SECTION

VII Facility Setting Process

Version 5.1

EASEE-gas/Edig@s Workgroup

Document version: 2

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1 REFERENCES

The content of the electronic documents defined in the implementation guide are based on the definition of terms and codes as agreed by the Edig@s Workgroup.

For the definition of the roles outlined in figure 1 refer to the Edigas RoleType codelist.

It is strongly recommended to read the Introduction to the Edig@s MIG before implementing this process since it contains a number of general rules that are applicable for all the Edig@s messages.

2 GENERAL OVERVIEW

The Edig@s standard has been created to facilitate the exchanges required to support the activities for the exchange of information within the gas market. The principal activities are outlined in the use case diagram in figure 1.

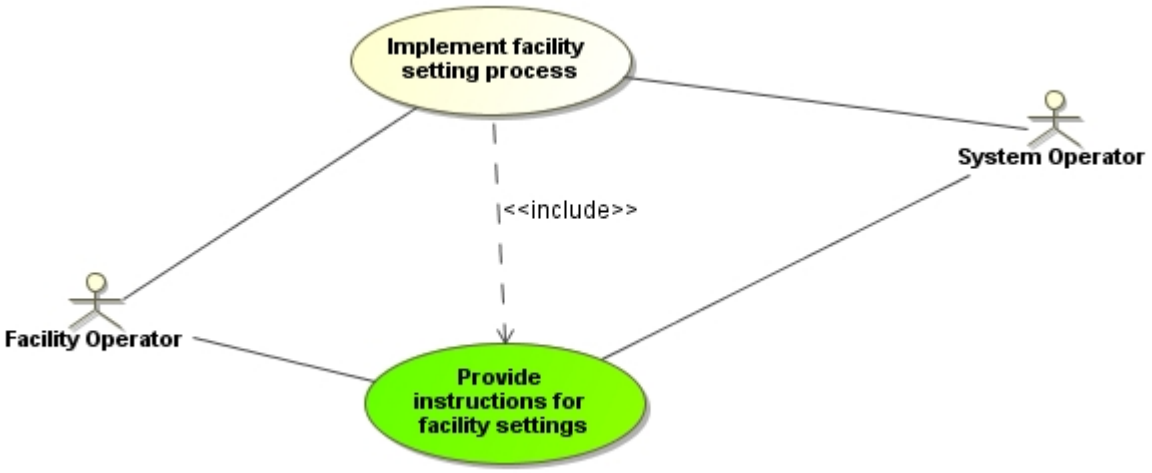


FIGURE 1: THE FACILITY SETTING USE CASE

The facility setting use case in figure 1 shows the use case that is possible within the process which is to provide different facilities with the operational settings for the injection or withdrawal of gas;

The actors involved in the facility setting process are

The System Operator whose role may cover:

1. Transmission System Operator
2. Independent System Operator
3. Independent Transmission Operator
4. Storage System Operator
5. LNG Operator
6. Market Operator

The Facility Operator.

