Standard CO_2 TRANSPORT AND STORAGE CONDITIONS

in respect of the Porthos System

PORTHOS CO2 TRANSPORT AND STORAGE C.V.

1. Definitions and Interpretations

1.1. The definitions used in the TSC are listed in Schedule A.

1.2. Interpretation

a. reference to the singular shall include a reference to the plural and vice-versa and reference to any gender shall include a reference to all genders;

b. the word "including" shall mean "including without limitation";

c. reference to any Article shall refer to an article of the TSA (not including the TSC) or the TSC, as the case may be;

d. reference to any Schedule or Annex shall refer to a schedule or annex of the TSC;

e. reference to statute, statutory provision or statutory instrument shall include any re-enactment or amendment thereof;

f. reference to any Party includes any successor or assign of such Party provided such assignment is not precluded under the TSA;

g. headings of Articles, Schedules or Annexes are inserted for convenience of reference only and shall not be construed to affect the meaning or construction thereof;

h. all monetary amounts shall be deemed to be in Euros ("EUR" or "€");

i. any amount becomes "due and payable" on the date on which any applicable credit or payment period has lapsed;

j. in accordance with the English numbering convention, the comma is used to indicate multiples of a thousand and full stop as the decimal point;

k. all calculations under or pursuant to the TSA, whether or not on the basis of a formula, shall be made (rounded off) to the nearest 1/10th (one-tenth) of a eurocent, the nearest 1/10th (one-tenth) of a kilogram or the nearest Hour, as the case may be;

l. where in the TSA a Dutch term is given in italics or in italics and in brackets after an English term and there is any inconsistency between the Dutch and the English, the meaning of the Dutch term shall prevail;

m. reference to time shall be to such time as is statutorily in force in the Netherlands; and

n. references to any dates or periods shall include such dates or the first and the last Day of such periods.

2. Scope

2.1. On each Hour of each Day between the Start Date and the End Date, including the Start Date and the End Date, Porthos shall (i) make available Transport Capacity up to Customer's Registered Transport Capacity and the possibility to deliver CO_2 at a (future) third party utilization point, and (ii) make available to Customer an agreed Storage Space and permanently store Customer's CO_2 as transported through the Porthos Transport System in the Porthos Storage System up to Customer's Registered Storage Space. Porthos has ensured, through its contractual arrangements with each of the Asset Owners, that it is able to perform all of its obligations under the TSA.

3. Registered and Firm Transport Capacity and Registered Storage Space

3.1. Customer's "**Registered Transport Capacity**" ("RTC") for any Hour is the Transport Capacity ("TC") (expressed in t/Hour) held by Customer at the Signing Date pursuant to the TSA as adjusted, from time to time, for an assignment (if any):

a. of Transport Capacity held by Customer to another Porthos customer; and/or

b. of Transport Capacity held by another Porthos customer to Customer,

as continually recorded by Porthos in its electronic "**Registered Transport Capacity Register**".

3.2. Customer's "**Firm Transport Capacity**" ("FTC") for any Hour is the aggregate of its Registered Transport Capacity and Transferable Transport Capacity purchased by Customer (if any) multiplied by the sum of 1 (one) minus the Maintenance Factor, minus the Outage Factor and minus the FM Factor, all as applicable for such Hour, and rounded to the nearest whole t/Hour, in accordance with the following formula:

$$FTC = (RTC + TTC \text{ (if any)}) \times (1 - mf - of - ff)$$

3.3. Customer's "**Registered Storage Space**" ("RSS") is the Storage Space ("SS") (expressed in t) held by Customer at the Signing Date pursuant to the TSA, as adjusted from time to time, for an assignment (if any):

a. of Storage Space by Customer to another Porthos customer; and/or

b. of storage space by another Porthos customer to Customer,

as continually recorded by Porthos in its electronic "**Registered Storage Space Register**".

4. Grid Connection, Nominations and Transferable Transport Capacity

4.1. The Parties shall act in full compliance with the grid connection and feed-in terms and conditions ("**GCFI**") set out in Schedule D relating to the Connection and the delivery of CO_2 into the Porthos Transport System at the Connection, including technical provisions relating to the Connection and specifications of the CO_2 to be delivered at the Connection.

4.2. At any time before a Nominations Close Time, Customer may for the first Day after the Nominations Close Time and/or for any Day thereafter, submit Nominations for each Hour in such Day for the delivery of CO_2 into the Porthos Transport System.

4.3. At any time before a Nominations Close Time, Customer may change a prior Nomination.

4.4. Each Nomination or change thereof shall be made in accordance with the Operating Guidelines set out in Schedule B.

4.5. For any Hour, the Customer's final Nomination shall be:

a. the quantity of CO_2 (t/hour) in the Customer's latest valid Nomination for the relevant Day; or

b. in absence of any latest valid Nomination for the relevant Day whatsoever: the quantity of CO_2 in the Customer's latest valid nomination;

c. in the absence of any latest valid Nomination whatsoever: the RTC.

4.6. Porthos will confirm to Customer no later than the Confirmations Close Time the Confirmed Transport Capacity determined in accordance with Article 4.7 TSC ("**Confirmation**").

4.7. For any Hour, the Customer's "**Confirmed Transport Capacity**" shall be its final Nomination adjusted by Porthos, if and to the extent applicable, in accordance with the following:

a. if the final Nomination for any Hour exceeds Customer's Firm Transport Capacity for such Hour, the Confirmed Transport Capacity will be reduced to Customer's Firm Transport Capacity for such Hour;

b. if the aggregate final Nominations of all Porthos customers are below the Technical Minimum Flow, the Confirmed Transport Capacity will be 0 (zero);

c. if the aggregate final Nominations of all Porthos customers exceed the Technical Ramp Rate, the Confirmed Transport Capacity will be adjusted pro rata for each Porthos customer to ensure the Technical Ramp Rate is not exceeded;

d. if the Customer's final Nomination, if it would remain unchanged, would lead to the Customer exceeding its Registered Storage Space according to Article 3.3 TSC, the Confirmed Transport Capacity will be reduced such that the Registered Storage Space is not exceeded.

Any adjustments made by Porthos pursuant to this Article 4.7 TSC shall be communicated to Customer in the Confirmation as referred to in this Article 4.7 TSC, including the reasons for adjustment.

4.8. For any Hour, the Customer's "**Metered Quantity**" ("MQ") shall be the CO_2 (t) delivered by Customer as metered at the Metering Point.

4.9. Customer shall use its reasonable efforts to deliver an amount of CO_2 equal to the Confirmation.

4.10. For any year, the Customer's "**Stored Quantity**" ("SQ") shall be the Customer's Metered Quantity corrected for the actual CO_2 losses resulting from leakage and venting between the Metering Point and the point where the CO_2 is injected in an underground (depleted) gas reservoir (referred to as "actual losses" in the formula below):

$$SQ = \mathrm{MQ} - \left(\frac{MQ}{\sum_{all\ Customers} MQ}\right) * actual\ losses$$

4.11. Customer's cumulative Stored Quantity shall not exceed its Registered Storage Space.

4.12. If Customer foresees that it will not use (part of) its Registered Transport Capacity for a period of at least 24 (twenty four) Hours, it must -if it wishes to make such

unused Registered Transport Capacity available to one or more other Porthos customers- inform Porthos at least 48 (forty eight) Hours prior to the aforementioned 24 (twenty four) Hour period which part of its Registered Transport Capacity will not be used and for which period of time. Such capacity is defined as "**Transferable Transport Capacity**".

4.13. Any available Transferable Transport Capacity will be sold by Porthos on a first come first served basis. The procedure of this mechanism will be detailed in the Operating Guidelines.

4.14. If and to the extent that Customer's Transferable Transport Capacity is purchased by another customer, Porthos shall pay Customer the Transferable Transport Capacity Fee ("TTCF") received from such other customer, determined as the sum over all Hours of the Transferable Transport Capacity ("TTC") purchased by the other customer multiplied by the Transferable Transport Capacity Price ("TTCP") and corrected for the Maintenance Factor, the Outage Factor and the FM Factor, calculated in accordance with the following formula, it being understood that the TTCP is set at the sole discretion of Porthos and will be communicated in line with the Operating Guidelines:

$$TTCF = \sum_{hours} (1 - mf - of - ff)\, x\, TTC\, x\, TTCP$$

4.15. Customer shall express its interest (if any) in purchasing (part of) any available Transferable Transport Capacity from other Porthos customers 2 (two) Hours prior to the relevant Nomination Close Time at the latest.

5. Maintenance

5.1. Subject to the provisions of this Article 5 TSC, Porthos shall annually in June issue to Customer a notice in relation to the next calendar year ("**Maintenance Notice**") specifying the Hours (if any) during which Firm Transport Capacity is scheduled to be reduced or unavailable due to planned maintenance of the Porthos System ("**Maintenance Hours**"), and the relevant "**Maintenance Factor**".

A Maintenance Factor of 0 (zero) means that there is no reduction of the Firm Transport Capacity, a Maintenance Factor between zero (0) and one (1) represents on a linear scale proportionally reduced Firm Transport Capacity and a Maintenance

Factor of 1 (one) means that no Firm Transport Capacity is available. If no Maintenance Notice is issued a Maintenance Factor of 0 (zero) applies.

5.2. Porthos may revise:

a. by Maintenance Notice issued no later than the 1st (first) Day of the month preceding the month in which the Maintenance Hour was previously scheduled, any Maintenance Hour, provided that the revised Maintenance Hour shall start no more than 720 (seven hundred and twenty) Hours earlier or later than the previously scheduled Maintenance Hour. Porthos shall make reasonable efforts not to exercise its right to revise Maintenance Hours in accordance with this Article 5.2.a TSC more than is necessary; and

b. by Maintenance Notice issued no later than D-1 at 12:00 hours, the Maintenance Factor applied in respect of a Maintenance Hour by no more than 20% points (twenty percentage points).

5.3. In 4 (four) consecutive calendar years, the aggregate of all Maintenance Hours in each case multiplied by their respective Maintenance Factor (i) shall not exceed an average of 456 (four hundred and fifty six) Hours per calendar year and (ii) may include no more than one consecutive period of 576 (five hundred and seventy six) Hours.

5.4. If Porthos issues a Maintenance Notice which results in Maintenance Hours outside of or exceeding the limits set out in Articles 5.2 and 5.3 TSC, these excess or outside Hours shall be deemed Outage Hours.

5.5. Porthos shall consult with Customer and all other Porthos customers regarding the planning and performance of maintenance to the Porthos System, but Porthos shall at its sole discretion determine the timing of its scheduled maintenance.

6. Outages

6.1. Subject to the provisions of this Article 6 TSC, Porthos shall issue to Customer a notice (“**Outage Notice**”) specifying the Hours (if any) during which the Porthos System is unavailable or is expected to be unavailable for reasons other than maintenance as referred to in Article 5 TSC and/or Force Majeure as referred to in Article 14 TSC ("**Outage Hours**"), and the relevant "**Outage Factor**".

An Outage Factor of 0 (zero) means that there is no reduction of the Firm Transport Capacity, an Outage Factor between 0 (zero) and 1 (one) represents on a linear

scale proportionally reduced Firm Transport Capacity and an Outage Factor of 1 (one) means that no Firm Transport Capacity is available. If no Outage Notice is issued an Outage Factor of 0 (zero) applies.

6.2. Porthos may revise or revoke an Outage Notice at any time.

6.3. For the determination of the Firm Transport Capacity any change of the Outage Factor given in an Outage Notice shall take effect as from the 1st (first) Full Hour occurring immediately following the time of an Outage Notice.

6.4. If the Outage is due to the fact that (i) the Confirmed Transport Capacity of all Porthos customers is 0 (zero) pursuant to Article 4.7.b TSC, or (ii) the sum of all of Metered Quantities delivered by Porthos' customers during the Hour is below the Technical Minimum Flow, or (iii) the sum of all Metered Quantities delivered by Porthos' customers during the Hour exceeds the Technical Ramp Rate, or (iv) the delivery by the Customer of CO_2 at the Connection and/or the specifications of such CO_2 is not in accordance with the GCFI, then for these Outage Hours the Outage Factor relating to Fees shall not be applied, which -for the avoidance of doubt- means that the Customer shall be required to pay to Porthos the Fees in relation to such Outage Hours. Outages referred to in this Article 6.4 TSC are not deemed to contribute to any Outage Factor or Outage Termination Event.

6.5. If an Outage has occurred, Porthos shall:

a. as soon as reasonably possible, but in any event within 24 (twenty four) Hours after its occurrence inform Customer of the measures that Porthos is taking and the amount of time it expects to require (i) to determine the Outage's root cause(s) and (ii) to eliminate or, if such is not possible, mitigate its effect(s); and

b. as soon as reasonably possible inform Customer of the Outage's root cause(s) and/or any changes to the Porthos System in connection therewith.

Porthos shall on an ongoing basis inform Customer of any material developments in this regard.

6.6. If an Outage has occurred, Porthos shall be solely responsible and liable to take measures to eliminate or, if such is not possible, mitigate its effect(s) as soon as reasonably possible (including deciding how, when and by whom such measures are taken), taking into account the legitimate interests of both Parties and taking

into consideration, to the extent reasonably possible, the advice and/or views provided by Customer in accordance with Article 6.7 TSC.

6.7. Subject to Article 6.6 TSC:

a. Customer is entitled to provide Porthos with its views and/or advice in relation to an Outage, including any possible measures to eliminate and/or mitigate its effects;

b. Porthos may, in relation to any Outage, at any time, at its sole discretion, consult with Customer which shall (i) use its reasonable efforts to provide Porthos with all assistance that can reasonably be required in connection therewith, and (ii) at Porthos' first request, make available relevant experts to assist in assessing and/or resolving an Outage.

c. Porthos shall, if the effects of an Outage have not been eliminated and/or mitigated within 30 (thirty) Days after the occurrence of such Outage, consult with Customer on the measures envisaged by Porthos to eliminate and/or mitigate the effects of such Outage, prior to the implementation of any such measures.

7. Operating Guidelines and Customer's Access to Data

7.1. Without prejudice to any other provision of the TSC and after consultation with all other customers of Porthos whom have entered into transport capacity and storage space agreements identical to the TSA, Porthos will develop, maintain and from time to time revise the Operating Guidelines which will address various operational subjects including the exchange of and access to Customer specific data (including Nominations and registered capacities) and Porthos System data (including Maintenance Notices, Technical Minimum Flow, Technical Ramp Rate, etc). Any revisions will be implemented upon reasonable notice permitting Customer to adjust its systems. Additionally, Porthos may provide access to data through other media. Customer shall comply with the Operating Guidelines. For the record, Customer acknowledges and agrees that the Operating Guidelines shall initially govern both CO_2 transport and CO_2 storage under the TSA, and that Porthos may at any time decide to establish separate operating guidelines for transport and storage which, once published, shall replace the relevant provisions in the Operating Guidelines initially in force, subject to prior consultation with all other Porthos customers as referred to above and a reasonable notice period to enable Customer to adjust its systems (if required).

7.2. Porthos shall procure that amongst others, the following data is accessible to the Customer at all times (e.g. via the Porthos website, subject to operational availability, and in case of its unavailability Porthos shall endeavour to provide this information by other means available to Porthos):

a. Customer's Registered Transport Capacity;

b. Customer's Registered Storage Space;

c. Customer's Stored Quantity;

d. Nominations and Confirmed Transport Capacity;

e. aggregate Registered Transport Capacity and Registered Storage Space of all Customers;

f. aggregate Registered Transport Capacity and/or aggregate Registered Storage Space available for assignment in accordance with Article 15.4 TSC;

g. availability, including Maintenance Factor, Outage Factor and FM Factor;

h. near real time physical flow (gross);

i. aggregate Metered Quantities of all Customers per calendar month;

j. Transferable Transport Capacity made available by Customer and other Porthos customers;

k. Transferable Transport Capacity Price;

l. Maintenance Notices and changes thereto;

m. Outage Notices and changes thereto;

n. FM Notices and changes thereto;

o. Technical Minimum Flow;

p. Technical Ramp Rate; and

q. certain historic data in respect of the above.

7.3. Porthos shall store historic data as from the date of their creation for the term of the TSA.

8. Fees

8.1. Customer shall pay to Porthos the fees set out in this Article 8 TSC ("**Fees**").

8.2. Customer shall pay to Porthos the following as and when applicable:

8.2.1. "**Fixed Transport Capacity Fee**" ("FTCF") determined as the sum over all Hours of the Registered Transport Capacity (RTC) multiplied by the Fixed Transport Capacity Price (FTCP) in accordance with the Customer's TSA and corrected for the Maintenance Factor, the Outage Factor and the FM Factor:

$$FTCF = \sum_{hours} (1 - mf - 0.5\ x\ of - 0.5\ x\ ff)\ x\ RTC\ x\ FTCP$$

Porthos shall accordingly, in relation to each month, invoice Customer an amount equal to the FTCF for the sum over all Hours in the relevant month calculated in accordance with the formula set out above, and Customer shall pay the invoiced amount to Porthos.

8.2.2. "**Storage Space Fee**" ("SSF") is the sum over all Hours of the Registered Storage Space (RSS) divided by the contract duration in Hours (CDH) multiplied by the Storage Space Price (SSP) in accordance with the Customer's TSA and corrected for the Maintenance Factor, the Outage Factor and the FM Factor, calculated in accordance with the following formula:

$$SSF = \sum_{hours} (1 - mf - \ 0.5\ \mathrm{x}\ of - 0.5\ \mathrm{x}\ ff)\ x \frac{RSS}{CDH}\ x\ SSP$$

Porthos shall accordingly, in relation to each month, invoice Customer an amount equal to the SSF for the sum over all Hours in the relevant month calculated in accordance with the formula set out above, and Customer shall pay the invoiced amount to Porthos.

8.2.3. "**Transferable Transport Capacity Fee**" ("TTCF") if and to the extent that Customer purchases Transferable Transport Capacity made available by another customer, determined as the sum over all Hours of the Transferable Transport Capacity purchased by Customer multiplied by the Transferable Transport Capacity Price (TTCP), calculated in accordance with the following formula, it being understood that the Transferable Transport Capacity Price (TTCP) is set at the sole

discretion of Porthos and will be communicated in line with the Operating Guidelines:

$$TTCF = \sum_{hours} (1 - mf - of - ff)\ x\ TTC\ x\ TTCP$$

8.2.4. If the value of the CPI (as defined hereinafter) in a given year has changed from the value of the CPI for August 2018, then the FTCP, SSP, TTCP, TCE Fee and RRP referred to in the TSA will be adjusted for indexation in accordance with the value of the CPI multiplied whereby CPI means the consumer price index published under the name "*Consumentenprijsindices* (CPI) *alle huishoudens*, 2015=100" on the website of the Dutch Centraal *Bureau voor de Statistiek* (CBS) (*http://www.cbs.nl*), annually in accordance with the following formula:

$$relevant\ price\ year\ X\ relevant\ price\ 2019 + \left(\frac{CPI_{aug\ year\ x-1} - CPI_{aug\ 2018}}{CPI_{aug\ 2018}}\right)\ x\ \ relevant\ price\ 2019$$

If the calculation in this Article 4 TSC would result in a decrease of the amounts referred to in the TSA in relation to the preceding year, the amounts will not be adjusted.

