

Information Exchange Guidelines

Versions

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Version 2		
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Table of Contents

Versions	2
1. Introduction	4
1.1. Purpose of this document	4
1.2. Common Zone IT-Platform (platform.conexus.lv)	4
1.3. Edig@s 5.1. compliance	4
2. AS4 connection	5
3. Data exchange via direct AS4 connection	6
3.1. Capacity	6
3.1.1. Capacity booking.....	6
3.1.2. Capacity trading.....	9
3.1.3. Capacity surrendering.....	10
3.2. Nomination	11
3.3. Settlement	13
3.3.1. Imbalance	13
3.3.2. Allocation	14
3.3.3. Forecast.....	15
3.4. Storage	16
3.4.1. Balance	16
3.4.2. Storage Capacity Booking.....	16
3.4.3. Transfer Request.....	16
3.5. Balancing	16
3.5.1. Balancing Bids.....	16

1. Introduction

1.1. Purpose of this document

This document contains information exchange guidelines for direct data exchange with Common Zone IT-Platform (platform.conexus.lv) via secure AS4 connection. In this document you will find useful information for establishing secure AS4 connection and ensuring Edig@s based xml message exchange between network user and common market area gas transmission operators Elering JSC and Conexus Baltic Grid JSC.

1.2. Common Zone IT-Platform (platform.conexus.lv)

Common Zone IT-Platform (platform.conexus.lv) is a data exchange environment for gas market network users covering the following processes:

- Booking and confirmation of common zone entry and exit capacities;
- Submission and confirmation of nominations and renominations;
- Information about the imbalance of network user's portfolio imbalance.

Access to Common Zone IT-Platform (platform.conexus.lv) is available to all network users who have a valid balance agreement with one of the common balancing zone system operators (Elering AS or JSC „Conexus Baltic Grid“).

Link for accessing platform production environment: <https://platform.conexus.lv/>

Link for accessing platform test environment: <https://bcgp-test.conexus.lv/>

1.3. Edig@s 5.1. based communication

According to the provisions of TNC, electronic exchange of information related to execution of transmission services is based on the Electronic Document Interchange (EDI) standard, in its version developed for the gas industry, codenamed EDIG@S, which is described in detail in Edig@s Message Implementation Guideline (MIG) documents.

Edig@s Message Implementation Guidelines (including XSD schemas) are published on www.edigas.org and this should be used as the primary source for detailed guidance regarding Edig@s message specific details and document exchange implementation.

Please pay attention, that harmonized identification and versioning of the message shall be applied. Edig@s message is determined uniquely by the attributes Identification and Version; every change of nomination (renomination) or provisional/final allocation should have the same Identification and incremented Version number (TSO shall only accept a document with a version number which is greater than the previous version number of the same document).

EIC codes are used to identify the issuer and receiver of Edig@s message and to identify the connection point (these changes arise from the need to fulfil obligations under REMIT).

For the additional information, please see further pages. **Please note that this document is provided as an example only and can be changed at any time without any prior notice.**

In case of questions regarding implementation, please send an email to address: platform@conexus.lv.

2. AS4 connection

For the purpose of network user business process automation, it is possible to establish secure communication with Common Zone IT-Platform (platform.conexus.lv) via AS4 connection using the official ENTSOG profile.

ENTSOG profile used for communication:

General information:	https://www.entsog.eu/interoperability-and-data-exchange-nc#as4-documents-for-implementation
Profile description:	https://www.entsog.eu/sites/default/files/2019-05/INT0488-161115%20AS4%20Usage%20Profile_Rev_3.6_clean_final.pdf

AS4 technical details:

AS4 standard communication technical details:	http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/profiles/AS4-profile/v1.0/os/AS4-profile-v1.0-os.html
Conformant AS4 solutions for external service provision:	https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+AS4+conformant+solutions

To configure and establish direct AS4 connection, the following information has to be submitted to the connecting TSO via email:

Table 1. Network user AS4 endpoint details

Parameter	Value	Description
URL	ENTER HERE	URL of the network user's AS4 endpoint.
Sender id	ENTER HERE	EIC code of the network user.
IP and port of the sending system	ENTER HERE	Public IP address of the network user's sending system and ports used in the communication.