3 THE FACILITY SETTING PROCESS

3.1 FUNCTIONAL DEFINITION

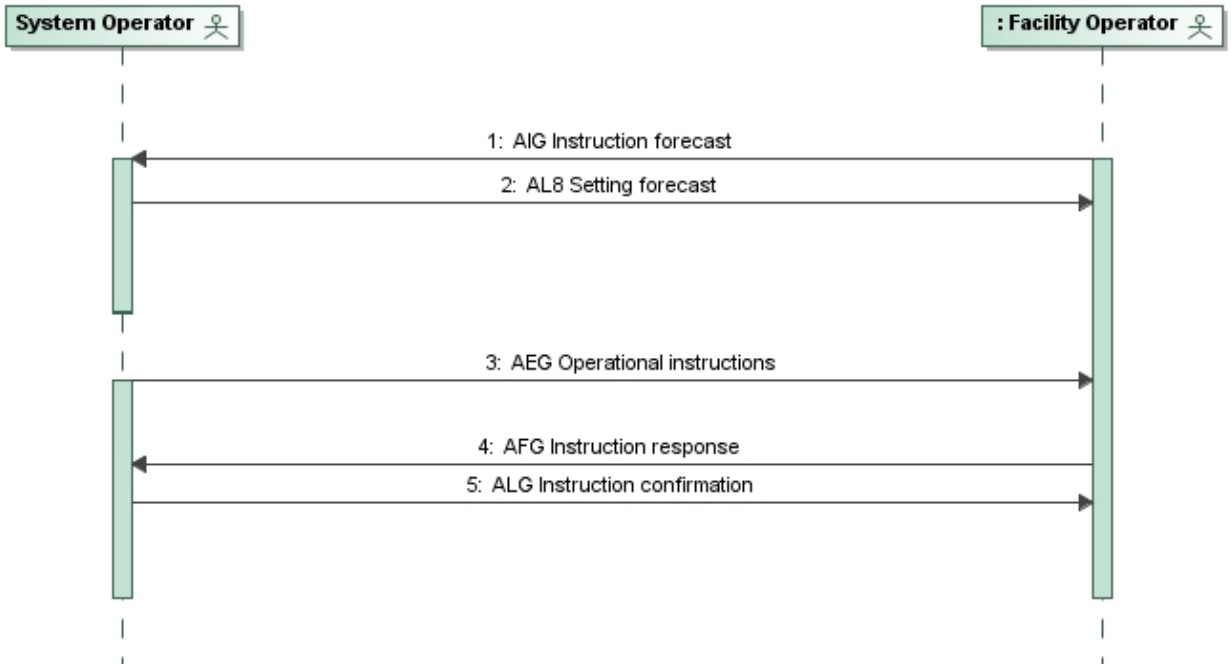


FIGURE 2 FACILITY OPERATION SEQUENCE DIAGRAM

A Facility Operator may send a forecast of the quantity of gas to be produced through the use of flow 1 in order to enable the System Operator to be aware of the quantity of gas that may be supplied (flow 1). This phase may occur at any time.
A System Operator may send a setting forecast of the quantity of gas to be produced through the use of flow 2 in order to enable the Facility Operator to prepare for the supply of the quantity of gas required. This phase may occur at any time.
When the System Operator has determined the exact requirements operational instructions are sent to the respective Facility Operators (flow 3).
The Facility Operators reply with an Instruction Response that may modify the quantities initially requested by the System Operator (flow 4).
The System Operator takes the contents of the Instruction Response into consideration and finally sends an Instruction Confirmation that confirms the quantities to be produced (flow 5).

