CCS Network Code

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# CCS Network Code

# Section A – Introduction, Structure and Interpretation

## 1. Introduction

1.1 This document is the CCS Network Code maintained by each T&SCo pursuant to Standard Condition B5 (CCS Network Code) of the Licence (the "**Code**").

1.2 The Code is divided into different sections and sets out the commercial and technical rules and arrangements between the T&SCos and Users, and between individual T&SCos, in relation to:

(a) the connection by Users to a T&S Network, or part of a T&S Network;

(b) the delivery of carbon dioxide by Users into the T&S Network at a Delivery Point;

(c) the transportation and storage of carbon dioxide delivered by Users at Delivery Points;

(d) the operation and maintenance of each T&S Network; and

(e) the interface between the T&SCos in relation to different T&S Networks or parts of a T&S Network.

1.3 This Section A (Introduction, Structure and Interpretation) also deals with the requirement for each User to enter into a Connection Agreement, a Construction Agreement and a Code Accession Agreement.

## 2. Parties

2.1 For the purposes of the Code:

(a) "**T&SCo**" means, in relation to each T&S Network or part of a T&S Network, the entity that is the holder of a Licence authorising it to operate that T&S Network or part of a T&S Network;

(b) "**User**" means an entity other than a T&SCo who is for the time being bound by the Code;

(c) a "**Party**" means a T&SCo or a User;

(d) in the context of any Ancillary Agreement, references to "Parties" are to the T&SCo or a User who is party to that agreement;

(e) where a right or obligation is imposed on a T&SCo, unless otherwise specified, that right or obligation relates to the T&S Network, or part of a T&S Network, to which the Licence held by that T&SCo relates;

(f) a reference to the T&SCos is a reference to all T&SCos collectively; and

(g) anything required to be done jointly by the T&SCos which is done by or on behalf of all of them shall be treated as having been done by all of them, provided that any T&SCo's failure to comply with such joint obligation will not place any other T&SCo in breach of the Code where such other T&SCo has co-operated in relation to the joint obligation.

## 3. Contractual effect

3.1 The Code is given legal effect by and made binding on a T&SCo or a User pursuant to the Code Agreement or the Code Accession Agreement, as the case may be.

## 4. Additional Code Parties

4.1 The Parties must admit as an additional party to the Code Agreement any person who:

(a) accepts a Connection Offer from the T&SCo in accordance with Section C (Connection) and who has satisfied the additional requirements set out in paragraph 4.7 (a "**New User**"); or

(b) holds a Licence and satisfies the additional requirements set out in paragraph 4.6 (a "**New T&SCo**"),

(each a "**New Code Party**") and who is not at the time a Party.

4.2 Admission of a New Code Party shall take effect by way of a Code Accession Agreement prepared by:

(a) in the case of a New T&SCo, an existing T&SCo nominated by the Regulator; and

(b) in the case of a New User, the T&SCo that owns and operates the T&S Network to which the New User will connect,

at the expense and cost of the New Code Party and to be executed by the New Code Party and the relevant existing T&SCo (being the T&SCo referred to in paragraph 4.2(a) or 4.2(b), as the case may be) for itself and on behalf of all other Parties.

4.3 Upon execution of the Code Accession Agreement by the relevant T&SCo under paragraph 4.2 and the New Code Party, subject to and in accordance with the terms and conditions of that Code Accession Agreement, the New Code Party shall become a Party for all purposes of the Code Agreement.

4.4 Each Party hereby authorises and instructs the relevant T&SCo under paragraph 4.2 to sign any such Code Accession Agreement on its behalf and undertakes not to withdraw, qualify or remove any such authority or instruction at any time.

4.5 The relevant T&SCo under paragraph 4.2 must promptly notify the Secretary under Section B (Governance) that the New Code Party has become a Party. Such notification must be by written notice (which may be sent electronically) and notify the name, registered address and capacities in which the New Code Party will, or intends to, be connected to or use the T&S Network.

4.6 In order to become a New T&SCo in relation to a T&S Network, a person must enter into a CDS Accession Agreement.

4.7 In order to become a New User in relation to a T&S Network, a person must satisfy or secure satisfaction of the following requirements:

(a) the applicant must have entered into:

(i) a Construction Agreement with the T&SCo; and

(ii) a Connection Agreement with the T&SCo,

and each document shall have become effective in accordance with its terms;

(b) the applicant must have provided to the T&SCo, in the form prescribed by the T&SCo from time to time, the applicant's name, legal nature and address and any other information that is required to be provided as part of the connection process set out in Section C (Connection); and

(c) the applicant must have provided the emergency contact details required under Section G (Common Interface Procedures).

4.8 Unless otherwise expressly stated or unless the context otherwise requires:

(a) a User must comply with the obligations under the Code from the date it accedes to the Code, including during any period prior to that User's Commencement Date; and

(b) a T&SCo must comply with the obligations under the Code from the date it accedes to the Code, including any period prior to that T&SCo's Commercial Operations Date.

## 5. Structure

5.1 The Code comprises:

(a) the following sections of the main body:

(i) Section A: Introduction, Structure and Interpretation;

(ii) Section B: Governance;

(iii) Section C: Connection;

(iv) Section D: Network Structure and Planning;

(v) Section E: Network Use and Capacity;

(vi) Section F: Network Design and Specification;

(vii) Section G: Common Interface Procedures;

(viii) Section H: Charges, Invoicing and Payment;

(ix) Section I: Data;

(x) Section J: General; and

(xi) Section K: Glossary;

(b) the following exhibits:

(i) Exhibit A: Code Accession Agreement;

(ii) Exhibit B: Construction Agreement;

(iii) Exhibit C: Connection Agreement; and

(iv) Exhibit D: CDS Accession Agreement; and

(c) the following annexures:

(i) Annexure A: Carbon Dioxide Specifications – General;

(ii) Annexure B: Carbon Dioxide Specifications – T&S Networks;

(iii) Annexure C: Measurement Requirements – T&S Networks;

(iv) Annexure D: CO2 Quality Monitoring Procedure Terms of Reference;

(v) Annexure E: Technical Parameters – T&S Networks;

(vi) Annexure F: Emergency Procedure Terms of Reference;

(vii) Annexure G: Start-up and Shut-down Procedure Terms of Reference;

(viii) Annexure H: Isolation Procedure Terms of Reference;

(ix) Annexure I: Minimum Documentation Requirements;

(x) Annexure J: Information Publication Requirements;

(xi) Annexure K: Retained Data;

(xii) Annexure L: CDS Terms of Reference;

(xiii) Annexure M: Independent Verifier Terms of Reference; and

(xiv) Annexure N: T&S Network Portal Minimum Specification.

5.2 The following are the "**Uniform Provisions**" and apply equally to all T&S Networks: Section A to Section K, the prescribed forms set out in Exhibit A to Exhibit D and Annexure A, Annexure D, Annexure F, Annexure G, Annexure H, Annexure I, Annexure J, Annexure K, Annexure L, Annexure M, and Annexure N.

5.3 The following are the "**Specific Provisions**" and are specific to each individual T&S Network: Annexure B, Annexure C and Annexure E.

5.4 The Exhibits include the prescribed forms for the Ancillary Agreements (the "**Ancillary Agreement Templates**").

5.5 Ancillary Agreements must be in or substantially in the form of the Ancillary Agreement Templates and must be prepared in accordance with any "Drafting instruction" set out in the Ancillary Agreement Templates (provided that where the contents of the schedules in the Ancillary Agreements require further population, any information to be populated must be specific to each User and/or connection). Any substantial departures from the Ancillary Agreement Templates (including the terms of any schedule and any "Drafting instruction") are only permitted where such substantial departures are the subject of an approved Modification under Section B (Governance) or where they have been approved by the Regulator in accordance with the T&SCo's Licence.

5.6 Each and every Ancillary Agreement entered into by a User and a T&SCo and in force from time to time shall constitute a separate agreement governed by the terms of the Code and will be read and construed accordingly.

5.7 For the purposes of any Ancillary Agreement:

(a) no T&SCo shall enjoy any rights nor incur any obligations against any other T&SCo; and

(b) no User shall enjoy any rights nor incur any obligations against any other User.

## 6. Interpretation – general

6.1 In the Code and in each Ancillary Agreement:

(a) the interpretation rules in this paragraph 6; and

(b) the words and expressions defined in paragraph 7,

shall, unless the subject matter or context otherwise requires or is inconsistent therewith, apply.

6.2 Save as otherwise expressly provided in the Code, in the event of any inconsistency between the provisions of any Ancillary Agreement and the Code, the provisions of the Ancillary Agreement shall prevail in relation to the Delivery Point which is the subject thereof to the extent that the rights and obligations of Users not party to that Ancillary Agreement are not affected.

6.3 Unless the context otherwise requires, words and expressions defined in the Act or the Licence and not otherwise defined in the Code shall have the meaning given to them in the Act or the Licence.

6.4 References to the Code (or any part thereof) are to the Code (or such part thereof) as from time to time modified in accordance with the Modification Rules.

6.5 A reference in the context of any provision of the Code to a "representative" of any person is a reference to any director, officer or employee of that person or any agent, consultant or contractor appointed or engaged by that person for purposes connected with the subject matter of the relevant provision of the Code.

6.6 An "**Affiliate**", in relation to a Party, is any entity that directly or indirectly controls, is controlled by, or is under common control with that Party from time to time and "control" has the meaning given in section 1124 of the Corporation Tax Act 2010 and controls, controlled and the expression "change of control" shall be interpreted accordingly.

