (IDMG)	RESPONSE	Output	IS OTE	RMP
GVE	Copy of one´s own trades data (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GVF	Product data request (IDMG)	ISOTEREQ	Input	RMP	IS OTE
GVG	Product data request - error / confirmation (IDMG)	RESPONSE	Output	IS OTE	RMP
GVH	Product master data (IDMG)	ISOTEMASTERDATA	Output	IS OTE	RMP

GVK	Copy of trading screen - market depth (IDMG)	ISOTEDATA	Output	IS OTE	RMP
GX1	Request for provision of a message from the queue	COMMONGASREQ	Input	RMP	CDS
GX2	Response – notification that there are no more messages in the message queue	GASRESPONSE	Output	CDS	RMP
GX3	Request for verification of the server-server connection	COMMONGASREQ	Input	RMP	CDS
GX4	Response forwarded to call-back service during verification of the server-server connection	GASRESPONSE	Output	CDS	RMP
050	Syntax error in incoming message - error on communication channel level (from CDS to message sender)	GASRESPONSE	Output	CDS	RMP
051	Syntax error in incoming message - error on communication channel level (from message receiver to CDS)	GASRESPONSE	Input	RMP	CDS
100	Syntax error - invalid message format (from CDS to message sender)	GASRESPONSE	Output	CDS	RMP
101	Syntax error - invalid message format (from message receiver to CDS)	GASRESPONSE	Input	RMP	CDS
964	Požadavek na statistická data zúčtování odchylek	ISOTEREQ	Vstup	RUT	IS OTE
965	Požadavek na statistická data zúčtování odchylek - chyba / potvrzení	RESPONSE	Výstup	IS OTE	RUT

966	Požadavek na statistická data zúčtování odchylek - Opis dat	ISOTEDATA	Výstup	IS OTE	RUT
983	Notification about BM product aggregation	RESPONSE	OUT	IS OTE	RUT
984	Notification about BM product announce	RESPONSE	OUT	IS OTE	RUT
985	Notification about product dealing opening on BM	RESPONSE	OUT	IS OTE	RUT
986	Notification about product dealing termination on BM	RESPONSE	OUT	IS OTE	RUT
987	Notification about dealing result finalization of product on BM	RESPONSE	OUT	IS OTE	RUT
988	Notification about BM product non-announce	RESPONSE	OUT	IS OTE	RUT

Appendix II List of reason codes in CS OTE

Code	Message text
G00000	Internal fault during message processing.
G00001	No data found.
G00002	Document & version &: Accepted & attachments of &
G00003	Message no.& was received succesfully
G00004	Already accepted doc. type & ID & version & attach. &.
G00005	Document &: total amount of VAT is different (PDT &: & x &)
G00006	Correctly received request the change of supplier
G00007	PDT &1: change to past finnished.
G00008	Message no.& was rejected
G00009	Message no.& was received with reservation
G00010	Access check failed for PDT & in onterval & - & (Partner &)
G00011	PDT & does not exist.
G00012	Request error - selected version not exist
G00013	Trading day & is closed for PDT & registration.
G00014	PDT & will not be registered. Registration parameters failure.
G00015	For PDT &1 any data found.
G00016	PDT & (& - &): supplier is not &.
G00017	PDT & does not exist in given interval & - &.
G00018	Message is too big (&1 seg., max. &2), please narrow the request.
G00019	Invoice no. & for PDT & with internal ID & was canceled
G00020	Term for send message was exceeded, request was accept &1
G00021	WORKFLOW ID &1 is not in status ANP - Accepted
G00022	PDT &1 not found in CDS.
G00023	Business Day &1 is already closed for sending a message.
G00024	On PDT &1 is active another request for change supplier, ID &2
G00025	PDT & successfully registered
G00026	PDT &: attribute value & not save.
G00028	PDT & registration failed. For more informations see the application log.
G00029	Document & version &: Accept & attachments, main document is missing.
G00030	For workflow &1 already exist action &2
G00031	Send action &1 is not relevant for SZD with reason &2
G00032	PDT &: Required parameter & is empty.
G00033	Specified grid &1 is not defined in system.
G00034	On PDT &1 is from &2 another supplier.
G00035	In message is allow just one activity, found &1
G00036	Message is too big (&1 PDT, max. &2), please narrow the request.
G00037	Sender & is not registered in CDS.

