



ACCESS CODE FOR TRANSMISSION



Attachment C.4: ~~Operating Procedures~~-Specific requirements at Connection Points

Table of Contents

1	Operating Conditions and quality requirements at IZT and Zeebrugge _____	2
2	Operating Conditions and quality requirements at ZPT _____	3
3	Operating Conditions and quality requirements at Eynatten 1 (GasPool) ¹ _____	4
4	Operating Conditions and quality requirements at Eynatten 2 (NCG) ² _____	5
5	Operating Conditions and quality requirements at VIP THE-ZTP ³ _____	6
6	Operating Conditions and quality requirements at Virtualys _____	7
7	Operating Conditions and quality requirements at GDLux _____	8
8	Operating Conditions and quality requirements at VIP-BENE _____	9
9	Operating Conditions and quality requirements at Hilvarenbeek L _____	10
10	Operating Conditions and quality requirements at Blaregnies L _____	11
11	Operating Conditions and quality requirements at Zeebrugge LNG Terminal _____	12
12	Operating Conditions and quality requirements at Dunkirk LNG Terminal _____	13
13	Operating Conditions and quality requirements at Loenhout _____	14
14	Operating Conditions and quality requirements at Installation Point H ₂ -IN, after H ₂ injection _____	15
15	Operating Conditions and quality requirements at Domestic Points for Injection _____	16

~~Specific Requirements at all Interconnection Points and Domestic Exit Points are published on the Fluxys Belgium's website and may be amended from time to time.~~ Prior to an amendment of the Specific Requirements, the TSO shall consult the market parties on this amendment and such amendment shall be subject to CREG approval.

¹ As from 01/04/2022 it will be included in the VIP THE-ZTP (subject to a pre notice of 4 weeks)

² As from 01/04/2022 it will be included in the VIP THE-ZTP (subject to a pre notice of 4 weeks)

³ As from 01/04/2022 (subject to a pre notice of 4 weeks)

1 Operating Conditions and quality requirements at IZT and Zeebrugge

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.38
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.05
Pressure ⁽¹⁾	barg	55	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8 ⁽²⁾
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

- (1) Natural gas shall be made available in the entry direction at any pressure within this range as requested from time to time by Fluxys
- (2) As long as the maximum water dewpoint applicable in the IUK system is -10°C at 69 barg, said value shall be applicable.

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



2 Operating Conditions and quality requirements at ZPT

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	11.17	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	14.17	15.47 ⁽¹⁾
Pressure ⁽²⁾	barg	45	80
Temperature	°C	2	30(Oct-May) 32 (June- Sept)
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 10
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

- (1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.
- (2) Natural gas shall be made available at any pressure within this range as requested from time to time by Fluxys

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



3 Operating Conditions and quality requirements at Eynatten 1 (GasPool)

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Pressure ⁽²⁾	barg	49 exit 55 entry	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint ⁽³⁾	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

- (1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT – Attachment C1.
- (2) Natural gas shall be made available in the entry direction at any pressure within this range as requested from time to time by Fluxys
- (3) As long as the maximum water dewpoint applicable in the IUK system is -10°C at 69 barg, said value shall be applicable

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



4 Operating Conditions and quality requirements at Eynatten 2 (NCG)

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Pressure ⁽²⁾	barg	49 exit 55 entry	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint ⁽³⁾	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

- (1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.
- (2) Natural gas shall be made available in the entry direction at any pressure within this range as requested from time to time by Fluxys
- (3) As long as the maximum water dewpoint applicable in the IUK system is -10°C at 69 barg, said value shall be applicable

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



5 Operating Conditions and quality requirements at VIP THE-ZTP

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Pressure ⁽²⁾	barg	49 exit 55 entry	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint ⁽³⁾	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

- (1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.
- (2) Natural gas shall be made available in the entry direction at any pressure within this range as requested from time to time by Fluxys
- (3) As long as the maximum water dewpoint applicable in the IUK system is -10°C at 69 barg, said value shall be applicable

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



6 Operating Conditions and quality requirements at Virtualys

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

(1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



7 Operating Conditions and quality requirements at GDLux

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Pressure	barg	27	66.2
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 10
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

(1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



8 Operating Conditions and quality requirements at VIP-BENE

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽¹⁾
Pressure			
IP s' Gravenvoeren	barg	49	66.2
IP Zandvliet H		55	80
IP Zelzate 1		59	80
IP Zelzate 2		55	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n)		6

(1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



9 Operating Conditions and quality requirements at Hilvarenbeek L

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	9.53	10.74
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	12.20 ⁽¹⁾	13.02
Pressure	barg	49	66.2
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n)		6

- (1) This value will be lowered in agreement with the adjacent operator, subject to compliance with the range and values of the Belgian legislation as in effect at that time

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.



10 Operating Conditions and quality requirements at Blaregnies L

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	9.53	10.74
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	12.20⁽¹⁾	13.02
Pressure	barg	49	66.2
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n)		6

~~(1) — This value will be lowered in agreement with adjacent operator, subject to compliance with the range and values of the Belgian legislation as in effect at that time~~

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.



11 Operating Conditions and quality requirements at Zeebrugge LNG Terminal

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 010)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.67	15.56 ⁽¹⁾
Pressure	barg	55	80
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

(1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



12 Operating Conditions and quality requirements at Dunkirk LNG Terminal

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	11.17	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	14.17	15.47 ⁽¹⁾
Pressure	barg	55	84.5
Temperature	°C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 10
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n) (as S)		6

(1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.