6.7 In the Code and in each Ancillary Agreement:

(a) unless the context otherwise requires all references to a particular paragraph, Part, Section, Schedule, Exhibit or Annexure shall be a reference to that paragraph, Part, Section, Schedule, Exhibit or Annexure in or to the Code and all references to a particular Appendix shall be a reference to that Appendix to the relevant Ancillary Agreement;

(b) unless the context otherwise requires, all references to a particular paragraph within a Section shall be a reference to that paragraph within that Section;

(c) a table of contents and headings are inserted for convenience only and shall be ignored in construing the Code or any Ancillary Agreement;

(d) references to the words "include" or "including" are to be construed without limitation to the generality of the preceding words;

(e) unless the context otherwise requires, any reference to an Act of Parliament or any part or section or other provision of or schedule to an Act of Parliament shall be construed, at the particular time, as including a reference to any modification, extension or re-enactment thereof then in force and to all instruments, orders or regulations then in force and made under or deriving validity from the relevant Act of Parliament; and

(f) references to the masculine shall include the feminine and references in the singular shall include the plural and vice versa and words denoting persons shall include any individual, partnership, firm, company, corporation, joint venture, trust, association, organisation or other entity, in each case whether or not having separate legal personality.

## 7. Interpretation – times, dates and measures

For the purposes of the Code:

(a) "**Day**" means the 24 hour period from 00:00 hours until 24:00 hours;

(b) "**Business Day**" means a Day other than:

(i) a Saturday or a Sunday; or

(ii) a Day which begins at 00:00 hours on a bank holiday in the nation where the T&S Network is located;

(c) "**Calendar Week**" means a period of 7 consecutive Days starting at 00:00 hours on a Monday;

(d) "**Charging Year**" means the period from 00:00 on 1 April in any year until and including 24:00 hours on 31 March in the following year;

(e) references to:

(i) a week is to the period from 00:00 hours on a day until 24:00 hours on the 7th day following;

(ii) a month (or a number of months) is to the period from 00:00 hours on a Day in one (1) month until 00:00 hours on the same day of the month which follows (or follows by the relevant number of months), or if there is no such Day in such month 00:00 on the first Day of the next following month;

(iii) a calendar month is to the period from 00:00 hours on the first Day of a month until 00:00 hours on the first Day of the following month, and references to a particular calendar month (such as January) shall be construed accordingly;

(iv) a year is to the period from 00:00 hours on a Day in one (1) year until 00:00 hours on the same Day (or where the day in the first year was 29 February, on 1 March) in the following year;

(v) a calendar year is to be construed accordingly; and

(vi) each reference in the Code to any time of the day shall, unless otherwise stated, be construed as a reference to official time in the United Kingdom;

(f) in relation to any Charging Year ("**Charging Year t**"):

(i) Charging Year t-1 means the Charging Year before it; and

(ii) Charging Year t+1 means the Charging Year after it;

(c) a reference to t or tonne is a reference to a metric tonne; and

(g) unless the context otherwise requires, capitalised terms have the meanings set out in Section K (Glossary).

# CCS Network Code

# Section B – Governance

## 1. Modification Panel

1.1 Each T&SCo, together with the other T&SCos, is required to operate a procedure for the Modification of the Code so as to better facilitate the achievement of the Relevant Objectives in accordance with the terms of its Licence.

1.2 The procedure is to provide for:

(a) a mechanism by which the Code and each Specific Provision may be modified and/or reviewed;

(b) the making of proposals for the modification of the Code either by a T&SCo, a User, a Third Party Participant, the Secretary of State or, in certain circumstances, the Regulator;

(c) where a proposal is made for the modification of the Code, the making of alternative proposals for the modification of the Code by any T&SCo, User, Third Party Participant or Secretary of State and, in certain circumstances, the Regulator, other than the person who raised the original modification proposal;

(d) determination by the Modification Panel whether a proposal for modification of the Code (other than a proposal made by the Regulator in the circumstances set out in paragraph 23.3) is a Self-Governance Modification Proposal;

(e) determination by the Modification Panel whether a proposal for modification of the Code (other than a proposal made by the Regulator in the circumstances set out in paragraph 23.3) satisfies the Fast Track Self-Governance Criteria;

(f) a right of appeal in respect of any determination by the Modification Panel to implement or not to implement a Self-Governance Modification Proposal;

(g) the giving of adequate publicity to any such proposals;

(h) the seeking of the view of the Regulator on any matter connected with any such proposals other than Self-Governance Modification Proposals, Significant Code Review Modification Proposals made by the Regulator in the circumstances specified at paragraph 23.3 and SoS Modification Proposals;

(i) the consideration of any representations relating to such proposals (excluding Significant Code Review Modification Proposals made by the Regulator in the circumstances specified at paragraph 23.3 and SoS Modification Proposals) made (and not withdrawn) by a T&SCo, a User, a Third-Party Participant or Non-Code Parties invited to make such representations by the Modification Panel;

(j) where the Regulator accepts that the Code may require modification as a matter of urgency, the exclusion, acceleration or other variation, subject to the Regulator's approval, of any particular procedural steps which would otherwise be applicable;

(k) the making of Significant Code Review Modification Proposals by the Regulator and the co-ordination of the processes for modification of the Code with Significant Code Reviews;

(l) the making of SoS Modification Proposals by the Secretary of State during the Interim Period and the co-ordination of the processes for modification of the Code with SoS Modifications; and

(m) the making of determinations regarding the Resource Plan and Budget Forecast and Secretary Expenses Claims to be submitted under paragraph 7.

1.3 The T&SCos must ensure that a Modification Panel is established within three (3) months from the Code Implementation Date. The Modification Panel will be comprised of:

(a) the Panel Chairperson, being a non-voting Member;

(b) subject to paragraph 11.8, a maximum of six (6) T&SCo Representatives, being Voting Members;

(c) subject to paragraph 11.7, a maximum of six (6) User Representatives, being Voting Members, with at least one (1) representative of each User Type;

(d) one (1) representative of the Regulator, being a non-voting Member; and

(e) one (1) representative of the Secretary of State, being a non-voting Member,

the persons appointing the Members under paragraphs 1.3(b) and 1.3(c) being the "**Panel Constituency**" in respect of such Members.

1.4 Subject to paragraph 1.5, it is expected that each Voting Member must, as appropriate, represent and inform the Modification Panel of the views of that Member's appointor (or appointors) in relation to Modification Proposals.

1.5 Where a Voting Member has been appointed pursuant to paragraphs 3.1 or 4.1, such Voting Member must represent and inform the Modification Panel of the views of the T&SCo, User or User Type (as applicable) of which that Voting Member is a part, in relation to Modification Proposals.

1.6 Any appointment of a Voting Member must expressly include provisions which require that Voting Member to carry out the duties of the Voting Members as set out in this Section B (Governance).

## 2. Panel Chairperson

2.1 The Members must appoint (and as the case may be remove and reappoint) by Panel Majority and by notice to the Secretary, one (1) person from time to time as the:

(a) Panel Chairperson; and

(b) the Deputy Panel Chairperson.

2.2 The Panel Chairperson and Deputy Panel Chairperson shall be appointed for a two (2) year period commencing on 1 October and ending with effect from the second anniversary of such date provided that, the first appointment period shall commence on the date which the Modification Panel is established and end on 30 September the following year.

2.3 The Panel Chairperson and Deputy Panel Chairperson must at all times act and take decisions in an impartial, objective and balanced manner.

2.4 The Panel Chairperson or, in the absence of the Panel Chairperson, the Deputy Panel Chairperson shall preside at meetings of the Modification Panel. If, in the period directly following the Code Implementation Date only, a Panel Chairperson has not yet been appointed under paragraph 2.1, the Secretary shall preside at the first and any subsequent meeting of the Modification Panel until the Panel Chairperson has been appointed.

2.5 The Panel Chairperson must conduct all meetings of the Modification Panel in compliance with the Code.

## 3. T&SCo Representatives

3.1 Subject to paragraphs 3.3 and 11.2, each T&SCo must appoint one (1) T&SCo Representative to the Modification Panel.

3.2 Subject to paragraph 11.2(b), each T&SCo shall have discretion over the individual that it appoints as the T&SCo Representative representing that T&SCo, provided that such individual is required at all times to be an employee, representative, officer or contractor of the T&SCo and, subject to paragraph 3.4, does not hold a Conflicting Appointment.

3.3 Subject to paragraph 11.8, the T&SCos may appoint (and as the case may be re-appoint) a maximum of six (6) T&SCo Representatives to the Modification Panel.

3.4 Where a T&SCo proposes to appoint an individual under paragraph 3.1 who holds a Conflicting Appointment, the T&SCo must:

(a) notify the Secretary and the Secretary must notify the Regulator of the nature of any such appointment;

(b) provide satisfactory evidence of the confidentiality and conflict management processes which are in place to prevent a conflict of interest arising; and

(c) not give notice to the Secretary of such appointment until such time as the Regulator has provided its approval in writing of such proposed appointment, which may be subject to conditions.

## 4. Users' Representatives

4.1 Subject to paragraphs 4.3 and 11.5, each User must appoint one (1) User Representative to the Modification Panel.

4.2 Subject to paragraph 11.5(b), each User shall have absolute discretion over the individual that it appoints as the User Representative representing that User, provided that such individual is required at all times to be an employee, representative, officer or contractor of the User and, subject to paragraph 4.4, does not hold a Conflicting Appointment.

4.3 Subject to paragraph 11.7, the Users may appoint (and as the case may be re-appoint) a maximum of six (6) User Representatives to the Modification Panel.

4.4 Where a User proposes to appoint an individual under paragraph 4.1 who holds a Conflicting Appointment, the User must:

(a) notify the Secretary and the Secretary must notify the Regulator of the nature of any such appointment;

(b) provide satisfactory evidence of the confidentiality and conflict management processes which are in place to prevent a conflict of interest arising; and

(c) not give notice to the Secretary of such appointment until such time as the Regulator has provided its approval in writing of such proposed appointment which may be subject to conditions.