G00038	New supplier &1 is already suppliern on PDT &2
G00039	Requester ID &1 is different from new supplier ID &2
G00040	EAN PDT &1 is missing or in in wrong format
G00041	Invoice no. & for PDT & not found
G00042	PDT & not existing PDT can not be change to past
G00043	RMP &1 is not in (&2-&3) service provider &4
G00044	There is missing reason for SZD in the message.
G00045	Old supplier (&1) is different from sender (&2)
G00046	Estimate of annual consumtion have to be negative or zero.
G00047	For year &1 and month &2 clearing was not start yet.
G00048	Message ID & is not unique.
G00049	For locality &1 is date FROM bigger than date TO
G00050	Atribute Contract type is not fill
G00051	Found more messages for POF & ID will be checked for the highest version.
G00052	Date From &1 in request of CHS can not be later than 4 months.
G00053	There is mistake in time interval PDT &1
G00054	PDT &1 not found in period &2 - &3 in CDS
G00055	New supplier (&1) is not sender of message (&2)
G00056	Not entered estimate of annual consumtion for PDT &.
G00057	Reserved capacity must be negative.
G00058	For action & is required action reason.
G00059	On PDT &1 is already ending &2 supplier &3.
G00060	On PDT &1 is supplier &4 only in period &2 - &3.
G00061	PDT &: Value & is not supported for parameter &.
G00062	For WF &1 was not received action CNR or CRD or IRD. Message rejected.
G00063	PDT &1 does not match EIC format
G00064	In message must not be reason change of supplier.
G00065	On PDT &1 does not finnish supplier &2 on &3
G00066	Value Contract type in message is different than value in WORKFLOW ID &1
G00067	PUF & not found!
G00068	Original invoice for correction &1 not found.
G00069	Wrong quantity RMP for role &1
G00070	It is impossible to determinate distributor
G00071	PDT &: parameter & is not allowed.
G00072	PDT EIC &1 is not in period &2 - &3 registered in CDS
G00073	The sender does not have permission to send event on PDT &1.
G00074	Withdrawal of CHS according to §11a parag.2 Energy Act is not possible.
G00075	Value Reason of CHS in message is different than in WORKFLOW ID &1
G00076	On PDT &1 is from &2 another supplier with cannot cancel the contract
G00077	Value Type of change supp. in message is different than in WORKFLOW ID &1
G00078	Atribute WORKFLOW ID &1 is not fill

G00079	Date "To" for locality &1 has an incorrect format (YYYYMMDD) or is miss
G00080	Invoice no. & for PDT & was already been canceled.
G00081	User & has insufficient access rights for message &.
G00082	PDT &: Grid with id & does not exist in system.
G00083	Different grid ID for existing PDT &.
G00084	LP class was not set for PDT &.
G00085	New SST (&1) is not sender of message (&2)
G00086	Sender must be supplier on PDT &1
G00087	On PDT &1 is not in &2 - &3 SST &4
G00088	Sender &1 is different from SST &2
G00089	Object requested is currently locked by user &
G00090	Values period of time in message are different than in WORKFLOW ID &1
G00091	Isn´t fill new subject of settlement.
G00092	For PDT & and date & can not be conclusively set SST
G00093	On PDT &1 can not be send RZD from &2.
G00094	Unidentified WORKFLOW ID &1
G00095	Unallowed Message code &1,type of change supplier &3 and Action type &2.
G00096	In period & - & was not done billing version &.
G00097	Sum PDT not found in grid & (interval & - &).
G00098	Segment &1:time field &2 with value &3 is not valid.
G00099	Segment &1:field &2 has initial value.
G00100	PDT &: Meter reading result has to be filled in.
G00101	Grid for PDT & is not entered.
G00102	Metered data provider for PDT & is not entered
G00103	LP class & does not exist.
G00104	Time interval exceeds validity PDT &1 - &2
G00105	Interval for PDT in LDS grid can not exceed one month
G00106	DUF contains duplicit time entries.
G00107	On PDT &1 was &2 change of supplier. Expect single DUF for each period.
G00108	On PDT &2 missing measurement.
G00109	Object EXT_UI & is blocked. Repeat action later.
G00110	Access check failed on interval &1-&2 Data for PDT& will not be processed
G00111	& records found.
G00112	Request interval &1 - &2 exceeds maximum length &3 days.
G00113	In message missing Contract method
G00114	Value OPM_ID in message is different than in WORKFLOW ID &1
G00115	For this type of PDT is not supported change of supplier.
G00116	For SZD with reason S2 have to be PDT &1 on DPI mode.
G00117	On PDT & was changed supplier during WF change of supplier.
G00118	Action &1 with reason &2 is not relevant for contract method &3.
G00119	On PDT &1 can not be done extension for interval &2 - &3.

