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General - Gas Flow Requirements Document

Model Documentation



The European message format for the gas market

Version 6.1

Document Version: 2
Schema Version: 1

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49 4.1 Version14

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52 1 Model Detail

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63 2 Document usage decision table

64 The following decision table provides a summary of the message requirements depending on the type of message:

Gas Flow Requirements Document	System Operator Request to Nominate	Flow Commitment	TSO to TSO Gas Flow
identification	Mandatory		
version	Mandatory		
documentCode	AQG = System Operator Request to Nominate (Refer to Edig@s DocumentCodeTypeCodeList for the list of valid codes).	ARG = Flow Commitment (Refer to Edig@s DocumentCodeTypeCodeList for the list of valid codes).	ASG = TSO to TSO gas flow (Refer to Edig@s DocumentCodeTypeCodeList for the list of valid codes).
creationDateTime	Mandatory		
validityPeriod	Mandatory		
issuer_MarketParticipant.identification	Mandatory; codingScheme = 305 (EIC X code))		
issuer_MarketParticipant.marketRole.code	ZUO = LNG System Operator ZUS = Storage System Operator (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).	ZUW = Transmission System Operator (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).	ZUW = Transmission System Operator (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).
recipient_MarketParticipant.identification	Mandatory; codingScheme = 305 (EIC X code)		
recipient_MarketParticipant.marketRole.code	ZSH = Balance Responsible Party (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).	ZSH = Balance Responsible Party (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).	ZUW = Transmission System Operator (Refer to Edig@s RoleCodeTypeCodeList for the list of valid codes).
ConnectionPoint.identification	Mandatory; codingScheme = 305 (EIC Measurement Point Z or Y code) or ZSO		
ConnectionPoint.measureUnit.unitOfMeasureCode	KW1 = Kilowatt hour per hour (Refer to Edig@s UnitOfMeasureCodeTypeCodeList for the list of valid codes).	KW1 = Kilowatt hour per hour Refer to Edig@s UnitOfMeasureCodeTypeCodeList for the list of valid codes).	KW1 = Kilowatt hour per hour MQH = Cubic meter per hour Refer to Edig@s UnitOfMeasureCodeTypeCodeList for the list of valid codes).
ConnectionPoint.account.identification	Not used	Mandatory	Used if necessary
ConnectionPoint.account.accountTso.identification	Not used	Used if necessary	Used if necessary
Period.timeInterval	Mandatory		

Gas Flow Requirements Document	System Operator Request to Nominate	Flow Commitment	TSO to TSO Gas Flow
Quantity.direction.gasDirectionCode	Z02 = Input, Z03 = Output Refer to Edig@s GasDirectionCodeTypeCodeList for the list of valid codes).		
Quantity.amount	Mandatory.		
Quantity.quantityCode	Used if necessary ZYF = Minimum Refer to Edig@s QuantityCodeTypeCodeList for the list of valid codes).	Used if necessary ZYG = Calculated Refer to Edig@s QuantityCodeTypeCodeList for the list of valid codes).	Used if necessary ZYG = Calculated Refer to Edig@s QuantityCodeTypeCodeList for the list of valid codes).