## 5. Regulator Representative

5.1 The Regulator may, from time to time, by notice to the Secretary identify the individual to be appointed as the Regulator's representative on the Modification Panel. The Regulator shall have absolute discretion over the individual that it appoints as the Regulator's representative.

5.2 The Regulator may, from time to time, revoke the appointment of an individual appointed as the Regulator's representative pursuant to paragraph 5.1 and, in its absolute discretion, identify a new individual to take over the role as the Regulator's representative.

## 6. Secretary of State Representative

6.1 The Secretary of State may, from time to time, by notice to the Secretary identify the individual to be appointed as the Secretary of State's representative on the Modification Panel. The Secretary of State shall have absolute discretion over the individual that it appoints as the Secretary of State's representative.

6.2 The Secretary of State may, from time to time, revoke the appointment of an individual appointed as the Secretary of State's representative pursuant to paragraph 6.1 and, in its absolute discretion, identify a new individual to take over the role as Secretary of State's representative.

## 7. Secretary

7.1 Subject to paragraph 7.3, the T&SCos must jointly appoint an individual representative to act as the Secretary within two (2) months from the Code Implementation Date. The Secretary must:

(a) attend meetings of the Modification Panel;

(b) carry out the various tasks and duties assigned to it in this Section B (Governance) in an efficient, effective and economic manner; and

(c) at all times act and take decisions in an impartial, objective and balanced manner and so as to act on behalf of all Parties.

7.2 The Secretary shall be appointed for a two (2) year period commencing on 1 April and ending with effect from the second anniversary of such date, provided that the first appointment period shall commence on the date which the Secretary is appointed under paragraph 7.1 and end on the following 31 March.

7.3 Where, at the time of appointment under paragraph 7.1 there is only one (1) T&SCo, that T&SCo must solely appoint the Secretary for the first appointment period.

7.4 Any appointment of the Secretary under paragraph 7.1 must expressly include provisions which:

(a) require the Secretary to carry out the duties of the Secretary as set out in this Section B (Governance);

(b) make clear that any duties of care that the Secretary owes to Users will be owed to Users whether or not they are a party to any agreement governing such appointment;

(c) make clear that any duties of care that the Secretary owes to the T&SCos will be owed to the T&SCos whether or not they are a party to any agreement governing such appointment; and

(d) require the Secretary to enable future T&SCos to accede to any agreement governing such appointment.

7.5 The T&SCos may at any time jointly revoke the appointment of an individual as the Secretary and appoint a new individual to the role.

7.6 The Secretary must notify the Regulator of any changes in the composition of the Modification Panel.

7.7 The Secretary must:

(a) develop a CCS Network Code Website within three (3) months of appointment under paragraph 7.1 for the purposes of publishing various Code related documents;

(b) notify each User, each T&SCo, each Third Party Participant, the Regulator and the Secretary of State in writing of the domain name of the CCS Network Code Website upon the CCS Network Code Website going live;

(c) maintain a list on the CCS Network Code Website of:

(i) all Parties to the Code and the dates upon which such Parties acceded to the Code; and

(ii) all Third Party Participants and Designated Non-Code Parties and the dates of designation of them as such;

(d) upon written notice by a T&SCo under paragraph 4.5 of Section A (Introduction, Structure and Interpretation), update the list of Parties to the Code under paragraph 7.7(c) to include any New Code Party; and

(e) otherwise maintain and update the CCS Network Code Website.

7.8 The Secretary shall be responsible for entering into a contract with the Panel Chairperson and Deputy Panel Chairperson to permit the recovery of reasonable costs and expenditure, with the terms to be agreed by Modification Panel vote.

7.9 Each T&SCo shall be responsible for funding an equal proportion of the costs and expenditure incurred by the Secretary in the carrying out of the various tasks and duties assigned to it in this Section B (Governance) ,including the Panel Chairperson and Deputy Panel Chairperson's costs and expenditure as a pass-through charge, provided that where paragraph 7.3 applies, the costs of the Secretary shall solely be borne for the first appointment period by the appointing T&SCo.

7.10 By:

(a) the date that is one (1) month after the date upon which the Secretary is first appointed under paragraph 7.1 in relation to the first Charging Year; and

(b) 30th October each Charging Year thereafter,

the Secretary must prepare and submit to the Modification Panel and the Regulator for the Modification Panel's approval:

(c) a Resource Plan; and

(d) Budget Forecast,

(the "**Resource Plan and Budget Forecast**") in accordance with the requirements of paragraphs 7.11 and 7.12.

7.11 The "**Resource Plan**" must include provision for the level of resources that the Secretary and Panel Chairperson and Deputy Panel Chairperson consider necessary to undertake theirfunctions respectively, which for the Secretary alone, may also include:

(a) suitable facilities for business purposes;

(b) office equipment, including telephones and other communication devices or computer workstations;

(c) office furniture; and

(d) any applications developed for internal or external business purposes, including the CCS Network Code Website to be established and maintained under paragraph 7.7.

7.12 The "**Budget Forecast**" must set out on a quarterly basis:

(a) the itemised budget forecast expenditure for each line item of resource to be provided;

(b) the estimated aggregate funds required to implement the Resource Plan; and

(c) such other costs and expenses, which the Modification Panel considers reasonable, to be incurred or likely to be incurred by the Secretary; and

(d) such other costs and expenditure, which the Modification Panel considers reasonable, to be incurred or likely to be incurred by the Panel Chairperson and Deputy Panel Chairperson, in the carrying out of the various tasks and duties assigned to them in this Section B (Governance).

7.13 The Modification Panel must, as quickly as practicable and in any event within ten (10) Business Days of receipt of the Resource Plan and Budget Forecast, determine whether or not to approve the proposed Resource Plan and Budget Forecast and must within such ten (10) Business Day period either notify the Secretary of its approval or, in the event that the Modification Panel considers changes or variations are required and reasonably withholds its approval, notify the Secretary of any changes or variations to the proposed Resource Plan and Budget Forecast recommended by the Modification Panel. If the Secretary does not accept such changes or variations submitted by the Modification Panel, any such dispute or difference must be referred to the Regulator to be determined by the Regulator.

7.14 Within one (1) month of the end of each Quarter within a Charging Year, the Secretary must prepare and submit to the Modification Panel and the Regulator an expenses claim setting out the details of any Secretary Expenditure (net of VAT) and Panel Chairperson and Deputy Panel Chairperson's costs and expenditure, during that Quarter, together with reasonable supporting evidence in relation to such expenses ("**Secretary's Expenses Claim**").

7.15 On receipt of the Secretary's Expenses Claim, the Modification Panel must, within ten (10) Business Days prepare and circulate to the Parties a statement setting out for the relevant Quarter within the Charging Year its determination of:

(a) the budgeted expenditure under the Resource Plan;

(b) taxes or duties chargeable, if any;

(c) the proportion of the Secretary Expenditure and Panel Chairperson and Deputy Panel Chairperson's costs and expenditure payable by each T&SCo in accordance with the principle of equal apportionment set out in paragraph 7.8; and

(d) any other information the Modification Panel, in its reasonable discretion, considers relevant,

(the "**Draft Statement of Expenses**").

7.16 If a Party disputes the Draft Statement of Expenses (or any part of it), it must, within five (5) Business Days of the date of the Draft Statement of Expenses, notify the Modification Panel and the Secretary with details of the dispute (an "**Expenses Dispute Notification**") and, within a further five (5) Business Days, provide such supporting evidence as the Modification Panel may reasonably require.

7.17 Within five (5) Business Days of the notice period for disputes under paragraph 7.16 expiring, the Modification Panel must:

(a) where no Expenses Dispute Notification has been made, notify the Parties and the Secretary that the Draft Statement of Expenses is final; or

(b) where one (1) or more Expenses Dispute Notifications have been made, circulate to the Parties and the Secretary a revised statement of expenses which must reflect the undisputed part of the Secretary's Expenses Claim only,

(the "**Final Statement of Expenses**").

7.18 The Modification Panel must consider all disputes under paragraph 7.16 and must make a determination, which must be notified to the Parties and the Secretary within fifteen (15) Business Days of the notice period for disputes under paragraph 7.15 expiring.

7.19 Determinations under paragraph 7.18 must be reflected in the next following Draft Statement of Expenses to be issued under paragraph 7.15, and any Party that made an Expenses Dispute Notification may not make an Expenses Dispute Notification in respect of that part or parts of the Draft Statement of Expenses that was subject to the earlier dispute. For any determinations or votes of the Modification Panel under paragraphs 7.8, 7.13, 7.15, 7.17, 7.18 and 7.19, the Panel Chairperson shall have the right of the Casting Vote, granted under paragraph 12.2(d), revoked.

7.20 Following receipt by the Modification Panel of the Final Statement of Expenses, the Secretary may invoice each of the T&SCos for its proportion of the Secretary Expenditure and Panel Chairperson and Deputy Panel Chairperson's costs and expenditure, together with VAT, for each Quarter within the Charging Year, as set out in the Final Statement of Expenses.

7.21 Each T&SCo must pay any amount due under paragraph 7.20 to the Secretary within thirty (30) Days of the amount being invoiced to it.

## 8. Appointments and retirements

8.1 Each Voting Member shall, by notice to the Secretary, be appointed for a two (2) year period commencing on 1 October and ending with effect from the second anniversary of such date ("**Appointment Period**"), provided that the first Appointment Period shall commence on the date of such appointment as indicated in the notice to the Secretary and end on the following 30 September.

8.2 Each Voting Member shall, prior to attending their first meeting of the Modification Panel, confirm by notice to the Secretary (in such form as the Secretary may reasonably request) that the Voting Member either:

(a) does not hold a Conflicting Appointment; or

(b) holds a Conflicting Appointment but such Conflicting Appointment has been approved by the Regulator in accordance with paragraph 3.4 or 4.4,

and until such time as the Voting Member has submitted such notice, the Voting Member shall not be entitled to exercise any voting rights.