G00120	Receiver of el. invoice have to be distributor or supplier.
G00121	'Date from' is greater than 'Date to'.
G00122	On & all periodic request will be finished, perform eventualy recovery.
G00123	Action reason & is not supported.
G00124	For Contract type & is allowed only action & with rejection reason &.
G00125	PDT &1 is on DPI mode. For change of supplier use SZD with reason S2.
G00126	PDT exists, SZD R1 can not be send.
G00127	Sender &(&] is not equal to signer &(&).
G00128	PDT &1: Deadline has been exceeded for processing, contact OTE support.
G00129	Deadline exceeded for proccessing message &1 (idoc &2, blok &3), PDT &4.
G00130	Unexpected error &1 on creating/changing contact.
G00131	For corr. invoice is not completed obligatory field(corReason, SCNumber).
G00132	For PDT &1 allowed prof role not found.
G00133	PSC field can contain only numerical values.
G00134	Different types of installation for existing PDT &.
G00135	Check handover of respons. for imbalance SST &1(&2-&3)-process finished
G00136	EAN (ext_ui) & is not in correct form or grid EAN interval.
G00137	"Date from" on existing PDT can not be change to the past.
G00138	Invoice number & is blocked.
G00139	There are different versions in request (&1, &2). Request rejected.
G00140	Atribute Contract type is not correct value
G00141	'Date from' has an incorret format (YYYYMMDD) or is missing.
G00142	Longer term for request than is allowed (&1 days, max. &2).
G00143	Change to past PDT &1: error when saving operand & in term &2 - &3.
G00144	Date "From" for locality &1 has an incorrect format (YYYYMMDD) or is miss
G00145	Number of corrected invoice is missing.
G00146	Document & Version &: ListOfItems element must be completed.
G00147	Distributor (&1) is different than sender (&2)
G00148	Atribute Type of change supplier is not fill
G00149	Sender is not supplier of any required service for mess. code &.
G00150	Error &3 on assignment service &1 on PDT &2. Descr. of error in long text
G00151	On PDS &1 is from &2 another subject of settlement.

List of reason codes in Communication server

Code	Message text
K00000	Internal fault during message processing.
K00001	Any message not found.
K00002	Communication confirmed.
K00003	Sending of test message was verified.
K00004	The request was accepted.

K00005	Message was sent into IMW, task &.
K00006	Test message sending failed.
K00007	Sender & is different from signer & (&).
K00008	Unknown message type.
K00009	Message certificate is out of EU.

Appendix III Certificate import

This appendix describes how to import certificates to ensure secure communication with the CDS system. In order to configure secure email communication, aside from the procedure described here, Outlook must also be configured. A detailed description of this procedure is available at www.ote-cr.cz in the Market Participants/Registration and Contracts/Logica Installation Procedures sections.