3.2 WORKFLOW

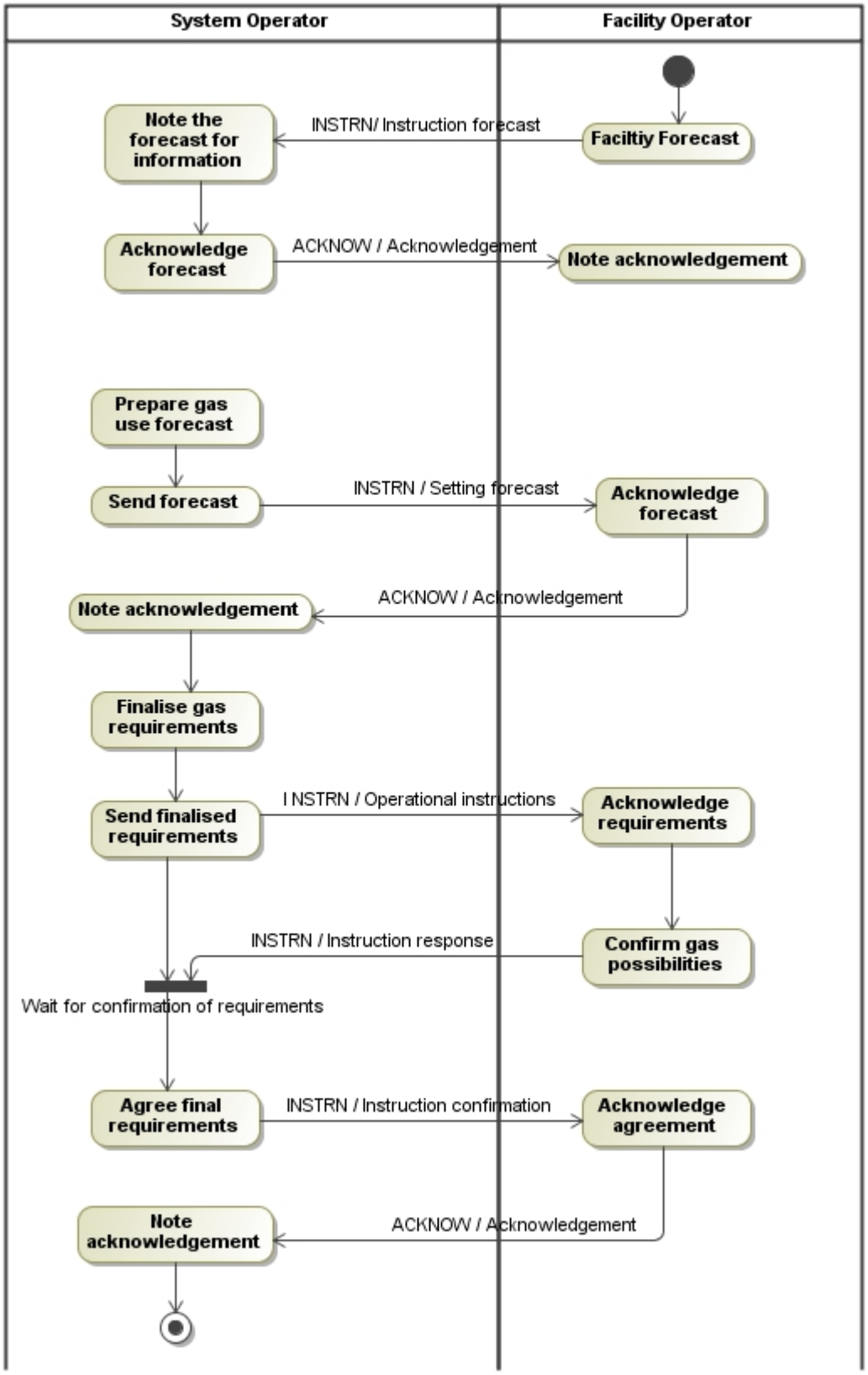


FIGURE 3: FACILITY OPERATIONAL SETTING WORKFLOW

A Facility Operator may initially forecast the quantity of gas to be produced and inform the System Operator to enable the preparation for the supply of the quantity of gas required.
When the System Operator has determined the exact requirements the Facility Operators are informed through a setting forecast. The Facility Operators acknowledge requirements on reception.

When the gas requirements are finalised the System Operator sends the operational instructions to the Facility Operators. A Facility Operator may accept the quantities requested or may modify the quantities requested through the use of the instruction response that is sent to the System Operator who consequently takes the modifications into consideration.
The process is finalised when the System Operator transmits an instruction confirmation to the Facility Operators confirming the quantities to be produced. The Facility Operators must systematically acknowledge receipt of the confirmation.