8.3 Each Voting Member shall retire at end of their Appointment Period.

8.4 Each retiring Member shall be eligible for re-appointment.

8.5 Any Voting Member who is, pursuant to paragraph 8.3 to retire and who is not to be re-appointed (and consequently in respect of whom no notice shall have been received pursuant to paragraphs 8.6 or 8.7) shall not be entitled to receive notice of any meeting of the Modification Panel which is to take place after the end of their Appointment Period.

8.6 In respect of each individual who is a T&SCo Representative, the T&SCos must, not later than six (6) months prior to the expiry of the T&SCo Representative's Appointment Period, notify the Secretary (copying the notice to the Regulator):

(a) that such individual is to be re-appointed as a T&SCo Representative; or

(b) that such individual is not to be so re-appointed and the identity of the individual to be appointed as a T&SCo Representative in accordance with paragraph 3.3.

8.7 In respect of each individual who is a User Representative, the Users must, not later than six (6) months prior to the expiry of the User Representative's Appointment Period, notify the Secretary (copying the notice to the Regulator):

(a) that such individual is to be re-appointed as a User Representative; or

(b) that such individual is not to be so re-appointed and the identity of the individual to be appointed as a User Representative in accordance with paragraph 4.3.

8.8 Where any notice is received pursuant to paragraphs 8.6 or 8.7, the appointment or, as the case may be, the re-appointment to which such notice relates shall have effect from the 1 October specified in such notice. Each individual who is to be appointed or, as the case may be, reappointed as a Member at that meeting shall be entitled to receive notice of any

meeting of the Modification Panel which is to take place after the commencement of their Appointment Period.

8.9 If notices received in accordance with paragraph 8.6 or 8.7 are in respect of less than six (6) individuals to be appointed (or, as the case may be, reappointed) as User Representatives or T&SCo Representatives (as applicable), all individuals identified in such notices shall, pursuant to paragraph 8.6 or 8.7 (as applicable) be appointed (or, as the case may be, reappointed) and the individuals who are, pursuant to paragraph 8.3, to retire and in respect of whom no notice has been received pursuant to paragraph 8.6(a) or 8.7(a), shall retire at the end of their Appointment Period.

## 9. Alternates

9.1 Each Voting Member shall appoint two (2) individuals (including another Member other than the Panel Chairperson) to be the Voting Member's alternate.

9.2 Each non-Voting Member may appoint an individual (which may be another Member, but not the Panel Chairperson) to be the Member's alternate.

9.3 The appointment (and revocation of the appointment) of an alternate must be conditional upon and shall only be effective upon:

(a) in respect of an appointment, receipt of notice by the Secretary (in such form as the Secretary may reasonably request):

(i) from the Member identifying the individual to be appointed as the alternate; and

(ii) from the alternate to confirm a willingness to act as the Member's alternate and (in the case of an alternate to a Voting Member) to confirm the alternate either (A) does not hold a Conflicting Appointment or (B) holds a Conflicting Appointment but such Conflicting Appointment has been approved by the Regulator in accordance with paragraph 3.4 or 4.4; and

(b) in respect of a revocation of appointment, receipt of notice by the Secretary (in such form as the Secretary may reasonably request):

(i) of the Member's notice of revocation of the alternate's appointment; or

(ii) from the alternates confirming they no longer wish to act as an alternate.

9.4 A Member who is, by reason of also being an alternate of a Voting Member, entitled to exercise more than one (1) vote shall not be required to exercise all the votes which that Member is entitled to exercise, or to exercise all of the votes which that Member is entitled to exercise in the same way.

9.5 In addition to notices sent to Members, each alternate for the time being shall be entitled to be sent notices.

9.6 An alternate may attend any meeting of the Modification Panel which is not also attended by the Member (in their capacity as a Member) who appointed them. If that alternate is the alternate of a Voting Member, they may also vote and generally at any such meeting shall have and shall be able to exercise and discharge any and all of the functions, powers and duties of the Member who shall have appointed that alternate; provided that in the event both alternates of a Voting Member attend only the first to attend the meeting shall be able to vote, and the alternate second to attend shall have observer status only. Alternates of Voting Members may sign written resolutions pursuant to paragraph 18.3, provided that if an alternate of a Voting Member and the Voting Member who appointed them shall sign a written resolution, the signature of the Voting Member shall be effective and the signature of the alternate shall be disregarded.

9.7 If a Member ceases, for whatever reason, to be a Member, the appointment of any alternate of the Member shall lapse with immediate effect; provided that if any Member retires but is reappointed, any appointment made by that Member pursuant to paragraph 9.1 which is, and continues to be, effective prior to the retirement of that Member, shall continue to be effective after that Member's re-appointment.

9.8 Where an alternate to a Voting Member ceases to be an alternate in accordance with paragraph 10.5 or 10.6 or notifies the Voting Member that they no longer wish to be an alternate or has their appointment revoked, the Voting Member must appoint a replacement alternate as soon as reasonably practicable.

## 10. Ceasing to be a Member

10.1 A Member shall, other than by way of retirement pursuant to paragraph 8.3, cease to be a Member where:

(a) the Member notifies the Secretary that they wish to cease to be a Member; or

(b) in the case of a Voting Member:

(i) the Member (or its alternate) is absent from three (3) consecutive meetings (convened in accordance with paragraphs 13.1 and 14.1) of the Modification Panel;

(ii) the Member notifies the Panel Chairperson that they hold (or will hold) a Conflicting Appointment in accordance with paragraph 10.5 or

(iii) the Panel Chairperson determines the Member holds (or will hold) a Conflicting Appointment in accordance with paragraph 10.6 ,

and the Secretary must notify the other Members and such other relevant persons as the Secretary determines, on receipt of a notice under paragraph 10.1(a) or on the occurrence of any of the circumstances referred to in paragraph 10.1(b).

10.2 Where a Member ceases to be employed or engaged by the same specified entity as at the time of nomination, the appointing T&SCo or User must procure that such Member is

required (as soon as is practicable) to notify the Secretary of such change in circumstances and the date from which such change took, or will, take effect.

10.3 Where a notification is received by the Secretary under paragraph 10.2, that Member shall cease to be a Member with effect from the later of:

(a) the date from which that Member will no longer be employed or engaged by the relevant entity; or

(b) the day following the date the Secretary is informed, or made aware, of such change in circumstances.

10.4 A Voting Member or its alternate holds a "**Conflicting Appointment**" where:

(a) the Voting Member or alternate is employed or engaged by, or represents in any capacity an organisation (or an Associate or representative of such organisation); and

(b) another Voting Member or its alternate appointed to represent a different Panel Constituency is employed or engaged by, or represents in any capacity that same organisation (or an Associate or representative of that same organisation).

10.5 Unless the appointment has been approved by the Regulator pursuant to paragraph 3.4 or 4.4, where a Voting Member or an alternate holds a Conflicting Appointment, the Voting Member or alternate must promptly notify the Panel Chairperson and the Secretary, and the Secretary must notify the other Members and such other relevant persons as the Secretary determines, and the Voting Member or alternate shall cease to be a Member or an alternate with immediate effect.

10.6 Where a Member has bona fide grounds for believing a Voting Member or alternate holds (or will hold) a Conflicting Appointment, the Member may notify the Panel Chairperson, and the Panel Chairperson may investigate the matter; and where the Panel Chairperson determines that (in its reasonable opinion) the Voting Member or alternate holds (or will hold) a Conflicting Appointment the Panel Chairperson must notify the Secretary and the Secretary must notify the Voting Member or the alternate, the other Members (and such other relevant persons as the Secretary determines) and the Voting Member or the alternate shall cease to be a Member or an alternate with immediate effect.

10.7 For the purposes of an investigation in accordance with paragraph 10.6, the Panel Chairperson may engage a suitably qualified third party to assist with the investigation.

10.8 Where a Voting Member or an alternate ceases to be a Member in accordance with paragraph 10.5 or 10.6, the relevant individual may not:

(a) act as a Member or as an alternate until such time as there is no longer a Conflicting Appointment or such Conflicting Appointment has been approved by the Regulator in accordance with paragraph 3.4 or 4.4; or

(b) be appointed to fill the vacancy arising as a result of the Voting Member or alternate ceasing to be a Voting Member or alternate.

10.9 Where pursuant to paragraph 10.1 or otherwise a vacancy shall arise, subject always to the principles set out in paragraphs 3, 4 and 11, in the case of:

(a) a T&SCo Representative, the T&SCos must, by notice to the Secretary, identify another individual to be appointed as a T&SCo Representative in accordance with paragraph 3.3; or

(b) a User Representative, the Users must, by notice to the Secretary, identify another individual to be appointed as a User Representative in accordance with paragraph 4.3.

## 11. New Code Parties

11.1 At any time after the Modification Panel has been established in accordance with paragraph 1.3 where a new T&SCo accedes to the Code:

(a) subject to paragraph 11.2, such new T&SCo shall be entitled to appoint a T&SCo Representative in accordance with paragraph 3.1; and

(b) the Appointment Period for any such new T&SCo Representative shall commence on the date notice is provided to the Secretary of such appointment under paragraph 8.1 and end on the following 30 September.

11.2 At any time after the Modification Panel has been established in accordance with paragraph 1.3, where a new T&SCo accedes to the Code and the limit of six (6) T&SCo Representatives prevents each T&SCo from having one (1) T&SCo Representative in accordance with paragraph 3.1:

(a) each of the existing T&SCo Representatives must give notice to the Secretary in accordance with paragraph 10.1 that it wishes to cease to be a Member;

(b) the T&SCos (including the T&SCo that has recently acceded to the Code) shall collectively by ballot, vote to appoint the six (6) T&SCo Representatives; and

(c) the Appointment Period for any such newly appointed Voting Members shall commence on the date notice is provided to the Secretary of such appointment under paragraph 8.1 and end on 30 September the following year.

