

SECTION

I

01

**Sales Messages**

**AVAILY**

***Availability Message***

***Version 4.0***



***EASEE-gas/Edig@s Workgroup***

***Document version: 2***

---

## **COPYRIGHT & LIABILITY**

The Edig@s Workgroup disclaims and excludes, and any user of the Edig@s Workgroup Implementation Guidelines acknowledges and agrees to the Edig@s Workgroup disclaimer of, any and all warranties, conditions or representations, express or implied, oral or written, with respect to the guidelines or any part thereof, including any and all implied warranties or conditions of title, non-infringement, merchantability, or fitness or suitability for any particular purpose (whether or not the Edig@s Workgroup knows, has reason to know, has been advised, or is otherwise in fact aware of any such purpose), whether alleged to arise by law, by reason of custom or usage in the trade, or by course of dealing. Each user of the guidelines also agrees that under no circumstances will the Edig@s Workgroup be liable for any special, incidental, exemplary, punitive or consequential damages arising out of any use of, or errors or omissions in, the guidelines.

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>4</b>
1.1	Functional definition .....	4
1.2	Principles.....	4
1.3	Field of application .....	4
1.4	References .....	4
<b>2</b>	<b>INFORMATION MODEL OF AVAILY .....</b>	<b>5</b>
2.1	Information model structure .....	5
2.2	Information model description .....	6
2.2.1	<i>Rules governing the Availability Document Class .....</i>	<i>6</i>
2.2.2	<i>Rules governing the Contractual Offtake Possibility Class .....</i>	<i>8</i>
2.2.3	<i>Rules governing the Connection Point Information Class .....</i>	<i>10</i>
2.2.4	<i>Rules governing the Gas Quantity Nature Class.....</i>	<i>11</i>
2.2.5	<i>Rules governing the Period Class .....</i>	<i>11</i>
2.2.6	<i>Rules governing the Quality characteristic Class .....</i>	<i>13</i>
2.2.7	<i>Rules governing the Quality Information Class .....</i>	<i>13</i>
<b>3</b>	<b>EDIFACT IMPLEMENTATION OF AVAILY .....</b>	<b>16</b>
3.1	Edig@s subset of the UN/EDIFACT UTILTS Branching Diagram.....	16
3.2	EDIFACT Template Description .....	17
<b>4</b>	<b>XML IMPLEMENTATION OF AVAILY .....</b>	<b>28</b>
4.1	XML Structure .....	28
4.2	XML Schema .....	29
4.2.1	<i>Introduction.....</i>	<i>29</i>
4.2.2	<i>Schema .....</i>	<i>29</i>
<b>5</b>	<b>DOCUMENT CHANGE LOG.....</b>	<b>33</b>

Please note that as of version 5 of the Edig@s message set;  
only the XML syntax shall be supported  
This is in compliance with the EASEE-gas CBP 2007-005/01

---

## 1 INTRODUCTION

This document provides the definition of the Edig@s Availability - AVAILY - message to be used in Electronic Data Interchange (EDI) between Gas Companies.

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

### 1.1 FUNCTIONAL DEFINITION

Message destined to advise interested parties on the (changed) availability of gas on a periodical basis. The key information advised is the Maximum Offtake Possibility or MOP.

The current definition of the message, as described in this guideline reflects its use in the current Gas Industry procedure. It does not however preclude the use of this message between other parties than those indicated in this description. The criteria for the use of the message should be its functionality rather than the parties involved.

### 1.2 PRINCIPLES

Where agreements exist between parties, the Seller will advise the Buyer of the availability of gas and its quality by means of an availability forecast. If due to circumstances such availability is not in line with the former forecasted quantities, the Seller will advise the Buyer of the changed availability.

In day-to-day practice, and depending on agreements, the transmission of the AVAILY message only occurs if the Maximum Offtake Possibility (MOP) or quality deviates from the agreed level notifying the Buyer of the changed availability.

### 1.3 FIELD OF APPLICATION

The AVAILY message:

- Is used by a party to advise another party about reduced or increased availability of gas.
- Is used by a party to advise another party about the availability of gas.
- May be used by a party to advise another party about a different quality of gas or different delivery location (switch-over).
- May be used by a party to advise another party about delivery limitations.

In most cases this message will trigger a response from the recipient of the message. This response is the request message - REQUEST - that is described in Part II.02 of the Edig@s MIG.

### 1.4 REFERENCES

The content of the AVAILY message is based on the definition of terms and codes as agreed by the Edig@s EDIFACT Workgroup.

## 2.1 INFORMATION MODEL STRUCTURE

## 2.2 INFORMATION MODEL DESCRIPTION

### 2.2.1 Rules governing the Availability Document Class

#### 2.2.1.1 IDENTIFICATION

ACTION	DESCRIPTION
<b>Definition of element</b>	Unique identification of the document.
<b>Description</b>	An Availability document must have a unique identification assigned by the initiator of the document to be sent to a recipient. The identification must take the following form: AVAILY followed by the date in the form YYYYMMDD followed by the letter "A" followed by a 5 character sequential number (e.g. 00001) providing the unique identification of the document. Example "AVAILY20090101A00001". The sender must guarantee that this identification is unique over time
<b>Size</b>	The identification of an Availability document may not exceed 35 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None

#### 2.2.1.2 TYPE

ACTION	DESCRIPTION
<b>Definition of element</b>	The type of the document being sent.
<b>Description</b>	This identifies the type of Availability Document that is being sent. The following types of Availability Document are currently permitted: 30G availability forecast. A non-binding operational document issued by the seller or service provider to advise the buyer or service user about the forecasted maximum and minimum availability of natural gas or a service. AGG = Availability notice. A binding operational document issued by the seller or service provider to advise the buyer or service user about the maximum and minimum availability of natural gas or a service.
<b>Size</b>	A type may not exceed 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

#### 2.2.1.3 CREATION DATE AND TIME

ACTION	DESCRIPTION
<b>Definition of element</b>	Date and time of the creation of the Availability Document.
<b>Description</b>	The date and time that the document was prepared for transmission by the application of the initiator.
<b>Size</b>	Refer to section 1.20 of the Edig@s General Guidelines for information on the attribute structure.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

#### 2.2.1.4 VALIDITY PERIOD

ACTION	DESCRIPTION
<b>Definition of element</b>	The start and end date and time of the period of validity covered in the document.
<b>Description</b>	This information provides the start and end date and time of the period of validity of the document.
<b>Size</b>	Refer to section 1.20 of the Edig@s General Guidelines for information on the attribute structure.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.1.5 CONTRACT REFERENCE**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the contract reference that governs the documents contains.
<b>Description</b>	The contract reference identifies the contract under which the conditions of the content and transmission of the document have been agreed.
<b>Size</b>	The maximum length of the contract reference identification is 35 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.1.6 CONTRACT TYPE**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the type of contract reference that has been identified.
<b>Description</b>	<p>This identifies the type of contract reference that has been described.</p> <p>Three types of contract reference may be identified:</p> <ul style="list-style-type: none"> <li>• Z11 = A contract group identification when the document relates to different contracts that belong to the same contract group. If this type of identification is used different specific contracts must be identified at the connection point level.</li> <li>• CT = A contract identification when only one contract is relevant for the whole document.</li> <li>• ZSC = A contract identification that is referring to a service contract.</li> </ul> <p>Z11 and CT can only be used in the context of sales availability</p>
<b>Size</b>	The maximum length of the contract type is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.1.7 SELLER IDENTIFICATION – CODING SCHEME**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the party who initiated the document.
<b>Description</b>	<p>The initiator 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. In the case of an Availability Document it is always the Seller or the Service Provider.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute and should indicate either the code "321" if it is an Edig@s code or the code "305" if it is an EIC code.</p>
<b>Size</b>	<p>The maximum length of an initiator's identification is 16 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
<b>Applicability</b>	Both the identification and the coding scheme are mandatory.
<b>Dependence requirements</b>	None.