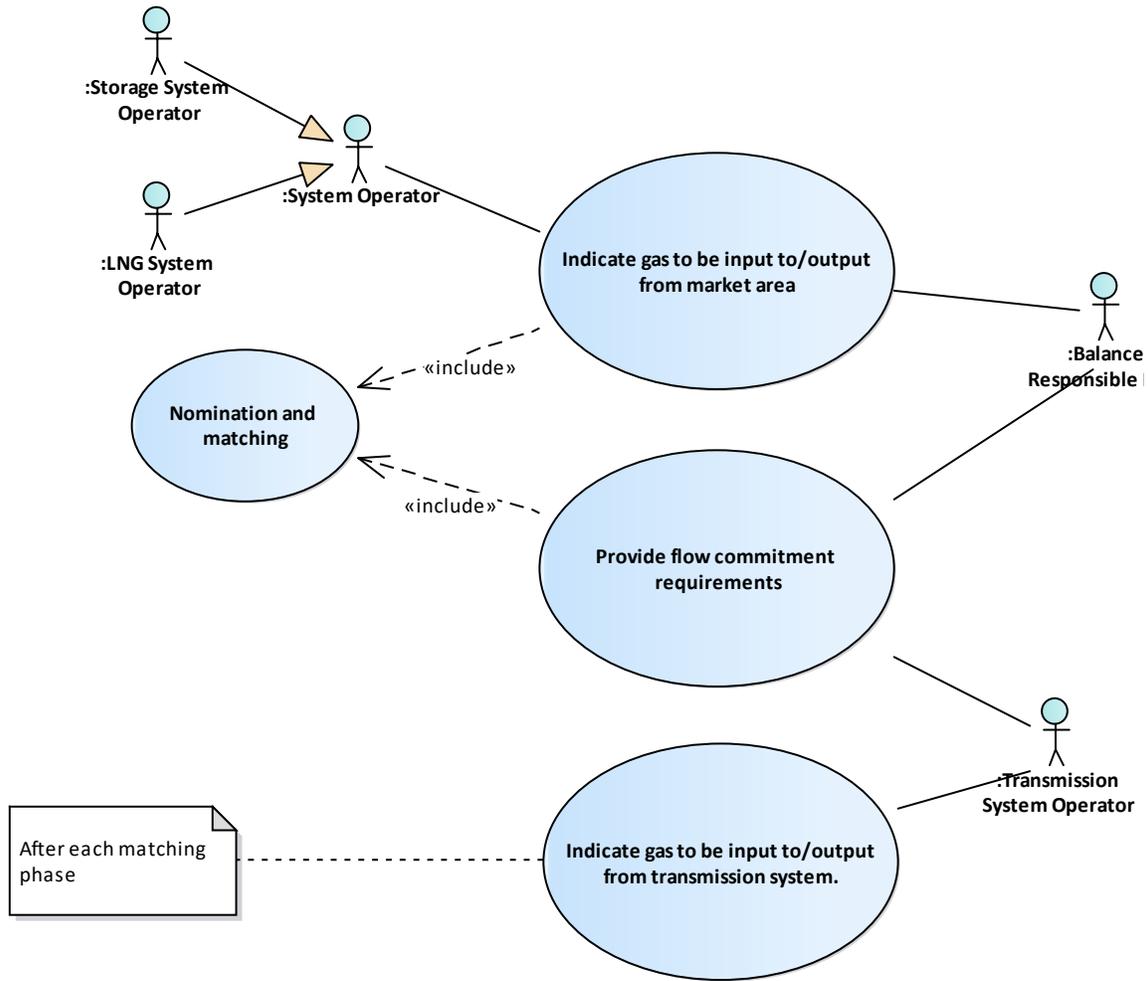
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67 3 Gas Flow Requirements Process