Installation of certificates for communication with CDS

The external user must have 3 certificates available for communication with CDS:

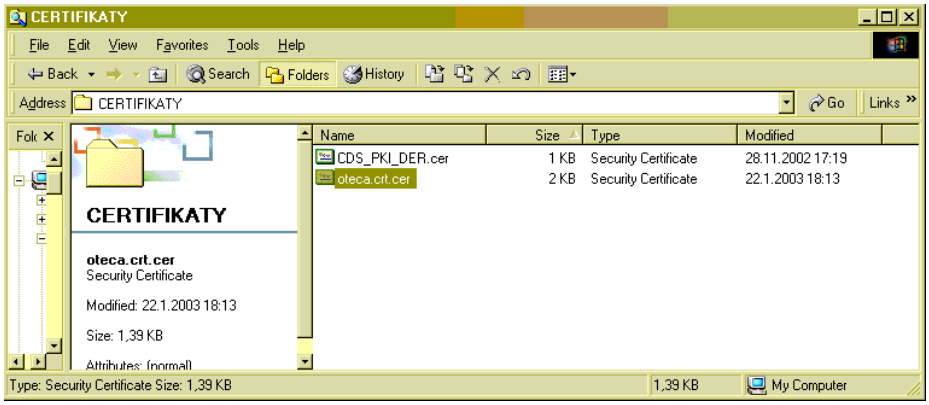
1. recipient certificate (CDS)
2. certificate by certification authority for verification of the recipient certificate
3. private certificate of external user.

OTE shall provide the external user with certificates 1 and 2. The private certificate is stored on the card of the person for entry in the OTE IS and CDS systems via web interface.

Installation of recipient certificates (CDS)

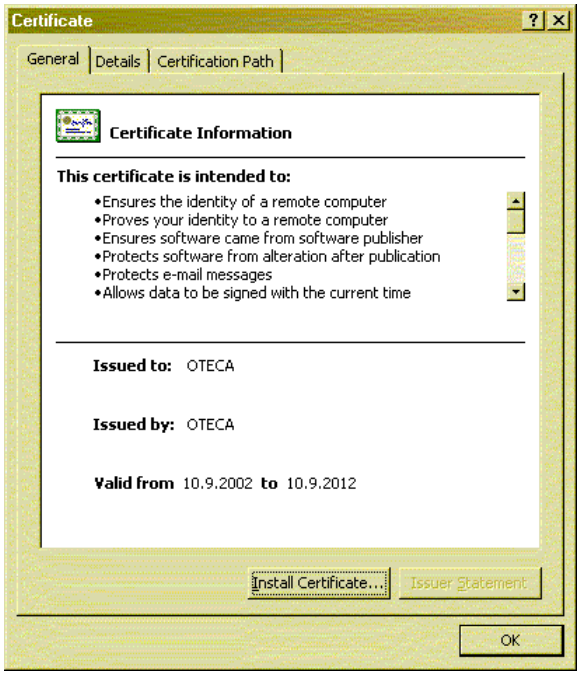
The external user shall receive from OTE 2 files with certificates (CDS, OTECA), which he save on the PC hard disc to any folder. Then the certificates must be installed in the Windows system in order to later install them in the MS Outlook application for sending email to the CDS system.

If the user has purchased a certificate from 1.CA, he will import it in the same manner, plus he must have imported the 1.CA root certificate – more information will be provided directly by 1.CA upon certificate delivery.



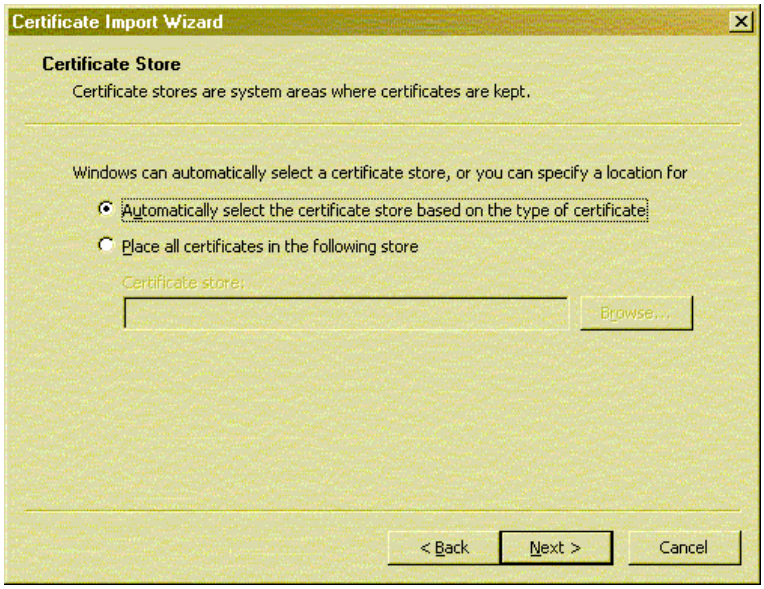
The installation is launched by double-clicking on the respective file. This launches the installation guide. The installation procedure is identical for both certificates, the preset values are retained in the installation guide. The OTECA certificate is installed first, followed by CDS certificate. Below is an example of certificates installation.