The Natural Gas delivered may not contain any other elements or impurities (such as, but not limited to methanol, condensates and gas odorants) to the extent that the Natural Gas delivered cannot be transported, stored or marketed in Belgium without incurring additional cost for quality adjustment.

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



13 Operating Conditions and quality requirements at Loenhout

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.56 ⁽¹⁾
Pressure ⁽²⁾	barg	60	80
Temperature	C	2	38
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.0 ⁽³⁾
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		30
Mercaptans (as S)	mg/m ³ (n)		6

- (1) For redeliveries of Natural Gas at IZT/Zeebrugge, we refer to ACT - Attachment C1.
- (2) A lower minimum pressure can be agreed upon by Fluxys and the Storage Operator in line with the provisions of attachment D.2 of the Access Code for Storage.
- (3) CO₂ content of the Natural Gas injected must on average be lower than 1 Mole % over the Storage Season, as defined in the Access Code for Storage

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the EASEE-Gas Common Business Practices or any other applicable European standard as in effect at that time at a European level.



14 Operating Conditions and quality requirements at Installation Point H₂-IN, after H₂ injection

	<u>Unit</u>	<u>Min.</u>	<u>Max.</u>
<u>Gross Calorific Value</u>	<u>kWh/m³ (n) (25°C, 0°C)</u>	<u>10.80⁽¹⁾</u>	<u>12.77</u>
<u>Wobbe Index</u>	<u>kWh/m³ (n) (25°C, 0°C)</u>	<u>13.82</u>	<u>15.47⁽²⁾</u>
<u>Hydrocarbon dewpoint</u>	<u>°C from 0 to 69 barg</u>		<u>Minus 2</u>
<u>Water dewpoint</u>	<u>°C at 69 barg</u>		<u>Minus 8⁽³⁾</u>
<u>Oxygen content (O₂)</u>	<u>ppm by vol</u>		<u>1000</u>
<u>Carbon dioxide content (CO₂)</u>	<u>Mole %</u>		<u>2.5</u>
<u>Hydrogen sulphide content (H₂S) (inclusive of COS) (as S)</u>	<u>mg/m³(n) (as S)</u>		<u>5</u>
<u>Total sulphur at any time (as S)</u>	<u>mg/m³(n) (as S)</u>		<u>20</u>
<u>Mercaptans (as S)</u>	<u>mg/m³ (n)</u>		<u>6</u>
<u>Hydrogen (H₂)</u>	<u>Mole %</u>		<u>2⁽⁴⁾</u>

(1) 10.7 kWh/m³(n) as long as the minimum Gross Calorific Value of 10.8 kWh/m³(n) is respected on Interconnection Points

(2) 15.05 kWh/m³(n) if injected gas can be redelivered at IZT/Zeebrugge

(3) Minus 10 °C if injected gas can be redelivered at IZT/Zeebrugge

(4) As long as applicable H₂ specifications are respected on other Connection Points.

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the applicable European standards as in effect at that time at a European level.



1415 Operating Conditions and quality requirements at Domestic Points for Injection

	Unit	Min.	Max.
Gross Calorific Value	kWh/m ³ (n) (25°C, 0°C)	10.80 ⁽¹⁾	12.77
Wobbe Index	kWh/m ³ (n) (25°C, 0°C)	13.82	15.47 ⁽²⁾
Hydrocarbon dewpoint	°C from 0 to 69 barg		Minus 2
Water dewpoint	°C at 69 barg		Minus 8 ⁽³⁾
Oxygen content (O ₂)	ppm by vol		1000
Carbon dioxide content (CO ₂)	Mole %		2.5 ⁽⁴⁾
Hydrogen sulphide content (H ₂ S) (inclusive of COS) (as S)	mg/m ³ (n) (as S)		5
Total sulphur at any time (as S)	mg/m ³ (n) (as S)		20
Mercaptans (as S)	mg/m ³ (n)		6
<u>Hydrogen (H₂)</u>	<u>Mole %</u>		<u>2⁽⁵⁾</u>

(1) 10.7 kWh/m³(n) as long as the minimum Gross Calorific Value of 10.8 kWh/m³(n) is respected on Interconnection Points

(2) 15.05 kWh/m³(n) if injected gas can be redelivered at IZT/Zeebrugge

(3) Minus 10 °C if injected gas can be redelivered at IZT/Zeebrugge

(4) Can be reduced down to 0,5% as a mitigation measure to decrease Wobbe Index variations in downstream network, when such variations arise from the connection of that Domestic Point for Injection

(5) As long as applicable H₂ specifications are respected on other Connection Points

The Natural Gas redelivered may not contain other elements and impurities (such as but not limited to methanol, condensates, gas odorants) to the extent that the Natural Gas redelivered cannot be transported, stored and marketed in Belgium without incurring additional cost for quality adjustment

The Natural Gas delivered may not contain any added odorants.

To the extent that in future all gas flows through and into Belgium, which could



Access Code for Transmission - Attachment C4

potentially be impacted by the prospective Shipper's gas delivery at the border, may accept wider quality specifications, the table above shall be adjusted accordingly subject to compliance with the ranges and values of the applicable European standards as in effect at that time at a European level.