11.3 Where upon completion of the voting process under paragraph 11.2(b), two (2) or more individuals have received the same number of votes, the ballot process will be repeated. A new ballot paper will be circulated to each T&SCo containing only the names of the individuals who received the same number of votes.

11.4 At any time after the Modification Panel has been established in accordance with paragraph 1.3, where a new User accedes to the Code:

(a) subject to paragraph 11.5, such new User shall be entitled to appoint a User Representative in accordance with paragraph 4.1; and

(b) the Appointment Period for any such new User Representative shall commence on the date notice is provided to the Secretary of such appointment under paragraph 8.1 and end on 30 September the following year.

11.5 At any time after the Modification Panel has been established in accordance with paragraph 1.3, where a new User accedes to the Code and the limit of six (6) User Representatives prevents each User from having one (1) User Representative in accordance with paragraph 4.1:

(a) each of the existing User Representatives must give notice to the Secretary in accordance with paragraph 10.1 that it wishes to cease to be a Member;

(b) provided that there is at least one (1) representative of each User Type, the Users (including the User that has recently acceded to the Code) shall collectively by ballot, vote to appoint the six (6) User Representatives; and

(c) the Appointment Period for any such newly appointed Voting Members shall commence on the date notice is provided to the Secretary of such appointment under paragraph 8.1 and end on 30 September the following year.

11.6 Where upon completion of the voting process under paragraph 11.5(b), two (2) or more individuals have received the same number of votes, the ballot process will be repeated. A new ballot paper will be circulated to each User containing only the names of the individuals who received the same number of votes.

11.7 Where there are more than six (6) User Types, from the date upon which any such additional User Types accede to the Code, the maximum number of User Representatives on the Modification Panel shall be increased to the number of User Types (and where such accession occurs after the Modification Panel has been established in accordance with paragraph 1.3, the process in paragraph 4.1 shall apply to the appointment of any additional User Representatives where there is one (1) User of each User Type and in all other cases, paragraph 11.5 shall apply to the appointment of User Representatives).

11.8 If the number User Representatives on the Modification Panel is increased pursuant to paragraph 11.7, the maximum number of T&SCo Representatives on the Modification Panel shall be increased to equal the increased number of User Representatives (and where such accession occurs after the Modification Panel has been established in accordance with paragraph 1.3, the process in paragraph 11.2 shall apply to the appointment of T&SCo Representatives).

## 12. Meetings of the Panel

12.1 Meetings of the Modification Panel will provide a forum in which Modification Proposals can be discussed in accordance with the Modification Procedures.

12.2 Except as otherwise permitted in the Code:

(a) determinations of the Modification Panel must be made by Panel Majority; and

(b) Workgroups may be created or dissolved by Panel Majority,

where "**Panel Majority**" means:

(c) a majority (in number) of the votes exercised by the Voting Members present at that meeting and voting in favour of such matter; or

(d) if there is an equal number of votes by the Voting Members present at that meeting in favour of and against such matter, where the Panel Chairperson elects to exercise a Casting Vote in favour of such matter.

12.3 Other than as expressly provided in the Modification Rules, the Modification Panel shall have no ability to determine any matter and no competence to discharge any function or to exercise any power.

## 13. Frequency of meetings

13.1 The Secretary must convene meetings of the Modification Panel by notice to the Members and Panel Chairperson not less frequently than once each month unless there is no matter as an Agenda item for the Modification Panel to discuss. In any event, a meeting of the Modification Panel must be convened once every three (3) calendar months.

## 14. Notice convening meetings

14.1 Subject to paragraphs 15.1, 15.2 and 41.2 and 42.1, the Secretary must not convene meetings of the Modification Panel pursuant to paragraph 13.1 on less than ten (10) Business Days notice.

14.2 Every notice convening a meeting of the Modification Panel pursuant to paragraph 13.1 must specify the place, date and time of the meeting and enclose an Agenda. All relevant materials in respect of a meeting of the Modification Panel must be circulated by the Secretary not less than five (5) Business Days prior to the meeting to which they relate, subject to paragraph 41.2 and 42.1 or paragraph 14.4 where in the opinion of the Secretary a shorter period would better facilitate the exercise by the Modification Panel of its powers, within such shorter period as the Secretary shall determine.

14.3 Each Member and the Panel Chairperson shall be entitled to receive each notice and the relevant materials. At the same time as any notice is despatched to Members and the Panel Chairperson, a copy of such notice must be despatched by the Secretary to each User, each T&SCo, each Third Party Participant and each Designated Non-Code Party. There may be circumstances where materials to be despatched with a notice have, pursuant to the Modification Rules, already been sent to Users, the T&SCos, Third Party Participants and Designated Non-Code Parties. In any such circumstance the relevant materials may be, but do not have to be, sent with the notice.

14.4 Notwithstanding where the Secretary has determined a shorter period to circulate the relevant materials in respect of a meeting of the Modification Panel pursuant to paragraph 14.2, no new items to the Agenda shall be considered except by determination of the Modification Panel.

## 15. Short notice

15.1 The Modification Panel may at any meeting of the Modification Panel determine that the next following meeting of the Modification Panel be convened on shorter notice than specified in paragraph 14.1 and where the Modification Panel has so determined, the Secretary must convene a meeting of the Modification Panel in accordance with that determination.

15.2 Without prejudice to paragraph 14.1, if a Panel Majority agree in writing, the Secretary must convene a meeting of the Modification Panel on shorter notice than specified in paragraph 14.1.

15.3 Any meeting of the Modification Panel convened pursuant to paragraph 15.1 or paragraph 15.2 shall, notwithstanding that such meeting is convened on shorter notice than that specified in paragraph 14.1, be duly convened.

## 16. Location and Form of Meetings

16.1 Meetings of the Modification Panel may take place by any audio, audio-visual or interactive communication, provided that each Member shall be able to communicate to each of the other Members and be heard by each of the other Members simultaneously.

16.2 Any Member who shall be able to participate in the manner envisaged by paragraph 16.1 in any meeting of the Modification Panel shall be treated as being present at such meeting, notwithstanding that the Members may not all be meeting in the same place and accordingly shall, if such Member is a Voting Member, be entitled to vote and shall count towards a quorum.

## 17. Quorum

17.1 The persons required to be present at a meeting of the Modification Panel for the meeting to be quorate are:

(a) a majority of the number of T&SCo Representatives appointed at the time of the meeting; and

(b) a majority of the number of User Representatives appointed at the time of the meeting, including at least one (1) User Representative for each User Type.

17.2 If a quorum is not present at the time for the holding of a meeting (specified in the notice convening the meeting) or at any time during the hour following that time or shall at any time during the meeting cease to be present for more than fifteen (15) minutes, the meeting shall stand adjourned to the same place and at the time specified in the notice convening the meeting five (5) Business Days later and the Secretary must notify each Member and (for information purposes only) each User, T&SCo, Third Party Participant and Designated Non-Code Party that such is the case. If at such place and time the meeting so adjourned is not quorate in accordance with paragraph 17.1 the Voting Members (if any) present shall be a quorum.

17.3 Any meeting of the Modification Panel at which a quorum is and remains present shall be competent to discharge any and all of the functions within the competence of the Modification Panel.

## 18. Voting

18.1 Any matter expressed to require a determination of the Modification Panel must be determined by a vote.

18.2 On any vote, each Voting Member present shall be entitled to exercise at least one (1) vote. Where there is:

(a) an equal number of T&SCo Representatives and User Representatives present, each Voting Member shall be entitled to exercise one (1) vote; and

(b) an unequal number of T&SCo Representatives and User Representatives present, votes shall be weighted such that:

(i) there shall be an equal number of voting rights between T&SCo Representatives and User Representatives;

(ii) between each T&SCo Representative there shall be equally weighted voting rights; and

(iii) between each User Representative there shall be equally weighted voting rights.

18.3 A resolution in writing signed in wet ink or electronically by Voting Members shall be valid and effective for the purposes of discharging any function requiring a determination of the Modification Panel as if such vote were conducted in accordance with paragraph 18.1 at a duly convened meeting of the Modification Panel, provided that votes are received by the Secretary from such Members as would, if present, form a quorum in accordance with paragraph 17.1 not later than three (3) Business Days (or such shorter period as the Secretary may reasonably notify) following receipt by Voting Members of such documents as are necessary for the purposes of such written resolution.

## 19. Observers and Invitees

19.1 Any Third Party Participant and any Designated Non-Code Party is entitled to have one (1) representative attending a meeting of the Modification Panel, subject to the terms of their designation by the Regulator. The Panel Chairperson may also at its discretion, authorise any additional individual (who is not a Member) to attend a meeting of the Modification Panel on behalf of a User, a T&SCo, a Third Party Participant, the Secretary of State or a Designated Non-Code Party and to participate in the business of the meeting.

19.2 In exercising its right to authorise any individual to attend a meeting of the Modification Panel in accordance with paragraph 19.1, the Panel Chairperson must have regard to the principle of maintaining (where reasonably practicable) equality of representation in any one (1) meeting.

19.3 The Modification Panel may, from time to time, determine to invite any individual to attend all or part of a meeting of the Modification Panel.

19.4 The Secretary may, at the written request of the Regulator, invite any individual to a meeting or meetings of the Modification Panel. Where such an invitation is made, the Secretary must give as much notice as reasonably practicable to Members of the name of the individual invited, the organisation that the individual represents and the date of the relevant meeting(s). Where the Regulator requests the Secretary to invite any individual, the Secretary must set out in writing to the Regulator details of any objections that the Parties may have to such attendance.