**2.2.1.8 BUYER IDENTIFICATION – CODING SCHEME**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the party who receives the document.
<b>Description</b>	The receptor of the document is identified by a unique coded identification. In the case of an Availability Document it is always the Buyer or Service User. The codification scheme used for the coded identification is indicated by the coding scheme attribute and should indicate either the code "321" if it is an Edig@s code or the code "305" if it is an EIC code.
<b>Size</b>	The maximum length of an receptor's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
<b>Applicability</b>	Both the identification and the coding scheme are mandatory.
<b>Dependence requirements</b>	None.

**2.2.1.9 SELLER ROLE**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the role of the initiator.
<b>Description</b>	This identifies the initiator identified in the document. The following roles have been identified: SE = Seller ZTV = Provider dispatching service
<b>Size</b>	The maximum length of the information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependent.
<b>Dependence requirements</b>	For upwards compatibility purposes with a previous release where the role did not exist, if the role is absent it is considered as "seller" by default.

**2.2.1.10 BUYER ROLE**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the role of the receptor.
<b>Description</b>	This identifies the receptor identified in the document. The following roles have been identified: BY = Buyer ZTW = User dispatching service
<b>Size</b>	The maximum length of the information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependent.
<b>Dependence requirements</b>	For upwards compatibility purposes with a previous release where the role did not exist, if the role is absent it is considered as "buyer" by default.

**2.2.2 Rules governing the Contractual Offtake Possibility Class****2.2.2.1 TIME INTERVAL**

ACTION	DESCRIPTION
<b>Definition of element</b>	The start and end date and time of the time interval of the contractual offtake possibility period in question.
<b>Description</b>	This information provides the start and end date and time of the period being reported.
<b>Size</b>	Refer to section 1.20 of the Edig@s General Guidelines for information on the attribute structure.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.



**2.2.2.2 OFFTAKE TYPE**

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the type of offtake that is being reported.
<b>Description</b>	This identifies the type of offtake that is being provided. The following offtake type possibilities have been identified: ZA2 = Buyer's Maximum Offtake Possibility – MOP ZA4 = Buyer's Minimum Offtake Possibility – mop ZA5 = Maximum input capacity available ZA6 = Maximum output capacity available ZA7 = Minimum input capacity to use ZA8 = Minimum output capacity to use
<b>Size</b>	The maximum length of the offtake type code is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.2.3 QUANTITY**

ACTION	DESCRIPTION
<b>Definition of element</b>	The quantity of the capacity defined as offtake within the time interval in question.
<b>Description</b>	This information defines the quantity of the capacity defined as offtake 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.
<b>Size</b>	The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, 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.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.2.4 MEASUREUNIT**

ACTION	DESCRIPTION
<b>Definition of element</b>	The unit of measure which is applied to the quantities in which the time series is expressed.
<b>Description</b>	The unit of measurement used for the quantities expressed within the 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
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

## 2.2.3 Rules governing the Connection Point Information Class

### 2.2.3.1 CONNECTION POINT – CODING SCHEME

ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of a Connection Point.
<b>Description</b>	The identification of a connection point within a System Operator's system. The codification scheme used for the coded identification is indicated by the coding scheme attribute and should indicate either the code "321" if it is an Edig@s code, the code "305" if it is an EIC code, the code "9" if it is a GS1 code or the code "ZSO" if it is a System Operator code.
<b>Size</b>	The maximum length of the connection point identification is 16 alphanumeric characters. The maximum length of the coding scheme is 3 alphanumeric characters
<b>Applicability</b>	Both the connection point identification and the coding scheme are mandatory.
<b>Dependence requirements</b>	None.

### 2.2.3.2 SUB CONTRACT REFERENCE

ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of the sub contract that forms a part of a contract group.
<b>Description</b>	A Sub Contract Reference is used to identify the sub contract that forms a part of a contract group.
<b>Size</b>	The maximum length of this information is 35 alphanumeric characters.
<b>Applicability</b>	The Sub Contract Reference is dependent.
<b>Dependence requirements</b>	This is used only when a contract group reference has been defined at the Request Document class.

### 2.2.3.3 GAS DELIVERY TYPE

ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of the direction that is applied to the gas delivery.
<b>Description</b>	The identification of the direction that the gas delivery will take. Two codes have been defined for this attribute: Z01 = Input to the contract Z02 = Output from the contract
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

## 2.2.4 Rules governing the Gas Quantity Nature Class

### 2.2.4.1 QUANTITY NATURE

ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of the nature of the gas.
<b>Description</b>	The identification of the nature of the gas requested. The gas quantity nature may have the following values: Z01 MQA - Maximum quantity available for offtake at a location Z02 Maximum capacity available Z03 Minimum capacity to use Z04 mqa - Minimum quantity available for offtake at a location Z05 Quality deficient gas quantity
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	The quantity nature is mandatory.
<b>Dependence requirements</b>	None.

## 2.2.5 Rules governing the Period Class

### 2.2.5.1 TIME INTERVAL.

ACTION	DESCRIPTION
<b>Definition of element</b>	The start and end date and time of the time interval of the period in question.
<b>Description</b>	This information provides the start and end date and time of the period being reported.
<b>Size</b>	Refer to section 1.20 of the Edig@s General Guidelines for information on the attribute structure.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

### 2.2.5.2 QUANTITY

ACTION	DESCRIPTION
<b>Definition of element</b>	The quantity of the capacity within the time interval in question.
<b>Description</b>	This information defines the quantity of the capacity 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.
<b>Size</b>	The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, 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.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.5.3 MEASUREUNIT**

ACTION	DESCRIPTION												
<b>Definition of element</b>	The unit of measure which is applied to the quantities in which the time series is expressed.												
<b>Description</b>	<p>The unit of measurement used for the quantities expressed within the time series.</p> <p>The following are the codes recommended for use:</p> <table border="0"> <tr> <td>KW1</td><td>Kilowatt-hour per hour (kWh/h)</td></tr> <tr> <td>KW2</td><td>Kilowatt-hour per day (kWh/d)</td></tr> <tr> <td>HM1</td><td>Million cubic meters per hour</td></tr> <tr> <td>HM2</td><td>Million cubic meters per day</td></tr> <tr> <td>TQH</td><td>Thousand cubic meters per hour</td></tr> <tr> <td>TQD</td><td>Thousand cubic meters per day</td></tr> </table>	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
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												
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.												
<b>Applicability</b>	This information is mandatory.												
<b>Dependence requirements</b>	None.												

**2.2.5.4 DEVIATION REASON**

ACTION	DESCRIPTION				
<b>Definition of element</b>	The identification of the reason for a deviation.				
<b>Description</b>	<p>The reason that has caused a deviation from the previous known and/or exchanged value.</p> <p>The following are the codes recommended for use:</p> <table border="0"> <tr> <td>25G</td><td>Planned maintenance</td></tr> <tr> <td>28G</td><td>Other</td></tr> </table>	25G	Planned maintenance	28G	Other
25G	Planned maintenance				
28G	Other				
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.				
<b>Applicability</b>	This information is dependant.				
<b>Dependence requirements</b>	This attribute is only used if there is a deviation from the previous known and/or exchanged value.				