Also attached to the form:

- Public part of signing/encryption certificate for the communication (*.cer file should be an X.509 certificate in base64 format);
- Server certificate of the AS4 endpoint (for https connection).

Configuration details for setting up AS4 connection to Common Zone IT Platform TEST and PRODUCTION environments will be shared via separate document.

3. Data exchange via direct AS4 connection

Following Edig@s based messages are used for data exchange and communication between the systems:

No.	Document type
1	Account position (94G)
2	Account synchronisation (APG)
3	Acknowledgement (294)
4	Auction bid (ALN)
5	Auction results (ANB)
6	Bid Activation document (ALP)
7	Bid document (ALO)
8	Booking confirmation (XBC)
9	Booking request (XBR)
10	Definitive allocation (96G)
11	Delivery order (26G)
12	Delivery response (27G)
13	Imbalance notification (14G)
14	Market situation (ANO)
15	Nomination (01G)
16	Nomination response interruption (AND)
17	Nomination response notification (08G)
18	Non daily metered forecast (ANW)
19	Offered capacity (AMV)
20	Operational balancing account position (AOG)
21	Provisional allocation (95G)
22	Reconciliation notification (16G)
23	SSN authorization (ANN)
24	SSN delivery order (ANC)
25	Storage situation notice (XSS)
26	Surrender capacity (ANP)
27	Transfer advice (AMN)
28	Transfer confirmation (XTC)
29	Transfer request (XTR)

3.1. Capacity

3.1.1. Capacity booking

Following documents are used under capacity booking process:

Document type	Shortening
Auction bid (ALN)	AUCBID
Auction results (ANB)	AUCRES

AUCBID - Document is used for capacity booking request for specific capacity product.

Element	Description
AuctionBid_Document	Root element with namespace: xmlns="urn:easee-gas.eu:edigas:capacitytrading:auctionbiddocument:5:1:5".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following same capacity booking should have version number increased.
type	Type of the file created. Default: "ALN".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	Participant EIC code.
issuer_MarketParticipant.marketRole.code	Participant role code. Default: "ZSH".
recipient_MarketParticipant.identification	EIC code of platform production environment. Default: "61V-IT-PLATFORM8".
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
contractReference	TSO reference of specific contract. Important to follow the coding: "EIC_DIRECTION_TYPE_AVAILABILITY_TYPE", Sample: "21Z00000000153U Z03 ZEK Z06 ZEP".
contractType	Description of contract used. Default: "ZSD".
bidder_Reference.identification	Bidder platform username. Free text field if used over API.
quantity_MeasureUnit.code	Description of the unit used in the quantity amount. Default: "KW2" (Kilowatt-hour per day (kWh/d)).
bid_Quantity.amount	Numerical value of total quantity requested.
min_Quantity.amount	Numerical value of min. quantity requested.
status.code	Description of status. Default: "62G".

Additional limitations for the message exchange:

- Capacity booking will first verify if capacity booking product forwarded is active in the system. Meaning if offered capacity products with the respective period and contract reference exist.
- Each document will contain specific capacity booking product. Meaning multiple products have to be booked with multiple documents.

AUCRES - Document is used for capacity booking request for specific capacity product.