19.5 Any invitee to a meeting of the Modification Panel pursuant to paragraph 19.3 or 19.4 shall be entitled to receive copies of any relevant minutes, agendas, notices and Modification Proposals due to be discussed at that meeting and shall, at the discretion of the Panel Chairperson, be entitled to participate in the business of the meeting.

## 20. Minutes

20.1 The Secretary must:

(a) ensure that all meetings of the Modification Panel and all determinations of the Modification Panel (at meetings of the Modification Panel) are minuted and, as regards such determinations, that the minutes record the manner in which each Voting Member cast their vote in respect of each matter determined by the Modification Panel; and

(b) issue a report of determinations of the Modification Panel to each Member, each T&SCo, each User and each Third Party Participant within three (3) Business Days of the meeting of the Modification Panel at which such determinations were made.

20.2 The Secretary must, within five (5) Business Days following the date of the relevant meeting, send each Member, each T&SCo, each User and each Third Party Participant a copy of any minutes of that meeting made pursuant to paragraph 20.1.

## 21. Provision of information

21.1 The Modification Panel may, from time to time, determine to provide to any person a document derived from the application of these Modification Rules (including any minutes made pursuant to paragraph 20.1), or considered in accordance with the Modification Rules.

21.2 If the Modification Panel determines, the Secretary must ensure that within a reasonable period of time the document which is the subject of such determination shall be sent to such person.

## 22. Third Party Participants

22.1 The Regulator has the right (but not the obligation) to designate, from time to time, any person or body who is not a Party to the Code but who is representative of interested third parties to participate in the Modification Procedure as a third party participant ("**Third Party**

**Participant**"), in accordance with Standard Condition B5.8 (CCS Network Code) of the Licence.

22.2 Third Party Participants may include a future User and/or future T&SCo as identified under a Selection Process.

22.3 Any designation under paragraph 22.1 must be made in writing and must be maintained on a register held by the Regulator.

22.4 The Regulator shall be entitled to de-designate any persons designated under paragraph 22.1 at any time.

## 23. Modification Proposals

23.1 A Modification Proposal in respect of the Code may be made from time to time by:

(a) a T&SCo;

(b) a User;

(c) a Third Party Participant;

(d) the Regulator, where such Modification Proposal is a Significant Code Review Modification Proposal or an Urgent Modification Proposal; or

(e) the Secretary of State.

23.2 The Regulator may direct a T&SCo to make a Significant Code Review Modification Proposal in respect of the Code and the T&SCo must make a proposal in accordance with that direction and such a proposal must proceed in accordance with the Modification Procedures.

23.3 Without prejudice to the generality of paragraph 23.1(d), where the Regulator has issued:

(a) a statement (that it will continue work on a Significant Code Review) in accordance with Standard Condition B5.18 (CCS Network Code) of the Licence; or

(b) a direction (a backstop direction) in accordance with Standard Condition B5.24 (CCS Network Code) of the Licence,

the Regulator may make a Significant Code Review Modification Proposal.

23.4 A T&SCo, a User or a Third Party Participant may not make a Modification Proposal in respect of the Code during the relevant Significant Code Review Phase if the subject matter of such proposal relates to a matter which is the subject of a Significant Code Review, unless the Regulator directs that it may do so, having taken into account, among other things, the urgency of the subject matter of such proposal.

## 24. Form of Modification Proposals

24.1 Each Modification Proposal made pursuant to paragraph 23.1:

(a) must state the Proposer's view as to:

(i) whether it should be a Self-Governance Modification Proposal and the Proposer's reasons for such a view; and

(ii) whether, if the Proposer's view is that it should be a Self-Governance Modification, it satisfies the Fast Track Self-Governance Procedure and the Proposer's reasons for such a view;

(b) must, where it is made pursuant to a direction of the Regulator, state that it is so made;

(c) in the case of a Modification which proposes a timescale for the implementation of the Modification (for the purposes of enabling the Regulator and any persons, including but not limited to Users, the T&SCos and Third Party Participants to be aware of the potential benefits or constraints associated with such timing), except in the case where the Regulator has directed a timetable in accordance with paragraph 42.1 and/or 42.2, where only one (1) Fixed Implementation Date may be included, must include:

(i) two (2) or more Fixed Implementation Dates;

(ii) a Proposed Regulator Decision Date in respect of each Fixed Implementation Date, for the purposes of enabling the Modification to be implemented by the Fixed Implementation Date;

(iii) a Backstop Lead Time; and

(iv) the reasons why it is proposing each date under paragraph 24.1(c)(i), 24.1(c)(ii) and 24.1(c)(iii);

(d) must be in writing;

(e) must set out in reasonable but not excessive detail the case for change and the solution proposed;

(f) must detail the Sections and paragraphs of the Code which are potentially impacted by the Modification Proposal;

(g) must, if the Proposer considers that the Modification Proposal should be treated as an Urgent Modification Proposal, identify the Modification Proposal as such and indicate the Proposer's justification for such belief;

(h) must state the name of the Proposer and their contact details;

(i) must, unless paragraph 24.1 (a) (ii) applies, and without prejudice to the Modification Panel's right of determination pursuant to paragraph 28.2, state the Proposer's preference as to whether the Modification Proposal should:

(i) proceed to Consultation;

(ii) proceed to Workgroup Assessment.

(j) may state the Proposer's opinion of the likely impact of the implementation of the Modification Proposal upon User's computer systems and/or manual processes and procedures;

(k) may include the Proposer's suggested text;

(l) where it is a Significant Code Review made by the Regulator must state that it is such;

(m) must set out on the basis upon which the Proposer considers that it would better facilitate the achievement of the Relevant Objectives; and

(n) must state the proposed timeframe for the implementation of the Modification Proposal.

24.2 The Modification Panel may, from time to time, stipulate the form which Modification Proposals should take.

24.3 The Secretary must establish and maintain an online register publishing the content of all Modification Proposals on the CCS Network Code Website to be established under paragraph 7.7.

24.4 Each Modification Proposal must be given to the Secretary who must ensure that the information required pursuant to the Code has been provided before accepting such Modification Proposal.

24.5 Where a purported Modification Proposal, does not comply with paragraph 24.1, the Secretary may reject such a Modification Proposal.

24.6 On receipt of a Modification Proposal, the Secretary must:

(a) allocate a unique reference number to that Modification Proposal;

(b) update the online register of Modification Proposals established pursuant to paragraph 24.3;

(c) by the later of:

(i) the end of three (3) Business Days following receipt of a Modification Proposal; or

(ii) the end of the first Business Day following the date on which the Secretary receives notification of any decision of the Regulator pursuant to paragraph 41.2 as to whether the Modification Proposal should be treated as an Urgent Modification Proposal,

send a copy of that Modification Proposal to each Member, each Third Party Participant and each Designated Non-Code Party (if any); and

(d) subject to paragraph 41.2, put initial discussion of the Modification Proposal on the Agenda for the next meeting of the Modification Panel (provided the Modification

Proposal is received no later than eight (8) Business Days prior to the date of the next meeting of the Modification Panel). Where there are fewer than eight (8) Business Days before the next Modification Panel meeting, the discussion of the Modification Proposal shall be put on the Agenda for the following Modification Panel meeting.

## 25. Proposer's Representative

25.1 Subject to paragraph 41.2, each Proposer must ensure the attendance of its representative at the meeting of the Modification Panel at which a Modification Proposal is to be discussed initially; at such meeting the representative may give a presentation in respect of the Modification Proposal and must endeavour to answer any questions which the Modification Panel may have in respect of the Modification Proposal and any presentation given.

25.2 If a representative of the Proposer does not for whatever reason attend the meeting of the Modification Panel at which the relevant Modification Proposal is to be discussed initially, the Modification Panel may determine that, notwithstanding such non-attendance of the representative, the Modification Panel shall proceed to discuss the Modification Proposal.

25.3 If the Modification Panel does not make a determination pursuant to paragraph 25.2, the Modification Panel will not discuss the Modification Proposal further unless and until the representative of the Proposer has attended a meeting of the Modification Panel pursuant to paragraph 25.1 or the Modification Panel has determined to discuss the Modification Proposal further.

## 26. Non-Code Parties

26.1 The Secretary must:

(a) send copies of any Modification Proposal and any Modification Report prepared in respect of such Modification Proposal to and invite representations in respect thereof from Designated Non-Code Parties; and

(b) publish on the CCS Network Code Website copies of the documents referred to in paragraph 26.1(a) so that they are accessible to any other interested Non-Code Parties.

## 27. Modification Proposals made during a Significant Code Review Phase

27.1 Where the Regulator has received a written assessment of the Modification Panel under paragraph 28.4 in respect of a Modification Proposal, the Secretary must notify the Proposer and each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any), of the direction or re-direction it has received from the Regulator.

27.2 Where the direction or re-direction received by the Secretary from the Regulator is not to proceed with the Modification Proposal, that Modification Proposal shall become a Significant Code Review Suspended Modification Proposal and shall continue to be so until either the end of the Significant Code Review Phase or as the Regulator directs otherwise (having taken into account, among other things not limited to, the urgency of the subject matter of such a proposal).

27.3 Where the Regulator has not made a direction or has not made a re-direction not to proceed with a Modification Proposal in respect of which the Regulator has received a written assessment under paragraph 28.4, such proposal shall not be or shall cease to be a Significant Code Review Suspended Modification Proposal and that Modification Proposal shall proceed in accordance with the Modification Procedures.