## 2.2.6 Rules governing the Quality characteristic Class

### 2.2.6.1 MEASUREMENT TYPE

ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of the nature of the gas measured
<b>Description</b>	<p>The identification of the nature of the gas measured. The measurement type may have the following values:</p> <ul style="list-style-type: none"> <li>Z10 = water dew point</li> <li>Z11 = Oxygen Content (O2))</li> <li>Z12 = Carbon Dioxide Content (CO2)</li> <li>Z13 = Hydrogen Sulphide (H2S)</li> <li>Z14 = Carbon oxide Sulphide (COS)</li> <li>Z15 = Mercaptan Sulphur</li> <li>Z16 = Total Sulphur</li> <li>Z17 = Hydrocarbon Dew Point</li> <li>Z18 = Temperature</li> <li>Z19 = C1</li> <li>Z20 = C2,</li> <li>Z21 = C3</li> <li>Z22 = iC4</li> <li>Z23 = nC4</li> <li>Z24 = iC5,</li> <li>Z25 = nC5,</li> <li>Z26 = neoC5</li> <li>Z27 = C6</li> <li>Z28 = C7,</li> <li>Z29 = C8,</li> <li>Z30 = C9</li> <li>Z31 = C10+,</li> <li>Z32 = N2</li> <li>ZGF = Nominated GCV</li> <li>ZGV = GCV conversion</li> <li>ZPR = Pressure</li> <li>ZWN = Nominated Wobbe index</li> </ul>
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

## 2.2.7 Rules governing the Quality Information Class

### 2.2.7.1 TIME INTERVAL.

ACTION	DESCRIPTION
<b>Definition of element</b>	The start and end date and time of the time interval of the period in question.
<b>Description</b>	This information provides the start and end date and time of the period being reported.
<b>Size</b>	Refer to section 1.20 of the Edig@s General Guidelines for information on the attribute structure.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.7.2 EXPECTED QUALITY VALUE**

ACTION	DESCRIPTION
<b>Definition of element</b>	The value that is expected for the gas nature within the time interval in question.
<b>Description</b>	This information defines the value that is expected for the gas being described within the time interval. 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 values are non-signed values. (Note: negative values are allowed for the transmission of negative temperature information)
<b>Size</b>	The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, 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.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.7.3 MEASUREUNIT**

ACTION	DESCRIPTION
<b>Definition of element</b>	The unit of measure which is applied to the gas measurement in which the time series is expressed.
<b>Description</b>	The unit of measurement used for the gas measurement expressed within the time series. The following are the codes recommended for use: KW3 = Kilowatt hour per cubic meter (kWh/m <sup>3</sup> ) VPC = Vol % MOL = mole % GP = mg/m <sup>3</sup> CEL = °C BAR = bar or kPa
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

**2.2.7.4 CONTRACTUAL MAXIMUM VALUE**

ACTION	DESCRIPTION
<b>Definition of element</b>	The maximum value that is contractually permissible.
<b>Description</b>	This information defines the value that contractually cannot be exceeded 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 values are non-signed values.
<b>Size</b>	The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, 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.
<b>Applicability</b>	This information is dependant.
<b>Dependence requirements</b>	Used only if there is a contractual value.

**2.2.7.5 CONTRACTUAL MINIMUM VALUE**

ACTION	DESCRIPTION
<b>Definition of element</b>	The minimum value that is contractually permissible.
<b>Description</b>	<p>This information defines the value that contractually cannot be below.</p> <p>A decimal point value may be used to express values that are inferior to the defined unit of measurement.</p> <p>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 (".").</p> <p>All values are non-signed values.</p>
<b>Size</b>	<p>The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, included). All leading zeros are to be suppressed.</p> <p>The number of decimal places identifying the fractional part of the quantity depends on local market rules.</p>
<b>Applicability</b>	This information is dependant.
<b>Dependence requirements</b>	Used only if there is a contractual value.

**2.2.7.6 QUALITY REASON**

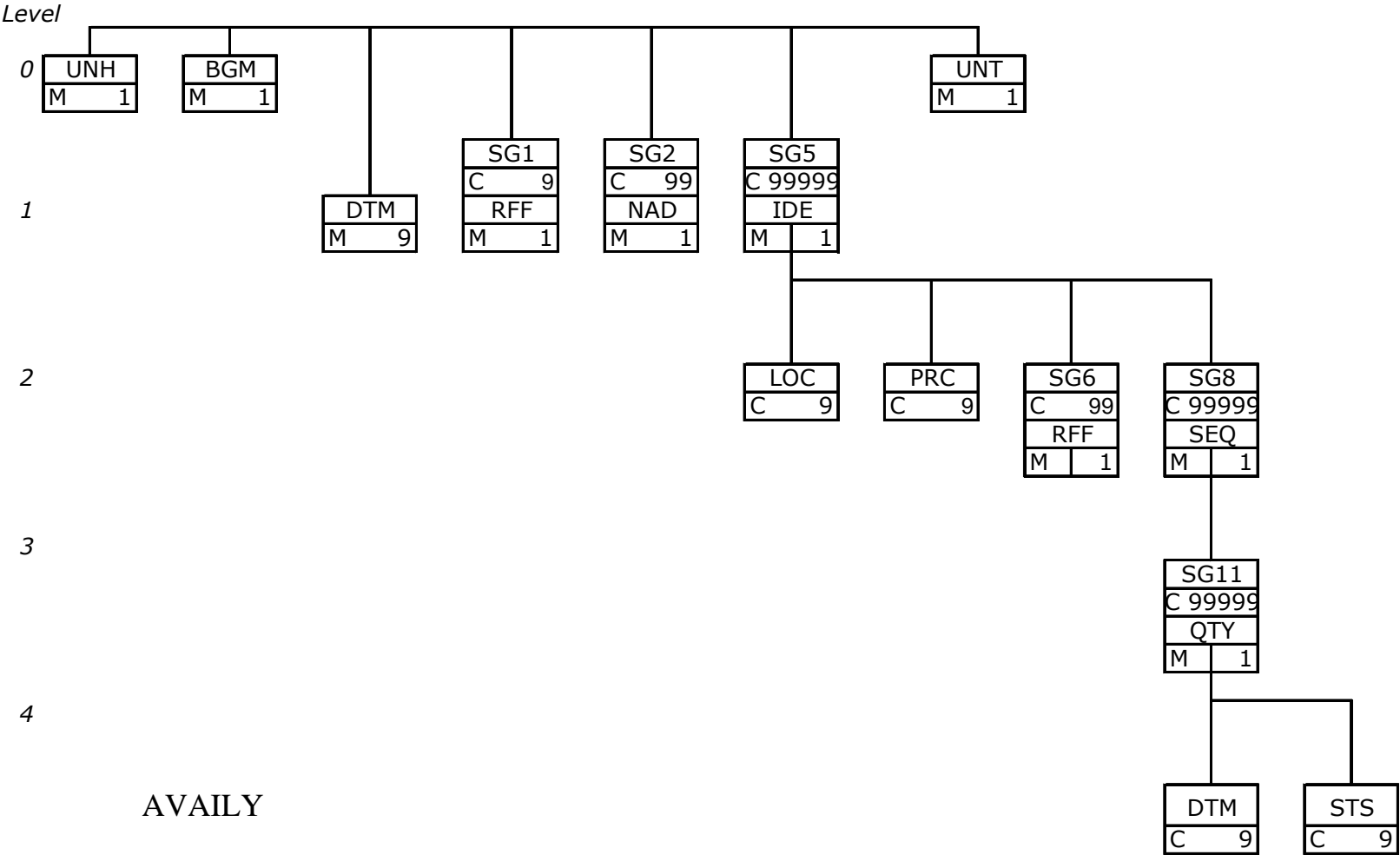
ACTION	DESCRIPTION
<b>Definition of element</b>	The identification of the reason for a quality variation or deviation.
<b>Description</b>	<p>The reason that has caused a quality variation or deviation at the connection point.</p> <p>The following are the codes recommended for use:</p> <p style="padding-left: 40px;">09G = Quality deficient gas</p> <p style="padding-left: 40px;">24G = Quality variation</p> <p>Note: if absent the quality data is for information only</p>
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependant.
<b>Dependence requirements</b>	This attribute is only used if there is a quality variation or deviation for the connection point