8.3. Customer will also pay to Porthos the following fees:

8.3.1. "**Variable Electricity Fee**" shall be for each month the actual total electricity costs incurred by Porthos in relation to the Porthos System in the relevant month pro rata Customer's Metered Quantity in accordance with the following formula:

MQ(A,X) / MQ(all customers,X) * P(X)

where,

MQ (A,X) is the quantity of CO_2 (MQ) delivered to the Porthos System by Customer (A) during month X

MQ (all customers) is the aggregate quantity of CO_2 delivered to the Porthos System by all customers during month X

P (X) is the actual invoiced cost for electricity to Porthos during month X (including grid connection charges, green power surcharge, electricity balancing charges and all relevant surcharges).

The electricity will be purchased by Porthos by means of one or more power purchasing tenders. In a tender Porthos will request both fixed and variable electricity price proposals. Porthos will use its reasonable endeavors to keep electricity costs, including, imbalance charges as low as possible. Before a tender, Porthos shall consult Customer regarding its tender strategy. Customer shall be entitled, at its own cost, to audit the tender process.

8.3.2. "**Variable CO_2 Fee**" shall be for each year the costs incurred by Porthos under the EU ETS in relation to actual CO_2 losses within the Porthos System due to seal gas, venting and other fugitive emissions as reported by Porthos to the Dutch Emissions Authority (NEa) allocated pro rata Customer's Net Metered Quantity in accordance with the following formula:

Variable CO_2 costs for Customer (A) in Year X = NMQ(A,X) / NMQ(all customers, X) * (Actual losses (X) * EEP)

where,

NMQ (A,X) is the quantity of net CO_2 (Net Metered Quantity) delivered to the Porthos System by Customer (A) during year X

NMQ (all Porthos customers) is the total quantity of net CO_2 delivered to Porthos by all Porthos customers during year X

Actual losses (X) are the actual CO_2 losses within the Porthos System due to seal gas, venting and other fugitive emissions as reported by Porthos to the Dutch Emissions Authority (NEa) for that specific year (year X).

EEP (EU ETS price) means the most recent relevant settlement price for EUA ETS published by ICE. The EUA ETS settlement prices are made publicly available in the C-EUA-Future Report and can be downloaded from the report center at theice.com. An example of the report can be found in Schedule F. If ICE ceases to report EUA ETS settlement prices, Parties agree to replace the EEP reference to these prices with a reference to prices that are equivalent to or, if there are no equivalent prices, as similar as possible to, the EUA ETS settlement prices.

Customer shall be entitled, at its own cost, to audit the reconciliation process.

Porthos is entitled, but shall in no way whatsoever be obliged, to compensate CO_2 losses due to venting by injecting biogenic CO_2.

8.3.3. "**Transport Capacity Exceedance Fee**" ("**TCE Fee**") shall be for each ton/Hour that Customer's Metered Quantity (MQ) exceeds the sum of Customer's Registered Transport Capacity (RTC) and its Transferable Transport Capacity (if any), a fee of EUR 100 (one hundred euros) for each ton/Hour in excess of the aforementioned RTC and TTC (if any). This TCE Fee will be invoiced once every calendar quarter.

8.3.4. "**Ramp Rate Penalty**" ("**RRP**") shall be for each Hour in which Customer's Metered Quantity (MQ) deviates from Customer's Metered Quantity (MQ) in the previous Hour by a mass equal to more than 20% (twenty percent) of the Customer's Registered Transport Capacity (RTC), a penalty of EUR 100 (one hundred euros) for each ton/Hour in excess of the 20% (twenty percent).

9. Invoicing and Payment

9.1. Porthos shall submit to the Customer in the course of each calendar month following that in which an obligation to pay Fees and/or other amounts is incurred by the Customer, an electronic invoice for such Fees and/or other amounts incurred in the previous month (the "**Invoice**"). Amounts payable and amounts receivable shall be set-off against each other in the Invoice.

9.2. The Customer shall pay to the Porthos Bank Account (or if the net amounts payable is due by Porthos, Porthos shall pay to the Customer Bank Account), by wire transfer in freely available funds, the amount set forth in the Invoice on or before 30 (thirty) Days after the date of the Invoice (the "**Due Date**").

9.3. Any amounts invoiced by Porthos, including Fees and termination fees, are expressed in euros and are exclusive of any Tax. Any applicable Tax due by Customer by or pursuant to the law related to any fees set out in the TSA (provided that such Tax is not included in the fees themselves) shall be payable by Customer in addition to the fees set out in the TSA. Without prejudice to Customer's obligation to pay Taxes due in accordance with or pursuant to the TSA, Customer shall not be liable or responsible towards Porthos or any Competent Authority for Taxes that are due by Porthos itself under Dutch law, unless and to the extent that the Parties have agreed that Porthos may charge on such Tax to Customer.

9.4. Late payments shall accrue interest at the Default Interest Rate from and including the Due Date up to, but excluding, the date of payment.

9.5. If Customer, in good faith, disputes the accuracy of an Invoice, it shall, on or before the Due Date provide a written explanation of the basis for the dispute and shall pay the full amount invoiced no later than the Due Date. If any amount paid under dispute is finally determined to have not been due, such overpayment shall, at the election of the owed Party, be credited or returned to it within 10 (ten) Days of such determination, along with interest accrued at the Default Interest Rate, from and including the date such amount was paid to the other Party but excluding the date that it is returned or credited.

9.6. If Porthos determines, in good faith, that an Invoice that was provided to Customer is incorrect, including for reasons related to Measuring errors, Porthos shall provide Customer with a corrected Invoice including an explanation in reasonable detail for any such correction, and any overpayment or underpayment shall, taking into account the Default Interest Rate, promptly be retroactively settled between the Parties, it being understood that any payment made in this regard shall be the receiving Party's sole remedy. Porthos shall, however, not be required to correct Invoices with a date that is more than 18 (eighteen) months prior to the date of the aforementioned determination. A corrected Invoice shall relate to a period that is equal to the period to which the incorrect Invoice relates, unless the incorrect Invoice relates to a period longer than 18 (eighteen) months, in which case the corrected Invoice shall relate to a period limited to 18 (eighteen) months, i.e. to the extent that the period of the incorrect Invoice is longer than 18 (eighteen) months it shall not be corrected.

9.7. No Party has the right to withhold payment nor has any right of set off under the Customer's TSA or otherwise, other than specifically permitted by the Customer's TSA.

10. EU ETS Liability and CO_2 Ownership and Risk

10.1. In accordance with EU directive 2003/87/EC (as amended, replaced or supplemented from time to time) the EU ETS liability will transfer to Porthos at the Connection.

10.2. Ownership of the CO_2 in the Porthos Transport System will remain with Customer until the Storage Connection, at which point the ownership of the CO_2 will transfer

from Customer to PSO which will hold the CO_2 storage permits required to enable Porthos to perform its obligations under the TSA, free and clear of all Encumbrances of any kind whatsoever. At the Storage Connection, Customer shall unconditionally and irrevocably relinquish ownership of the CO_2 delivered to PSO to the benefit of PSO. PSO shall unconditionally and irrevocably accept ownership of the CO_2 by appropriation of the CO_2 at the moment the CO_2 is delivered to PSO at the Storage Connection.

10.3. All risks in respect of the CO_2 shall transfer to Porthos at the Connection (including any risk in respect of EU ETS liability in accordance with EU directive 2003/87/EC (as amended, replaced or supplemented from time to time)) and Porthos shall indemnify (*schadeloosstellen*) and hold harmless (*vrijwaren*) Customer from any third party damage and/or third party claim arising out of or in connection with the CO_2 which has passed the Connection. Article 13 TSC shall not apply to this indemnity.

11. Credit Terms and Process

11.1. The Customer shall comply with the credit terms and process as set out in Schedule C.

12. Termination and suspension

12.1. A Party shall be entitled to terminate the TSA with immediate effect by written notice to the other Party, without judicial intervention being required and/or to suspend the fulfilling of its obligations under the TSA, if:

a. the other Party is declared bankrupt (*in staat van faillissement verklaard*), is granted a suspension of payment (*surséance van betaling*) or is declared in a similar status generally affecting the rights of its creditors;

b. the other Party terminates its business activities or is subject to liquidation or dissolution; or

c. the other Party is in breach of a material term of the TSA (including a breach of a representation or warranty), which breach has not been remedied within a reasonable period of time not exceeding 30 (thirty) Days of the other Party requesting the Party in breach to remedy the breach by notice referring to this Article 12.1 TSC. The occurrence of an Outage shall not be considered a breach by Porthos of a material term of the TSA;

d. the Connection between the Parties' Facilities has been closed in accordance with Article 5.3 GCFI (with the exception of Article 5.3.e GCFI) for a period longer than 12 (twelve) consecutive months.

12.2. Customer shall be entitled to terminate the TSA for convenience with immediate effect by written notice to Porthos and without judicial intervention being required.

12.3. In the event that (i) Porthos terminates the TSA in accordance with Article 12.1 TSC or (ii) Customer terminates the TSA for convenience in accordance with Article 12.2 TSC, Customer is obliged to pay Porthos 100% (one hundred percent) of all the fees for the cancelled services that would have been due and payable up to and including the End Date, calculated in accordance with the following formula, thereby applying a discount rate:

$$Termination\ Fee = 95\% \cdot \sum_{t=t_{termination}}^{t=t_{end}} \frac{\left(FTCP_{termination} \cdot RTC \cdot 730 + \frac{RSS}{15 \cdot 12} \cdot SSP_{termination}\right)}{(1.055)^{\frac{t-t_{termination}}{12}}}$$

In such case, Porthos shall for a period of 36 (thirty six) months use its reasonable efforts to enter into a (new or amended) Porthos transport capacity and storage space agreement with a third party, including any other Porthos customer, for all or a part of the transport capacity and/or storage capacity that has become available as a result of Customer's termination of the TSA. If Porthos enters into an unconditional Porthos transport capacity and storage space agreement with a third party in said period, Porthos shall repay to Customer its termination payment within 30 (thirty) Business Days after entering into an unconditional Porthos transport capacity and storage space agreement with such third party to the extent that such capacity is subject to the third party Porthos transport capacity and storage space agreement and for the duration of the third party Porthos transport capacity and storage space agreement, it being understood that any interest on the termination payment that has accrued to Porthos shall not be repaid and that any costs incurred by Porthos in relation to entering into the third party Porthos transport capacity and storage space agreement and/or physically connecting the third party to the Porthos Transport System, shall be deducted from such repayment.

12.4. Customer shall be entitled to terminate the TSA with immediate effect by written notice to Porthos, without judicial intervention being required and/or to suspend the fulfilling of his obligations under the TSA, if an "**FM Termination Event**" occurs, i.e.

when during a consecutive period of 8760 Hours the FM Factor equals 1 (one). Customer shall not be required to pay any termination fee (or any other fees) to Porthos in relation to a termination in accordance with this Article 12.4 TSC.

12.5. Customer shall be entitled to terminate the TSA with immediate effect by written notice to Porthos, without judicial intervention being required, and/or to suspend the fulfilling of his obligations under the TSA, if an "**Outage Termination Event**" occurs, i.e. when during a consecutive period of 4380 Hours on a 8760 Hour rolling basis, the Outage Factor exceeds 0.5 (five tenths) as calculated in accordance with the following formula:

$$\sum_{\boldsymbol{hour=1}}^{\boldsymbol{hour=8760}} \frac{\boldsymbol{of}}{\mathbf{8760}} > \mathbf{0.5}$$

Customer shall not be required to pay any termination fee (or any other fees) to Porthos in relation to a termination in accordance with this Article 12.5 TSC.

Outages that are directly or indirectly caused by Customer and/or any other Porthos customer(s) do not contribute to an Outage Termination Event. For the avoidance of doubt, this means that Customer shall not be entitled to terminate the TSA on the basis of an Outage Termination Event that is directly or indirectly caused by Customer and/or any other Porthos customer(s).

12.6. Customer agrees that it will, upon the date of termination of the TSA, be deemed to have relinquished (*afstand doen*) with immediate effect any and all rights to its Registered Transport Capacity and Registered Storage Space and that Customer's Registered Transport Capacity and Registered Storage Space shall thus, at the same time, automatically revert to (*terug vallen aan*) Porthos without any compensation whatsoever being due to Customer in relation thereto.

12.7. Obligations which by their nature are intended to continue after the termination of the TSA (including Article **Fout! Verwijzingsbron niet gevonden.** TSA (*Liability*), A rticle **Fout! Verwijzingsbron niet gevonden.** TSA, Article 10 TSC (*EU ETS Liability and CO_2 Ownership and Risk*), Article 16 TSC (*Confidentiality*) and Article 20 TSC (*Applicable Law and Dispute Resolution*)) will remain valid after termination.

12.8. Subject to Article 12.9 TSC, Porthos shall be entitled to suspend the fulfilling of its obligations under the TSA with immediate effect by written notice to Customer,

without judicial intervention being required, if one or more of the following has occurred:

a. Customer has caused a situation as described in Article 6.4 TSC under (iii) to occur more than 12 (twelve) times per calendar quarter; and/or

b. Customer has caused a situation as described in Article 6.4 TSC under (iv) to occur more than 2 (two) times per calendar year; and/or

c. Porthos, any of the Asset Owners or one or more Porthos customers has (or have) suffered direct damage as a result of one event caused by or attributable to Customer which damage exceeds an amount of EUR 250,000 (two hundred and fifty thousand euros); and/or

d. Porthos, any of the Asset Owners or one or more Porthos customers has (or have) suffered damage as a result of one event caused by or attributable to Customer which damage exceeds an amount of EUR 2,500,000 (two million five hundred thousand euros); and/or

e. Porthos, any of the Asset Owners or one or more Porthos customers has (or have) suffered damage as a result of two or more events, each of which individually has caused damage not exceeding EUR 2,500,000 (two million five hundred thousand euros), which damage exceeds an aggregate amount of EUR 5,000,000 (five million euros) in a 6 (six) month) rolling period.

Any such suspension shall continue until Customer has demonstrated to Porthos' satisfaction that it has taken, for its own risk and account, any and all measures reasonably possible to ensure that the chance of such damage reoccurring has been eliminated or limited to the fullest possible extent.

12.9. If a situation referred to in Article 12.8.c, 12.8.d or 12.8.e occurs, and provided that the relevant damage does not continue to occur, Porthos shall notify Customer of its intention to suspend and the reason(s) for the intended suspension and grant Customer a grace period of 5 (five) Business Days after the date of its notice to demonstrate to Porthos' satisfaction that it has taken, for its own risk and account, any and all measures reasonably possible to ensure that the chance of such damage reoccurring has been eliminated or limited to the fullest possible extent, before exercising its right to suspend the fulfilling of its obligations under the TSA.

12.10. For the avoidance of doubt, it is stipulated that if Porthos suspends the TSA in accordance with Article 12.8 TSC, Customer shall (i) during the TO Phase not be required to pay to Porthos any Fees and (ii) during the CO Phase be required to

pay to Porthos the Fees in relation to such period of suspension as if Customer were not suspended.

12.11. Parties shall cooperate in good faith to limit the duration of any period of suspension to the extent reasonably possible.

13. Liability

13.1. A Party's liability to the other Party for damage arising out of or pursuant to the TSA (whether in contract, tort or otherwise), (i) shall be limited to liability for direct damage meaning property damage (*zaakschade*) to the other Party's facilities (i.e. the Porthos System or the Customer Facility) which, for the avoidance of doubt, also includes any direct damage to the Porthos System (or any part thereof) incurred by any of the Asset Owners in accordance with article 7:419 of the Dutch Civil Code, including the reasonable costs of cleaning the other Party's facilities if and to the extent reasonably incurred, and (ii) shall be excluded for any other damage, including damage to property or persons, environmental damage and any indirect or consequential damage (including loss of profit, loss of business, loss of turnover, loss of expectations or opportunities, loss of contract, goodwill and anticipated savings), unless and, if so, only to the extent that such damage is caused solely by the first Party's intent (*opzet*) or deliberate recklessness (*bewuste roekeloosheid*) in which case the aforementioned limitation and exclusion of liability do not apply.

13.2. In the event that a Party is liable to the other Party in accordance with Article 13.1 TSC (including, if applicable, the Customer vis-à-vis Porthos with respect to damage of any of the Asset Owners), its liability to the other Party (or, in the case of Porthos, its liability to Customer and all other Porthos customers jointly) will per event or series of related events be limited to EUR 2,500,000 (two million five hundred thousand euros), unless and, if so, only to the extent that such damage is caused by the first Party's intent (*opzet*) or deliberate recklessness (*bewuste roekeloosheid*).

13.3. In deviation of Articles 13.1 and 13.2 TSC, Customer's aggregate liability to Porthos for any and all damage (including direct, indirect and consequential damage) suffered by Porthos or any of the Asset Owners, if and to the extent caused by Non-compliant CO_2 that has not been accepted by Porthos in accordance with Article 3 GCFI and that has been fed into the Porthos System by Customer, is not limited.

13.4. If and to the extent that Customer has caused any damage to any third party (including one or more other Porthos customers), Customer shall fully indemnify (*schadeloosstellen*) and hold harmless (*vrijwaren*) Porthos and each of the Asset Owners against any and all third party claims, including claims by other customers of Porthos, in connection therewith. The limitations of liability under Articles 13.1 and 13.2 TSC do not apply to this indemnification.

13.5. In deviation of Article 13.4 TSC, Customer shall fully indemnify (*schadeloosstellen*) and hold harmless (*vrijwaren)* Porthos and each of the Asset Owners against any third party claim, including a claim by another customer of Porthos, if and to the extent such claim relates to damage suffered by such third party as a result of Non-compliant CO_2 fed into the Porthos System by Customer, and not accepted by Porthos in accordance with Article 3 GCFI, only if (i) Porthos or any of the Asset Owners has taken appropriate actions to counter such claim, including properly invoking any relevant limitation or exclusion of liability towards such third party, and (ii) Porthos or any of the Asset Owners has given written notice to Customer of such third party claim within 6 (six) months after such claim was received by Porthos or any of the Asset Owners, including the provision of all relevant details and information which it may have relative to the such claim. The limitations of liability under Articles 13.1 and 13.2 TSC do not apply to this indemnification.

13.6. If the value of the CPI (as defined hereinafter) in a given year has changed from the value of the CPI for December 2021, then any amount in this Article 13 TSC that limits a Party's liability will be adjusted for indexation in accordance with the value of the CPI whereby CPI means the consumer price index published under the name "*Consumentenprijsindices* (CPI) *alle huishoudens*, 2015 = 100" on the website of the Dutch *Centraal Bureau voor de Statistiek* (CBS) *(http://www.cbs.nl*).

13.7. Any relief from liability, indemnity given or received, or benefit in favour of a Party shall extend to its employees, officers, directors, consultants and agents, its Affiliates and its contractors, subcontractors and third party suppliers.

13.8. Each Party shall use its best endeavours to mitigate any loss, damage, liability, expense and cost suffered by it under or arising out of the TSA.