Upon double-clicking the file, the certificate information is displayed. Installation is then launched by clicking the Install button.



Click Next on the next screen.

Leave the preset automatic selection of the location of saving the certificate in the system.



Click Finish upon completion of setting.

The system should respond the import was successful.

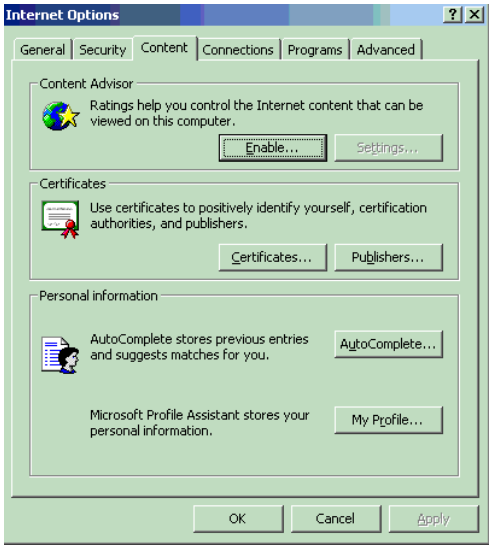
Export of the private certificate for registration in the MS Outlook application

Private personal certificate is stored on the token (or another device) for access to the OTE IS and CDS systems via web interface. The certificate must be exported to the PC hard disc for

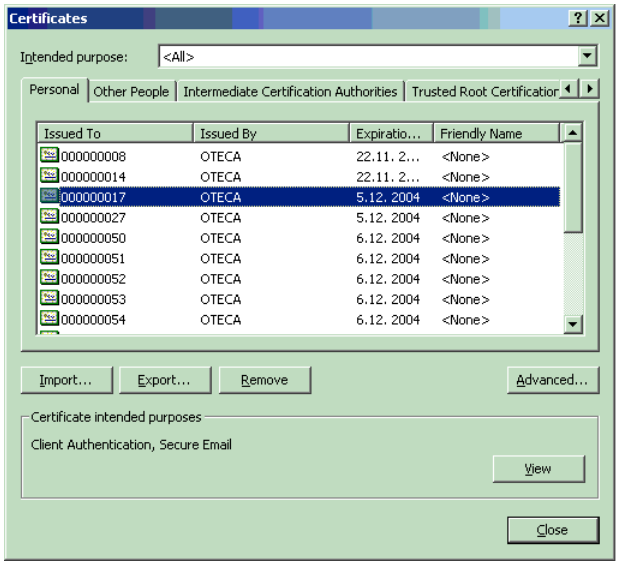
later installation to the MS Outlook application. The procedure is identical for all HW with stored private certificate.

The procedure of export of the private certificate is the following:

1. insert token
2. launch MS Explorer
3. select Tools in the menu – Internet Options and bookmark Content



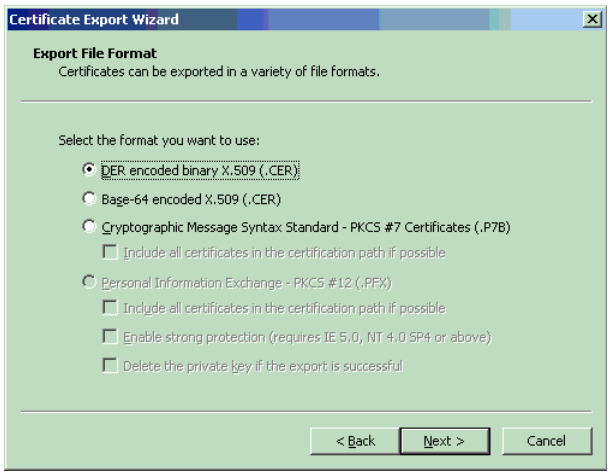
4. click Certificates button, a list of available certificates should appear