3 EDIFACT IMPLEMENTATION OF AVAILY

*Note: The Information Model Description in section 2 shall always take precedence if there is any contradictory information provided in this section.*

3.1 EDIG@S SUBSET OF THE UN/EDIFACT UTILTS D.08B BRANCHING DIAGRAM

The AVAILY template is based on the UN/EDIFACT UTILTS message. This structure illustrates what segments will be used in this template.





### 3.2 EDIFACT Template Description

This template is applicable when the AVAILY message is used for the following purpose(s):

Message purpose	BGM -1001 =
<b>Availability Forecast:</b> A non-binding operational document issued by the seller or service provider to advise the buyer or service user about the forecasted maximum and minimum availability of natural gas.	30G
<b>Availability notice:</b> A binding operational document issued by the seller or service provider to advise the buyer or service user about the maximum and minimum availability of natural gas or a service.	AGG

The segments are shown in abbreviated form. For a full description of the segments refer to the description as found in section V Segment Directory.

#### HEADER SECTION

The content of UN/EDIFACT Interchange segments UNB/UNZ are defined in the general introduction. The basic principle for an [Edig@s](#) Interchange being that there shall be only one UN/EDIFACT Message per Interchange.

UNH – M	0010 - MESSAGE HEADER – To head, identify and specify a Message			
0062	M	an..14	MESSAGE REFERENCE NUMBER	Unique message reference assigned by the sender.
S009:0065	M	an..6	Message type	Code identifying a type of message and assigned by its controlling agency. <b>AVAILY</b> (=Availability Message)
S009:0052	M	an..3	Message version number	Version number of a message type. <b>1</b> (=Message Implementation Guide version number)
S009:0054	M	an..3	Message release number	Release number within the current message type version number (0052). <b>0</b>
S009:0051	M	an..2	Controlling agency	Code to identify the agency controlling the specification, maintenance and publication of the message type. <b>EG</b> (=Edig@s)
S009:0057	M	an..6	Association assigned code	A code assigned by the association responsible for the design and maintenance of the message type concerned, which further identifies the message. <b>EGAS40</b> (=Edig@s package identification)
0068	N	an..35	COMMON ACCESS REFERENCE	Reference serving as a key to relate all subsequent transfers of data to the same business case or file. <b>NOT USED</b>
S010:0070	N	n..2	Sequence of transfers	Number assigned by the sender indicating the numerical sequence of one or more transfers. <b>NOT USED</b>
S010:0073	N	a1	First and last transfer	Indication used for the first and last message in a sequence of the same type of message relating to the same topic. <b>NOT USED</b>
<b>Remarks</b>	<i>There is one mandatory occurrence of UNH per message.</i>			
<b>Example</b>	<b>UNH+1+AVAILY:1:0:EG:EGAS40'</b>			

BGM-M		BEGINNING OF MESSAGE – To indicate the type and function of a message and to transmit the identifying number.		
C002:1001	M	An..3	Document name code	Code specifying the document name. <i>See restricted qualifier code list below</i>
C002:1131	N	An..3	Code list identification code	Code identifying a user or association maintained code list <b>NOT USED</b>
C002:3055	M	An..3	Code list responsible agency	Code identifying a user or association maintained code list. <b>321</b> (=Edig@s)
C002:1000	N	An..35	Document name	Name of a document. <b>NOT USED</b>
C106:1004	M	An..35	Document identifier	To identify a document. <i>See section 2.2.1.1</i>
C106:1056	N	An..9	Version identifier	To identify a version. <b>NOT USED</b>
C106:1060	N	An..6	Revision identifier	To identify a revision <b>NOT USED</b>
1225	M	An..3	MESSAGE FUNCTION CODE	Code indicating the function of the message. <b>9</b> (=Original)
4343	N	An..3	RESPONSE TYPE CODE	Code specifying the type of acknowledgment required or transmitted. <b>NOT USED</b>
<b>Remarks</b>	There is one mandatory occurrence of BGM per message.			
<b>Attention</b>	The following structure for the message number in BGM-1004 is mandatory in the Edig@s messages: 6 character message code + a unique identification			
<b>Example</b>	<b>BGM+30G::321+AVAILY20090101A00001+9'</b>			

## Restricted qualifier code list for BGM-C002:1001

30G	availability forecast
AGG	availability notice

DTM - M	
<b>Remarks</b>	There are 3 mandatory occurrences of DTM at message header level in the Edig@s messages. For more details regarding the mandatory use of DTM at header level in the Edig@s messages see item 4 in the Introduction to the Edig@s MIG.

DTM.1 - M		DATE/TIME/PERIOD - To specify date, and/or time, or period. It identifies the time definition		
C507:2005	M	an..3	Date or time or period function code qualifier	Code qualifying the function of a date, time or period. <b>205</b> (=Time definition)
C507:2380	M	an..35	Date or time or period text	The value of a date, a date and time, a time or of a period in a specified representation. <b>0</b> (=UTC)
C507:2379	M	an..3	Date or time or period format code	Code specifying the representation of a date, time or period. <b>805</b> (=Hour)
<b>Remarks</b>	All times indicated in this message must be expressed according to this same metrology. <b>Recommendation:</b> Edig@s strongly recommends using UTC as the standard time metrology. See also the Introduction to the Edig@s MIG.			
<b>Example</b>	<b>DTM+205:0:805'</b>			

DTM.2 - M		DATE/TIME/PERIOD - To specify date, and/or time, or period. It identifies the date and time of the message		
C507:2005	M	an..3	Date or time or period function code qualifier	Code qualifying the function of a date, time or period. <b>137</b> (=Document/message date/time)
C507:2380	M	an..35	Date or time or period text	The value of a date, a date and time, a time or of a period in a specified representation. <i>Date/time in format as indicated in C507:2379</i>
C507:2379	M	an..3	Date or time or period format code	Code specifying the representation of a date, time or period. <b>203</b> (=CCYYMMDDHHMM)
<b>Remarks</b>				
<b>Example</b>	<b>DTM+137:200309051506:203'</b>			

DTM.3 – M		DATE/TIME/PERIOD - To specify date, and/or time, or period. It identifies the (validity) period covered by the message		
C507:2005	M	an..3	Date or time or period function code qualifier	Code qualifying the function of a date, time or period. <b>Z01</b> (=Period identification)
C507:2380	M	an..35	Date or time or period text	The value of a date, a date and time, a time or of a period in a specified representation. <i>Date/time in format as indicated in C507:2379</i>
C507:2379	M	an..3	Date or time or period format code	Code specifying the representation of a date, time or period. <b>719</b> (=CCYYMMDDHHMMCCYYMMDDHHMM)
<b>Remarks</b>				
<b>Example</b>		<b>DTM+Z01:200309090400200309160400:719'</b>		