Element	Description
AuctionResults_Document	Root element with namespace: xmlns="urn:easee-gas.eu:edigas:capacitytrading:auctionbiddocument:5:1:5".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following same capacity booking should have version number increased.
type	Type of the file created. Default: "ANB".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	Auction organiser role code. Default: "ZUJ".
recipient MarketParticipant.identification	Participant EIC code.
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSH".
contractReference	TSO reference of specific contract. Important to follow the coding: "EIC_DIRECTION_TYPE_AVAILABILITY_TYPE", Sample: "21Z000000000153U Z03 ZEK Z06 ZEP".
contractType	Description of contract used. Default: "ZSD".
status.code	Description of status. Default: "64G".
capacityType.code	Description of capacity type. Default: "ZEP".
product_TimeSeries.SpanPeriod	Description of capacity length type. ZEJ = Yearly ZEK = Quarterly ZEL = Monthly ZEM = Daily ZEN = Within day
productTimeInterval Period.timeInterval	Period of the capacity booking product.
connectionPoint.identification	EIC code of the product connection point.
quantity_MeasureUnit.code	Measure unit of the booked product.
price_MeasureUnit.code	Measure unit of the quantity unit price.
currency.code	Currency of the price.
totalCapacityOffered Quantity.amount	Total capacity offered.
clearing_Price.amount	Clearing price. Not used. Default: "0".
ToTso MarketParticipant	Parent element to describe the direction.
identification	External TSO of the connection point.
availability.type	Availability code. Z06-Firm, Z05-Interruptible.
price_MeasureUnit.code	Measure unit of the quantity unit price.
currency.code	Currency of the price.

Element	Description
auctionHeld_Period.timeInterval	Period information about the auction.
BiddingRound_Characteristic	Parent element to describe the bidding information.
sequence	Sequence of the bidding round. Default: "1".
Bid_Document	Parent element to describe the bid document.
identification	Bid document identification.
version	Bid document version.
bid_MarketParticipant.identification	Bid document provided company EIC.
bidder_Reference.identification	Bid document provider.
bid_Quantity.amount	Bided quantity amount.
min_Quantity.amount	Min bided quantity amount.
allocated_Quantity.amount	Allocated quantity amount.
status.code	Status of the bid. Default: "64G".

3.1.2. Capacity trading

Element	Description
TransferAdvice_Document	Root element with namespace: xmlns=" urn:easee-gas.eu:edigas:capacitytrading:transferadvisedocument:5:1:5".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following document should have version number increased.
type	Type of the file created. Default: "AMN".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	Auction organiser role code. Default: "ZTU".
recipient_MarketParticipant.identification	Participant EIC code.
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
dealOriginator_MarketParticipant.identification	EIC code of the provider.
dealid_Agreement.identification	Deal ID provided by trading participant.
tradeNature_Reference.type	Type of trade. Default: "A18".
connectionPoint.identification	EIC code of the connection point capacity traded.
quantity_MeasureUnit.code	Measurement of the unit of capacity.
trading_Procedure.code	Description of trading type. Default: "A03".
transferType.type	Transfer type. Default: "A02".
Account	Parent element describing the account information.
identification	Account of the data provider.

Element	Description
Period	Parent element describing the period of trading.
timeInterval	Period of the traded capacity period.
direction.code	Direction code describing the direction of the capacity trades. Z02- Entry, Z03-Exit.
quantity.amount	Amount of capacity traded.
quantity.type	Type of capacity traded. Default: "ZXO".
capacityType.code	Type of capacity traded. Default: "ZEP".
availability.type	Availability code. Z06-Firm, Z05-Interruptible.

3.1.3. Capacity surrendering

Element	Description
SurrenderCapacity_Document	Root element with namespace: xmlns=" urn:easee-gas.eu:edigas:capacitytrading:surrendercapacitydocument:5:1:5".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following same capacity booking should have version number increased.
type	Type of the file created. Default: "ANP".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	Participant EIC code.
issuer_MarketParticipant.marketRole.code	Auction organiser role code. Default: "ZSH".
recipient_MarketParticipant.identification	TSO EIC code.
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
connectionPoint.identification	EIC code of the connection point were capacity surrendering is made.
connectionPoint.measureUnit.code	Measurement of the unit of capacity.
connectionPoint.fromTso_MarketParticipant.identification	Description of status. Default: "64G".
connectionPoint.period.timeInterval	External TSO of the connection point.
connectionPoint.period.surrendered_Quantity.amount	Surrendered quantity amount.