14. Force Majeure

14.1. The definition under the Dutch Civil code of “**Force Majeure**” will apply. For convenience only an unofficial translation is given hereunder of article 6:75 of the Dutch Civil Code. The official Dutch text of said article applies exclusively.

"A failure in performance cannot be attributed to the obligor if it is neither due to his fault nor comes for his account pursuant to the law, a juristic act or the generally prevailing opinion."

14.2. The Party claiming Force Majeure shall give written notice thereof and reasonably full particulars to the other Party promptly after the occurrence of such Force Majeure and shall also notify the other Party of the period of time which said Party estimates it will require to remedy the Force Majeure situation and shall keep the other Party regularly informed as to the progress of such remedy.

14.3. The Party claiming Force Majeure shall take all the measures which may reasonably be required to eliminate or, if such is not possible, mitigate the effects of the Force Majeure as soon as reasonably possible in consultation with the other Party which shall use its reasonable efforts to provide the Party claiming Force Majeure with all assistance that can reasonably be required in connection therewith.

14.4. If Porthos is claiming Force Majeure it shall issue as soon as reasonably practicable a "**FM Notice**", specifying the relevant "**FM Factor**" being for any Hour the extent to which the Porthos System is (or is to be) unavailable or restricted during Force Majeure. The factor zero (0) represents that there is no restriction, a factor consisting of a decimal fraction between zero (0) and one (1) represents on a linear scale proportionally increasing unavailability or restriction and the factor one (1) represents complete unavailability due to Force Majeure. Unless otherwise specified by FM Notice, the FM Factor is zero (0).

15. Assignment

15.1. Each Party may assign its rights and obligations under the TSA (which, for the purpose of this Article 15 TSC, includes any transfer of, or creation of any security interest on, such rights and obligations) to a third party (which, for the avoidance of doubt, includes any Affiliate), but only with the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed.

15.2. Consent shall in any event be deemed to be reasonably withheld if, in the case of any proposed assignment of rights and obligations, the Party proposing the assignment is unable to demonstrate to the reasonable satisfaction of the other Party that the proposed assignee (i) has the ability to exercise the rights and perform the obligations assigned to it and (ii) has a creditworthiness that meets the requirements of Schedule C or, if the third party is an Affiliate, provided that otherwise adequate security to the satisfaction of the other Party has been provided to the other Party on behalf of such Affiliate.

15.3. Each Party shall notify the other Party in writing at least 30 (thirty) Business Days in advance of any envisaged assignment of its rights and obligations under this Article 15 TSC. Assignments of rights or obligations that are executed in contravention of this Article 15 TSC shall have no effect under property law.

15.4. Subject to Articles 15.1 up to and including 15.3 TSC, Customer may assign a part of its Registered Transport Capacity or Registered Storage Space to a third party for the then remaining term of the TSA, it being understood (i) that Customer shall not be entitled to assign less than 5 (five) tons / Hour of Registered Transport Capacity or less than 100,000 (one hundred thousand) tons of Registered Storage Space to a third party and (ii) if such third party is not party to a Porthos transport capacity and storage space agreement, that Porthos' consent to such assignment shall in any event be deemed to be reasonably withheld until the third party and Porthos have entered into a Porthos transport capacity and storage space agreement duly signed by both parties.

15.5. Porthos shall use its reasonable efforts to connect to the Porthos Transport System a third party to which Customer has assigned Registered Transport Capacity or Registered Storage Space it being understood that Porthos shall not be required to make any investment in order to realise such connection.

15.6. In deviation of Article 15.1 TSC, Porthos shall be entitled to assign its rights and obligations under the TSA without the prior written consent of Customer to a legal entity or legal entities, as the case may be, that may be incorporated by Porthos or any of its (direct or indirect) shareholders individually or jointly as part of the venture structuring within the Porthos Project. Customer hereby agrees in advance to give its full co-operation to such assignment, provided that the legal entity or legal entities to whom the TSA will be assigned has/have the expertise reasonably necessary to perform Porthos' obligations under the TSA and a creditworthiness at least equal to that of Porthos and provided that no parties other than Porthos and/or

a Porthos Affiliate individually and/or jointly participates in such legal entity or legal entities. Any such transfer and assignment shall take effect upon written notice to Customer.

16. Confidentiality

16.1. The Parties agree that the contents of the TSA and all information obtained hereunder by each Party from the other, including all engineering and operational data, shall be held strictly confidential by the Parties during the term of the TSA and for a term of 3 (three) years after the Day that it terminates. Parties declare that they shall not make or have made public any information with regard to the contents of the TSA without prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed. However, a Party may make available said contents or information without such prior written consent to:

a. its employees, shareholders or Affiliates, provided that such employees, shareholders and Affiliates are bound by equivalent provisions of confidentiality as set forth in this Article 16 TSC; or

b. any Competent Authority, recognised security exchange or third party, if such disclosure is required by law, order or regulation; in such case the disclosing Party will inform the other Party in advance of such disclosure and of its extent; or

c. banking and financial institutions and their consultants, if such disclosure is necessary in connection with financing arrangements, provided that such Party shall first obtain a written undertaking of confidentiality from such banking and financial institutions and their consultants, similar to the undertaking of confidentiality that is set forth in this Article 16 TSC; or

d. independent consultants, contractors or advisors nominated or engaged by a Party on a need to know basis, provided that such Party shall first obtain a written undertaking of confidentiality from each consultant or contractor, similar to the undertaking of confidentiality that is set forth in this Article 16 TSC; or

e. any third party to which pursuant to Article 15 TSC the rights or obligations under the TSA have been or may be assigned or any legal successor of a Party, provided that the Party assigning or to be legally succeeded shall first obtain a written undertaking of confidentiality from such assignee or legal successor, similar to the undertaking of confidentiality that is set forth in this Article 16 TSC.

16.2. Notwithstanding the provisions in Article 16.1 TSC, the Party receiving information may disclose such information without the other Party's prior written consent, but only to the extent that such information:

a. is already lawfully known to the Party receiving the information; or

b. is already in or enters the public domain other than through the act or omission of the Party receiving the information; or

c. is acquired independently from a third party that is entitled to disseminate such information at the time it is acquired by the Party receiving the information.

16.3. Porthos Affiliates shall in relation to Customer be bound by, and be entitled to rely on, this Article 16 TSC (Confidentiality), i.e. this provision shall be considered an irrevocable third-party clause (*derdenbeding*) made for no consideration, to ensure that any information relating to Project Porthos provided by Customer to a Porthos Affiliate or vice-versa, is subject to the provisions in this Article 16 TSC as from the Signing date of the TSA. Porthos shall ensure that all Porthos Affiliates are notified of this Article 16 TSC in writing within 15 (fifteen) Business Days of the Signing Date and grant each Porthos Affiliate a term of 30 (thirty) Days after the date of its notice to accept or reject the third party clause. Porthos shall, promptly after this 30 (thirty) Day term has expired, notify Customer in writing which Porthos Affiliates, if any, have accepted the third party clause.

17. Exchange of Information

17.1. All notices shall be given in the English language, unless Parties agree otherwise.

17.2. Unless otherwise stipulated in the TSA any notice to be given herein shall be in writing and shall be deemed given and effective upon receipt by the Party addressed, or, in case the receipt is disputed:

a. if posted in the Netherlands, postage prepaid, to an address in the Netherlands on the next Business Day subsequent to posting; or

b. if posted outside the Netherlands or to an address outside the Netherlands, via airmail and postage prepaid, on the 5th (fifth) Business Day subsequent to posting; or

c. if given (encrypted) electronic mail, on the next Business Day after the dispatch thereof, or, if this is earlier, the moment at which the recipient of electronic mail confirms the receipt of electronic mail.

17.3. Parties to the TSA undertake to co-operate in good faith with any third parties in so far as involvement of those parties is directly or indirectly necessary for the fulfilment by Porthos or Customer of any obligation under the TSA.

17.4. Parties will at all times give each other all such information as each may have available and as may be necessary or useful to enable Parties to carry out their obligations under the TSA (to the extent that each Party is entitled to disclose such information to the other) and/or to carry out their obligations with respect to its public tasks.

18. Miscellaneous

18.1. Porthos shall design, operate and maintain the Porthos System (including obtaining and maintaining any permits required in this regard), and Customer shall design, operate and maintain the Customer Facility (including obtaining and maintaining any permits required in this regard), as a Reasonable and Prudent Operator.

18.2. The TSA, together with any documents referred to herein, contains the entire agreement between the Parties relating to its subject matter and replaces and supersedes any previous written or oral agreement between the Parties in relation to the matters dealt with in the TSA.

18.3. If and to the extent that there is a conflict or inconsistency between a provision in the TSA (not including the TSC) and a provision in the TSC, the provision in the TSA shall prevail.

18.4. The failure at any time of either Party to require performance by the other Party of any provision of the TSA shall in no way affect the right of a Party to require any performance which may be due thereafter pursuant to such provision nor shall the waiver by either Party of any breach of any provision under the TSA be taken or held to be a waiver of any subsequent breach of such provision.

18.5. The invalidity, in whole or in part, of any provision of the TSA does not affect the validity of the remainder of the TSA. Parties will co-operate in creating as soon as possible an effective new provision which approaches the economic purpose and any other effect of the invalid provision as closely as possible. Until such new provision has been agreed upon, in case legal proceedings are pending in which the invalid provision(s) are of any significance, Parties agree to request the arbitral

tribunal for the application of article 3:42 of the Dutch Civil Code, if such application is legally possible.

18.6. Nothing in the TSA shall constitute any type of partnership, joint venture or other similar relationship between the Parties.

18.7. A Party shall not be entitled to represent the other Party (as agent or otherwise) towards any third party, except with the prior written consent of the other Party.

18.8. Parties agree that they shall comply with all applicable legislation (including but not limited to anti-bribery and corruption, anti-money laundering, data privacy, trade compliance and antitrust laws) in the performance of the TSA.

18.9. Any amendments to the TSC requires prior written consent of Customer, except for the Amendments described in Article 18.10 TSC.

18.10. Subject to the provisions of Articles 18.11, 18.12 and 18.13 TSC, Porthos is entitled to unilaterally amend the content of the TSC ("**Amendment**") if, in the reasonable judgement of Porthos and thereby taking into account the legitimate interests of all Parties, such amendment is necessary:

a. to avoid, limit and/or remedy inefficiencies in the use or management of the Porthos System; or

b. to secure or improve the integrity of the Porthos System; or

c. to secure or improve the reliability of the performance of a service (e.g. Nomination, maintenance, Transferable Transport Capacity); or

d. to address the consequences of recurrent abusive use of a contractual service; or

e. to facilitate future CO_2 transport services related to carbon capture utilization; or

f. to improve or clarify the wording of the TSC, provided that such improvement does not alter materially the nature and meaning of the initial wording of the TSC.

18.11. If Porthos wishes to implement an Amendment, it shall notify Customer in writing thereof, stating in reasonable detail the nature and necessity of the required Amendment, the suggested time frame for implementation thereof, thereby inviting Customer to give its views and/or advice in relation to such Amendment.

18.11.1. Within 14 (fourteen) Days after the notification under Article 18.11, Porthos shall organise a meeting with Customer and all other customers of Porthos (which entered into transport capacity and storage space agreements identical to the TSA) to explain in more detail the required Amendment, to take note of the views and/or advice with all customers of Porthos on the necessity of the required Amendment, and to discuss in good faith any suggested revisions by such customers of the Amendment;

18.11.2. Within 14 (fourteen) Days after the meeting pursuant to Article 18.11.1 TSC, Porthos will notify Customer to what extent the views and/or advice conveyed by customers, have been taken into consideration, and if so, what revisions have been made to the Amendment, provided that it remains at all times at Porthos' sole discretion, acting reasonably, to decide on the implementation of an Amendment.

18.12. After the notification pursuant to Article 18.11.2 TSC, Porthos shall notify Customer when an Amendment will be published on Porthos' website, thereby observing a reasonable notice period to enable Customer to prepare its organisation and/or operation sufficiently (if required) and to minimize the impact (if any) on Customer's organisation and/or operation. Upon publication of the Amendment by Porthos on its website, an Amendment shall come into effect and the previous version of the TSC shall be deemed to be replaced in full by the newly published version which includes the Amendment.

18.13. Porthos shall only implement an Amendment in the TSC if the overall balance of risks, rights, rewards and obligations between the Parties in the TSC in force prior to such Amendment is not materially affected.

19. Change in Law

19.1. A Party shall notify the other relevant Parties of any Change in Law which has or would have a material effect on the terms of the TSA or the ability of any Party to fulfil its obligations or exercise its rights under the TSA.

19.2. In the event that a Change in Law is proposed, authorised, approved or decided by a Competent Authority which has or would have a material effect on any of the terms of the TSA or the ability of any Party to fulfil its obligations or exercise its rights under the TSA, and as a result it would be unduly onerous for the TSA to be maintained in an unmodified form or for all the provisions of the TSA to be adhered to strictly, then upon the written request of any Party, the relevant Parties shall

promptly meet to discuss and, acting in good faith, negotiate to agree upon any amendments that may be required to the terms of the TSA or any arrangements to be made in order to maintain, so far as is practicable, the overall balance of risks, rights, rewards and obligations between the relevant Parties that existed prior to such change.

20. Applicable Law and Dispute Resolution

20.1. The TSA shall be governed by and construed in accordance with the laws of the Netherlands. The Parties exclude the application of The United Nations Convention on Contracts for the International Sales of Goods to the TSA.

20.2. All disputes arising in connection with the TSA or further agreements resulting therefrom, shall be settled in accordance with the Arbitration Rules of the Netherlands Arbitration Institute (*Nederlands Arbitrage Instituut*). The arbitral tribunal shall be composed of three arbitrators. The two arbitrators appointed by the Parties in accordance with article 13(2) of the Arbitration Rules shall jointly appoint as chair of the arbitral tribunal a lawyer who is a member of the Dutch bar and who has adequate experience with gas and/or CO_2 storage projects. The arbitral tribunal shall decide in accordance with the rules of law. The proceedings shall be conducted in the English language. The place of arbitration shall be Rotterdam, the Netherlands.

20.3. Service of any request for arbitration made pursuant to this Article 20 TSC must be by registered post at the address of the other Party indicated in the TSA.

SCHEDULE A DEFINITIONS

"**Acceptable Bank**" is defined in Schedule C, Paragraph 1;

"**Additional Security**" is defined in Schedule C, Paragraph 1;

"**Affiliate**" means

- in respect of each Party and each party referred to in sub (d) and sub (e) below (each hereinafter also referred to as "**Entity**"):

(a) any entity controlled, directly or indirectly, by that Entity;
(b) any entity that controls, directly or indirectly, that Entity;
(c) any entity which is directly or indirectly under common control with an Entity.

- in respect of Porthos (in addition to the above):

(d) the Porthos general partner and any Porthos limited partner;
(e) the legal entity or legal entities, as the case may be, that may be incorporated by Porthos or any of its (direct or indirect) partners or shareholders individually or jointly as part of the venture structuring within the Porthos Project, and which, for the avoidance of doubt, will include (i) any entity which will hold the CO_2 storage permits required to enable Porthos to perform its obligations under the TSA, (ii) any entity legally owning all or part of the Porthos System and (iii) any entity acting as operator of the Porthos System, in each case including, if applicable, their general and limited partners, provided that no parties other than Porthos' (direct or indirect) partners or shareholders and/or their Affiliates individually and/or jointly and/or Porthos participates in such legal entity or legal entities.

For the purpose of this definition, "control" means the power of an entity, directly or indirectly (i) to exercise more than 50% (fifty percent) of the voting rights at a shareholders meeting of a company, or (ii) to appoint or dismiss more than 50% (fifty percent) of the members of the management (board) or of the members of the supervisory board of a company, or (iii) to direct the management of a company through the exercise of majority votes at supervisory board and management board meetings of such company.

For the avoidance of doubt, it is stipulated that for the purpose of this definition the non-capitalised term "entity" includes a limited partnership (*commanditaire vennootschap*);

"**Amendment**" has the meaning ascribed to it in Article 18.10 TSC;

"**Annex**": an annex to a Schedule;

"**Asset Owners**": POT and POTS;

"**Business Day**": a Day when banks are open in The Netherlands;

"**Capture System**": a system for the purpose of capturing the CO_2 emitted at the Customer Facility;

"**Cash Collateral**" is defined in Schedule C;

"**Change in Law**": (i) any enactment or issue of any applicable law, (ii) any amendment or repeal of any applicable law, or (iii) any change in the interpretation or application of any applicable law, by any Competent Authority (including any change in tax) in each case coming into effect after the Signing Date, except to the extent that such enactment, amendment or change was authorized, approved or decided by the relevant Competent Authority prior to the Signing Date for implementation at a later date and such authorization, approval or decision was as at the Signing Date within the public domain;

"**Competent Authority**": the Kingdom of The Netherlands (or the government thereof) and any state, province, municipality, agency or other authority (local, national or supra-national) with powers exercisable in law, the European Union (or institution or agency thereof) or a member of the European Union or European Economic Area (or institution or agency thereof) which exercises jurisdiction over Porthos or the Customer or the subject matter of the TSA, including courts, tribunals, departments, commissions, boards, bureaus and agencies;

"**Confidential Information**" is defined in Article 16.1 TSC;

"**Confirmation**" is defined in Article 4.6 TSC;

"**Confirmations Close Time**": D-1 at 13.00 hours;

"**Confirmed Transport Capacity**" is defined in Article 4.7 TSC;

"**Connection**" means the physical point in the Porthos Transport System connecting it to the Customer Facility, at or in the vicinity of the Metering Point, where Customer's CO_2 enters (or is deemed to enter) the Porthos Transport System, as identified on a technical drawing appended to the TSA;

"**CO_2**": a substance consisting predominantly of carbon dioxide. All references to a ton of CO_2 in the TSA refer to a gross t of CO_2, unless otherwise specified;

"**CO_2 CSS**": the Customer specific CO_2 specifications set out in Annex A;

"**CO_2 Flow**" means an amount of CO_2 that actually flows through the Connection in the direction of the Porthos Transport System;

"**CO_2 Flow Day**": in relation to the application of any provision of the TSA, the Day in relation to which the flow of CO_2 is to apply;

"**CO_2 GS**": the general CO_2 specifications set out in Annex A;

"**Credit Limit**" is defined in Schedule C;

"**Credit Rating**" is defined in Schedule C;

"**Customer Bank Account**": the bank account held by Customer, the details of which Customer shall timely communicate to Porthos;

"**Customer Facility**": Customer's onshore industrial facility or facilities, including the Capture System(s) and the pipeline(s) and all related equipment connecting said industrial facility or facilities to the Porthos Transport System;

"**D-1**": the Day before the CO_2 Flow Day;

"**Day**": the period from 00:00 hours on one calendar day until 00:00 hours on the next calendar day;

"**Default Interest Rate**": the Dutch statutory interest (*wettelijke handelsrente*);

"**Directive**": any present or future directive, request, requirement, instruction, code of practice, direction or rule of any Competent Authority (but only, if not having the force of law, if it is reasonable in all the circumstances for it to be treated as though it had legal force) and any modification, extension or replacement thereof;

"**Due Date**" is defined in Article 9.2 TSC;