SG1 – M		RFF		
<b>Remarks</b>		<p>The mandatory segment group 1 consists only of RFF.</p> <p>There will be only one occurrence of segment group 1 at header level to provide:</p> <ul style="list-style-type: none"> <li>➤ The contract group identification when the message relates to different contracts that belong to the same contract group. This contract group must be identified in the RFF segment at header level. If there is a common MOP for all the subcontracts then the different subcontracts must be identified in the RFF segment at detail level. If there are different MOP values for a subcontract within the contract group then a single message is sent with the contract group MOP and a single message is sent per related subcontract.</li> <li>➤ The contract identification when only one contract is relevant for the whole message.</li> </ul>		

RFF – M		REFERENCE – To specify a reference. Identifies the contract (group) relevant for this message		
C506:1153	M	an..3	Reference code qualifier	Code qualifying a reference. <i>See restricted qualifier code list below</i>
C506:1154	M	an..35	Reference identifier	Identifies a reference. <i>Mutually agreed contract identification</i>
C506:1156	N	an..6	Document line identifier	To identify a line of a document. <b>NOT USED</b>
C506:1056	N	an..9	Version identifier	To identify a version. <b>NOT USED</b>
C506:1060	N	an..6	Revision identifier	To identify a revision. <b>NOT USED</b>
<b>Remarks</b>				
<b>Example</b>		<b>RFF+CT:TRABCRR01'</b>		

Restricted qualifier code list for RFF-C506:1153	
CT	Contract reference
Z11	Contract group reference
ZSC	Service contract

<b>SG2 – M</b>	<b>NAD</b>
<b>Remarks</b>	<i>The mandatory segment group 2 consists of a NAD segment to identify the party - (mandatory) The EDIFACT guidelines indicate that the identification of the initiator and the receptor is mandatory.</i>

<b>NAD - M</b>	<b>NAME AND ADDRESS – To specify the name/address and their related function, either by C082 only and/or unstructured by C058 or structured by C080 thru 3207.</b>			
	<b>This identifies the initiator and receptor concerned by the message</b>			
3035	M	an..3	PARTY FUNCTION CODE QUALIFIER	Code giving specific meaning to a party. <i>See restricted qualifier code list below</i>
C082:3039	M	an..35	Party identifier	Code specifying the identity of a party.
C082:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C082:3055	M	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <i>See restricted qualifier code list below</i>
C058:3124	N	an..35	Name and address description	Free form description of a name and address line. <b>NOT USED</b>
C058:3124	N	an..35	Name and address description	Free form description of a name and address line. <b>NOT USED</b>
C058:3124	N	an..35	Name and address description	Free form description of a name and address line. <b>NOT USED</b>
C058:3124	N	an..35	Name and address description	Free form description of a name and address line. <b>NOT USED</b>
C058:3124	N	an..35	Name and address description	Free form description of a name and address line. <b>NOT USED</b>
C080:3036	N	an..35	Party name	Name of a party. <b>NOT USED</b>
C080:3036	N	an..35	Party name	Name of a party. <b>NOT USED</b>
C080:3036	N	an..35	Party name	Name of a party. <b>NOT USED</b>
C080:3036	N	an..35	Party name	Name of a party. <b>NOT USED</b>
C080:3036	N	an..35	Party name	Name of a party. <b>NOT USED</b>
C080:3045	N	an..3	Party name format code	Party name format code <b>NOT USED</b>
C059:3042	N	an..35	Street and number or post office box identifier x	To identify a street and number and/or Post Office box number. <b>NOT USED</b>
C059:3042	N	an..35	Street and number or post office box identifier x	To identify a street and number and/or Post Office box number. <b>NOT USED</b>
C059:3042	N	an..35	Street and number or post office box identifier x	To identify a street and number and/or Post Office box number. <b>NOT USED</b>
C059:3042	N	an..35	Street and number or post office box identifier x	To identify a street and number and/or Post Office box number. <b>NOT USED</b>
3164	N	an..35	CITY NAME	Name of a city. <b>NOT USED</b>
C819:3229	N	an..9	Country subdivision identifier	To identify a country subdivision, such as state, canton, county, prefecture. <b>NOT USED</b>
C819:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C819:3055	N	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C819:3228	N	an..70	Country subdivision name	Name of a country subdivision, such as state, canton, county, prefecture. <b>NOT USED</b>
3251	N	an..17	POSTAL IDENTIFICATION CODE	Code specifying the postal zone or address. <b>NOT USED</b>
3207	N	an..3	COUNTRY IDENTIFIER	Identification of the name of the country or other geographical entity as defined in ISO 3166-1 and UN/ECE Recommendation 3. <b>NOT USED</b>
<b>Remarks</b>				
<b>Example</b>	<b>NAD+BY+BUY123::321'</b>			

## Restricted qualifier code list for NAD-3035

BY	Buyer
SE	Seller
ZTV	Dispatching service of provider
ZTW	Dispatching service of user

## Restricted qualifier code list for NAD-C082-3055

321	Assigned by Edig@s
305	Assigned by ETSO (EIC)

**DETAIL SECTION**

<b>SG05 – M</b>	<b>IDE-LOC-PRC-SG06-SG08</b>
<b>Remarks</b>	<p>The mandatory segment group 05 (IDE-loop) identifies the different time series that are used in the AVAILY message. The segment group consists of:</p> <ul style="list-style-type: none"> <li>➤ IDE to uniquely identify the type of time series being handled – (mandatory)</li> <li>➤ LOC to provide the identification of the connection point in the case of connection point time series – (conditional)</li> <li>➤ To provide the gas delivery type (conditional)</li> <li>➤ SG06-[RFF] to provide a time series related contract reference – (conditional)</li> <li>➤ SG08-[SEQ-SG11] to provide the time series detail – (mandatory)</li> </ul> <p>There are 2 types of SG05 repetitions:</p> <ol style="list-style-type: none"> <li>1. A contractual offtake possibility time series set which contains IDE-SG08 only</li> <li>2. A connection point set of time series which contains IDE-LOC-SG06(conditional)-SG08 only</li> </ol>

<b>IDE-M</b>	<b>IDENTITY – To identify an object.</b>			
	<b>To identify a type of time series.</b>			
7495	M	an..3	OBJECT TYPE CODE QUALIFIER	Code qualifying a type of object. <b>1</b> (=Value list)
C206:7402	M	an..35	Object identifier	Code specifying the unique identity of an object. <i>See restricted code list below</i>
C206:7405	N	an..3	Object identification code qualifier	Code qualifying the identification of an object. <b>NOT USED</b>
C206:4405	N	an..3	Status description code	Code specifying a status. <b>NOT USED</b>
C082:3039	N	an..35	Party identifier	Code specifying the identity of a party. <b>NOT USED</b>
C082:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C082:3055	N	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
4405	N	an..3	STATUS DESCRIPTION CODE	Code specifying a status. <b>NOT USED</b>
1222	N	an..17	CONFIGURATION LEVEL NUMBER	To specify a level within a configuration. <b>NOT USED</b>
C778:7164	N	an..3	Hierarchical structure level identifier	To identify a level within a hierarchical structure. <b>NOT USED</b>
C778:1050	N	an..256	Sequence position identifier	To identify a position in a sequence. <b>NOT USED</b>
C240:7037	N	an..17	Characteristic description code	A code specifying a characteristic. <b>NOT USED</b>
C240:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C240:3055	N	an..3	Code list responsible agency code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C240:7036	N	an..70	Characteristic description	Free form description of a characteristic. <b>NOT USED</b>
C240:7036	N	an..70	Characteristic description	Free form description of a characteristic. <b>NOT USED</b>
<b>Remarks</b>	The IDE segment is used to identify a specific time series type. In the case of Contractual offtake possibility time series the segment LOC MUST not be present.			
<b>Example</b>	<b>IDE+1+03G'</b>			