68 3.1 Business Process

69 3.1.1 Use Case

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Figure: 1 Use Case

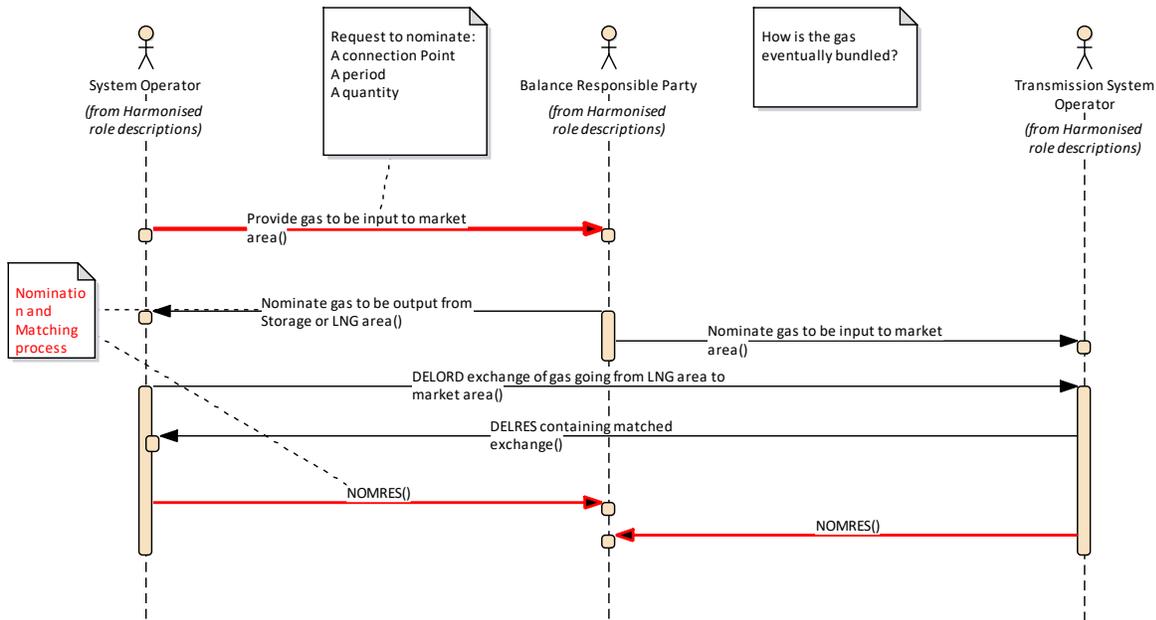
74 3.1.2 Sequence

75 3.1.2.1 System Operator request to nominate

76 A System Operator informs a Balance Responsible Party of the minimum amount of gas to be nominated to a market
77 area .

78
79 During the nomination process (shown here for understanding) the Balance Responsible Party nominates the quantity
80 to be output from the Storage or LNG area. The Balance Responsible Party also nominates the quantity of gas that
81 will be input to the Transmission System Operator market area.
82

83 The System Operator and Transmission System Operator exchange DELORD/DELRES messages to confirm the
84 nominations.



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Figure: 2 System Operator request to nominate

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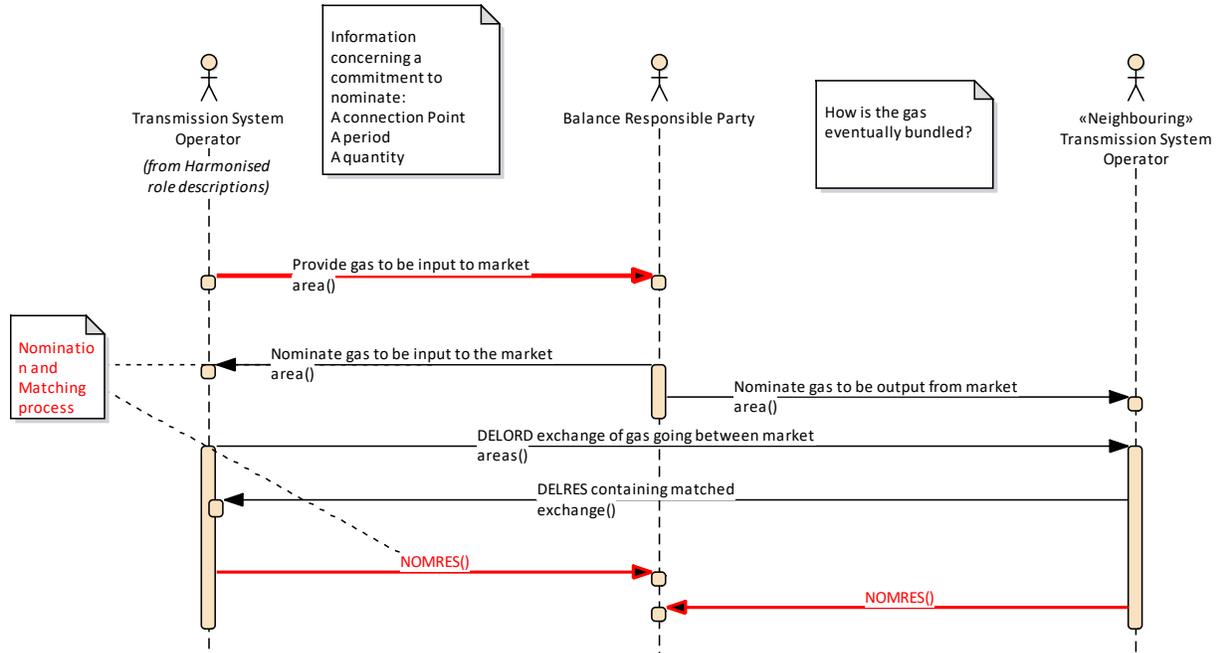
89 3.1.2.2 Flow commitment sequence

90 A Transmission System Operator informs a Balance Responsible Party of gas that has been committed to be input the
91 market area.