"**Encumbrance**": lien, charge, encumbrance, pledge, security interest or adverse claim (as to title or otherwise) including any claim for any tax, royalty or other charge;

"**End Date**" has the meaning ascribed to it in the TSA;

"**EU ETS**": the system for greenhouse gas emission allowance trading within the European Union as established in directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 (or any successor thereof);

"**Exposure**" is defined in Schedule C;

"**Facilities**" means the (CO_2) pipeline(s) and related equipment (including Measurement and safety equipment), operated and/or controlled by a Party or by a third party for or on behalf of this Party for the purpose of transporting CO_2;

"**Fees**" is defined in Article 8 TSC;

"**Firm Transport Capacity**" ("**FTC**") is defined in Article 3.2 TSC;

"**Fixed Transport Capacity Fee**" ("**FTCF**") is defined in Article 8.2.1 TSC;

"**Fixed Transport Capacity Price**" ("**FTCP**") has the meaning ascribed to it in the TSA;

"**Flow Measuring Installation**": the installation comprising all the equipment including the inlet and outlet pipework as far as the isolating valves and any structure within which the equipment is housed, used for CO_2 Flow and mass determination for fiscal purposes;

"**FM Factor**" ("**ff**") is defined in Article 14.4 TSC;

"**FM Notice**" is defined in Article 14.4 TSC;

"**FM Termination Event**" is defined in Article 12.4 TSC;

"**Force Majeure**" is defined in Article 14.1 TSC;

"**Full Hour**": a full clock hour, zero minutes, e.g. 00:00 hrs, 01:00 hrs, 23:00 hrs etc.;

"**GCFI**": the grid connection and feed-in terms and conditions set out in Schedule D and its Annexes;

"**Guarantee**" is defined in Schedule C;

"**Guarantor**" is defined in Schedule C;

"**Hour**": a period of sixty (60) minutes starting on the Full Hour;

"**International Standards**" means the standards and practices from time to time in force applicable to the ownership, design, equipment, operation or maintenance of the Facilities established by the CEN, ISO (or any successor body of the same) and/or any other (inter)nationally recognised agency or organisation with whose standards and practices it is customary for (inter)national operators of such systems for the transport and/or treatment of CO_2 to comply;

"**Invoice**" is defined in Article 9.1 TSC;

"**Legal Requirement**": any act of parliament, statute, law, decree, regulation, permit, license or Directive of a Competent Authority;

"**LET**": Local European Time including daylight saving, being equal to UTC + 1 outside the daylight saving period and equal to UTC + 2 during the daylight-saving period. For the avoidance of doubt the daylight saving period starts at UTC 0100 Hours on the last Sunday in March and ends at UTC 0100 Hours on the last Sunday in October, and UTC is the Coordinated Universal Time, according to ISO 8601 2004 (E);

"**Maintenance Factor**" ("**mf**") is defined in Article 5.1 TSC;

"**Maintenance Hours**" is defined in Article 5.1 TSC;

"**Maintenance Notice**" is defined in Article 5.1 TSC;

"**MEA**": the Minister of Economic Affairs and Climate Change;

"**Measure**" means to determine a physical quantity (fiscal and/or non-fiscal) or property (direct or derived), and "Measured", "Measurement(s)", "Measuring" and "Unmeasured" shall be construed accordingly;

"**Measuring Manual**": the specification of Customer's Measuring System including the details and operational procedures relating to its design, operation, data transmission and quality assurance based on the template in Annex G);

"**Measuring System**" Customer's system incorporating the Flow Measuring Installation, the Non-fiscal Gas Quality Measuring Instruments and the corresponding (remote) data handling systems and procedures;

"**Metered Quantity**" ("**MQ**") is defined in Article 4.8 TSC;

"**Metering Point**": the point at the Customer's facility where the Measuring takes place in accordance with the GCFI;

"**Minimum Capacity Threshold**" the aggregate Registered Storage Space held by all Porthos' customers divided by 15 equals at least 2.5 Mt / year;

"**Mton**" or "Mt" megaton (1 million metric tons);

"**Net Metered Quantity**" ("**NMQ**") is the Metered Quantity in (gross t) multiplied by the CO_2 % (percentage);

"**Nomination**": a nomination in respect of a quantity of CO_2 (t) to be delivered in any Hour, as further defined in Article 4.2 TSC;

"**Nominations Close Time**": D-1 at 12.00 hours;

"**Non-compliant CO_2**" means CO_2 delivered by Customer at the Connection that does not comply with the specifications as provided for in Annex A and Annex B;

"**Non-fiscal Gas Quality Measuring Instruments**" set of gas quality Measuring instruments for Measuring the critical components in the CO_2 specification for integrity purposes;

"**Operating Guidelines**" shall mean the operating guidelines set out in Schedule B;

"**Original Overall Storage Space**" ("**OOSS**"): is 37.5 Mt of CO_2;

"**Outage**": any non-availability of the Porthos System for a reason other than planned maintenance referred to in Article 5.1 TSC or Force Majeure;

"**Outage Factor**" ("**of**") is defined in Article 6.1 TSC;

"**Outage Hours**" is defined in Article 6.1 TSC;

"**Outage Notice**" is defined in Article 6.1 TSC;

"**Outage Termination Event**" is defined in Article 12.5 TSC;

"**Porthos Bank Account**": the bank account held by Porthos, the details of which Porthos shall timely communicate to Customer;

"**Porthos Information Service**" means Porthos' designated system used for the transfer and exchange of data between Customer and Porthos;

"**Porthos Project**" has the meaning ascribed to it in the TSA;

"**Porthos Storage System**": the Storage Connection, the offshore pipelines between the Storage Connection and the P18-A platform, the P18-2, P18-4 and P18-6 underground (depleted) gas reservoirs and their wells and all related facilities, equipment, pipelines between the wells and the treatment facility and pigging systems, electrical systems, power cables, transformers, communication and data systems, control systems, instrumentation and other systems or apparatus;

"**Porthos System**": the Porthos Transport System and the Porthos Storage System;

"**Porthos Transport System**": the Connection and the onshore pipelines between the Connection and the Storage Connection, including the compressor station and all related facilities, equipment, pipelines, valves, compression, pigging systems, electrical systems, power cables, transformers, communication and data systems, control systems, instrumentation and other systems or apparatus;

"**POT**": Porthos Onshore Transport C.V.;

"**POTS**": Porthos Offshore Transport and Storage C.V.;

"**PSO**": Porthos System Operator B.V.;

"**Ramp Rate Penalty**" ("**RRP**") is defined in Article 8.3.4 TSC;

"**Reasonable and Prudent Operator**" means a Party fulfilling its obligations under the TSA exercising the degree of diligence, skill, prudence and foresight that may reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same line of business under the same or similar circumstances and conditions and in accordance with good operating practice;

"**Registered Transport Capacity**" ("**RTC**") is defined in Article 3.1 TSC;

"**Registered Transport Capacity Register**" is defined in Article 3.1 TSC;

"**Registered Storage Space**" ("**RSS**") is defined in Article 3.3 TSC;

"**Registered Storage Space Register**" is defined in Article 3.3 TSC;

"**Revised Start Date**" has the meaning ascribed to it in the TSA;

"**Safeguarding System**" has the meaning ascribed to it in Annex A;

"**Schedule**": a schedule to the TSC;

"**Scheduling**": those actions a Party shall take to effect its delivery and acceptance obligations, including: Confirmations, Nominations, scheduling, confirmations, and notifications, as required under the TSA and the Operating Guidelines;

"**Signing Date**": the date written on the first page of the TSA;

"**Standby L/C**" is defined in Schedule C;

"**Start Date**" has the meaning ascribed to it in the TSA;

"**Storage Connection**" means [the flange that forms] the physical connection between the Porthos Transport System and the Porthos Storage System, at or in the vicinity of the onshore compression station, where the CO_2 transfers from the Porthos Transport System to the Porthos Storage System;

"**Storage Space**" ("**SS**") is a mass of space in the Porthos Storage System suitable for the permanent storage of CO_2;

"**Storage Space Fee**" ("**SSF**") is defined in Article 8.2.2 TSC;

"**Storage Space Price**" ("**SSP**") has the meaning ascribed to it in the TSA;

"**Stored Quantity**" ("**SQ**") is defined in Article 4.10 TSC;

"**t**": metric ton or 1,000 kg (one thousand kilograms);

"**Tax**": means any tax, duty, levy or similar instrument, including value added tax, that is imposed by any Competent Authority in respect of any payment, nomination, goods or services under the TSA relating to CO_2 and/or the supply, transport or storage of CO_2. For the avoidance of doubt, Tax shall exclude any tax on income and wealth;

"**Technical Minimum Flow**": the minimum flow required by the Porthos Transport System for a reliable and safe operation as set out in the TSA;

"**Technical Ramp Rate**": the maximum CO_2 Flow change on aggregated CO_2 Flow, from one Hour to the next Hour that the Porthos Transport System can accommodate for a reliable and safe operation as set out in the TSA;

"**Total Net Worth**" is defined in Schedule C;

"**Transferable Transport Capacity**" ("**TTC**") means a Customer's unused Registered Transport Capacity made available by Customer and/or sold by Porthos to another Porthos customer in accordance with the TSA or another customer's unused registered transport capacity made available by such other customer and/or sold by Porthos to Customer in accordance with the TSA, as the case may be;

"**Transport Capacity**" ("**TC**") means transport capacity (expressed in t / Hour) made available by Porthos to its customers in the Porthos Transport System suitable to allow customers to deliver up to an agreed mass of CO_2 per Hour into the Porthos Transport System at the Connection and to transport any such CO_2 delivered to the Storage Connection;

"**Transport Exceedence Fee**" ("**TCE Fee**") is defined in Article 8.3.3 TSC;

"**TSA**": "Porthos Transport Capacity and Storage Space Agreement", including its Appendices and the TSC;

"**TSC**": Standard CO_2 Transport and Storage Conditions, including its Schedules and Annexes;

"**Variable CO_2 Fee**" is defined in Article 8.3.2 TSC;

"**Variable Electricity Fee**" is defined in Article 8.3.1 TSC.

SCHEDULE B [OPERATING GUIDELINES]

To be agreed after the TSA Signing Date. After the TSA Signing Date, the Parties shall cooperate with the aim of finalizing the Operational Guidelines by 1 July 2023.

SCHEDULE C CREDIT TERMS AND PROCESS

1. INTERPRETATION AND DEFINITIONS

In this Schedule C the following terms shall have the following meanings:

"**Acceptable Bank**":

(i) bank or financial institution which has a rating for its long-term unsecured and non- credit-enhanced debt obligations of A - or higher by Standard & Poor's Rating Services or Fitch Ratings Ltd or A3 or higher by Moody's Investor Services Limited or a comparable rating from an internationally recognized credit rating agency; or

(ii) any other bank or financial institution approved by Porthos;

"**Additional Security**": Cash Collateral, a Guarantee, a Standby L/C or such other security as may be acceptable to Porthos;

"**Cash Collateral**": Euro denominated cash deposited with an Acceptable Bank in an interest-bearing account in the name of the Customer on the following conditions:

(i) until no amount is or may be owing by the Customer to Porthos under or pursuant to the TSA, withdrawals from the account may only be made to pay Porthos amounts due and payable to Porthos under the TSA; and

(ii) the Customer shall have executed a security document over that account, inform and substance satisfactory to Porthos, creating a first ranking security interest over that account in favour of Porthos;

"**Credit Limit**": at any time, the credit limit applicable to the Customer at such time determined for the purposes of the TSA by Porthos as being the aggregate at such time of:

an amount:

a. if such Customer is rated by Standard & Poor's or Moody's: equal to such Customer's Percentage of Total Net Worth set out in column (3) of the table below opposite the highest of the Customer's Credit Ratings listed in columns (1) and (2) of the table below applicable to the Customer by multiplying such percentage by such Customer's Total Net Worth; or

b. if such Customer is neither rated by Standard & Poor's nor Moody's: equivalent to the Dun & Bradstreet indicated maximum credit limit provided that the Customer has a rating classification of A3 or higher and a composite credit appraisal of 1 or 2; or

c. if such Customer is neither rated by Standard & Poor's nor Moody's nor Dun & Bradstreet: equal to such Customer's Percentage of Total Net Worth as determined by Porthos by applying an implied rating analogous to columns (1) or (2) of the table below to obtain the relevant percentage, by multiplying such percentage by the Customer's Total Net Worth;

1	2	3
Credit Rating Standard & Poor's	Credit Rating	Percentage of Total Net
AAA	Aaa	20%
AA+	Aa1	20%
AA	Aa2	20%
AA-	Aa3	20%
A+	A1	17%
A	A2	15%
A-	A3	12%
BBB+	Baa1	10%
BBB	Baa2	7%
BBB-	Baa3	3%
Below BBB-	Below Baa3	0%

plus:

d. the value of any Additional Security provided by the Customer;

provided that Porthos may adapt the Credit Limit based on additional information that may from time to time become available to Porthos.

"**Credit Rating**": in relation to the Customer or Guarantor, its credit rating status for the time being, namely the rating assigned to if its long-term unsecured and non-credit-enhanced debt obligations by Standard & Poor's Rating Services or Moody's Investor Services Limited;

"**Exposure**": on any Day, based on the Customer's entries in the Porthos' registers at the start of that Day, the aggregate of

(i) all unpaid amounts and all unpaid Fees that will be payable by the Customer under the TSA for the period up to the end of the last Day of the next 5 (five) years of the remaining term of the TSA, regardless of whether these amounts are invoiced or not;

"**Guarantee**": a financial guarantee duly executed and delivered by a company with a rating acceptable to Porthos, which may be the Customer's parent company (the "Guarantor"), in form and substance satisfactory to Porthos, pursuant to which the company guarantees on first demand Customer's payments under the terms of the TSA, the value of which for purposes of Additional Security is the amount so guaranteed;

"**Standby L/C**": a standby letter of credit, in form and substance satisfactory to Porthos, issued by an Acceptable Bank for the account of the Customer in favour of Porthos; and

"**Total Net Worth**": total assets minus total liabilities as determined by Porthos or an agent of Porthos, as per the most recent audited and published annual accounts (IFRS or equivalent) with a balance date not older than one year, whereby amounts in other currencies shall be translated into Euro at the exchange rate prevailing at the date of assessment of the Total Net Worth for purposes of this Schedule C.

2. CREDIT LIMIT AND ADDITIONAL SECURITY

2.1. Porthos shall determine the Customer's Credit Limit and may at any time re-determine the Customer's Credit Limit upon consultation with the Customer, and Porthos shall properly notify the Customer of its Credit Limit and any redetermination thereof.

2.2. If the Customer (or its Guarantor) is rated by Standard & Poor's, Moody's or Dun & Bradstreet, Porthos shall provide such Customer with notice of its Credit Limit within 15 (fifteen) Business Days of receipt by Porthos of information and documentation as may be required to reasonably determine the Customer's (or its Guarantor's) rating.

2.3. If the Customer (or its Guarantor) is neither rated by Standard & Poor's nor Moody's nor Dun & Bradstreet, Porthos shall provide the Customer with Notice of its Credit Limit within 20 (twenty) Business Days of receipt by Porthos and/or a rating agency appointed as its agent, of both (i) notification by the Customer that they would like to establish a Credit Limit, and (ii) delivery of all certified copies of the most recent annual accounts, most recent audited accounts, and such other financial information and documentation as may be required to reasonably determine the Customer's (or its Guarantor's) implied rating and Total Net Worth.

2.4. Upon receipt of Porthos' determination of the Customer's Credit Limit (or any change thereto), the Customer may discuss with Porthos the factors determining its Credit Limit, and arrange any Additional Security with Porthos, in order to increase such Credit Limit.

2.5. If a rating or Total Net Worth of the Customer (or its Guarantor) materially diminishes, or is expected to materially diminish, then the Customer shall notify Porthos of such (expected) changes.

2.6. If at any time Porthos determines that the Exposure exceeds the Credit Limit the Customer shall, on being so notified in writing by Porthos to do so, provide such Additional Security having a value equal to the excess.

2.7. If at any time Porthos determines that the Credit Limit exceeds the Exposure the Customer shall be entitled to withdraw Additional Security having a value equal to the excess of the Additional Security over the Exposure by so requesting Porthos in writing. Porthos shall release Additional Security in accordance with such request unless Porthos considers that (a) the amount to be so released is disproportionately small in relation to the total Credit Limit or (b) there is a material chance of the Exposure exceeding the Credit Limit within 10 (ten) Business Days of the request. In no event shall requests to release Additional Security be made by the Customer under this Schedule C or frequently than once in any calendar month.

2.8. Porthos may request that the Customer provides Porthos with a confirmation from an attorney licensed in the Customer's jurisdiction of incorporation (or jurisdiction where the Customer holds the majority of its assets) in a form reasonably acceptable to Porthos that the Agreement would be enforceable against that Customer in that Customer's jurisdiction of incorporation (or jurisdiction where that Customer holds the majority of its assets). If Porthos requires such a confirmation, then it must make this request to the Customer within 15 (fifteen) Business Days following that Customer's request to establish a Credit Limit. If Porthos has made such a request it need not provide the Customer with a Credit Limit until the Customer has provided the requested confirmation.

SCHEDULE D GRID CONNECTION AND FEED-IN TERMS AND CONDITIONS

1. Scope

1.1. The purpose of the GCFI is to ensure that the Customer Facility is safely and expediently connected to the Porthos Transport System at the Connection, that the Parties' Facilities, shall be operated, maintained and developed in a good, prudent and safe manner, in order to allow CO_2 to flow through the Parties' Facilities, including the Connection, without impeding or damaging (the correct operation of) a Party's Facilities in any way.

2. Parties' Facilities

2.1. Customer shall timely establish the Connection between the Customer Facility and the Porthos Transport System at its own risk, cost and expense, acting in accordance with and taking into account the GCFI, and following all reasonable instructions given by Porthos to Customer in this regard.

2.2. Each Party shall operate, maintain and develop its Facilities as a Reasonable and Prudent Operator in a safe and reliable way with due respect for the environment.

2.3. Each Party shall ensure that its Facilities are at all times compliant with the applicable (national and/or European) legal, technical, safety and environmental provisions and International Standards.

2.4. Customer shall be responsible for the transport of CO_2 in Customer's Facilities up to the Connection and Porthos shall be responsible for the transport of CO_2 in the Porthos Transport System.

2.5. Customer shall ensure that its Facilities are always technically and operationally compatible with the Porthos Transport System, such that the Parties' Facilities are safely connected to each other and that the CO_2 can flow in, into and out of Parties' Facilities in a safe, controllable and Measurable manner.

2.6. Customer shall deliver CO_2 at the Connection that was captured by a Capture System at a Customer Facility. In deviation of its obligation in the previous sentence Customer may, if and to the extent that the Capture System and/or the Customer Facility are unavailable due to planned maintenance, an Outage or Force Majeure affecting the Customer, deliver a mass of CO_2 from a third party not exceeding Customer's Registered Transport Capacity at the Connection.

2.7. Each Party shall ensure that control of the CO_2 Flow in its Facilities complies with the provisions in Annex B and Annex C and each Party shall ensure that it is able to discontinue the CO_2 Flow.