## 28. Discussion of Modification Proposal

28.1 Subject to paragraph 32.1 and 42.1, the Modification Panel must discuss each new Modification Proposal at a meeting of the Modification Panel. The Modification Panel must make determinations having:

(a) discussed the Modification Proposal;

(b) heard the presentation of the Proposer's representative (provided that the Modification Panel shall be entitled to determine to proceed where the Proposer's representative does not attend and such non-attendance shall not be taken into account in any further determination);

(c) had an opportunity to ask the Proposer's representative questions in respect of the Modification Proposal and the presentation of the Proposer's representative;

(d) considered whether there are any other persons from whom representations should be invited and considered; and

(e) determined whether it could be reasonably expected that the Modification Proposal would, if implemented, have a material impact having regard to any statements made by the Proposer pursuant to paragraph 24.1(a) as to whether and why the Modification Proposal should be a Self-Governance Modification Proposal.

28.2 The Modification Panel may determine that a Modification Proposal:

(a) either satisfies the Self-Governance Criteria or does not;

(b) where the Self-Governance Criteria has been determined to be satisfied, either satisfies the Fast Track Self-Governance Procedure (which must be determined Unanimously by the Modification Panel) or does not;

(c) where the Fast-Track Self-Governance Criteria has been determined to be satisfied, the Modification be implemented (which must be determined Unanimously by the Modification Panel);

(d) should be referred to a Workgroup for a Workgroup Assessment (and the Modification Panel may determine the Modification Terms of Reference for such work (including terms as to the identity of any third parties to be consulted, which may include Third Party Participants and Non-Code Parties) and the date upon which it requires the Workgroup to submit its Workgroup Report);

(e) should proceed to Consultation;

(f) should be deferred to a subsequent meeting of the Modification Panel for further discussions; or

(g) should be referred back to the Proposer for further development (provided this can only be determined once per Modification Proposal).

28.3 The Modification Panel must assess whether the subject matter of a Modification Proposal made by a Proposer other than the Secretary of State during a Significant Code Review Phase relates to a matter that is the subject of an ongoing Significant Code Review for the purposes of paragraph 23.4.

28.4 The Modification Panel must instruct the Secretary to submit to the Regulator as soon as is reasonably practicable, a written assessment of a Modification Proposal including:

(a) representations received as to whether such proposal relates to the matter which is the subject of a Significant Code Review;

(b) its determination (including where no determination can be reached due to a tie in the number of votes for and the number of votes against) as to whether such proposal relates to a matter which is the subject of Significant Code Review;

(c) its reasons for making such determination; and

(d) a copy of the relevant Modification Proposal.

28.5 If the Modification Panel determine that a Modification Proposal satisfies the Fast Track Self-Governance Criteria but fails to vote Unanimously to implement that Modification Proposal under paragraph 28.2(c), the Modification shall become a Self-Governance Modification and be further determined by the Modification Panel under paragraph 28.2.

28.6 Where the Modification Panel determines that paragraph 28.2(g) applies they:

(a) must set out the questions to be answered and specify any areas for further development by the Proposer; and

(b) shall only be entitled to exercise this vote once per Modification Proposal.

28.7 Paragraphs 28.1 to 28.6 shall not apply to any Significant Code Review Modification Proposals made by the Regulator in the circumstances specified under paragraph 23.3.

## 29. Workgroup Assessment

29.1 If the Modification Panel determines that a Modification Proposal should proceed to Workgroup Assessment then the Secretary must within ten (10) Business Days of such determination finalise the Modification Terms of Reference for that Workgroup Assessment in accordance with paragraph 31 and notify each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any) and invite them to make representations in respect of the Modification Proposal within fifteen (15) Business Days.

29.2 Once the Modification Terms of Reference for the Workgroup Assessment have been finalised:

(a) the Workgroup must meet and consider the Modification Proposal in accordance with the details and timescales set out in the Modification Terms of Reference. Each Workgroup must conduct its business:

(i) in such manner as to allow any person to attend and participate in meetings of the Workgroup; and

(ii) in accordance with the Code;

(b) the Secretary must ensure that the Regulator is notified of all meetings of the Workgroup and invited to attend; and

(c) the Secretary must ensure that the Secretary of State is notified of all meetings of the Workgroup and invited to attend; and

(d) the Secretary must prepare a Workgroup Report containing a recommendation based on the Workgroup's consideration of the Modification Proposal within the timescale set out in the Modification Terms of Reference and send a copy to all Members, Third Party Participants and Designated Non-Code Parties (if any) as soon as reasonably practicable but in any event not less than eight (8) Business Days prior to the meeting of the Modification Panel at which that report is to be discussed.

29.3 The Workgroup Report must comply with the requirements for a Modification Report set out in paragraph 36.1.

29.4 If two (2) or more Modification Proposals shall have been considered together by the Workgroup, the Workgroup Report must report on each Modification Proposal.

29.5 Each Workgroup Report must (subject to paragraphs 15.1 and 15.2) be sent to all Members, Third Party Participants and Designated Non-Code Parties (if any) as soon as reasonably practicable but in any event not less than eight (8) Business Days prior to the meeting of the Modification Panel at which that report is to be discussed.

## 30. Discussion of Workgroup Report

30.1 Having:

(a) discussed the Workgroup Report; and

(b) allowed any person who attended and participated in the relevant Workgroup (in attendance at the meeting of the Modification Panel) to express any views on the substance of the Workgroup Report or the conduct of the consideration of the Modification Proposal by the Workgroup,

the Modification Panel must determine:

(c) that the Modification Proposal shall proceed to Consultation in accordance with paragraph 35.1;

(d) to refer the Workgroup Report back to the Workgroup for revision or further work; or

(e) to consider further the Workgroup Report at a subsequent meeting of the Modification Panel.

## 31. Modification Terms of Reference

31.1 The Modification Terms of Reference for each Modification Proposal referred to a Workgroup must:

(a) detail the Modification Proposal, including;

(i) detailing the work to be undertaken by the Workgroup, to enable the Workgroup to prepare its report; and

(ii) specifying any matters, in addition to those referred to in the Code, which the Workgroup, should address in its report;

(b) detail other matters (if any) to be considered or reviewed by the Workgroup;

(c) state whether the Workgroup, should consult with any other person for the purposes of its report, and if so, detail the extent to which and identify which person (or persons) it should consult with, but this shall not require the Secretary to engage or remunerate any person so consulted; and

(d) set a timetable in accordance with which the work of the Workgroup is to be done and its report prepared.

31.2 Unless the Modification Panel shall otherwise determine, the timetable referred to in paragraph 31.1(d) shall consist of a period of up to six (6) months. Where the Modification Panel determines that such timetable should be extended so that it exceeds a period of six (6) months in aggregate, it must notify the Regulator and the timetable shall be so extended unless the Regulator objects. Where the Regulator objects to such extension, the Modification Panel shall make a determination under paragraph 28.2 in respect of the relevant Modification Proposal at the next meeting of the Modification Panel.

31.3 The Modification Panel may, from time to time, determine:

(a) to change the Modification Terms of Reference of any Workgroup; or

(b) if the Modification Terms of Reference of the relevant Workgroup so anticipate, that the Workgroup should undertake new or further work or consider new matters (whether or not related to any earlier work undertaken by that Workgroup).

## 32. Alternative Proposals

32.1 In respect of a Modification Proposal which the Modification Panel pursuant to paragraph 28.2(d) has determined should be referred to a Workgroup, a Party or a Third Party Participant, the Regulator (in the case of Urgent Modification Proposals or a Significant Code Review Modification Proposal) or the Secretary of State, being a person other than the Proposer, may make an alternative Modification Proposal in accordance with paragraph 24.1 and the Workgroup must consider an alternative Modification Proposal made under this

paragraph 32.1 if it is made no less than five (5) Business Days before the next meeting of the Workgroup. Where there are fewer than five (5) Business Days before such Workgroup meeting, the alternative Modification Proposal will be included on the agenda for the following Workgroup meeting.

32.2 Where a Modification Proposal has been referred to a Workgroup and the Workgroup requests that the Modification Proposal should be amended but the Proposer of the Modification Proposal does not agree to amend the Modification Proposal, any person (other than the Proposer) who is eligible to make an alternative Modification Proposal under paragraph 32.1 may, in accordance with paragraph 24.1 make an alternative Modification Proposal under this paragraph 32.2 which must include the amendment.

32.3 Where the Modification Panel has determined a Modification Proposal should be referred to a Workgroup and:

(a) the Workgroup Report in respect of such Modification Proposal has been sent to all Members in accordance with paragraph 29.2; or

(b) the Modification Panel has made a determination to refer the Workgroup Report in respect of such Modification Proposal back to the Workgroup for revision or further work under paragraph 30.1(d) and such Workgroup Report has been sent to all Members in accordance with paragraph 32.1 after such revision or further work,

an alternative Modification Proposal shall not be made in respect of Modification Proposal or be considered by the Workgroup under paragraph 32.1.

32.4 Where the Modification Panel has determined a Modification Proposal should be referred to a Workgroup under paragraph 28.2(d) and the Workgroup Report in respect of such Modification Proposal has been sent to the Modification Panel, an alternative Modification Proposal shall not be made in respect of such Modification Proposal or be considered by the Workgroup under paragraph 32.1.

32.5 An alternative Modification Proposal may not be made:

(a) in respect of a Modification Proposal after the Modification Panel pursuant to paragraph 28.2(e) has determined such Modification Proposal should proceed to Consultation; or

(b) where the Regulator directs a T&SCo in writing that an alternative Modification Proposal shall not be made in respect of a Modification Proposal; or

(c) by the Regulator, unless such alternative Modification Proposal is in respect of a Significant Code Review,

in case of limb (b), the T&SCo must notify the Secretary about the direction as soon as reasonably practicable after it has been received by the T&SCo, and the Modification Panel must ensure that a Modification Proposal will not be considered as an alternative Modification Proposal to the relevant Modification Proposal.