3.2. Nomination

Following documents are used under nomination process

Document type	Shortening
Nomination (01G)	NOMINT
Nomination response notification (08G)	NOMRES

NOMINT - Document is used for Nominating specific quantity under specific connection point

Element	Description
NominationResponse_Document	Root element with namespace: xmlns="urn:easeegas.eu:edigas:nominationandmatching:nominationdocument:5:1".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following same capacity booking should have version number increased.
type	Type of the file created. Default: "01G".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	Participant EIC code.
issuer_MarketParticipant.marketRole.code	Auction organiser role code. Default: "ZSH".
recipient_MarketParticipant.identification	TSO EIC code.
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
ConnectionPoint	Parent element of connection point information.
identification	EIC code of the connection point where nomination is made.
measureUnit.code	Measure unit of the nomination made.
NominationType	Parent element describing the nomination type information.
type	Type of nomination made. Default: "A02".
Account	Parent element describing the account information.
internalAccount	Account EIC code of the nominating party.
externalAccount	Account EIC of the external nomination party.
Period	Parent element describing the period of nomination.
timeInterval	Time interval of nomination made.
direction.code	Direction of the nomination in reference to internal and external account.
quantity.amount	Quantity amount of the nomination.

Additional limitations for the message exchange:

- Each message contains only one Connection point but will contain all trades (account classes) in same document.

NOMRES - Document is used for confirming nominating specific quantity under specific connection point

Element	Description
NominationResponse_Document	Root element with namespace: xmlns="urn:easeegas.eu:edigas:nominationandmatching:nominationresponsedocument:5:1".
identification	Unique ID of the capacity booking request.
version	Version of the file created. Every following same capacity booking should have version number increased.
type	Type of the file created. Default: "08G".
creationDateTime	Timestamp of the file creation.
validityPeriod	Validity period of the capacity product booked. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	Auction organiser role code. Default: "ZSO".
recipient_MarketParticipant.identification	Participant EIC code.
recipient_MarketParticipant.marketRole.code	TSO role code. Default: "ZSH".
applicationContext	
nomination_Document.identification	Description of contract used. Default: "ZSD".
nomination_Document.version	Description of status. Default: "64G".
ConnectionPoint	Parent element of connection point information.
identification	EIC code of the connection point where nomination is made.
measureUnit.code	Measure unit of the nomination made.
NominationType	Parent element describing the nomination type information.
type	Type of nomination made. Default: "A02".
Account	Parent element describing the account information.
internalAccount	Account EIC code of the nominating party.
externalAccount	Account EIC of the external nomination party.
InformationOrigin TimeSeries	
type	
Period	Parent element describing the period of nomination.
timeInterval	Timeinterval of nomination made.
direction.code	Direction of the nomination in reference to internal and external account.
quantity.amount	Quantity amount of the nomination.
Status	Parent element containing information on the status of nomination.
code	Status of nomination. Default: "13G".
reason.text	Text to describe the status of nomination.

3.3. Settlement

Following documents are used under settlement process

Document type	Shortening
Imbalance notification (14G)	MARSIT
Provisional allocation (95G)	
Definitive allocation (96G)	
Non daily metered forecast (ANW)	

3.3.1. Imbalance

MARSIT - Document is used for updating network user imbalance situation.