Restricted qualifier code list for IDE-C206:7402	
01G	Contractual offtake possibility time series
03G	Connection Point Time Series

LOC - C		LOCATION – To identify a place or a location and/or related locations. Identifies the connection Point relevant to the time series		
3227	M	an..3	LOCATION FUNCTION CODE QUALIFIER	Code identifying the function of a location. <i>Z19 (= connection point)</i>
C517:3225	M	an..35	Location identification	To identify a location. <i>The identification of a connection point.</i>
C517:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C517:3055	M	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <i>See restricted code list below</i>
C517:3224	N	an..256	Location name	Name of the location. <b>NOT USED</b>
C519:3223	N	an..35	First related location identifier	To identify a first related location. <b>NOT USED</b>
C519:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C519:3055	N	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C519:3222	N	an..70	First related location name	Name of first related location. <b>NOT USED</b>
C553:3233	N	an..35	Second related location identifier	To identify a second related location. <b>NOT USED</b>
C553:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C553:3055	N	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C553:3232	N	an..70	Second related location name	Name of the second related location. <b>NOT USED</b>
5479	N	an..3	RELATION CODE	Code specifying a relation. <b>NOT USED</b>
<b>Remarks</b>	<i>Within a connection point time series a connection point is mandatory. A connection point is never defined for a Contractual Offtake Possibility time series.</i>			
<b>Example</b>	<b>LOC+Z19+DEESS::321'</b>			

Restricted code list for LOC-C517:3055	
9	GS1
305	Assigned by ETSO (EIC)
321	Assigned by <a href="mailto:Edig@s">Edig@s</a>
ZSO	Assigned by System Operator

PRC – C		PROCESS IDENTIFICATION – To identify a process. Identifies whether the flow at the connection point is an input or an output to contract or service.		
C242:7187	M	an..17	Process type description code	Code specifying a type of process. <i>The identification of the flow to a connection point.</i>
C242:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C242:3055	M	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <i>See restricted code list below</i>
C242:7186	N	an..35	Process type description	Free form description of a type of process. <b>NOT USED</b>
C242:7186	N	an..35	Process type description	Free form description of a type of process. <b>NOT USED</b>
C830:7191	N	an..17	Process description code	Code specifying a process. <b>NOT USED</b>
C830:1131	N	an..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C830:3055	N	an..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C830:7192	N	an..70	Process description	Free form description of a process. <b>NOT USED</b>
<b>Remarks</b>		<i>For a connection point time series a connection point may need the identification of a gas delivery type. The type may be either input or output.</i>		
<b>Example</b>		<b>PRC+Z01::321'</b>		

Restricted code list for PRC-C242:3055	
9	GS1
305	Assigned by ETSO (EIC)
321	Assigned by <a href="mailto:Edig@s">Edig@s</a>
ZSO	Assigned by System Operator

Restricted code list for PRC-C242:7187	
Z01	Input to the contract
Z02	Output from the contract

SG06 – C		RFF
<b>Remarks</b>		<i>The conditional segment group 6 consists only of RFF and it will have only one occurrence containing the sub-contract identification when a contract group identification has been specified at the header level in segment group 1.</i>

RFF – M		REFERENCE – To specify a reference. Identifies the sub-contract that is relevant for this connection point		
C506:1153	M	An..3	Reference code qualifier	Code qualifying a reference. <b>CT (=contract number)</b>
C506:1154	M	An..35	Reference identifier	Identifies a reference. <i>Mutually agreed sub contract identification</i>
C506:1156	N	An..6	Document line identifier	To identify a line of a document. <b>NOT USED</b>
C506:1056	N	An..9	Version identifier	To identify a version. <b>NOT USED</b>
C506:1060	N	An..6	Revision identifier	To identify a revision. <b>NOT USED</b>
<b>Remarks</b>				
<b>Example</b>		<b>RFF+CT:TRABCRR01'</b>		

<b>SG08 – M</b>	<b>SEQ – SG11</b>
<b>Remarks</b>	<i>The mandatory segment group 8 is used to identify a specific time series set. It is composed of SEQ to identify the type of time series and SG11 (QTY-DTM-STS) that provides the time series for the period in question.</i>

<b>SEQ - M</b>	<b>To provide details relating to the sequence.</b>			
1229	M	An..3	ACTION CODE	Code specifying the action to be taken or already taken. <b>8</b> (=Schedule only)
C286:1050	M	An..10	Sequence position identifier	To identify a position in a sequence. <i>See restricted code list below</i>
C286:1159	C	An..3	Sequence identifier source code	Code specifying the source of a sequence identifier. <i>See restricted code list below for the gas quantity nature codes to be used</i>
C286:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C286:3055	M	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>321</b> (=Edig@s)
<b>Remarks</b>	<i>A SEQ segment shall be provided for all time series</i>			
<b>Example</b>	<b>SEQ+8+G-QUANTITY:Z01::321'</b>			

Restricted code list for SEQ-C286:1050	
OFFTAKE	This identifies the contractual offtake possibility time series
G-QUANTITY	This identifies the gas quantity time series
G-QUALITY	This identifies the gas quality time series

Restricted code list for SEQ-C286:1159	
Z01	MQA- Maximum Quantity Available for offtake at a location ( <b>Gas quantity Nature TS only</b> )
Z02	Maximum capacity available
Z03	Minimum capacity to use
Z04	mqa - Minimum Quantity Available –for offtake at a location. ( <b>Gas quantity Nature TS only</b> )
Z05	Quality deficient gas quantity ( <b>Gas quantity Nature TS only</b> )
ZGF	Nominated GCV ( <b>Quality Characteristic TS only</b> )
ZGV	GCV conversion ( <b>Quality Characteristic TS only</b> )
ZPR	Pressure ( <b>Quality Characteristic TS only</b> )
ZWN	Nominated Wobbe index ( <b>Quality Characteristic TS only</b> )
Z10	water dew point ( <b>Quality Characteristic TS only</b> )
Z11	Oxygen Content (O <sub>2</sub> ) ( <b>Quality Characteristic TS only</b> )
Z12	Carbon Dioxide Content (CO <sub>2</sub> ) ( <b>Quality Characteristic TS only</b> )
Z13	Hydrogen Sulphide (H <sub>2</sub> S) ( <b>Quality Characteristic TS only</b> )
Z14	Carbon oxide Sulphide (COS) ( <b>Quality Characteristic TS only</b> )
Z15	Mercaptan Sulphur ( <b>Quality Characteristic TS only</b> )
Z16	Total Sulphur ( <b>Quality Characteristic TS only</b> )
Z17	Hydrocarbon Dew Point ( <b>Quality Characteristic TS only</b> )
Z18	Temperature ( <b>Quality Characteristic TS only</b> )
Z19	C <sub>1</sub> ( <b>used with Quality Characteristic TS only</b> )
Z20	C <sub>2</sub> ( <b>used with Quality Characteristic TS only</b> )
Z21	C <sub>3</sub> ( <b>used with Quality Characteristic TS only</b> )
Z22	iC <sub>4</sub> ( <b>Quality Characteristic TS only</b> )
Z23	nC <sub>4</sub> ( <b>Quality Characteristic TS only</b> )
Z24	iC <sub>5</sub> ( <b>Quality Characteristic TS only</b> )
Z25	nC <sub>5</sub> ( <b>Quality Characteristic TS only</b> )
Z26	neoC <sub>5</sub> ( <b>Quality Characteristic TS only</b> )
Z27	C <sub>6</sub> ( <b>Quality Characteristic TS only</b> )
Z28	C <sub>7</sub> ( <b>Quality Characteristic TS only</b> )
Z29	C <sub>8</sub> ( <b>Quality Characteristic TS only</b> )
Z30	C <sub>9</sub> ( <b>Quality Characteristic TS only</b> )
Z31	C <sub>10+</sub> ( <b>Quality Characteristic TS only</b> )
Z32	N <sub>2</sub> ( <b>Quality Characteristic TS only</b> )



SG11 – M	QTY – DTM – STS
Remarks	The mandatory SG08 provides the quantity (QTY) and status (STS) information for a period (DTM).