3.3 CONTEXTUAL MODEL FOR INSTRUCTIONS DOCUMENT (INSTRN)

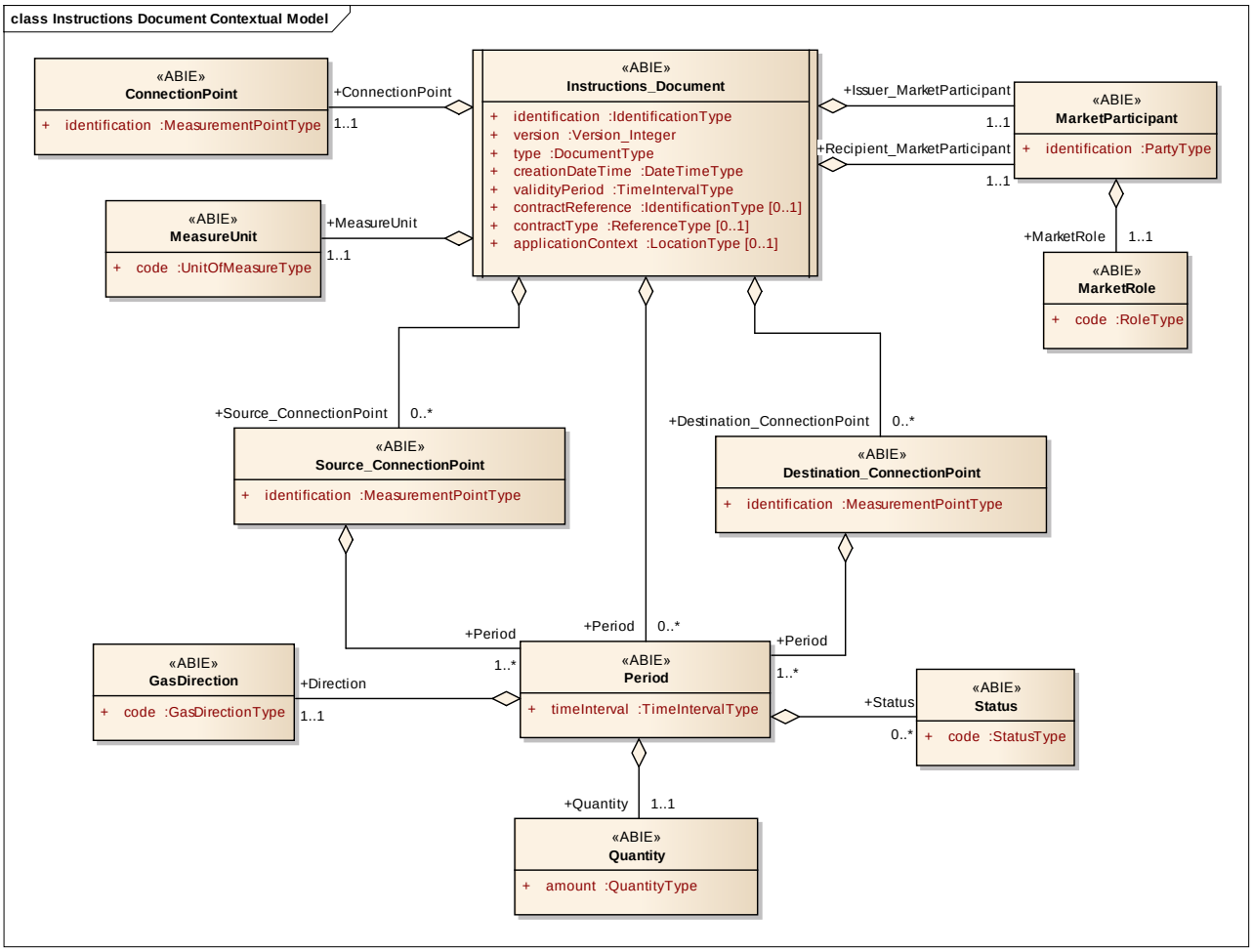


FIGURE 4: INSTRUCTIONS DOCUMENT CONTEXTUAL MODEL

3.3.1 INFORMATION MODEL STRUCTURE

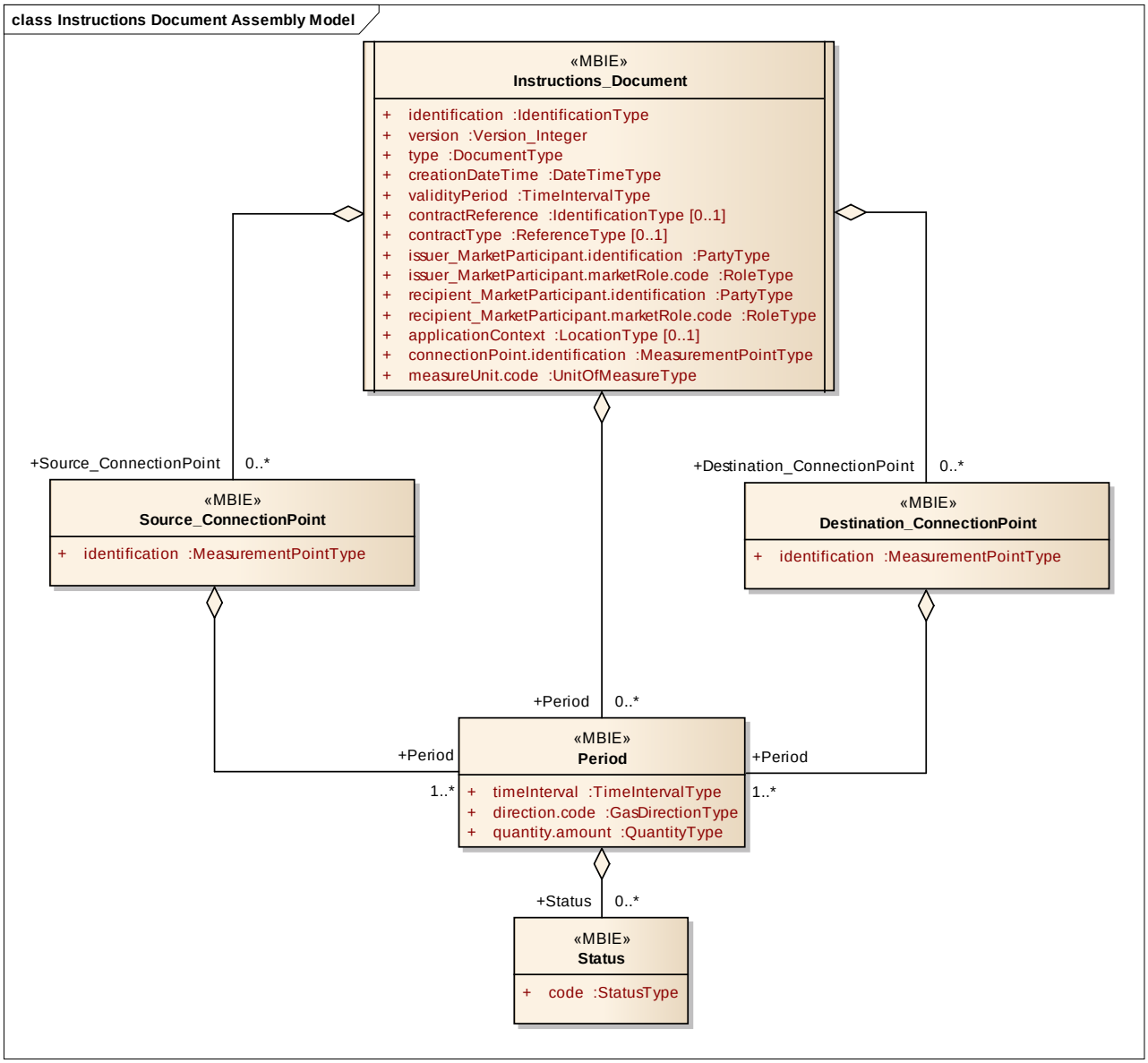


FIGURE 5: INSTRUCTIONS DOCUMENT MODEL

3.3.2 INFORMATION MODEL DESCRIPTION

3.3.3 RULES GOVERNING THE INSTRUCTIONS DOCUMENT CLASS

A document is uniquely identified by:

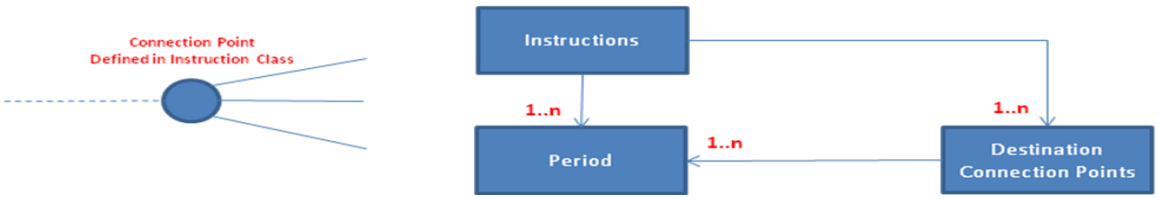
- The identification of the document
- The issuer identification
- The identification of the version.