2.8. Customer shall ensure that the physical CO_2 Flow stays within the Measuring capabilities.

2.9. Porthos' personnel and/or its representatives shall in connection with the GCFI be entitled to enter Customer's Facilities at all reasonable hours in the presence of Customer's personnel and/or representatives. Porthos' personnel and/or representatives present at Customer's Facilities shall at all times adhere to the Customer's instructions and safety requirements. Porthos will always announce its visits to Customer's Facilities to Customer timely in advance.

2.10. If any part of the Porthos Transport System is located on Customer's site Customer shall, if and to the extent the site is owned by Customer, and prior to the start of commercial operations of the Porthos Transport System, grant Porthos a right of superficies with respect to such part of the Porthos Transport System and ensure that such right of superficies will survive any transfer of ownership of the relevant part of the site. If and to the extent that Customer's site is not owned by Customer, Customer shall use its best endeavours to ensure that the relevant owner grants Porthos a right of superficies in accordance with the above.

3. CO_2 Specifications

3.1. Customer shall ensure that the CO_2 delivered at the Connection and/or into the Porthos Transport System by Customer is compliant with the GCFI, including the provisions in Annex A regarding CO_2 components, and the provisions in Annex B regarding temperature, pressure, flow and safeguarding. For the avoidance of doubt, this Article 3.1 GCFI applies to any and all CO_2 delivered at the Connection by Customer regardless of where it originated, i.e. including any third-party CO_2.

3.2. If Customer has reason to suspect or becomes aware that a CO_2 component that is subject to "safeguarding" is not being Measured correctly or if Customer detects Non-compliant CO_2, it shall ensure that the CO_2 Flow is immediately and automatically discontinued in order to prevent Non-compliant CO_2 from entering the Porthos Transport System, and promptly take all actions within its control to remedy and/or reduce the non-compliance and the consequences thereof.

3.3. In deviation of Article 3.2 GCFI, Customer shall not be required to immediately and automatically discontinue the CO_2 Flow if it detects Non-compliant CO_2 that qualifies as such solely because one or more of its components that are not

subject to "safeguarding" pursuant to Annex B exceed one or more agreed limit values, but Customer shall in such case also promptly take all actions within its control to remedy and/or reduce the non-compliance and the consequences thereof.

3.4. If Customer detects Non-compliant CO_2, it shall (i) promptly notify Porthos thereof and include in its notification all relevant information relating to the Non-compliant CO_2, including the specifications thereof and any information gathered in accordance with the Measuring Manual and Annex C (ii) promptly and diligently investigate the cause(s) of any Non-compliant CO_2 and (iii) as soon as possible provide Porthos with all relevant information relating to said cause(s).

3.5. Porthos shall inform Customer no later than 1 (one) Hour after receiving the notification referred to in Article 3.4 GCFI of its decision to either accept or reject the Non-compliant CO_2 (on the basis of the specifications notified by Customer to Porthos in accordance with Article 3.4 GCFI) in whole or in part, it being understood that such acceptance may be subject to certain conditions and that if the Non-compliant CO_2 is accepted in part, the remaining part of the Non-compliant CO_2 shall be deemed to have been rejected.

3.6. If and to the extent that Porthos has accepted Non-compliant CO_2 (whether or not subject to certain conditions), Customer shall be entitled to resume the CO_2 Flow to enable the accepted Non-compliant CO_2 to enter the Porthos Transport System.

3.7. If Customer, in relation to Non-compliant CO_2 accepted by Porthos, detects one or more deviations from the specifications of such Non-compliant CO_2 as provided by Customer to Porthos in its latest notification in accordance with Article 3.4 GCFI, then Article 3 GCFI shall apply *mutatis mutandis* (i.e. Customer shall inter alia prevent the deviating Non-compliant CO_2 from entering the Porthos Transport System and promptly notify Porthos of the deviation(s) following which Porthos shall decide to either accept or reject the Non-compliant CO_2).

3.8. Any Non-compliant CO_2 accepted by Porthos (whether or not subject to certain conditions) that has been fed into the Porthos Transport System (if subject to certain conditions, in accordance with the conditions subject to which the Non-compliant CO_2 was accepted by Porthos), shall be deemed to comply with all relevant CO_2 specifications with retroactive effect as per the moment such CO_2 was fed into the Porthos Transport System (i.e. shall no longer be considered Non-compliant CO_2).

3.9. Porthos shall, at all times, retain the right to reject any Non-compliant CO_2 and/or to subject the acceptance of any Non-compliant CO_2 to (additional) conditions

and/or close the Connection with, where reasonably possible, prior warning by telephone to the Customer in cases including those set out in Article 5.3 GCFI.

4. Measuring Terms and Data Transfer

4.1. Customer shall act in compliance with the provisions in Annex C.

4.2. Customer is responsible for, and shall at its own cost and expense, design, construct, operate and maintain its Measuring System in accordance with Annex C.

4.3. Customer shall ensure, at the latest 8 (eight) weeks before (directly or indirectly) delivering any CO_2 at the Connection and/or into the Porthos Transport System, that its Measuring System and Measuring procedures are in compliance with Annex C (including, in particular, the requirements in paragraph 4 thereof), and that they shall remain in compliance with Annex C until the TSA has terminated.

4.4. Customer shall ensure that its Measuring System is adequately capable of accurately Measuring any CO_2 delivered at the Connection and/or into the Porthos Transport System, all in accordance with Annex A, Annex B and Annex C.

4.5. Customer shall Measure the CO_2 components referred to in Annex A in accordance with Annex C. Customer shall continuously Measure the CO_2 Flow and the contractual equivalent of this CO_2 Flow and the contractual equivalent of this CO_2 Flow (ton/hr) in accordance with Annex C.

4.6. Customer shall act in compliance with the provisions in Annex E. Customer shall connect and continuously transmit its Measurement signals to Porthos by means of data transfer in accordance with Annex E. Each Party is entitled to connect, at its own cost, risk and expense, a system for data communication (e.g. telemetry) to the Measuring System.

5. Operations

5.1. The Parties shall apply the Scheduling Procedure set out in Annex D as well as the dispatching procedure as set out in Annex F.

5.2. On a regular basis, but at least once a year, the Parties shall meet to discuss their (annual) maintenance programs.

5.3. In addition to each Party's respective rights and/or obligations to close (*afsluiten*) the Connection between Parties' Facilities as set out in the GCFI (if any), each Party is entitled to close the Connection between Parties' Facilities without prior written notification if:

a. the other Party does not fulfil a material term of the GCFI, including the situation in which Non-compliant CO_2 that has been rejected by Porthos is fed into the Porthos Transport System by Customer; or

b. the other Party fails to fulfil any other term of the GCFI within 5 (five) Business Days after having been summoned to do so in writing, the non-fulfilment of the obligation not being due to Force Majeure; or

c. it has suspended the fulfilling of its obligations under the TSA in accordance with Article 12 TSC;

d. continuing the operation of the Parties' Facilities in case an emergency situation or Force Majeure poses a threat to the normal functioning or safety of the Parties' Facilities or the Connection; or

e. the other Party suffers an emergency or Force Majeure.

5.4. The relevant Party will again open up the Connection as soon as the situation(s) underlying the application of Articles 5.3.a, 5.3.b, 5.3.c, 5.3.d and/or 5.3.e GCFI is/are remedied.

5.5. Promptly after termination of the TSA, Parties will close the Connection between their Facilities, if it is not already closed. From the date of termination of the TSA each Party has the right to disconnect and remove its Facilities at its own costs and expenses, provided that the Parties shall consult each other always in advance to minimise the impact on the Facilities of the other Party.

Annex A CO_2 components

1. General obligation

Customer shall ensure that the CO_2 that it delivers at the Connection and/or into the Porthos Transport System meets (i) the general CO_2 specifications ("**CO_2 GS**") and (ii) Customer specific CO_2 specifications ("**CO_2 CSS**"), if any.

2. General CO_2 specifications

The CO_2 GS are set out in the table below.

Component	Mole Base
CO_2	≥ 95%
H_2O	≤ 70 ppm
Sum [H_2+N_2+Ar+CH_4+CO+O_2]	≤ 4%
H_2	≤ 0.75%
N_2	≤ 2.4%
Ar	≤ 0.4%
CH_4	≤ 1%
CO	≤ 750 ppm
O_2	≤ 40 ppm
Total sulfur-contained compounds (COS, DMS, H_2S, SOx, Mercaptan)	≤ 20 ppm Of which H2S ≤ 5 ppm
Total NOx	≤ 5 ppm
Total aliphatic hydrocarbons (C2 to C10)[i]	≤ 1200 ppm
Total aromatic hydrocarbons (C6 to C10, incl.BTEX)[i]	≤ 0.1 ppm
Total volatile organic compounds[ii] (excl. methane, total aliphatic HC (C2 to C10), methanol, ethanol, and aldehydes)	≤ 10 ppm
Total aldehyde compounds	≤ 10 ppm
Ethanol	≤ 20 ppm
Methanol	≤ 620 ppm
Hydrogen cyanide (HCN)	≤ 2 ppm
Total amine compounds	≤ 1 ppm
Total glycol compounds	follow dewpoint specification
Ammonia (NH_3)	≤ 3 ppm
Total carboxylic acid and amide compounds	≤ 1 ppm
Total phosphorus-contained compounds	≤ 1 ppm
Toxic compounds [iii]	
Dew point limit value measurement (for all liquids, i.e. for complete CO_2 composition)	< -10 °C (at 20 bara)

Note i: Specification values are molecular based
Note ii: VOC definition according to Dutch policy
Note iii: Toxic compounds: although CO_2 and other gases like i.e. H_2 and N_2 can form a risk of asphyxiation, Porthos would like to know other components within the stream which impose a risk on personal safety to be taken into account in Porthos HSE policy

3. Customer specific CO_2 specifications

The CO_2 CSS, if any, shall be established as follows.

a. Customer shall at least 12 (twelve) months before the Start Date inform Porthos of the reasonably expected specifications of the CO_2 that it envisages to deliver at the Connection and/or into the Porthos Transport System (including CO_2 components, the concentrations thereof and trace elements) taking into account the Customer Facility, the Capture System, the feedstock to be used in the Customer Facility and any other relevant Customer specific information. Customer shall base the aforementioned CO_2 specifications on an analysis of a sample of the CO_2 emitted by the Customer Facility, unless the Customer Facility is not (yet) operational in which case Customer shall base the aforementioned CO_2 specifications on a theoretical analysis.

b. If the aforementioned reasonably expected CO_2 specifications include one or more CO_2 components with a lower concentration limit of >0.1 ppm that are not included in the CO_2 GS and that can adversely affect Porthos, Porthos' personnel or the Porthos Transport System (e.g. as a result of liquid formation (the dew point line), corrosion or toxicity (HSE)), then Porthos shall in relation to each such component, in consultation with Customer, but at Porthos' sole discretion, establish an upper concentration limit.

c. The combination of a component not included in the CO_2 GS and the related upper concentration limit constitutes a customer specific CO_2 specification. The aggregate of such customer specific CO_2 specifications, as established from time to time, applicable to Customer shall constitute the CO_2 CSS. The Customer's CO_2 CCS, if any, are set out in the TSA, **Fout! Verwijzingsbron niet gevonden.**.

d. Each time that Customer becomes aware of or expects, or should reasonably have become aware of or expected, a change in the aforementioned reasonably expected CO_2 specifications, including as a result of a process or feedstock change, Customer shall promptly inform Porthos of such change in accordance with 3.a, in which case 3.b shall apply.

e. If Porthos has determined a customer specific CO_2 specification in relation to a Porthos customer, then that same customer specific CO_2 specification including the same upper concentration limit shall apply to all other Porthos customers.

f. To ensure the safety of persons and/or to protect the technical integrity of the Porthos System, Porthos shall be entitled, at any time, following consultation with Customer, but at Porthos' sole discretion, to redetermine (decrease or increase) the upper concentration limit referred to in 3.b in relation to any CO_2 component, thus amending the relevant customer specific CO_2 specification which shall, insofar as relevant, promptly become an integral part of all Porthos customers' CO_2 CSS.

f. Customer shall ensure that it complies with any amendment by Porthos of its CO_2 CSS in accordance with this Annex A as soon as reasonably possible.

Annex B CO_2 pressure, temperature, flow and Safeguarding System

1. General description

Customer shall ensure that the CO_2 that it delivers at the Connection and/or into the Porthos Transport System meets the specifications in this Annex B regarding pressure, temperature and flow. Customer shall further ensure that its Safeguarding System (as defined in this Annex B, paragraph 5) meets the requirements in this Annex B.

2. Pressure (P), Temperature (T), and Flow (F) specifications

Pressure						
Downstream design pressure	Pdd	X-845-0x	Porthos		36,0	bar (g)
Range of operating pressure		X-845-0x	Porthos		24-35	bar (g)
Downstream max. operating pressure	MOPd	X-845-0x	Porthos		35,0	bar (g)
Downstream max. incidental pressure (process safety to avoid 2 phase CO2, lower than the MIP acc. NEN-3650-1)	MIPd	X-845-0x	Porthos		40,0	bar (g)
Upstream design pressure	Pdu	pipeline tag-number	client		xx	bar (g)
Upstream max. operating pressure at the feeding point	MOPu		client		xx	bar (g)
					setpoint	
Pressure Relief Valve (if aplicable)		tag-number	client		xx	bar (g)
Pressure alarming and recording (NEN 3650-1)		PARxx	client		36,7	bar (g)
High Pressure Shut Down (HPSD)		tag-number	client		38,0	bar (g)
HPSD action: open V-C02, close V-C01						
Temperature				Min.	Max.	
Downstream design temperature	Tdd	X-845-0x	Porthos	-45	50,0	°C
Downstream max. operating temperature	MOTd	X-845-0x	Porthos	NA	40,0	°C
temporary for extreme circumstances, after consultation with CCP-Porthos					50,0	°C
Downstream max. incidental temperature	MITd	X-845-0x	Porthos	-49,5	55,0	°C
Upstream design temperature	Tdu	pipeline tag-number	client	xx	xx	°C
Upstream max. operating temperature	MOTu		client	NA	40,0	°C
Upstream min. operating temperature			client	8	NA	°C
					setpoint	
Temperature alarm		tag-number	client		43 and 50	°C
High Temperature Shut Down (HTSD)		tag-number	client		52,0	°C
HTSD action: open V-C02, close V-C01						
Low Temperature Shut Down (LTSD)		tag-number	client		5,0	°C
LTSD action: open V-C02, close V-C01						
Flow					setpoint	
Reverse Flow Trip (RFT)		tag-number	client		client to decide	
RFT action: close V-C01						

3. Pressure (P)

Customer shall ensure that the pressure at which it delivers CO_2 at the Connection and/or into the Porthos Transport System is such that the pressure safety of the Porthos Transport System is in compliance with the following standards:

a) EN 12186, Gas supply systems – Gas pressure regulating stations for transmission and distribution – Functional requirements (Edition February 2000);
b) NEN-3650-1 (Dutch part), Requirements for pipeline systems – Part 1: General requirements: Chapter 1 up to and including 7 (Edition June 2012).

Customer shall apply any new (i.e. revised and/or amended) version of the above-mentioned standards as soon as reasonably possible after it is published, if the Customer Facility has changed in any way after the date that the new version of the standard was published. Customer may, but is not obliged to, apply any new (i.e. revised and/or amended) version of the above-mentioned standards, if the Customer Facility has not changed in any way after the date that the new version of the standard was published. Customer shall promptly inform Porthos in writing when the new version of a standard is applied.

4. Flow (F)

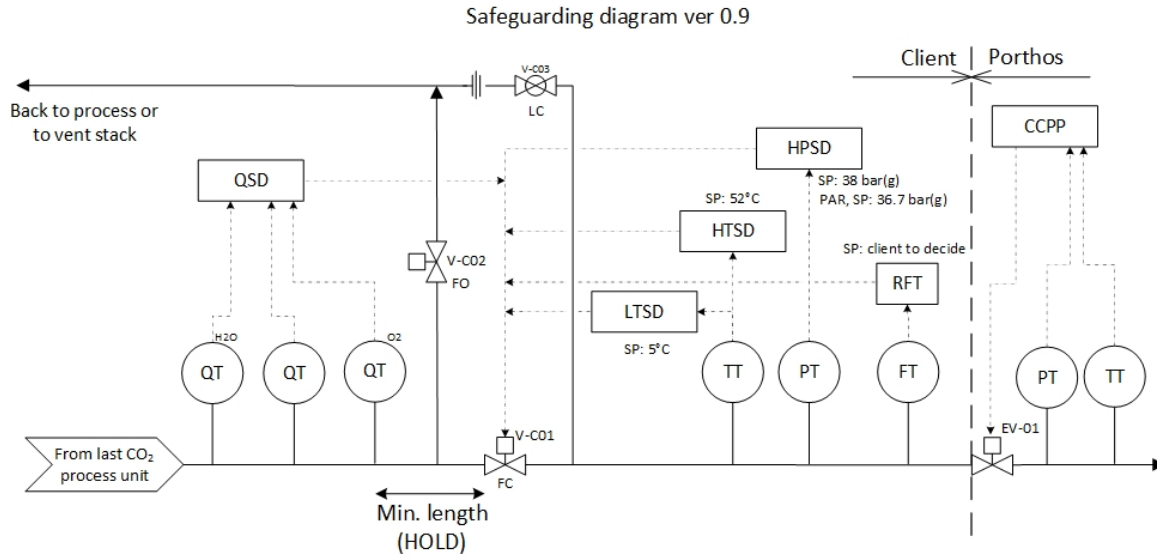
Porthos will operate the Porthos System as an open-access CO_2 transport and storage system with a unidirectional flow of CO_2, i.e. the CO_2 shall flow only from a Connection to the Porthos Storage System. Customer is responsible for controlling the flow of CO_2 at the Connection to prevent any CO_2 from (reverse) flowing from the Porthos Transport System into the Customer Facility.

5. Safeguarding System

A safeguarding system, aimed at protecting the technical integrity of the Porthos System, consists of one or more systems and equipment incorporated in, or relating to, the Customer Facility that continuously Measure the CO_2 specifications in Annex A, paragraph 2 and Annex B, paragraph 2 and ensures that the CO_2 Flow is immediately and automatically discontinued if and when (i) the mole base as specified in Annex A, paragraph 2 of a CO_2 component subject to safeguarding in accordance with this Annex B, paragraph 5, is

exceeded, and/or (ii) the pressure, temperature or flow as specified in this Annex B, paragraph 2 is not met ("**Safeguarding System**").

Customer shall design and install a Safeguarding System to ensure that the CO_2 that it delivers at the Connection and/or into the Porthos Transport System meets the CO_2 specifications set out in Annex A including in relation to quality and in this Annex B including in relation to pressure, temperature and flow. For information purposes only, an example of a Safeguarding System is set out in the diagram below.