QTY – M	QUANTITY – To specify a pertinent quantity.			
C186:6063	M	An..3	Quantity type code qualifier	Code qualifying the type of quantity. See restricted qualifier code list below
C186:6060	M	An..35	Quantity	Alphanumeric representation of a quantity. Actual quantity
C186:6411	M	An..8	Measurement unit code	Code specifying the unit of measurement. See recommended qualifier code list below
Remarks	It is best practise that KW1 and KW2 be used for all time series except the quality information TS. All gas quantities MUST be positive.			
Example	QTY+1:6782:KW1'			

Restricted code list for QTY-C186:6063	
1	Discrete quantity
ZAR	Maximum quantity (used with Quality Information TS only)
ZAS	Minimum quantity (used with Quality Information TS only)
ZA2	Buyers Maximum Offtake Possibility - MOP (used with Contractual Offtake Possibility TS only)
ZA4	Buyer's minimum offtake possibility - mop (used with Contractual Offtake Possibility TS only)
Z05	Maximum Input Capacity available
Z06	Maximum output capacity available
Z07	Minimum input Capacity to use
Z08	Minimum output capacity to use

Recommended qualifier code list for QTY-C186:6411	
KW1	Kilowatt-hour per hour (kWh/h) (used with offtake possibility and Quantity Information TS only)
KW2	Kilowatt-hour per day (kWh/d) (used with offtake possibility and Quantity Information TS only)
HM1	Million cubic meters per hour (used with offtake possibility and Quantity Information TS only)
HM2	Million cubic meters per day (used with offtake possibility and Quantity Information TS only)
TQH	Thousand cubic meters per hour (used with offtake possibility and Quantity Information TS only)
TQD	Thousand cubic meters per day (used with offtake possibility and Quantity Information TS only)
KW3	Kilowatt hour per cubic meter (kWh/m <sup>3</sup> ) (used with Quality Information TS only)
VPC	vol % (used with Quality Information TS only)
MOL	Mole % (used with Quality Information TS only)
GP	mg/m <sup>3</sup> (used with Quality Information TS only)
CEL	°C (used with Quality Information TS only)
BAR	bar (used with Quality Information TS only)

DTM – M	DATE/TIME/PERIOD - To specify date, and/or time, or period. Identifies the date/time/period for the preceding quantity			
C507:2005	M	an..3	Date or time or period function code qualifier	Code qualifying the function of a date, time or period. 2 (=Delivery date/time requested)
C507:2380	M	an..35	Date or time or period text	The value of a date, a date and time, a time or of a period in a specified representation. Period in format as indicated in C507:2379
C507:2379	M	an..3	Date or time or period format code	Code specifying the representation of a date, time or period. 719 (=CCYYMMDDHHMMCCYYMMDDHHMM)
Remarks	DTM can be repeated only 1 time per QTY in segment group 11.			
Example	DTM+2:200309150400200309160400:719'			

STS - C		Status – To specify the status of an object or service, including its category and the reason(s) for the status. This identifies the reason for a deviation or a quality change		
C601:9015	M	An..3	Status category code	Code specifying the category of a status. <b>08G</b> (=Status category)
C601:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C601:3055	M	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>321</b> (=Edig@s)
C555:4405	M	an..3	Status description code	Code specifying a status. <i>See restricted code list below</i>
C555:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C555:3055	M	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>321</b> (=Edig@s)
C555:4404	N	An..35	Status description	Free form description of a status. <b>NOT USED</b>
C556:9013	N	An..3	Status reason description code	Code specifying the reason for a status. <b>NOT USED</b>
C556:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C556:3055	N	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C556:9012	N	An..25 6	Status reason description	Free form description of the status reason. <b>NOT USED</b>
C556:9013	N	An..3	Status reason description code	Code specifying the reason for a status. <b>NOT USED</b>
C556:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C556:3055	N	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C556:9012	N	An..25 6	Status reason description	Free form description of the status reason. <b>NOT USED</b>
C556:9013	N	An..3	Status reason description code	Code specifying the reason for a status. <b>NOT USED</b>
C556:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C556:3055	N	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C556:9012	N	An..25 6	Status reason description	Free form description of the status reason. <b>NOT USED</b>
C556:9013	N	An..3	Status reason description code	Code specifying the reason for a status. <b>NOT USED</b>
C556:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C556:3055	N	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C556:9012	N	An..25 6	Status reason description	Free form description of the status reason. <b>NOT USED</b>
C556:9013	N	An..3	Status reason description code	Code specifying the reason for a status. <b>NOT USED</b>
C556:1131	N	An..17	Code list identification code	Code identifying a user or association maintained code list. <b>NOT USED</b>
C556:3055	N	An..3	Code list responsible agency code	Code specifying the agency responsible for a code list. <b>NOT USED</b>
C556:9012	N	An..25 6	Status reason description	Free form description of the status reason. <b>NOT USED</b>
<b>Remarks</b>		The STS segment is only used in the context of the quality information and the gas quantity nature driven time series. It MUST NOT be used for all other time series.		
<b>Example</b>		<b>STS+08G::321+09G::321'</b>		