An Instructions Document may address a single connection point or multiple connection points. The following three diagrams describe the different possibilities for the use of the model:

1. *An unspecified source and destination*

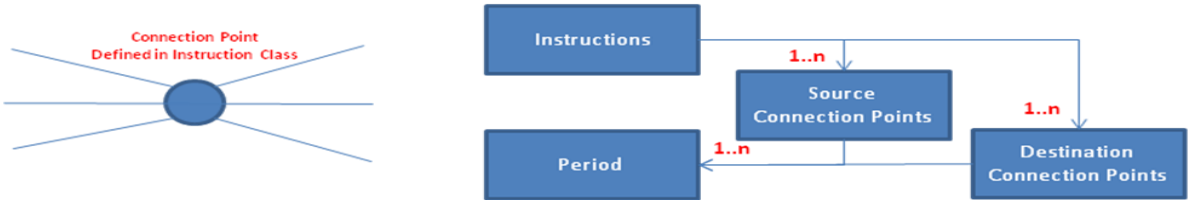
In this case only the Period class related directly with the Instructions Document class shall be used to provide the time series information. This is the general case.

2. *An unspecified source with multiple destinations*



In this case the Period class related to the Instructions Document class shall be used to provide the time series information entering the Connection Point.
The Destination Connection Point class shall be used to identify the connection point for each destination.
The Period class related to the Destination Connection Point class shall be used to provide the time series information for each destination connection point.

3. *Multiple specified sources with one or multiple destinations*



In this case there is no Period class related to the Instructions class.
The Source Connection Point class shall be used to identify the connection point for each source.
The Period class related to the Source Connection Point class shall be used to provide the time series information for each source connection point.
The Destination Connection Point class shall be used to identify the connection point for each destination.
The Period class related to the Destination Connection Point class shall be used to provide the time series information for each destination connection point.
Note: the possibility of multiple source connection points and a single destination point uses this same possibility with only one Destination Connection Point class.

132 #### 3.3.3.1 IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Identification of the document describing the Instructions Document.
Description	An Instructions Document must have a unique identification assigned by the initiator of the document to be sent to a recipient for a given validity period. The issuer must guarantee that this identification is unique over time.
Size	The identification of an Instructions Document may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

133 #### 3.3.3.2 VERSION

ACTION	DESCRIPTION
Definition of element	Version of the document being sent.
Description	The document version is used to identify a given version of a Instructions Document. The first version number for a given document identification shall normally be 1. The document version number must be incremented for each retransmission of a document that contains changes to the previous version. The receiving system shall only accept a document with a version number which is greater than the previous version number of the same document.
Size	A version number may not exceed 3 numeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

134 #### 3.3.3.3 TYPE

ACTION	DESCRIPTION
Definition of element	The type of the document being sent.
Description	This identifies the type of Instructions Document that is being sent. The following types of Instructions Document are permitted: AEG =Operational instructions. An instruction sent by the System Operator to a Facility Operator to provide instructions for the operation of the plant. AIG = Instruction forecast. An instruction sent by the Facility Operator to a System Operator to provide a forecast of instructions for the operation of the plant AFG = Instruction Response. An instruction reply sent by the Facility Operator to the System Operator acknowledging the instruction message and providing information on the action that has been taken. ALG = Instruction confirmation. A confirmation to an instruction response containing the confirmed values that will be taken into consideration. AL8 = Setting forecast. (Reference Edig@s DocumentType code list).
Size	A type may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

3.3.3.4 CREATIONDATETIME

ACTION	DESCRIPTION
Definition of element	Date and time of the creation of the document.
Description	The date and time that the document was prepared for transmission by the application of the issuer.
Size	Refer to section 1.2 of the Edig@s General Guidelines for information on the attribute structure.
Applicability	This information is mandatory.
Dependence requirements	None.

3.3.3.5 VALIDITYPERIOD

ACTION	DESCRIPTION
Definition of element	The start and end date and time of the period of validity covered in the document.
Description	This information provides the start and end date and time of the period of validity of the document.
Size	Refer to section 1.2 of the Edig@s General Guidelines for information on the attribute structure.
Applicability	This information is mandatory.
Dependence requirements	None.