Current tag-numbers are for identification only, to be changed according to P&ID's

Component	SafeGuarding (Yes/No)
CO_2	No
H_2O	Yes
Sum [H_2+N_2+Ar+CH_4+CO+O_2]	n.a.
H_2	Yes
N_2	No
Ar	No
CH_4	No
CO	No
O_2	Yes
Total sulfur-contained compounds (COS, DMS, H_2S, Sox, Mercaptan)	Yes
Total NOx	No
Total aliphatic hydrocarbons (C2 to C10)	No
Total aromatic hydrocarbons (C6 to C10, incl.BTEX)	No
Total volatile organic compounds[b] (excl. methanol, ethanol, and aldehydes)	No
Total aldehyde compounds	No
Ethanol	No
Methanol	No
Hydrogen cyanide (HCN)	No
Total amine compounds	No
Total glycol compounds	No
Ammonia (NH_3)	No
Total carboxylic acid and amide compounds	No
Total phosphorus-contained compounds	No
Toxic compounds	No
Dew point limit value measurement (for all liquids, i.e. for complete CO_2 composition)	Yes
Note b: VOC definition according to Dutch policy	

Tabel: Components and Measured values that should be part of any Safeguarding System

Customer shall ensure that as part of the safeguarding on liquid drop out an inline dewpoint limit value Measurement is effectuated.

6. Availability of Safeguarding System

Customer shall ensure that the Safeguarding System achieves the target likelihoods set out in the table below, i.e. that the Safeguarding System is designed such that the chance that

it fails to correctly Measure and safeguard against certain specific events shall be no more than the target likelihood (e.g. a target likelihood of 0.002 means that the chance that the Safeguarding System fails to correctly meter and safeguard against the relevant event is no more than 2 times in one thousand years).

	Target Likelihood/yr:
Over Pressure (HPSD)	: 0.002
Low Temperature (LTSD)	: 0.001
High Temperature (HTSD)	: 0.01
Reverse Flow (RFT)	: 0.01
Deviation (Composition) (QSD)	: 0.001
Dewpoint	: 0.001

In case of failure of (a part of) the Safeguarding System (i.e. the Safeguarding System not achieving the target likelihood set out above), the Customer shall switch to a safe state (= shut-down of V-C01) in accordance with NEN3650-1 par. 7.4.6.

Customer shall, at the latest 3 (three) months before the physical connection of the Customer Facility to the Porthos Transport System is made, demonstrate to Porthos that its Safeguarding System shall achieve the target likelihoods in the table above by submitting to Porthos, for its approval, the design of the Safeguarding System and a Layer of Protection Analysis (LOPA) study, based on IEC-61511 and in accordance with publications of the Center for Chemical Process Safety (CCPS), including a Safety Integrity Level (SIL) classification. Porthos shall verify and validate the design and the LOPA study within 90 (ninety) Days after the date of receipt of the design and the LOPA study. Porthos shall approve the Safeguarding System provided that the design and the LOPA study demonstrate to Porthos' reasonable satisfaction that the Safeguarding System shall achieve the target likelihoods in the table above. Customer shall not be entitled to physically connect the Customer Facility to the Porthos Transport System until its Safeguarding System has been approved by Porthos, which approval shall not be unreasonably withheld.

7. Maintenance and testing of Safeguarding System

Customer shall verify that its Safeguarding System is performing in accordance with this Annex B by performing regular maintenance and periodic functional testing of the Safeguarding System in accordance with IEC-61511. The extent and frequency of maintenance and testing shall be in accordance with IEC-61511. Customer shall not be

entitled to deliver CO_2 at the Connection and/or into the Porthos Transport System if the latest test performed by Customer does not demonstrate that its Safeguarding System is functioning in accordance with this Annex B.

8. Safeguarding System - exchange of information

1. Customer shall, upon Porthos' first request, make the results of any Safeguarding System test available to Porthos in writing as soon as they have become available.
2. Customer shall, upon Porthos' first request, provide to Porthos any information and/or answers to questions relating to the Safeguarding System reasonably requested by Porthos.
3. Customer shall allow Porthos, upon its first request, to witness inspections of any part of the Safeguarding System.
4. Porthos may at any time perform a verification of the maintenance performed on the Safeguarding System.
5. Customer shall not in whole or in part deactivate or put out of service any part of its Safeguarding System without prior written notice to and written approval from Porthos.
6. Customer shall not make any change to the design and/or installation of its Safeguarding System, as approved by Porthos, without Porthos' prior written approval.

Annex C Functional requirements for fiscal and non-fiscal Measuring Systems

1. GENERAL

1.1. The Parties acknowledge and agree that CO_2 transport and storage is subject to evolving and advancing insights. Porthos is entitled to amend this Annex C, including on the basis of evolving and advancing insights as it progressively gains a more detailed understanding of technical and operational aspects of the Porthos System and its interaction with the Customer Facilities. For the avoidance of doubt, the Parties agree that any amendment to this Annex C shall be made in accordance with Articles 18.9 up to and including 18.13 TSC.

1.2. Porthos shall, in consultation with the Customer, develop and finalize a Measuring Manual, which shall form an integral part of this Annex C as from the moment that it has been finalised. The Measuring Manual shall incorporate the contents of Annex G, and Annex G shall cease to apply as from the moment the Measuring Manual has been finalised.

1. ABBREVIATIONS AND SYMBOLS

1.1. In this Annex C the following abbreviations apply:

BIPM	International bureau for Weight and Measures
CUSUM	Cumulated Sum (of systematic errors)
FC	Flow conditioner
GC	Gas Chromatograph
GCFI	Grid Connection and Feed-In Terms and Conditions
ISO	International Standardisation Organisation
MID	Measuring Instruments Directive
MPE	Maximum Permissible Error
OIML	International Organisation for Legal Metrology
P&ID	Piping and instrumentation diagram
PFD	Process flow diagram
SL	Significance Level
SOS	Speed of Sound
TM	Turbine gas meter

US	Ultrasonic
USM	Ultrasonic gas meter
XML	Extensible Mark-up Language

1.2. In this Annex C the following symbols apply:

Symbol	Description	Unit
M	mass	kg
f	influencing factor	1
k	threshold value	1
V_n	normalised volume	m^3 (n)
V	Actual volume (under operational conditions)	m^3
V_c	Actual volume corrected for the error curve gas meter	m^3
P	Absolute pressure	bar (abs)
D	Normal density	kg/ m^3 (n)
s	Standard deviation	1
T	Thermodynamic temperature	K
t	Temperature	°C
Z	Compression factor	1
Z_n	Compression factor at normalised conditions	1

2. REFERENCE DOCUMENTS

2.1. This Annex C shall be deemed to include the requirements set out in the following standards:

NEN-EN 1776	Gas infrastructure - Gas measuring systems - Functional requirements.
OIML R137	Gas meters; Part 1: Requirements.
OIMIL R140	Measuring systems for gaseous fuel
NEN-EN 12405-1	Gas meters - Conversion devices - Part 1: Volume conversion.
NEN-EN 12405-3	Gas meters - Conversion devices - Part 3: Flow computer.
NEN-EN-ISO 6974-1	Natural gas - Determination of composition and associated uncertainty by gas

	chromatography Part 1: General guidelines and calculation of composition.
NEN-EN-ISO 6974-2	Natural gas - Determination of composition and associated uncertainty by gas chromatography - Part 2: Uncertainty calculations.
NEN-EN-ISO 6976	Natural gas - Calculation of calorific values, density, relative density and Wobbe indices from composition.
NEN-EN-ISO 10715	Natural gas -- Sampling guidelines.
NEN-EN-ISO 10723	Natural gas - Performance evaluation for analytical systems.
NEN-EN-ISO 12213-1	Natural gas – Calculation of compression factor; Part 1: Introduction and guidelines.
NEN-EN-ISO 12213-2	Natural gas – Calculation of compression factor; Part 2: Calculation using molar-composition analysis.
NEN-EN-ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories.
ISO 7870-1	Control charts; part 1: General guidelines
ISO 7870-4	Control charts; part 4: Cumulative sum charts.
ISO 6141	Gas analysis — Contents of certificates for calibration gas mixtures
ISO 6142-1	Gas analysis — Preparation of calibration gas mixtures — Part 1: Gravimetric method for Class I mixtures
ISO 6143	Gas analysis — Comparison methods for determining and checking the composition of calibration gas mixtures
ISO 10101-3	Determination of water by Karl Fisher Method
ASTM D7607	Standard Test Method for Analysis of Oxygen in Gaseous Fuels (Electrochemical Sensor Method)

1	ISO/CEI GUIDE 99 - International vocabulary of metrology - Basic and general concepts and associated terms (VIM; International vocabulary of metrology).
2	"Statistical methods for quality improvement" by Thomas P. Ryan, John Wiley & Sons, 1989, ISBN 0-471-84337-7.
3	"Statistical process control" by G. Barrie Wetherill and Don W. Brown, Chapman and Hill, 1991, ISBN 0-412-35700-3.
4	NEN-ISO 17089**-1 -** Measurement of fluid flow in closed conduits - Ultrasonic meters for gas; part 1: Meters for custody transfer and allocation measurement.
5	NEN-EN 12261 - Gas meters - Turbine gas meters.
6	ISO 10790 - Guidance to the selection, installation and use of Coriolis flow meters (mass flow, density and volume flow measurements)

The references to the above-mentioned standards are deemed to include references to supplements and/or errata, if any.

Customer shall apply any new (i.e. revised and/or amended) version of the above-mentioned standards as soon as reasonably possible after it is published, unless the standard has a specific date in which case only the standard with that specific date shall be applied.

The Parties agree and acknowledge that although, in many cases, the above-mentioned standards refer to natural gas since there are not yet comparable standards available specifically for CO_2. The above-mentioned standards will nevertheless -unless and to the extent a CO_2 specific standard becomes applicable - be applied in relation to CO_2 for lack of specific CO_2 related standards.

3. REQUIREMENTS

3.1. Measuring System

3.1.1. Customer shall ensure that its Measuring System shall comply with applicable national legislation and this Annex C, including the above-mentioned standards.

3.1.2. Customer shall timely, and at the latest 8 (eight) weeks before (directly or indirectly) delivering any CO_2 at the Connection and/or into the Porthos Transport System, provide to Porthos, for its approval, the relevant P&IDs, PFDs and other information required to demonstrate that its Measuring System complies with this Annex C. Customer shall notify Porthos no less than 2 (two) months in advance, of the date on which it will provide the aforementioned information to Porthos. Porthos will grant or withhold its approval within 4 (four) weeks after the receipt of the above-mentioned information. Porthos shall not unreasonably withhold or delay such approval. If Porthos withholds its approval, such decision will at all times be motivated in writing.

3.1.3. Customer's Measuring System shall be connected to the Porthos System.

3.1.4. Customer shall not employ its Measuring System until the Measuring Manual has been finalized.

3.1.5. Customer shall ensure that the overall uncertainty on mass CO_2 shall not exceed 1.5%. This uncertainty number applies to the performance of the Flow Measuring Installation at nominal capacities. In deviation of the above, for capacity lower than 10% of the maximum capacity ('Q-transition'), Customer shall ensure that the overall uncertainty on mass CO_2 shall not exceed 3%. These maximum uncertainty requirements are illustrated in Figure 1.

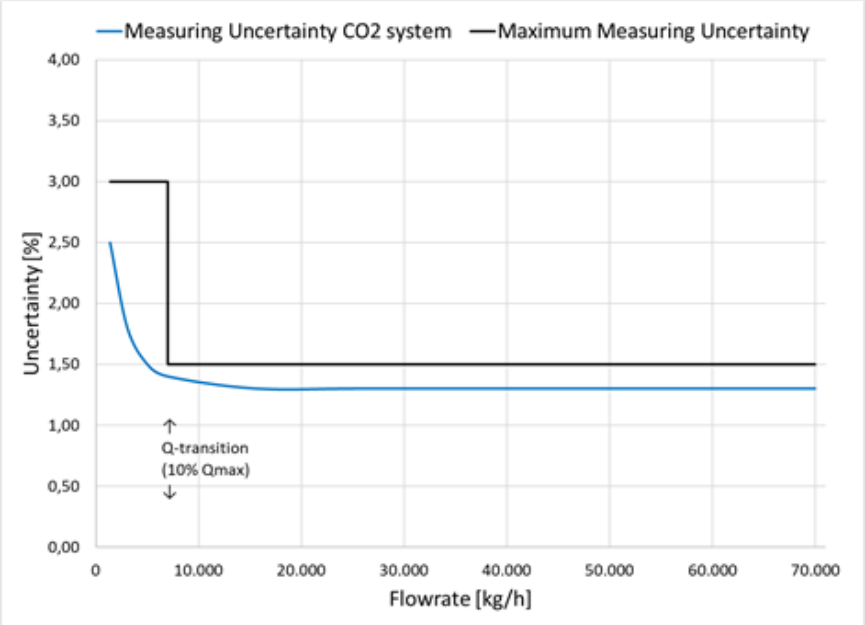


Figure 1: Maximum uncertainty requirements related to the

Measuring range of a Q-max of 70.000 kg/hr

3.1.6. Measuring uncertainty numbers in table 1 shall be used. A numerical example is given in Annex G.

Measured value or method	significance level	adjustment level	MPE	factor
	[%]	[%]	[%]	
base flow				
absolute pressure				
temperature				
Z/Z_n method AGA8				
D (kg/m3n) (ISO6976)				
CO2 + 5% (mol%) (GC)				
mass CO2			<=1,5%	

Table 1 Template for the Measuring uncertainty

a. The Customer shall prove that the operational uncertainty is within limits by using an uncertainty model.

b. When a systematic error is found in the determination of CO_2 over a period of time (e.g. caused by incorrect settings or deviations of instruments outside the agreed limits), the system shall be capable to deliver all the required data to calculate the deviated amount of CO_2 (for the purpose to be presented to Porthos and to be settled with the concerned Parties).

c. All Measuring instruments, including calibration equipment, shall be traceable to international (reference) standards (BIPM; NEN-EN-ISO/IEC 17025).

d. For the calculation of the volume and mass of CO_2, the pressure, temperature and gas composition shall be used, Measured at the Flow Measuring Installation, on positions representative for the gas passing the gas meter.

e. The degree of transparency on data, quality assurance and instrument maintenance shall be agreed upon and shall be established in a Measuring Manual. This Measuring Manual shall include among others:

   (i) all calibration procedures for the used instruments including tolerances and actions;

   (ii) the quality control, periodical and overall check, at which all instruments are calibrated using reference materials, Measuring reference instruments and/or certified calibration facilities;

(iii) used reference materials and performance registration (quality assurance);

(iv) the data handling includes verifications, corrections and final approval of the Measuring data;

(v) in case of Measuring failures or loss of data the volumes and masses shall be corrected and/or determined.

f. The required availability (during flowing conditions) for the Flow Measuring Installation is 98.6%. This can be achieved by using redundancy in the installation (e.g.: n+1 meter runs, where n runs are needed for the maximum flow capacity, double gas chromatographs, no-break power).

g. For large volumes (> 1.5 Mton CO_2 per year per meter run) two flow meters in series of different Measuring principles, if available for CO_2 (different manufacture and/or type) and separate pressure and temperature Measurement shall be used. The same applies for the gas quality Measurement, where double gas chromatographs shall be used for the Flow Measuring Installation, including separate sample conditioning system, separate carrier gas, separate calibration gas and separate reference gas.

h. In case of a two flow meters in series, the mass CO_2 determination shall be based on the average value of both Measurements.

i. In case of double Measurements on-line comparison shall be performed between the two Measurements (the gas chromatographs, concentration CO_2 (mol%) and gas meters (V_n)) with relevant alarms on the calculated deviations.

j. Safeguarding:

(i) Due to the requirements to prevent corrosion, liquid formation and toxicity issues Customer is obliged to design and install a Safeguarding System. The required SIL (Safety Integrity Level) classification is the SIL classification referred to in Annex B.

(ii) For Pressure, Temperature and Flow Measurement as well as Safeguarding on CO_2-compositions SIL requirements will be applicable and defined in Annex B of the TSC (CO_2 pressure, temperature, flow and safeguarding).

(iii) Note: See Annex G for the examples for the configuration of the meter runs.

3.2. Flow Measurement

3.2.1. The Flow Measuring Installation shall meet the following requirements:

a. The equipment used shall have an MID approval (a standard MID certificate for the meter type approval). The gas meter shall be protected against unauthorised access and the parameters of the meter and the calibration certificate(s) shall be well documented.

b. In case of an ultrasonic meter an upstream flow conditioner shall be used; the same flow conditioner and the same upstream pipe of the gas meter shall be used during calibration. The Flow Measuring Installation and the distance to the flow conditioner shall be accordance with the manufacturer instructions and the ISO or CEN standard. The manufacturer of the gas meter shall have documented evidence that the gas meter has a good performance with the flow conditioner at the chosen distance. If a flow conditioner is not used, the Customer shall provide proof that there is no installation effect on the flow Measurement.

c. Flow meters shall be protected against pollution or dirt.

d. Active interpretation of diagnostic data of a gas meter shall be used if present, for example:

   (i) a comparison of Speed of Sound (SOS) when using an US meter: SOS derived from the gas chromatograph data versus SOS Measured by the ultrasonic meter

   (ii) Calculation of the amount of CO_2 with SOS when using an US meter versus the derived CO_2 concentration from the GC

   (iii) or, when using a turbine gas meter, a second independent read-out (e.g. opto-electronically read-out of the mechanical index).

e. The meter run shall be thermally insulated from ambient temperature, only when the CO_2 gas temperature differs more than 10K from the ambient temperature.

f. Calibration curve correction for the gas meter shall be applied to minimise systematic errors using the physical reference points of the calibration.

g. Initially the as found recalibration of the gas meter shall be done in the period of the second year of operation of the Connected Party. When the as-found

calibration is within 0.3% of the previous calibration, the calibration shall be done with an interval of 4 to 6 years.

h. Every gas meter in the installation shall have an individual calibration certificate and the calibration shall be performed complying to the following requirements:

(i) The flow meter shall be calibrated at a calibration facility accredited (ISO 17025) for CO_2 if available. When there is no calibration institute for CO_2, the calibration of the gas meters will be performed at an internationally recognised calibration site for natural gas that is accredited by the national council of accreditation in accordance with NEN-EN-ISO/IEC 17025 and holds the Harmonised European Gas Cubic Meter for natural gas as realised by PTB, NMI-VSL and BNM (the national metrological institutes of the Netherlands, Germany and France). Care must be taken that the meter is valid for pressures up to 60 bar when calibrating, as procedures may require a calibration with natural gas at higher pressures. Customer shall inform Porthos at which facility the gas meters will be calibrated. At least 1 month in advance the Customer will inform Porthos when the gas meters will be calibrated.

(ii) The conditions at flow calibration shall resemble the physical conditions during operation for density, viscosity and Reynolds number. In case of CO_2 as calibration medium this means the same default operational pressure and temperature. In case of another calibration medium than CO_2, the calibration pressure and temperature shall be used, that results in physical conditions closest to the operational conditions at the Flow Measuring Installation. Any known systematic effect on the meter reading due to differences in gas medium, pressure and temperature shall be compensated for in the flow computer.

(iii) All parameters that can adversely affect the performance of the meter shall be considered: wall roughness (coating), temperature, diameters steps, protrusions, bends, flow conditioners and the like. All generally recognised differences between the conditions at flow calibration and conditions during operation shall be eliminated if these differences result in a significant shift of (part of) the calibration curve. Therefore, in case of an ultrasonic meter the gas meter, the relevant upstream piping and the flow conditioner shall be calibrated as a package.