Element	Description
MarketSituation_Document	Root element with namespace: xmlns="urn:easee-gas.eu:edigas:marketbalancing:marketsituationdocument:5:1:5".
Identification	Unique ID of the imbalance notification document.
version	Version of the document. Every following document for the same period will have incremented version number.
type	Type of the document. "14G" for imbalance notification.
creationDateTime	Timestamp of the document creation.
validityPeriod	Validity period of the document. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
recipient_MarketParticipant.identification	Receiving market participant (network user) EIC code.
recipient_MarketParticipant.marketRole.code	Receiving market participant (network user) role code. Default: "ZSH".
Account	Parent element describing the account information.
identification	EIC code of the market participant (network user) for whom the imbalance is calculated.
type	Type of the account. Default: "ZOC" (internal account).
TimeSeries	Parent element describing the TimeSeries.
type	"ZXM" (imbalance).
measureUnit.code	Measure unit used for the value. Default: "KW2" (Kilowatt-hour per day (kWh/d)).
Period	Parent element describing the period.
timeInterval	Time interval for which the imbalance value is calculated.
accountDirection.Code	Direction code describing the direction of the imbalance. ZPD = Debit quantity. ZPE = Credit Quantity.
accountDirection.account_Quantity.amount	Amount of the imbalance.

3.3.2. Allocation

MARSIT - Document is used for updating network user allocation information.

Element	Description
MarketSituation_Document	Root element with namespace: xmlns="urn:easee-gas.eu:edigas:marketbalancing:marketsituationdocument:5:1:5".
Identification	Unique ID of the allocation document.
version	Version of the document. Every following document for the same connection point and period will have the incremented version number.
type	Type of the document. "95G" for provisional allocation. "96G" for definitive allocation.
creationDateTime	Timestamp of the document creation.
validityPeriod	Validity period of the document. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
recipient_MarketParticipant.identification	Receiving market participant (network user) EIC code.
recipient_MarketParticipant.marketRole.code	Receiving market participant (network user) role code. Default: "ZSH".
ConnectionPoint	Parent element of connection point information.
identification	EIC code of the connection point where allocation is done.
Account	Parent element describing the account information.
identification	EIC code of the market participant (network user) for whom the allocation is done.
type	Type of the account. Default: "ZOC" (internal account).
externalAccount	Account EIC of the external allocation party.
TimeSeries	Parent element describing the TimeSeries.
type	"Z01" (allocated).
measureUnit.code	Measure unit used for the value. Default: "KW2" (Kilowatt-hour per day (kWh/d)).
Period	Parent element describing the period.
timeInterval	Time interval of the allocation value.
Quantity	Parent element describing the quantity.
direction.code	Direction of the allocation in reference to internal and external account. Z02- Entry, Z03-Exit.
amount	Quantity amount of the allocation.

3.3.3. Forecast

MARSIT - Document is used for updating non daily metered forecast information.

Element	Description
MarketSituation_Document	Root element with namespace: xmlns="urn:easee-gas.eu:edigas:marketbalancing:marketsituationdocument:5:1:5".
Identification	Unique ID of the non daily metered forecast document.
version	Version of the document. Every following document for the same period will have the incremented version number.
type	Type of the document. "ANW" for non daily metered forecast.
creationDateTime	Timestamp of the document creation.
validityPeriod	Validity period of the document. Important to follow the Gas day periods.
issuer_MarketParticipant.identification	TSO EIC code.
issuer_MarketParticipant.marketRole.code	TSO role code. Default: "ZSO".
recipient_MarketParticipant.identification	Receiving market participant (network user) EIC code.
recipient_MarketParticipant.marketRole.code	Receiving market participant (network user) role code. Default: "ZSH".
Account	Parent element describing the account information.
identification	EIC code of the market participant (network user) for whom the non daily metered forecast is done.
type	Type of the account. Default: "ZOE" (shipper account).
externalAccount	Account EIC of the external party.
TimeSeries	Parent element describing the TimeSeries.
type	"Z01" (allocated).
measureUnit.code	Measure unit used for the value. Default: "KW2" (Kilowatt-hour per day (kWh/d)).
Period	Parent element describing the period.
timeInterval	Time interval of the non daily metered forecast value.
accountDirection.Code	Code describing the direction of an account movement. ZPD = Debit quantity. ZPE = Credit Quantity.
accountDirection.account_Quantity.amount	Amount of the non daily metered forecast.