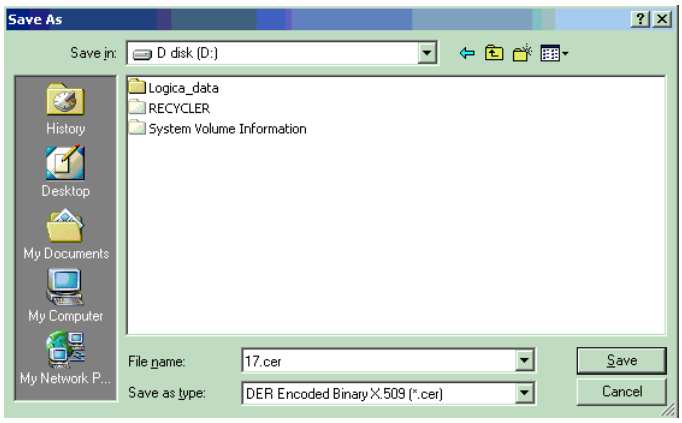
5. use the mouse to select the number of the certificate of the respective person and click Export button. This will launch the export guide, where we click Next button.

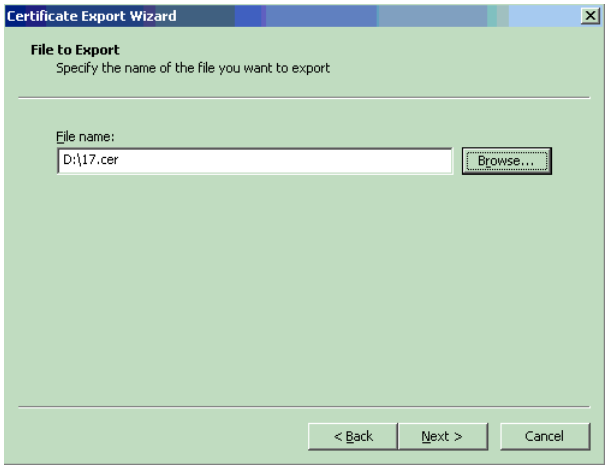
6. leave the selection do not export the private key (the key is physically stored on the token and it may not be exported, only referred to)

7. on the next screen, also leave the preset 1st format selection for storing - DER_Encoded



8. on the next screen, enter the folder and file name for storing the certificate - Browse





9. upon clicking Next button, a summary information about export appears and after clicking Finish button, the system should display the information about successful export.


Certificate Export Wizard
The export was successful.
OK

Appendix IV Rights for sending CDS messages

Code	Description	Service	Other conditions
GA1	Request for change of supplier	All RMPs	
GA4	Message about possible reservation of distribution or transport capacity	101 Supplier 113 Data provider (TSO/DSO)	
GA8	Request for suspension of the change of supplier process	101 Supplier 111 subject of Settlement	
GAB	Confirmation/rejection of assignment of responsibility for imbalance for the point of delivery	101 Supplier 111 subject of Settlement	
GAE	Confirmation of customer's consent with change of supplier	101 Supplier	
GAH	Confirmation/rejection of continuation of gas supplies at the point of delivery by the existing supplier and its subject of settlement	101 Supplier 111 subject of Settlement	
GAL	Request for change of subject of settlement at a PDT	101 Supplier 111 subject of Settlement	
GAO	Approval/rejection of request for change of subject of settlement by the subject of settlement	101 Supplier 111 subject of Settlement	
GAR	Request for sending the status of change of supplier	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GBA	Request for extension/reduction of supply by the existing supplier	101 Primary supplier	
GBD	Consent with acceptance of responsibility for imbalance in case of extension/reduction of supply	111 Subject of settlement	
GC1	Entering/updating of claim	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GC4	Inquiry about claim data	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GC8	Inquiry about OTE messages	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GI1	Request for data of preliminary imbalance	111 subject of Settlement	
GI3	Request for data of preliminary difference in allocation	111 subject of Settlement	
GI5	Request for data of actual imbalance	111 subject of Settlement	
GI7	Request for data of actual difference in allocation	111 subject of Settlement	
GI9	Request for off-tolerance imbalances	111 subject of Settlement	
GIB	Request for data of final imbalance	111 subject of Settlement	
GID	Request for data of take over preliminary	111 subject of Settlement	