(iv) Calibration at least at 6 flow set points conform the OIML requirements (R137) (Qmin, 10%, 25%, 40%, 70% and 100% of Qmax).

(v) Bi-directionally used gas meters are to be calibrated bi-directionally which results in the appropriate certificates for each direction.

(vi) It is preferable that the gas meters are adjusted such that the weighted average deviation is as close as possible to zero.

3.3. Volume and mass conversion

3.3.1. This article is only applicable for volume meters. Volumes Measured at operational conditions shall be converted to volumes at normal conditions (273.15 K and 1.01325 bar (abs)) and to mass with the density calculated with ISO 6976. Volume conversion shall be performed continuously by using live inputs of absolute pressure (P), temperature (T) and calculated compression factor (Z). The compression factor (Z) shall be calculated using live inputs of P, T and gas composition (e.g. NEN-EN-ISO 12213 part 1 and 2, NIST RefProp, GERG2008).

3.4. Flow computer, pressure and temperature transmitter

3.4.1. The flow computer including the pressure transmitter and temperature transmitter shall have a MID approval, and comply with NEN-EN 12405 (part 1 u/i 3). Pressure shall be Measured with an absolute pressure transmitter. Ambient influences such as temperature, pressure, noise, moisture, pulsations and sunlight shall be minimised.

3.4.2. The volume and mass conversion shall meet the following requirements:

a. It shall be demonstrated that the pressure and temperature Measurement will function within the stated uncertainty of the Uncertainty Modelling.

b. The initial uncertainty of absolute pressure Measurement is 0.1% and for the temperature Measurement 0.07% (0,2K)

c. Initially the calibration/verification of the pressure and temperature Measurement shall be done at least every 3 months. This interval can be extended to 12 months, if the stability is demonstrated within the stated uncertainties for the pressure and temperature Measurement.

d. Full traceability of actions by electronic logging.

e. Use of transparent logical decisions (alarm handling and low flow).

f. The inputs shall be digital (serial) to eliminate additional uncertainty by transmission techniques (like analogue transmission).

g. Measured volumes and mass shall be registered using non-volatile counters.

3.4.3. Counters shall be installed for volume at operational conditions, volume or mass corrected for the calibration curve, volume at normal conditions and mass CO_2 gross (includes 5% other components) and mass CO_2 nett. Bi-directional Flow Measuring Installations shall be equipped with the above-mentioned counters for each direction.

The flow computer shall be examined and verified periodically. The flow computer shall be protected against unauthorised access by means of a password and changes of parameters shall be tested and well documented.

3.5. Gas chromatograph

3.5.1. A gas chromatograph for the determination of CO_2 and all components, used for fiscal Measuring purposes, greater than 0.01 mol% shall meet the following requirements:

a. Mounted in accordance with ISO/TR 14749.

b. Minimization of ambient influences such as temperature, pressure, noise, moisture, pulsations, sunlight and the like.

c. Authorised access only.

d. The gas chromatograph shall be operated in accordance with the following points:

(i) The gas chromatograph shall be used in accordance with NEN-EN-ISO 6974.

(ii) The calculation of the density shall be in accordance with NEN-EN-ISO 6976.

(iii) The calculation of the molar mass shall be in accordance with NEN-EN-ISO 6976.

(iv) The sampling system shall be in accordance with NEN-EN-ISO 10715 and provided with a fast loop, if required, to prevent extra delay time in the analyse.

(v) Calculation of the mass of CO_2 mixture shall be performed with all components greater than 0.01 mol%. According to the Porthos

specifications these components could be: CO_2, H_2, N_2, CH_4, CO, Ar, methanol and C_2H_6.

(vi) The use of a fixed component shall be applied for Unmeasured components under the condition that the concentration is constant in time. This shall be demonstrated by the Connected Party through analysing spot samples.

(vii) It shall be demonstrated that the gas chromatograph will function within the stated uncertainty of the Uncertainty Modelling (see Annex G) by using:

(A) Calibration with a calibration gas: a gravimetric prepared synthetic gas, certified to ISO 6142-1, or a prepared synthetic gas certified to ISO 6143; the certificate shall be in accordance with ISO 6141. Periodically the calibration gas cylinder shall be connected to the GC and the analyse be used for adjustment of the GC response factors. It is common practice that this is done automatically, but may also be done manually.

(B) Verification with a reference gas: a real process gas sampled from the Flow Measuring Installation in a cylinder, analysed and certified by an ISO 17025 laboratory. The validation can be done online or offline:

(1) Online: In the same way as described for the calibration gas, but instead of adjustment, the analyses shall be compared with the certificate and validated against the limits settled in the Measuring Manual. So, the same cylinder is repeatedly used for the validations, as long as the composition of the reference gas is representative for the process gas (can change over time).

(2) Offline: The GC analyses during the period of the sampling of the cylinder and the analyses of the laboratory are compared afterwards, as soon as the certificate is provided by the laboratory.

(viii) Initially in the first half year of operation the calibration (1) and verification (2) of the GC shall be done at least every month. This interval can be extended to 3 months, if the stability is demonstrated within the stated uncertainties for the GC Measurement.

(ix) The maximum analyse time of the GC is 15 minutes.

3.5.2. Recommendations for the analysis of the performance of the gas chromatograph are given in the documents "Statistical methods for quality improvement" and "Statistical process control" (see: "Statistical methods for quality improvement" by Thomas P. Ryan, John Wiley & Sons, 1989, ISBN 0-471-84337-7, and "Statistical process control" by G. Barrie Wetherill and Don W. Brown, Chapman and Hill, 1991, ISBN 0-412-35700-3).

3.5.3. In case other alternative technology than a gas chromatograph is used (e.g. Mass spectrometer, other type of analyzer) the same functional requirements apply.

3.6. Reference instruments, equipment and materials

3.6.1. Reference materials like test and calibration gasses and calibration equipment (reference Measurement instruments) shall be used to check the gas chromatograph, pressure and temperature transmitters and flow computers. The uncertainty of the used reference materials shall be corresponding to the uncertainty model to be established in the Measuring Manual in accordance with paragraph 3.1.6, table 1. Reference materials shall be periodically calibrated at a calibration facility that is accredited by the national council of accreditation in accordance with NEN-EN-ISO/IEC 17025.

3.6.2. Provisions shall be made for a proper connection of the references to the installation. For the reference temperature sensor a spare thermowell shall be fitted for calibration, close to the position of the primary thermowell. Care shall be taken not to install them in line (to avoid resonance and mutual influence), therefore it shall be mounted at an angle to the primary thermowell.

3.6.3. Reference materials and reference Measurement equipment for the on-site verifications shall meet the following requirements:

a. These shall be fit for the purpose (regarding range, uncertainty and the like).

b. These shall be calibrated at a facility with (higher) reference instruments with a NEN-EN-ISO/IEC 17025 certificate for the specific Measurement and traceable to international standards.

c. These shall have a valid calibration certificate with stated reference uncertainty and established deviations.

d. The recalibration period of reference materials shall be done every 2 years.

3.7. Non-fiscal Gas Quality Measurements

3.7.1. The gas must demonstrably meet the applicable specifications as laid down in the Porthos specifications. In the Measuring Manual, the individual parties make mutual agreements with Porthos on detailed Measuring of gas quality. At least the Measurement requirements for the following components are currently being provided due to integrity demands.

a. Oxygen:

(i) Oxygen (O_2) shall be Measured using an online Measurement device with an availability of 99.0% (or higher if required for safeguarding)

(ii) The maximum uncertainty of the online Measurement device is 2 ppm.

(iii) Calibration of the Oxygen (O2) Measurement device shall be done according to ASTM D 7607 using a reference gas

(iv) The reference gas should be close to the maximum allowed amount of O2 according to the agreement (with an uncertainty of ± 5%), balanced with CO_2.

(v) Safeguarding in accordance with Annex B.

b. Water concentration:

(i) An online Measurement device shall be installed to Measure the concentration of H20 with an availability of 99.0% (or higher if required for safeguarding)

(ii) The aspired maximum uncertainty of the online Measuring device is 10% in ppm or 1 Kelvin. Only under a SIL2 safety integrity level a maximum uncertainty of 2 Kelvin is permitted.

(iii) The water concentration device shall be periodically calibrated. This may be carried out in one of the following ways:

(iv) On-site verification with a reference Measuring instrument parallel to the field instrument

(v) Against a reference gas consisting H2O balanced with CO_2

(vi) Using a reference method, such as a Karl Fisher titration according to ISO 10101

(vii) Replacement by a calibrated instrument

(viii) Another method

(ix) Safeguarding in accordance with Annex B.

3.7.2. To demonstrate that the gas meets the applicable specification for pressure, temperature and CO_2 concentration, the Measurements of the Flow Measuring Installation may be used, also for non-fiscal purposes. The minimum Measuring and data transfer interval is 15 seconds for pressure and temperature. For the O2 and H2O concentration the maximum cycle time for the Measurement is 5 minutes.

3.7.3. Other components than H2O and O2 listed in the CO_2 Specification (Annex A) and labelled as continuously shall be Measured with an availability of 99.0%. (or higher if required for safeguarding).

3.7.4. Components to be safeguarded in accordance with Annex B.

3.7.5. To assure that Customer's composition applies to the dewpoint required (on specific pressure and temperature), Customer needs to install a dewpoint limit value Measurement with an availability and accuracy in accordance with Annex B. The dewpoint Measurement device shall have an availability of 99.0% (or higher if required for safeguarding).

3.7.6. Details regarding further requirements for accuracy, calibration and maintenance of the dewpoint Measurement device will added in later phase.

3.7.7. With the Measurements, including their uncertainties taken into account, shall be proven that the concentrations are within the stated contractual limits. The applied method to analyse these components is depending on the concentrations and will be agreed between the parties.

3.7.8. The sampling system for the LAB analysis shall be in accordance with NEN-EN-ISO 10715. Initially, and in any event during the TO Phase, the calibration of the analysers and the samples for LAB analyses shall be done at least once every month. This interval can, in the CO Phase, be extended to once every 3 months subject to Porthos' prior written approval, which shall not be unreasonably withheld or delayed, if the stability is demonstrated within the stated limits for the components.

3.7.9. If a sample for LAB analysis demonstrates that the mole base as specified in Annex A, paragraph 2 of a CO_2 component not subject to safeguarding in accordance with Annex B, paragraph 5, is exceeded, then Porthos is entitled to perform a risk

analysis of this circumstance in relation to the safety and/or integrity of the Porthos System. If this analysis results in the conclusion that the risk to the safety and/or integrity of the Porthos System is high, then Porthos shall be entitled to take mitigating action, including the performance of a so-called "foam-pig" or "intelligent pig" of the Porthos System, at Customer's cost and expense, to establish the exact nature and scope of the risk and/or clean the Porthos System.

	Measurement/ monitoring type
Component	**Mole basis**
CO_2	continuously
H_2O	continuously
Sum [H_2+N_2+Ar+CH_4+CO+O_2]	
H_2	continuously
N_2	continuously
Ar	continuously
CH_4	continuously
CO	continuously
O_2	continuously
Total sulfur-contained compounds (COS, DMS, H_2S, Sox, Mercaptan)	continuously
Total NOx	continuously
Total aliphatic hydrocarbons (C2 to C10)	continuously
Total aromatic hydrocarbons (C6 to C10, incl.BTEX)	LAB
Total volatile organic compounds[b] (excl. methanol, ethanol, and aldehydes)	LAB
Total aldehyde compounds	LAB
Ethanol	continuously
Methanol	continuously
Hydrogen cyanide (HCN)	LAB
Total amine compounds	LAB
Total glycol compounds	LAB
Ammonia (NH_3)	continuously
Total carboxylic acid and amide compounds	LAB
Total phosphorus-contained compounds	LAB
Toxic compounds	LAB
Dew point (for all liquids, i.e. for complete CO_2 composition)[a]	continouosly

3.7.10. If Customer can demonstrate to Porthos' reasonable satisfaction that an individual component will not be present in the composition, at the request of the Customer this component is not required to be Measured or analyzed.

3.7.11. If Customer can demonstrate to Porthos' reasonable satisfaction that an individual component will remain below the associated limit value (at the discretion of Porthos), Porthos can, at the request of the Customer, accept that a sample Measurement will suffice instead of a continuous Measurement.

3.7.12. Upon Porthos' reasonable request and/or each time that Customer expects or should reasonably expect that the composition of the CO_2 that Customer delivers at the Connection may change (e.g. contain new individual components or the value of existing individual components may exceed the spec as result of adjusted operation, including as a result of feedstock changes), Customer shall promptly provide Porthos with one or more new or revised and/or supplemented demonstrations in relation to the relevant individual component(s), for Porthos' assessment in accordance with the above.

3.7.13. Those exceptions do not apply to H_2O and O_2. H_2O and O_2, both components shall be Measured continuously and safeguarded in any case.

Remark: Continuously means an instrument that continuously samples and Measures inline.

3.8. Offline data delivery and reporting

3.8.1. Next to the on-line (live) data transmission, off-line Measuring data and reports shall also be provided by the Customer to Porthos in accordance with the Measuring Manual.

3.8.2. Off-line data delivery and reporting:

a. On a monthly basis hourly values of delivered CO_2 (Metered Quantity): volume [m3(n)], mass gross [Ton], mass net [Ton] and composition of the GC. This data shall be verified as to correctness and completeness and corrected when necessary, according to procedures agreed in the Measuring Manual and approved by the Customer before sending to Porthos. This process shall be controlled with audit trailing.

b. Calibration results after calibrations.

4. ACCESS TO MEASURING SYSTEM AND MEASURING ERRORS

4.1. Porthos and its agents and representatives shall be entitled to access Customer's Measuring System at all reasonable hours, and upon reasonable notice, to inspect (any part of) the Measuring System and obtain samples of the Customer's CO_2 while observing the rules regarding access to the Customer Facility. In case the Measuring System is not part of the Customer Facility, Porthos will always announce its intention to access the Measuring System to Customer's personnel appointed for this purpose. Customer shall be entitled to have its employees, agents or representatives present during any such visit by Porthos.

4.2. If Porthos has reasonable doubts as to the correct operation of (any part of) the Measuring System, Porthos is entitled at all reasonable hours, upon reasonable notice and in consultation with Customer, to engage an independent third-party to inspect (any part of) the Measuring System. Parties shall accept the result of such inspection. The costs of the inspection shall be borne by Porthos, unless the inspection demonstrates that (the relevant part of) the Measuring System was not functioning in accordance with this Annex C, in which case the costs shall be borne by Customer. Customer shall be entitled to have its employees, agents or representatives present during any such inspection.

4.3. Customer shall, at its own cost and expense, repair or replace (any part of) the Measuring System that is not functioning in accordance with this Annex C.

4.4. If the aforementioned inspection demonstrates that (a part of) the Measuring System was not functioning in accordance with this Annex C, Porthos will establish the relevant quality or quantity of CO_2 during the relevant period on the basis of the results of the inspection. Recalculation will be performed by Porthos with retroactive effect over the period that (the relevant part of) the Measuring System was not functioning in accordance with this Annex C.

4.5. If the inspection does not produce a practicable standard for establishing the relevant quality or quantity of CO_2 in the relevant period, Porthos is entitled to estimate the quality or quantity of CO_2 according to the best data available to Porthos, including data provided by Customer (if any).

Annex D [Scheduling Procedure]

To be agreed after the TSA Signing Date. After the TSA Signing Date, the Parties shall cooperate with the aim of finalizing the Scheduling Procedure by 1 July 2023. The Scheduling Procedure shall not materially affect the overall balance of risks, rights, rewards and obligations between the Parties.

Annex E [Data Transfer]

To be agreed after the TSA Signing Date. After the TSA Signing Date, the Parties shall cooperate with the aim of finalizing this annex regarding Data Transfer by 1 July 2023.

Annex F [Dispatching Procedure]

To be agreed after the TSA Signing Date. After the TSA Signing Date, the Parties shall cooperate with the aim of finalizing the Dispatching Procedure by 1 July 2023.

Annex G Measuring Manual and Uncertainty Modelling

1. TEMPLATE MEASURING MANUAL

MEASURING MANUAL

MEASURING SYSTEM FOR THE MASS DETERMINATION AND GAS QUALITY

CLIENT AS-[XXX]

2. UNCERTAINTY MODELLING

2.1. The uncertainty model is based on the energy determination of natural gas. However, the model itself can be copied for the determination of the net mass CO_2 conversion with CO_2 concentration from gross to nett mass CO_2 instead of energy conversion).

2.2. Customer shall ensure that the overall uncertainty on mass CO_2 shall not exceed 1.5%, i.e. the overall MPE needs to be equal to or below 1.5%. For illustration please find an example below:

AGA 8				
Measured value or method	**significance level**	**adjustment level**	**MPE**	**factor**
	[%]	**[%]**	**[%]**	
base flow	0,30	0,50	***0,80***	1,00
absolute pressure	0,10	0,40	***0,50***	1,18
temperature	0,07	0,18	***0,22***	-1,56
Z/Z_n method AGA8	0,10		***0,10***	1,00
D (kg/m3n) (ISO6976)	0,10		***0,10***	1,00
CO_2 + 5% (mol%) (GC)	0,40	0,60	***1,00***	1,00
mass CO_2	0,55	0,93	1,47	

2.3. Definitions

2.3.1. The following definitions are based on ISO/CEI GUIDE 99 International vocabulary of metrology - Basic and general concepts and associated terms (VIM) (see paragraph 2.1).

Adjustment[a]	Operation of bringing a Measuring instrument into a state of performance suitable for its use.
Calibration[b]	Set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a Measuring instrument or Measuring System, or values represented by a material Measure or a reference material, and the corresponding values realised by standards.
Deviation[c]	Value minus the reference value.
Error[d]	Result of the Measurement minus the true value of the Measurement.
Maximum Permissible Error (MPE)[e]	Extreme values of an error permitted by specifications, regulations, and the like for a given Measuring instrument.
Reference standard[f]	Standard, generally having the highest metrological quality available at a given location or in a given organisation, from which Measurements are derived.
Significance Level (SL)[g]	Uncertainty in the - conventional - true value.
True value[h]	Value consistent with the definition of a given particular quantity.
Uncertainty[i]	Parameter, associated with the result of a Measurement, that characterises the dispersion of the values that could reasonable be attributed to the Measurand.

a. An adjustment shall minimise the deviation. A single point adjustment will reduce the deviation to zero, an operating range adjustment requires a weighing procedure.

b. In a calibration the difference between the Measured value and the reading of the reference is determined, within a defined operating range and under specified conditions. The defined range can be a single point or a number of points.

c. A deviation is the result of a calibration. The deviation can be determined exactly, in contrast with the error. The deviation is used to judge the performance of an instrument.

d. Since the true value is not exactly known, the error can only be determined within certain confidence limits.

e. The MPE is mutually agreed between Parties, either at component or overall level. Since the error cannot be determined exactly, additional agreement is necessary on how to deal with such a value.

f. The term "reference" will also be used. The reference is taken to be the instrument or system used for calibration, representing the true value with specified uncertainty. It is assumed that the reference has zero systematic error, or that the systematic error is known so it can be compensated for.

g. This term is not included in the VIM, but plays an important role in the model. The SL value is based on the uncertainty of the applied reference only.

h. This is the value that is obtained by a perfect Measurement. It is not possible to determine the true value exactly. For this purpose, the "conventional true value" is sometimes introduced, having an accepted uncertainty.

i. For practical purposes, the uncertainty is taken to be twice the standard deviation of a distribution. Also, the probabilities are assumed to be normally distributed. This implies that there is a 95 % probability to remain within the uncertainty boundaries and those values are distributed symmetrically around the expectation value.