## Restricted qualifier code list for STS-C555:4405

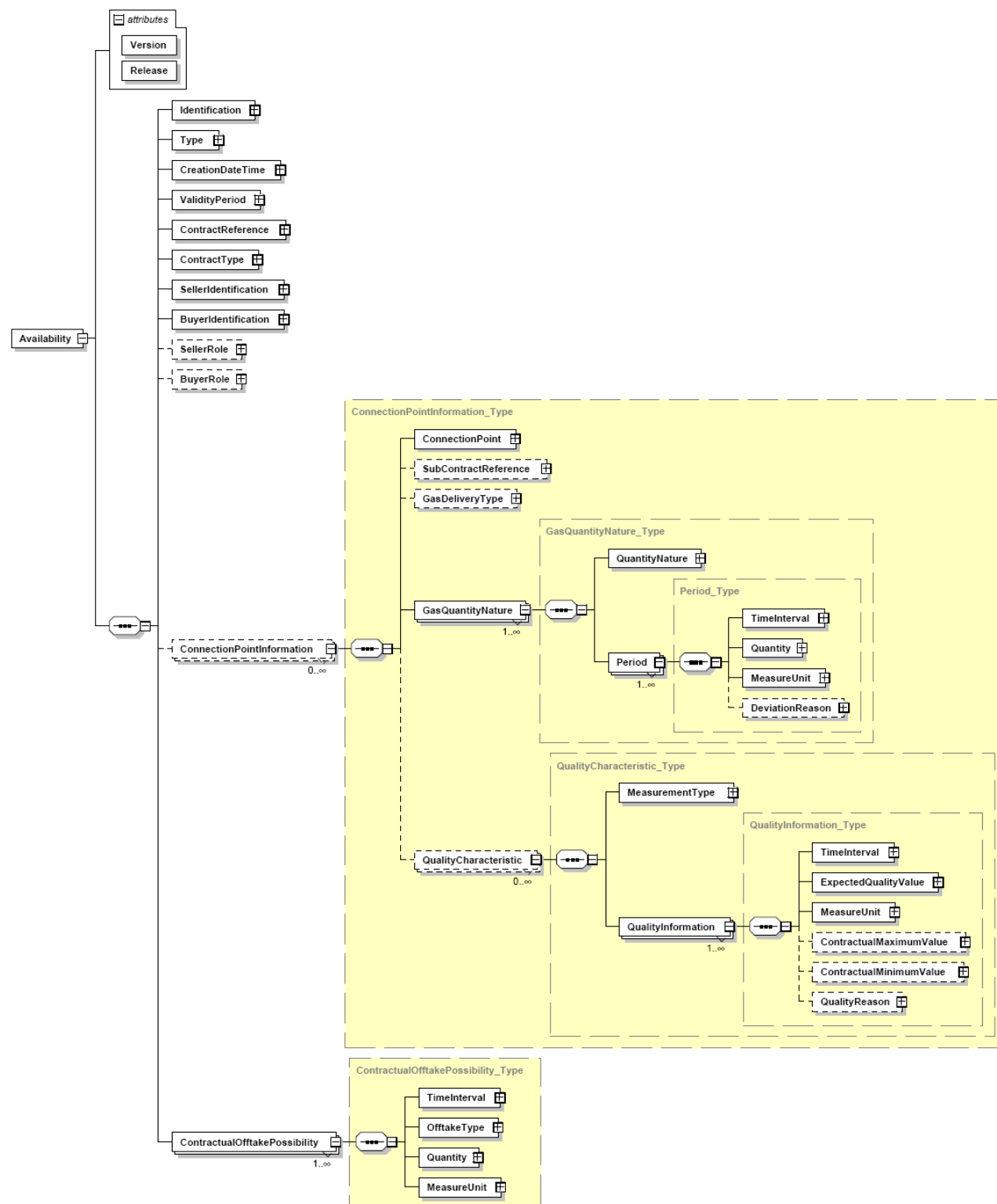
09G	Quality deficient gas (used with Quality Information TS only)
24G	Quality variation (used with Quality Information TS only)
25G	Planned Maintenance (Gas quantity Nature TS only)
26G	Other (Gas quantity Nature TS only)

**SUMMARY SECTION**

UNT – M	MESSAGE TRAILER – To end and check the completeness of a Message			
0074	M	n..6	NUMBER OF SEGMENTS IN THE MESSAGE	Control count of number of segments in a message. <i>Total number of segments in message (including UNH &amp; UNT)</i>
0062	M	an..14	MESSAGE REFERENCE NUMBER	Unique message reference assigned by the sender. <i>Must be identical to UNH-0062</i>
Remarks	<i>There is one mandatory occurrence of UNT at the end of the message.</i>			
Example	<b>UNT+175+1'</b>			

## 4 XML IMPLEMENTATION OF AVAILY

### 4.1 XML STRUCTURE



## 4.2 XML SCHEMA

### 4.2.1 Introduction

All electronic documents using this Implementation guide Specification shall complete the document Version and Release attributes as follows:

- Version: "EGAS40". This corresponds to the Edig@s package identification.
- Release: "2". This corresponds to the Message Implementation Guide Version number.

### 4.2.2 Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:ecc="core-cmpts.xsd" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified" attributeFormDefault="unqualified" ecc:VersionRelease="1.0">
  <xsd:import namespace="core-cmpts.xsd" schemaLocation="../cclib/core-cmpts.xsd"/>
  <!--
      EDIGAS Document Automatically generated from a UML class diagram using XMI.
      Generation tool version 1.7
  -->
  <xsd:element name="Availability">
    <xsd:complexType>
      <xsd:annotation>
        <xsd:documentation/>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="Identification" type="ecc:IdentificationType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="Type" type="ecc:MessageType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="CreationDateTime"
type="ecc:MessageDateTimeType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ValidityPeriod" type="ecc:TimeIntervalType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ContractReference" type="ecc:IdentificationType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ContractType" type="ecc:ReferenceType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="SellerIdentification" type="ecc:PartyType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="BuyerIdentification" type="ecc:PartyType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>
</xsd:schema>
```

```

        <xsd:element name="SellerRole" type="ecc:RoleType" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="BuyerRole" type="ecc:RoleType" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="ConnectionPointInformation"
type="ConnectionPointInformation_Type" minOccurs="0" maxOccurs="unbounded"/>
        <xsd:element name="ContractualOfftakePossibility"
type="ContractualOfftakePossibility_Type" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="Version" type="xsd:string" use="required"/>
    <xsd:attribute name="Release" type="xsd:string" use="required"/>
</xsd:complexType>
</xsd:element>
<xsd:complexType name="QualityInformation_Type">
    <xsd:annotation>
        <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="ExpectedQualityValue" type="ecc:QuantityType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="MeasureUnit" type="ecc:UnitOfMeasureType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="ContractualMaximumValue" type="ecc:QuantityType"
minOccurs="0">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="ContractualMinimumValue" type="ecc:QuantityType"
minOccurs="0">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="QualityReason" type="ecc:StatusType" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="Period_Type">
    <xsd:annotation>
        <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>

```

```

        </xsd:annotation>
      </xsd:element>
      <xsd:element name="Quantity" type="ecc:QuantityType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="MeasureUnit" type="ecc:UnitOfMeasureType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="DeviationReason" type="ecc:StatusType" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="ConnectionPointInformation_Type">
    <xsd:annotation>
      <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="ConnectionPoint" type="ecc:MeasurementPointType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="SubContractReference" type="ecc:IdentificationType"
minOccurs="0">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="GasDeliveryType" type="ecc:DeliveryType"
minOccurs="0">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="GasQuantityNature" type="GasQuantityNature_Type"
maxOccurs="unbounded"/>
      <xsd:element name="QualityCharacteristic" type="QualityCharacteristic_Type"
minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="ContractualOfftakePossibility_Type">
    <xsd:annotation>
      <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="OfftakeType" type="ecc:QuantityTypeType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="Quantity" type="ecc:QuantityType">
        <xsd:annotation>
          <xsd:documentation/>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>

```

```

        </xsd:element>
        <xsd:element name="MeasureUnit" type="ecc:UnitOfMeasureType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="GasQuantityNature_Type">
    <xsd:annotation>
        <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="QuantityNature" type="ecc:SequenceSourceType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="Period" type="Period_Type" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="QualityCharacteristic_Type">
    <xsd:annotation>
        <xsd:documentation/>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="MeasurementType" type="ecc:SequenceSourceType">
            <xsd:annotation>
                <xsd:documentation/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="QualityInformation" type="QualityInformation_Type"
maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
</xsd:schema>

```



---

## 5 DOCUMENT CHANGE LOG

Package	Version	Date	Description
<b>4.0</b>	1	2007-12-31	Version 4 issued
<b>4.0</b>	2	2009-04-27	Revamped to cater for packaging and introduced shipper swapping