3.3.3.6 CONTRACTREFERENCE

ACTION	DESCRIPTION
Definition of element	Identification of the contract reference that governs the documents contains.
Description	The contract reference identifies the operational facilities handbook under which the conditions of the content and transmission of the document have been agreed.
Size	The maximum length of the contract reference identification is 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	This information is used depending on local market rules.

3.3.3.7 CONTRACTTYPE

ACTION	DESCRIPTION
Definition of element	Identification of the type of contract covering the document.
Description	The contract type identifies the nature of the contract defined in the document. Refer to the Edigas ReferenceType codelist for the list of valid codes.
Size	The maximum length of the contract type is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	This information is used depending on local market rules.

3.3.3.8 ISSUER_MARKETPARTICIPANT.IDENTIFICATION – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who has issued the document.
Description	The issuer of the document is identified by a unique coded identification. This code identifies the party that is the "owner" of the information being transmitted in the document. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate the code "305" for an EIC party code.
Size	The maximum length of an issuer's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

140 #### 3.3.3.9 ISSUER_MARKETPARTICIPANT.MARKETROLE.CODE

ACTION	DESCRIPTION
Definition of element	Identification of the role that the party who has issued the document is playing.
Description	The role being played by the issuer of the document for this transmission. In the case of the transmission of an Instructions forecast Document (AIG) this shall always be equal to "ZSZ" for "Facility Operator". In the case of the transmission of a Setting Forecast Document (AL8) this shall always be equal to "ZSO" for "System Operator". In the case of the transmission of an Operational Instructions Document (AEG) this shall always be equal to "ZSO" for "System Operator". In the case of the transmission of an Instructions Response Document (AFG) this shall always be equal to "ZSZ" for "Facility Operator". In the case of the transmission of an Instructions Confirmation Document (ALG) this shall always be equal to "ZSO" for "System Operator". (Reference Edig@s RoleType code list).
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

141 #### 3.3.3.10 RECIPIENT_MARKETPARTICIPANT.IDENTIFICATION – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is receiving the document.
Description	The recipient of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate the code "305" for an EIC party code.
Size	The maximum length of a recipient's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

142 #### 3.3.3.11 RECIPIENT_MARKETPARTICIPANT.MARKETROLE.CODE

ACTION	DESCRIPTION
Definition of element	Identification of the role that the party who receives the document is playing.
Description	The role being played by the recipient of the document for this transmission. In the case of the transmission of an Instructions Forecast Document (AIG) this shall always be equal to "ZSO" for "System Operator". In the case of the transmission of a Setting Forecast Document (AL8) this shall always be equal to "ZSZ" for "Facility Operator". In the case of the transmission of an Operational Instructions Document (AEG) this shall always be equal to "ZSZ" for "Facility Operator". In the case of the transmission of an Instructions Response Document (AFG) this shall always be equal to "ZSO" for "System Operator". In the case of the transmission of an Instructions Confirmation Document (ALG) this shall always be equal to "ZSZ" for "Facility Operator". (Reference Edig@s RoleType code list).
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

143 #### 3.3.3.12 APPLICATIONCONTEXT – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The identification of a particular context that is significant to the recipient.
Description	The application context is used to identify a particular context (location, application, etc.) that is relevant to the recipient of the document. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate the code "305" for an EIC location code.
Size	The maximum length of an application context's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The information is only provided when there is bi lateral agreement between the parties.

144 #### 3.3.3.13 CONNECTIONPOINT.IDENTIFICATION – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the connection point that is the subject of this document.
Description	The identification of the connection point within a System Operator's system. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate and shall indicate the code "305" for an EIC measurement point code or the code "ZSO" for a System Operator code.
Size	The maximum length of the connection point identification is 35 alphanumeric characters. The maximum length of the coding scheme is 3 alphanumeric characters.
Applicability	Both the connection point identification and the coding scheme are mandatory.
Dependence requirements	None.