92

93 During the nomination process (shown here for understanding) the Balance Responsible Party nominates the quantity
94 of gas to be input to the Transmission System Operator market area. The Balance Responsible Party also nominates
95 the quantity of gas that will be output from a neighbouring Transmission System Operator market area.

96



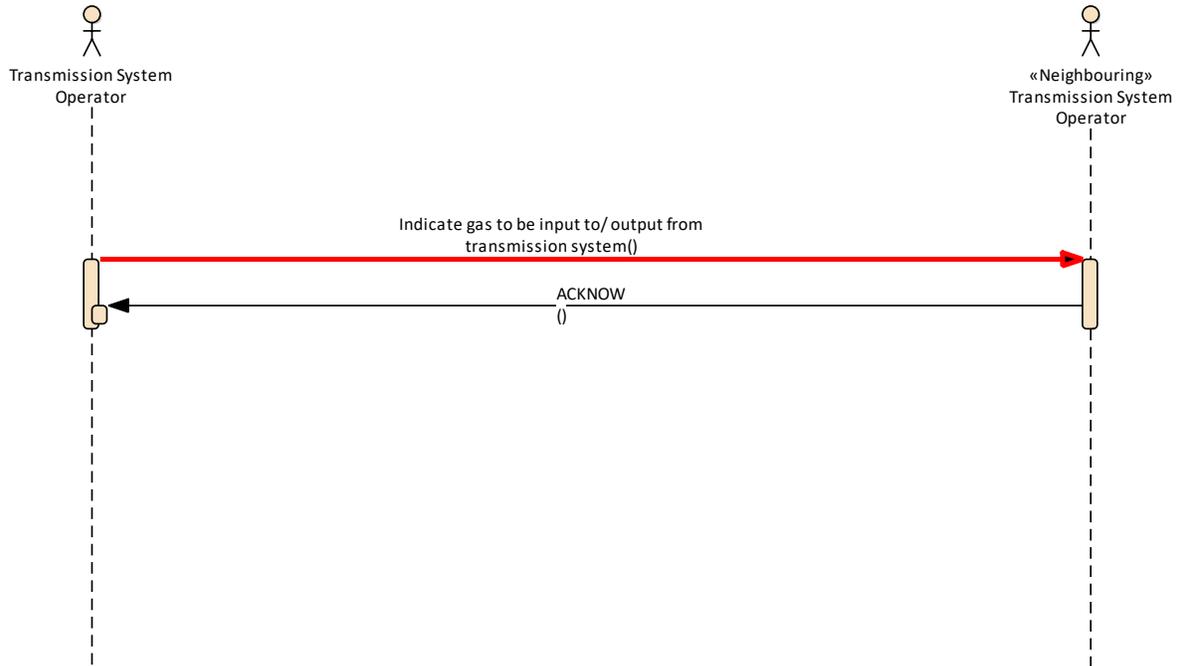
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Figure: 3 **Flow commitment sequence**

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101 **3.1.2.3 TSO to TSO gas flow**