2.4. Basis assumptions

2.4.1. For the uncertainty modelling the following basic assumptions apply:

a. Every instrument is checked on a regular basis by comparing its reading with a reference.

b. The uncertainty of the reference is specified.

c. Any instrument drift within the checking period will remain within specifications.

d. The calibration procedure does not introduce significant uncertainties.

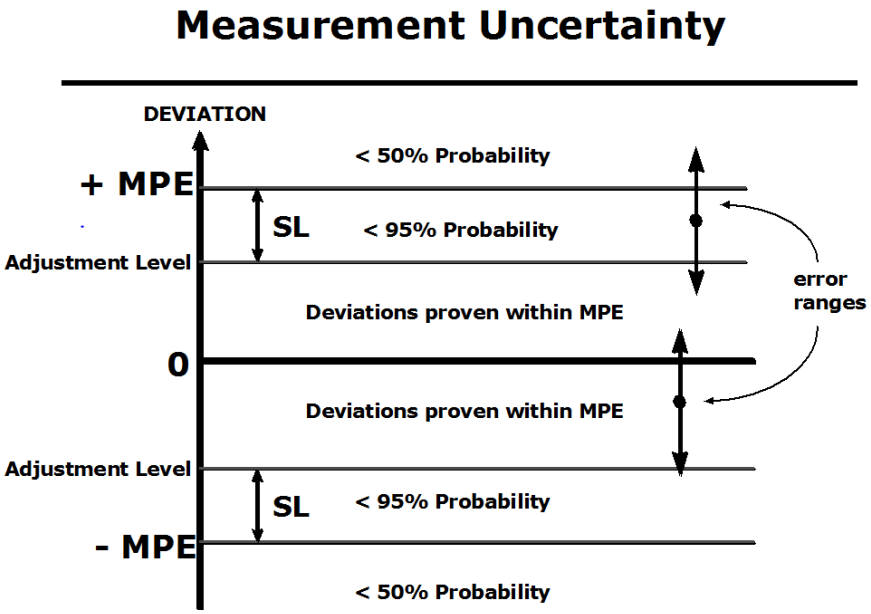
e. Either the reference used has no systematic error, or it has a known systematic error making it possible to compensate.

2.5. Single instrument

2.5.1. A single instrument calibration results in a deviation that requires interpretation. It is supposed that a Maximum Permissible Error value has been agreed upon, and that the reference uncertainty is specified.

2.5.2. The interpretation of the reference uncertainty is an important aspect of the model. Its origin lies in the traceability chain leading from the primary reference (traceable to international standards) to the specific reference used. The true value is defined by this primary reference, which means that it is by definition the only reference with zero error. Every next (traceable) step in producing copies of the reference leads to an additional uncertainty. The result is that the difference between any (non-primary) reference and the true value is fixed, but unknown. Therefore it is described by a probability distribution.

2.5.3. The interpretation of the Measured deviation is illustrated with the graph below.



2.5.4. Any deviation is the centre of a probability range of the actual associated error. This implies that deviations within the MPE boundaries do not automatically represent acceptable errors. As long as the absolute deviation value is much smaller than the

MPE, sufficient certainty is given that the error also lies within the MPE. With larger deviation values, this certainty decreases.

2.5.5. At the value MPE - SL, or its opposite, the confidence level of 95% is lost. (Strictly speaking 97.5 % for symmetry reasons.) At this stage the guarantee cannot be given anymore that the instrument operates within the Maximum Permissible Error. Therefore it shall be adjusted. This leads to the following relation between the three (absolute) values:

2.5.6. AdjustmentLevel = MPE-SL

2.5.7. Going further away from the zero level, the certainty decreases further, passing the 50% value at the MPE level. It shall be stressed that, even in this region, it is still possible that the instrument operates within the requirements, but the probability is small.

2.5.8. If both the adjustment and significance levels are known, as is the case in the present situation at the export delivery points, the MPE values can be calculated for the individual components.

2.6. Multi component significant level

2.6.1. Every Measuring System used for fiscal Measuring consists of more components, together determining the energy throughput.

2.6.2. The overall significance level for the energy Measurement can be determined from the individual SL values.

2.6.3. Since these individual values have been deduced from their own original primary reference, following different intermediate steps, it is assumed that the possible errors (fixed but unknown) have probability distributions that are not correlated. Therefore, the SL values shall be added quadratically to obtain the overall value.

2.6.4. Furthermore, it is recognised that the deviations in the Measured energy are not always directly proportional to deviations in certain components. This is due to the applied method of energy calculation.

2.6.5. A typical example is the effect of calorific value deviations when using PTZ volume conversion. The direct influence is through the multiplication of normal volume and calorific value. The use of calorific value in the sGERG compression factor

calculation introduces an indirect influence as well. It can be estimated that a 1% calorific value deviation will roughly lead to a 1.25% energy deviation. This influencing factor is somewhat dependent on the actual operational situation for pressure, temperature and gas quality.

2.6.6. In the same way there are also influencing factors for other quantities. Porthos has investigated these for a wide range of operating situations and compression factor calculation methods. Table 1 gives the values for the typical situation at the high pressure delivery stations.

Table 1: Influencing factors for PTZ conversion for sGERG and high pressure

Quantity	Influencing factor
pressure	1.13
temperature	-1.55
calorific value	1.25
normal density	0.14
CO_2 concentration	0.004

2.6.7. In general the overall significance level can be calculated as follows:

$$SL_{system}{}^2 = \left(f_1 \times SL_{comp1}\right)^2 + \left(f_2 \times SL_{comp2}\right)^2 + \ldots..$$

where the f values represent the influencing factors.

2.6.8. Mathematically the influencing factors are nothing else than the partial derivatives of energy with respect to the individual quantities, calculated at the point of operation.

2.7. Relation between individual and overall MPE values

2.7.1. Any overall value for the Maximum Permissible Error shall be related to the individual MPE values. In subclause 2.6.3 it is stated that individual significance levels are uncorrelated, and may therefore be added quadratically. The same argument applies to the Measured deviations. Therefore the overall MPE is chosen to have the same relation to the individual MPE values:

$$MPE_{system} = \sqrt{\left[\left(f1 \times MPE_{comp1}\right)^2 + \left(f2 \times MPE_{comp2}\right)^2 + \ldots.\right]}$$

2.7.2. From the above an adjustment level for the multi component system can be calculated in the same way as for the individual components by subtracting the system SL from the system MPE.

2.7.3. Requirement for overall MPE

a. An appropriate value for the maximum permissible error will be agreed between Parties. The requirement then reads:

$MPE_{system} \leq MPE_{required}$

b. When the Measurement system is engineered, this will be used as a requirement for the configuration. The instrument specifications, interpreted as MPE values, are added up as above and the resulting system value shall remain within the requirement.

c. Once the system is in operation, the results of periodical checks should prove the system to be within this requirement. For this purpose the overall deviation shall be calculated from the individual deviations, again making use of the energy calculation method and the influencing factors. In contrast with the SL and MPE calculation, deviations add up linearly:

$$DEV_{system} = \left(f_1 \times DEV_{comp1}\right) + \left(f_2 \times DEV_{comp2}\right) + \ldots..$$

d. In order to give sufficient guarantee the MPE requirement is not exceeded, the calculated system deviation be subject to:

$$\left|DEV_{system}\right| \leq MPE_{required} - SL_{system}$$

where the vertical bars represent the absolute value. The right hand side acts as the system adjustment level.

e. If the system deviation exceeds the given limit, measures shall be taken to reduce the overall deviation within the limit by adjusting or replacing the instrument(s) causing the deviation.

f. Remarks:

(i) Due to the quadratic addition of the MPE values it can occur that no individual component is outside its tolerance, but the system deviation has exceeded the overall adjustment level. In the numerical example given in subclause 2.7.4 such a case is described. It shall be determined which instrument shall be adjusted. It is advised to adjust the component with the largest deviation, but left to the personnel on site to decide what is best.

(ii) Changes in MPE values can take place when an improvement of a reference can be achieved. A smaller SL value will reduce the MPE for this particular instrument, allowing for larger adjustment levels on other components. In this way investment will reduce maintenance costs and keep the quality at the same level.

(iii) Another case is that performance of a certain instrument is worse than expected. The adjustment level and thus the MPE shall be enlarged accordingly, but not without tightening the tolerance on other components.

2.7.4. Numerical example

a. For the large delivery stations at the Dutch borders, table 2 shows the significance and adjustment levels that have been agreed upon. In the rightmost column the MPE values have been added. The system SL values on energy and on energy without the primary measurement are calculated, making use of the influencing factors.

b. The MPE values for these two quantities are proposed values. It can be calculated that the system values remain within this requirement, with respective values 0.73 % and 0.61 %. The two system adjustment levels are based on MPE required and SL values.

c. The "energy without base volume" is important for the periodically overall check, at which all instruments are calibrated against their reference, except the turbine/US meter. For this case the "overall" value on energy shall be determined, except the primary Measurement.

Table 2: Numerical example for natural gas

Measured value or method	Significance level (2·*s*)	Adjustment level	Maximum Permissible Error
Base flow	0.3 %	0.0 % (*)	0.3 %
Pressure	0.1 %	0.15 %	0.25 %
Temperature	0.03 % (0.1 K)	0.07 % (0.2 K)	0.10 % (0.3 K)
Z/Z_n method	0.1 %	-	0.1 %
Calorific value (gas chromatograph)	0.2 %	0.2 %	0.4 %
Normal density (gas chromatograph)	0.2 %	0.2 %	0.4 %
Energy	0.50 %	0.25 %	0.75 %
Energy without base volume	0.30 %	0.35 %	0.65 %

* Gas meters are always adjusted and any remaining error shall be removed by the application of curve correction.

Table 4: Numerical example for CO_2:

ISO 12231-2 (AGA 8)				
Measured value or method	**significance level**	**adjustment level**	**MPE**	**factor**
	[%]	**[%]**	**[%]**	
base flow	0.30	0.50	***0.80***	1.00
Absolute pressure	0.10	0.40	***0.50***	1.14
temperature	0.04	0.18	***0.22***	-1.60
Z/Z_n method AGA8	0.10		***0.10***	1.00
CO_2 + 5% (mol%) (GC)	0.40	0.60	***1.00***	1.00
D (kg/m3n) (ISO6976)	0.10		***0.10***	1.00
mass CO_2	0.54	0.92	1.45	

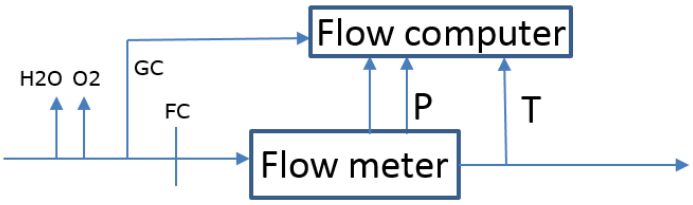
3. EXAMPLES OF CONFIGURATION OF METER RUNS

3.1. Abbreviations

TM	Turbine gas meter
USM	Ultrasonic gas meter
FC	Flow conditioner
GC	Gas Chromatograph
T	Temperature
P O2/H2O	Pressure Oxygen and water dewpoint analyser

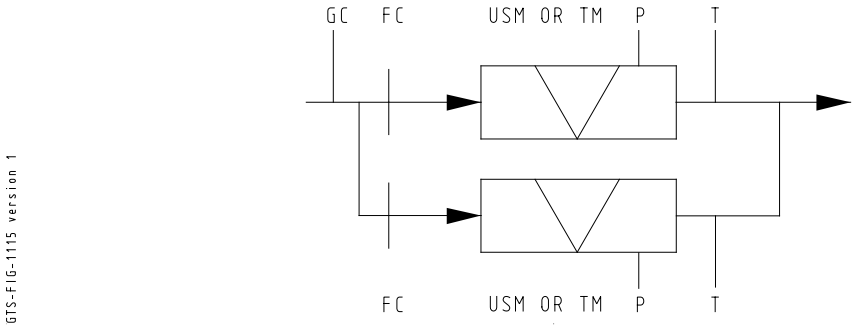
Notes:
1. the number "n" and the diameter of meter runs shall be chosen, such that the minimum and maximum flow capacity is covered.

3.2. Configuration for Q < 1.5 Mton/year (n=1) single line



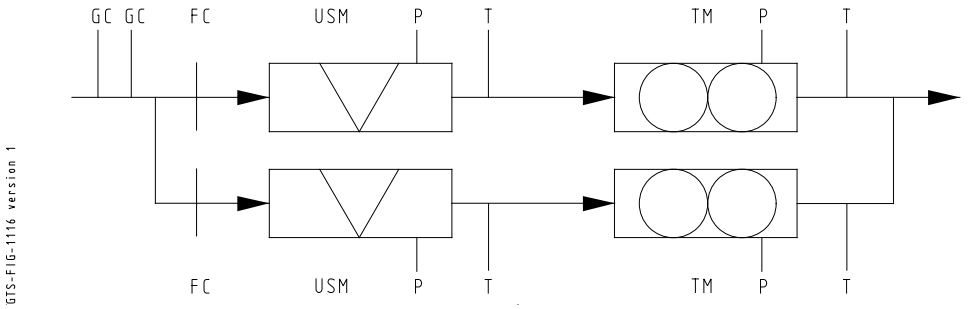
REMARK: the following figures are for illustration of the design. The selection of flow meter types will be decided by Porthos, in consultation with Customer, after the finalization of the test program with different types of flow meters.

3.3. Configuration for Q < 1.5 Mton /year (n) with n+1

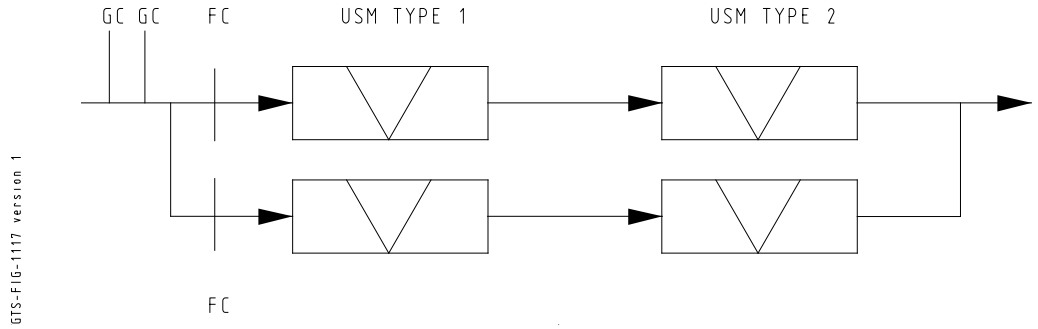


3.4. Configuration for Q > 1.5 Mton /year (n)

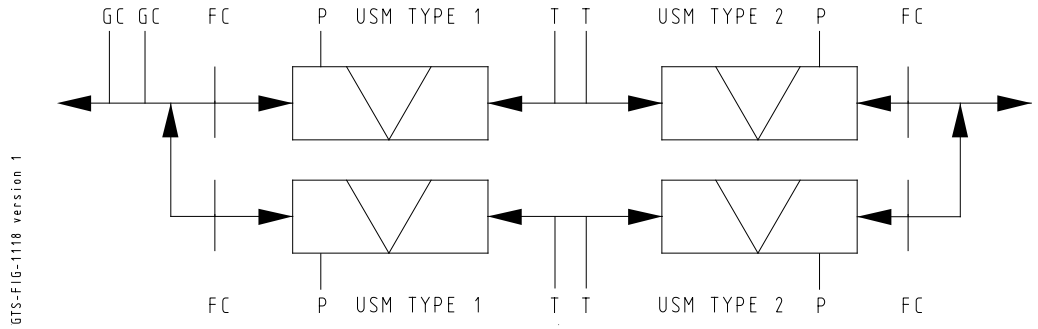
3.4.1. USM and Turbine (or other types) in series



3.4.2. Two USM's of different type in series (P and T identical as in 3.3)



3.5. Configuration for a bi-directional application



SCHEDULE E ICE C-EUA-FUTURE REPORT (EXAMPLE)

Futures Daily Market Report for ICE-ECX European Emissions
01-Oct-2020

COMMODITY NAME	CONTRACT MONTH	DAILY PRICE RANGE				SETTLE		VOLUME AND OI TOTALS						
		OPEN#	HIGH	LOW	CLOSE#	PRICE	CHANGE	TOTAL VOLUME	OI	CHANGE	EFP	EFS	BLOCK VOLUME	SPREAD VOLUME
C-EUA Future														
C	Oct20	26.56	26.56	26.56	26.56	26.49	-0.42	108	1,810	8	0	0	100	8
C	Nov20					26.50	-0.42	0	0	0	0	0	0	0
C	Dec20	27.35	27.35	26.25	26.50	26.51	-0.42	22,765	393,298	459	0	0	4,796	2,959
C	Mar21	27.17	27.17	26.35	26.35	26.56	-0.42	146	99,319	141	0	0	0	141
C	Jun21					26.61	-0.42	0	2,100	0	0	0	0	0
C	Sep21					26.66	-0.42	0	1	0	0	0	0	0
C	Dec21	27.34	27.34	26.48	26.71	26.72	-0.42	4,653	349,342	1,527	0	0	2,852	2,013
C	Mar22					26.81	-0.43	0	5,776	0	0	0	0	0
C	Jun22					26.88	-0.43	0	0	0	0	0	0	0
C	Sep22					26.97	-0.43	0	0	0	0	0	0	0
C	Dec22	27.66	27.69	26.83	27.11	27.07	-0.43	684	94,862	256	0	0	250	411
C	Dec23	27.55	27.59	27.49	27.55	27.51	-0.44	2,103	34,862	141	0	0	1,736	703
C	Dec24					28.05	-0.44	0	2,344	0	0	0	0	0
C	Dec25					28.66	-0.44	0	126	0	0	0	0	0
C	Dec26					29.27	-0.44	0	0	0	0	0	0	0
Totals for C:								**30,459**	**983,840**	**2,532**	**0**	**0**	**9,734**	**6,235**

NOTE: The information contained in this report is compiled for the convenience of subscribers and is furnished without responsibility for accuracy and is accepted by the subscriber on the condition that errors or omissions shall not be made the basis for any claim, demand or cause of action.

NOTE: OI information is not available until the next business day.

NOTE: Volume is aggregated and representative of each Futures market strip including applicable TAS and Minute Marker(s) trading activity.

NOTE: Spread Volume includes futures/options combinations, spreads, and defined strategies.

Open and Close prices reflect the first and last trade in the market and do not correlate to any opening or closing periods.

As an example, the price to be used on the invoice for the month of October 2020 is the December 2020 settlement price (26.51) as reported on te 1st of October, 2020. Prices are in euro.