3.3.3.14 MEASUREUNIT.CODE

ACTION	DESCRIPTION
Definition of element	The unit of measure which is applied to all the quantities in the time series of the document.
Description	The unit of measurement used for all the quantities expressed within a time series. The following are the codes recommended for use: KW1 = Kilowatt-hour per hour (kWh/h) KW2 = Kilowatt-hour per day (kWh/d) HM1 = Million cubic meters per hour HM2 = Million cubic meters per day TQH = Thousand cubic meters per hour TQD = Thousand cubic meters per day MQ6 = Normal cubic meters per hour MQ7 = Normal cubic meters per day (Reference Edig@s UnitOfMeasure code list).
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

3.3.4 RULES GOVERNING THE SOURCE CONNECTION POINT CLASS

The Source Connection Point class shall only be used if there are multiple source connection points. In the case it is used, the association between the Instructions Document class and the Period class is not permitted.

3.3.4.1 IDENTIFICATION – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The identification of a source connection point.
Description	The identification of a source connection point within a System Operator's system. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate the code "305" for an EIC measurement point code or the code "ZSO" for a System Operator code.
Size	The maximum length of the connection point identification is 35 alphanumeric characters. The maximum length of the coding scheme is 3 alphanumeric characters
Applicability	Both the connection point identification and the coding scheme are mandatory.
Dependence requirements	None.

3.3.5 RULES GOVERNING THE DESTINATION CONNECTION POINT CLASS

The Destination Connection Point class is only necessary if there are multiple destinations. It may also be used in the case of multiple source connection points and a single destination connection point.

3.3.5.1 IDENTIFICATION – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The identification of a destination connection point.
Description	The identification of a destination connection point within a System Operator's system. The codification scheme used for the coded identification is indicated by the coding scheme attribute and shall indicate either the code "305 for an EIC measurement point code or the code "ZSO" for a System Operator code.
Size	The maximum length of the connection point identification is 35 alphanumeric characters. The maximum length of the coding scheme is 3 alphanumeric characters.
Applicability	Both the connection point identification and the coding scheme are mandatory.
Dependence requirements	None.

3.3.6 RULES GOVERNING THE PERIOD CLASS

There must always be a Period class.
If there is only one source connection point, the Period class is associated directly with the Instructions Document Class.
If there are multiple source connection points, the direct association between the Instructions Document class and the Period class is not permitted.

3.3.6.1 TIMEINTERVAL

ACTION	DESCRIPTION
Definition of element	The start and end date and time of the time interval of the period in question.
Description	This information provides the start and end date and time of the period being reported.
Size	Refer to section 1.2 of the Edig@s General Guidelines for information on the attribute structure.
Applicability	This information is mandatory.
Dependence requirements	None.

3.3.6.2 DIRECTION.CODE

ACTION	DESCRIPTION
Definition of element	Identifies how the energy flow is to be seen from the perspective of the System Operator's area.
Description	This identifies the direction of the energy flow. Permitted codes are: Z02 = Input Z03 = Output (Reference Edig@s GasDirectionType code list).
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

163 #### 3.3.6.3 QUANTITY.AMOUNT

ACTION	DESCRIPTION
Definition of element	The quantity for the connection point within the time interval in question.
Description	This information defines the quantity for the connection point within the time interval period. A decimal point value may be used to express values that are inferior to the defined unit of measurement. The decimal mark that separates the digits forming the integral part of a number from those forming the fractional part (ISO 6093) shall always be a period (“.”). All quantities are non-signed values.
Size	The maximum length of this information is 17 numeric characters (decimal mark included). All leading zeros are to be suppressed. The number of decimal places identifying the fractional part of the quantity depends on local market rules.
Applicability	This information is mandatory.
Dependence requirements	None.

164 ### 3.3.7 RULES GOVERNING THE STATUS CLASS

165 Whenever a quantity has a status indicating an evolution this class shall be used.

166 #### 3.3.7.1 CODE

ACTION	DESCRIPTION
Definition of element	The status of given quantity within a time interval.
Description	This information provides status of the quantity for the being reported. Only one of the following status values are permitted: 32G = Increased 33G = Decreased 34G = Confirmed (Reference Edig@s StatusType code list).
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	This information is only provided in the case of an Instruction Response Document.

4 DOCUMENT CHANGE LOG

Package	Version	Date	Description
5.0	1	2013-07-03	Initial release
5.1	2	2013-12-19	Modified to ensure the alignment of all names in the models. Addition of an Account TSO to identify the TSO responsible for the creation of the account identification.