	imbalance		
GIF	Request for data of take over actual imbalance	111 subject of Settlement	
GIH	Request for data of take over final imbalance	111 subject of Settlement	
GIJ	Request for data of final difference in allocation	111 subject of Settlement	
GL1	Request for allocation data	111 subject of Settlement	
GL3	Requets for data of reserved capacity	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GM1	Request for metered values (interval metering)	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GM3	Request for substitute values (interval metering)	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO) 115 Sousední distributor	
GM5	Request for change of accumulation	113 Data provider (TSO/DSO)	
GM7	Request for metered values (non-interval metering)	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GM9	Request for planned estimate of annual consumption	101 Supplier 111 subject of Settlement 113 Data provider (TSO/DSO)	
GMB	Request for combustible heat	113 Data provider (TSO/DSO)	
GMD	Request for distribution capacity	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO)	
GMF	Request for transport capacity	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO)	
GMH	Request for actual own losses	113 Data provider (DSO/TSO)	
GMJ	Request for planned own losses	113 Data provider (DSO/TSO)	
GML	Inquiry about aggregated values at SS	111 subject of Settlement	
GMN	Inquiry about data for DS broken down to A, B, C, CM	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO)	
GMP	Inquiry about summary values for SS broken down to A, B, C, CM	101 Supplier 111 subject of Settlement	
GMR	Inquiry about summary values for SS and network broken down to A, B, C, CM	101 Supplier 111 subject of Settlement	PDT 1007
GMT	Request for daily values of metering C	101 Primary supplier 111 Subject of settlement	

		113 Data provider (DSO/TSO)	
GN1	Inquiry about nominations of the SS of all types	111 subject of Settlement	
GN3	Inquiry about all nominations of transport	113 Data provider (DSO/TSO)	
GN5	Inquiry about all nominations of distribution for the DSO	113 Data provider (DSO/TSO) 120	
GN7	Inquiry about all nominations of storage for the SSO	113 Data provider (DSO/TSO) 120	
GN9	Inquiry about shipper code list	111 subject of Settlement 113 Data provider (DSO/TSO)	
GP1	DGI data for invoicing of distribution	113 Data provider (DSO/TSO)	
GP4	Inquiry about data for invoicing of distribution (DGI)	111 subject of Settlement 113 Data provider (DSO/TSO)	
GP7	Electronic invoice message for gas	113 Data provider (DSO/TSO)	
GP9	Request for electronic invoice	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO)	
GPC	Request for informaction about electronic invoice handover	113 Data provider (DSO/TSO)	
GR1	Request for registration/update of PDT	113 Data provider (DSO/TSO)	
GR4	Request for PDT data	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO) 115	
GRE	Request for simplified list of PDT	101 Supplier 111 subject of Settlement 113 Data provider (DSO/TSO) 115	
GRX	Request for termination of PDT validity	113 Data provider (DSO/TSO)	
GT1	Request for data of normal and actual weather conditions (temperatures)	Všichni RÚT	
GT3	Request for LP data	113 Data provider (DSO/TSO)	
GT5	Request for data of temperature correlation coefficient	Všichni RÚT	
GT7	Inquiry about residue diagrams	111 subject of Settlement 113 Data provider (DSO/TSO)	
GT9	Inquiry about estimated diagram of consumption of a PDT group (C, CM)	111 subject of Settlement 113 Data provider (DSO/TSO)	

GTB	Request for clearing results for PDT	101 Dodavatel primární 111 Subjekt zúčtování	