102 A TSO informs a neighbouring TSO of the physical flow per hour that is required for system operation



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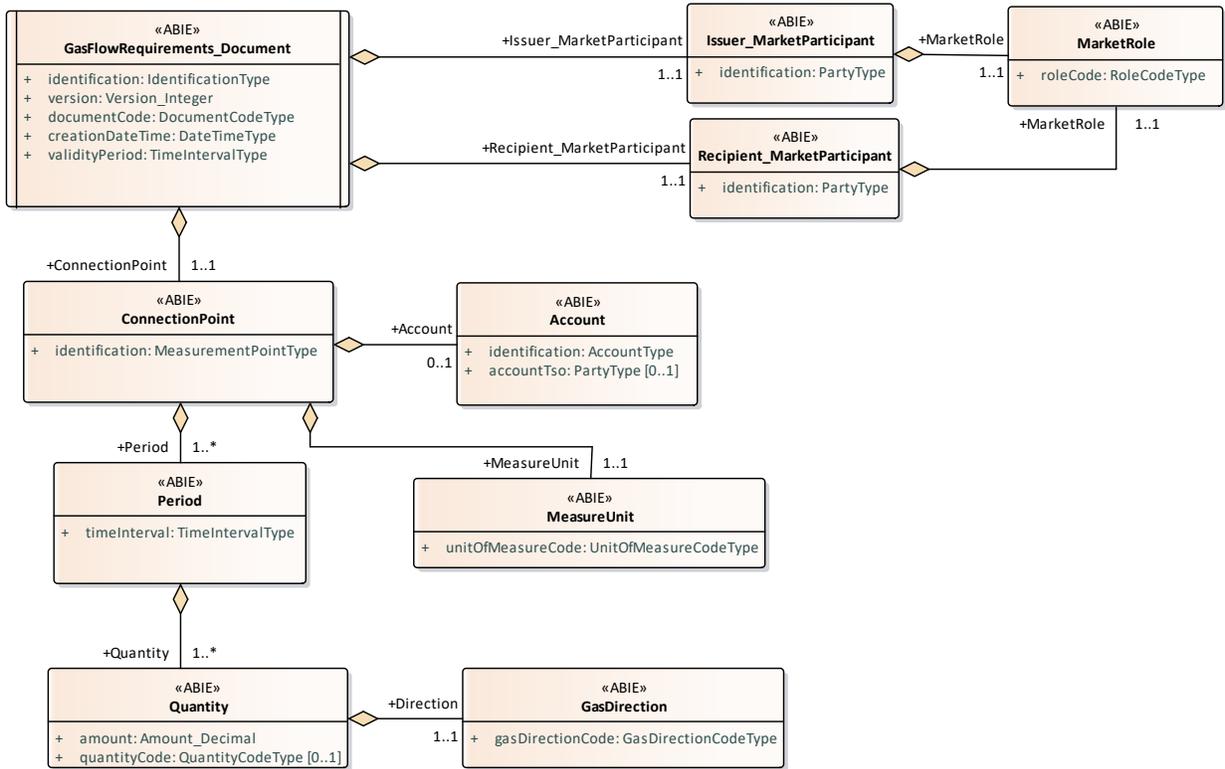
Figure: 4 TSO to TSO gas flow

106 3.2 Gas Flow Requirements Document (FLOWRQ)

- 107 A Gas Flow Requirements document is used in three contexts:
- 108 1. To enable a System Operator to inform a Balance Responsible Party of a quantity of gas that is to be injected into
- 109 a market area.
- 110 2. To enable a Transmission System Operator to inform a Balance Responsible Party of the quantity of gas that has
- 111 been committed for injection or for extraction.
- 112 3. To enable a Transmission System Operator to inform a neighbouring Transmission System Operator of a quantity
- 113 of gas that is to be injected or extracted.
- 114

115 3.2.1 Gas Flow Requirements Document Contextual Model

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Figure: 5 Gas Flow Requirements Document Contextual Model

3.2.2 Gas Flow Requirements Document Assembly Model

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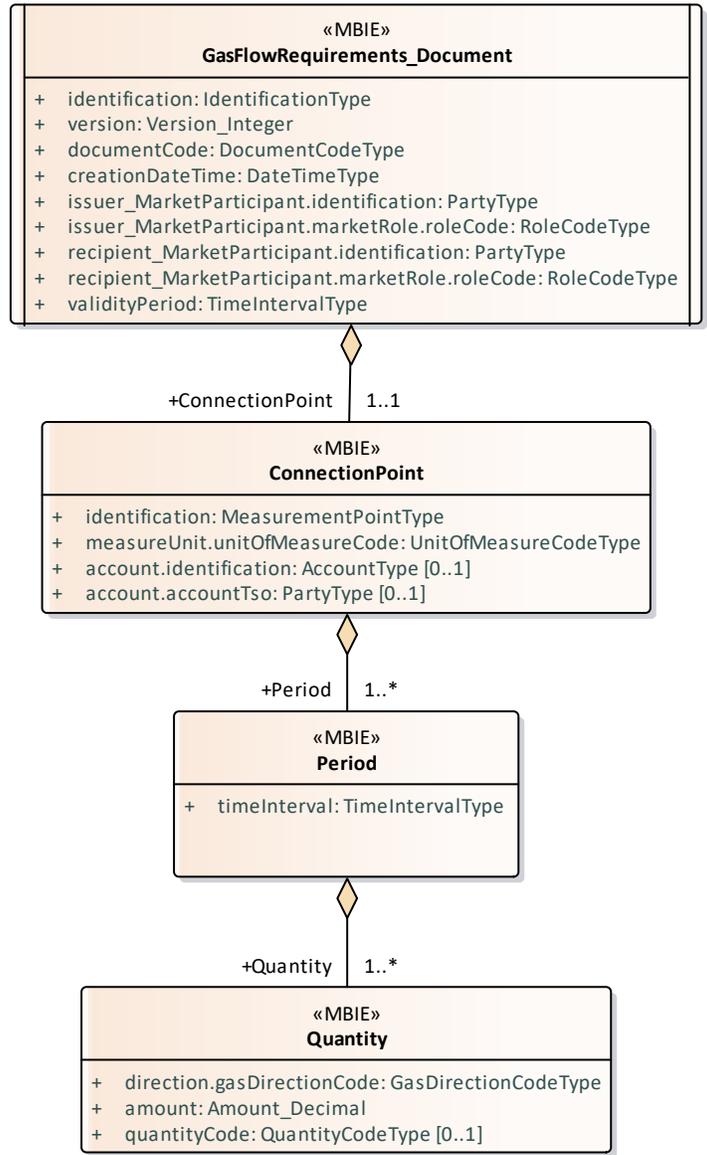


Figure: 6 **Gas Flow Requirements Document Assembly Model**

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126 3.2.2.1 GasFlowRequirements_Document

127 This class provides the basic information needed to describe most electronic documents.

128 3.2.2.1.1 Attributes

Attribute	Description	Multiplicity
identification	A unique identification of a document that is assigned by the issuer.	
version	Version of the document being sent. 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.	
documentCode	Coded representation of the type of the electronic document.	
creationDateTime	Date and time of the creation of the current document expressed in UTC.	
issuer_MarketParticipant.identification	The identification of the party participating in the market. --- The Issuer of the electronic document.	
issuer_MarketParticipant.marketRole.roleCode	A code identifying the role played by a market participant in the market. --- The Issuer of the electronic document. --- The role of the Issuer.	
recipient_MarketParticipant.identification	The identification of the party participating in the market. --- The Recipient of the electronic document.	
recipient_MarketParticipant.marketRole.roleCode	A code identifying the role played by a market participant in the market. --- The Recipient of the electronic document. --- The role of the Recipient.	
validityPeriod	The start and end date and time of the period of validity covered in the document.	

129 3.2.2.2 ConnectionPoint

130 A cross-border interconnection point, whether it is physical or virtual, between two or more Member States as well as
131 interconnection between adjacent entry-exit-systems within the same Member States, in so far as these points are
132 subject to booking procedures by Network Users. It may be used on the internal market.

133 3.2.2.2.1 Attributes

Attribute	Description	Multiplicity
identification	The identification of a connection point.	
measureUnit.unitOfMeasureCode	The coded representation of a unit of measure using the UN/CEFACT Recommendation 19 common codes.	
account.identification	The identification of an account. --- The account that may be used in the transaction.	[0..1]
account.accountTso	The identification of the TSO responsible for an account identification. --- The account that may be used in the transaction.	[0..1]

134 3.2.2.3 Period

135 The period that the dependent information is for.

136 3.2.2.3.1 Attributes

Attribute	Description	Multiplicity
timeInterval	The start and end date and time for the period. The time is expressed in UTC.	

137 **3.2.2.4 Quantity**

138 The quantity of an object.

139 **3.2.2.4.1 Attributes**

Attribute	Description	Multiplicity
direction.gasDirectionCode	A code identifying the direction of a gas flow. --- The direction of a quantity.	
amount	The amount of a quantity.	
quantityCode	A code defining the type of a quantity.	[0..1]

140

141 4 Document Change Log

142 4.1 Version

143 4.1.1 Attributes

Attribute	Description	Multiplicity
Version 1 2020-06-29	Initial release	
Version 2 2021-04-26	Release 6.1 Updated decision table, use case and sequence diagrams to allow for ZO3 (output) as gas direction.	

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