32.6 In respect of any Modification Proposal which is withdrawn, any of the Parties (except for the Proposer) may, but shall not be required to, either raise an alternative Modification Proposal in accordance with paragraph 24.1) or adopt the withdrawn proposal (in which case the adopted proposal shall continue through the Modification Procedures from the point at which it was withdrawn).

## 33. Withdrawal or variation of Modification Proposals

33.1 A Proposer may:

(a) subject to paragraph 33.7, withdraw a Modification Proposal, at any time before the final Modification Report is circulated to the Regulator pursuant to paragraph 35.7 or in respect of a Self-Governance Modification Proposal at any time before the Modification Panel makes a determination under paragraph 39.8(a), by notice to the Secretary, and subject to paragraph 32.1, any Modification Proposal so withdrawn shall lapse;

(b) subject to paragraph 33.7, vary a Modification Proposal, at any time before the Modification Panel has determined to proceed to Consultation by notice to the Secretary, and subject to paragraphs 32.1 to 32.6, any Modification Proposal so varied shall replace the original Modification Proposal; or

(c) subject to paragraphs 32.1 to 32.6, 33.7 and 33.8, request a variation to a Modification Proposal ("**Variation Request**"), at any time after the Modification Panel has determined to proceed to Consultation pursuant to paragraph 28.2(e) and before the Modification Panel has made a determination in respect of such Modification Proposal pursuant to paragraph 35.6(a), by notice to the Secretary, and any such Variation Request shall contain a description of the nature of the variation.

33.2 The Secretary must, within a reasonable period of time following any withdrawal (including any withdrawal directed by the Regulator pursuant to paragraph 33.8), variation or Variation Request (except where such Variation Request is made at the Modification Panel meeting) notify each T&SCo, each Member, each User, each Third Party Participant and each Designated Non-Code Party of such withdrawal, variation or Variation Request (as the case may be) and update the online register of Modification Proposals to indicate that this is the case.

33.3 Following receipt of the notice given pursuant to paragraph 33.1(c), the Secretary must submit such Variation Request to the appropriate Modification Panel which the Proposer may attend for the purpose of explaining the Variation Request.

33.4 Subject to paragraphs 32.1 to 32.6 and paragraph 33.8, the Modification Proposal shall be varied to replace the original Modification Proposal which shall be deemed withdrawn where the Modification Panel:

(a) determines by a Unanimous vote that the Variation Request is immaterial, and in such case the varied Modification Proposal shall continue through the Modification Procedures from the point at which the original Modification Proposal was deemed withdrawn; or

(b) does not so determine in accordance with paragraph 33.4(a), and in such case the Modification Panel shall make a determination in respect of the varied Modification Proposal in accordance with paragraph 28.2.

33.5 The Proposer of a Variation Request may withdraw it at any time before the Modification Panel votes in accordance with paragraph 33.4.

33.6 A Modification Proposal made by a User shall be deemed withdrawn where the User ceases to be a User.

33.7 For the purposes of paragraphs 33.1 to 33.8, the Regulator, upon request by a Proposer of a Significant Code Review Modification Proposal, may direct:

(a) that the Proposer may vary, withdraw or make a Variation Request in respect of the relevant Significant Code Review Modification Proposal; or

(b) that the Proposer may not vary, withdraw or make a Variation Request in respect of the relevant Significant Code Review Modification Proposal and that such proposal shall proceed in accordance with the Modification Procedures.

33.8 Any Significant Code Review Modification Proposal and any alternative to such Significant Code Review Modification Proposal shall be withdrawn where the Regulator issues a direction to that effect.

## 34. Significant Code Review Modification Proposals made by the Regulator during Significant Code Reviews

34.1 Upon receipt of a Significant Code Review Modification Proposal made by the Regulator in the circumstances specified in paragraph 23.3, the Modification Panel must:

(a) determine the factors which (in its opinion) justify the making or not making of the proposed modification, including whether, and if so, how, the proposed modification would better facilitate the achievement of the Relevant Objectives;

(b) determine whether or not to recommend the implementation of the Modification Proposal to the Regulator; and

(c) require the Secretary to prepare a report on the factors on which that recommendation is based, or where no recommendation can be reached, state in such report the number of Voting Members in favour of, and the number of Voting Members present and not voting in favour of, the implementation of the Modification Proposal.

34.2 The Secretary must, within five (5) Business Days of receipt of a Modification Panel recommendation pursuant to paragraph 34.1 (or within such other period as may be determined by the Regulator under paragraph 42.1):

(a) prepare a Modification Report setting out in detail the factors which (in the opinion of the Modification Panel) justify the making or not making of the proposed modification; and

(b) submit copies of the report and the Modification Panel's recommendation to the Regulator and provide copies to each T&SCo, each User, each Member, each Third Party Participant and each Designated Non-Code Party (if any).

34.3 The contents of any Significant Code Review Modification Proposal made by the Regulator and any conclusions published by the Regulator in respect of matters relating thereto shall not fetter the discretion of the Modification Panel or any Panel Member in connection with the Modification Panel's determination pursuant to paragraph 34.1(b) in respect of a Significant Code Review Modification Proposal made by the Regulator or in relation to any factor taken into account in making any such determination.

## 35. Consultation

35.1 If the Modification Panel determines that the Modification Proposal should proceed to Consultation (including in circumstances where the Modification Proposal has already been the subject of a Workgroup Report):

(a) the Modification Panel must notify the Secretary if it determines that the time periods set out in the remainder of this paragraph 35 for Consultation should, in its opinion, be deviated from in relation to the relevant Modification Proposal; and

(b) where the Modification Proposal is a Self-Governance Modification Proposal, the Secretary may invite each T&SCo, each User, the Secretary of State, each Third Party Participant and each Designated Non-Code Party (if any) to make representations in respect of whether such Modification Proposal should be a Self-Governance Modification Proposal.

35.2 Following determination of the Modification Panel that a Modification Proposal should proceed to Consultation under paragraph 28.2, the Secretary must prepare a draft Modification Report in accordance with paragraph 36.1 and circulate the draft Modification Report to each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and the Secretary of State within:

(a) fifteen (15) Business Days, where the Modification Panel has determined that legal text is required;

(b) three (3) Business Days, where the Modification Panel has determined that legal text is not required; or

(c) such other time period as the Modification Panel shall determine,

inviting them to make representations to the Secretary within fifteen (15) Business Days following the date of that invitation.

35.3 The Secretary must update the online register of Modification Proposals established pursuant to paragraph 24.3 to include publication in full of all representations received during Consultation in respect of such Modification Proposal.

35.4 Within ten (10) Business Days following the last day for making representations to the Secretary in respect of the draft Modification Report, the Secretary must:

(a) prepare a final Modification Report in accordance with paragraph 36.1 for approval of the Modification Panel;

(b) submit a copy of the final Modification Report to:

(i) each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any) that submitted (and did not withdraw) a representation with regard to the draft Modification Report pursuant to paragraph 35.2; and

(ii) each Member,

and must attach to that report all representations (if any) received and not withdrawn;

(c) add the Modification Proposal as an agenda item for the Modification Panel to discuss in the next meeting of the Modification Panel; and

(d) where the Secretary considers that any representation made identifies issues that may arise through implementation of the Modification Proposal, the Secretary must record such issues and include them in the final Modification Report and the Secretary must submit it to the next Modification Panel for determination pursuant to paragraph 35.5.

35.5 Where the Modification Panel determines that views on such issues identified under paragraph 35.4(d) should be obtained by the relevant Workgroup then:

(a) the Secretary must submit the final Modification Report to the relevant Workgroup and obtain a report containing their views;

(b) within three (3) Business Days following receipt of such report, the Secretary must submit a copy of the final Modification Report to:

(i) each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any); and

(ii) each Member;

and must attach to that report all representations (if any) received and not withdrawn and the report (if any) received pursuant to paragraph 35.5(a); and

(c) the Secretary must add the Modification Proposal as an Agenda item for the Modification Panel to discuss in the next meeting of the Modification Panel.

35.6 Subject to paragraph 39.3, upon receipt of the final Modification Report under paragraphs 35.4 or 35.5, the Modification Panel must assess whether the final Modification Report complies with the requirements of paragraph 36.1, and if it is compliant, must:

(a) determine whether or not to recommend the implementation of the Modification Proposal to the Regulator;

(b) submit to the Regulator its determination under paragraph 35.6(a) (including where no determination can be reached due to a tie in the number of votes for and the number

of votes against) and the factors which (in its opinion), justify its determination and which shall include details of the Modification Panel's reasoning for determining whether or not the Modification Proposal better facilitates the achievement of the Relevant Objectives; and

(c) instruct the Secretary to send the final Modification Report, together with its recommendation to the Regulator.

35.7 The Secretary must, within one (1) Business Day of an instruction under paragraph 35.6(c), send to the Regulator, each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and the Secretary of State the following:

(a) a copy of the final Modification Report and any other attachments; and

(b) a copy of the Modification Panel's recommendation to the Regulator seeking a determination of the Regulator as to whether the Modification Proposal should be implemented or not.

## 36. Content of Modification Report

36.1 Each Modification Report must include the following information:

(a) set out or append in full:

(i) the relevant Modification Proposal including any suggested text provided by the Proposer;

(ii) where the Modification Panel has determined that legal text is required, the legal text; and

(iii) all representations (if any) received and not withdrawn in respect of the relevant Modification Proposal;

(b) in relation to a recommendation of the Modification Panel under paragraph 35.6(a), details of the Modification Panel's reasoning for determining whether or not the Modification Proposal better facilitates the achievement (for the purposes of each T&SCo's Licence) of the Relevant Objectives;

(c) state whether or not a determination has been made by the Modification Panel under paragraph 35.6(a) and the number of Voting Members in favour of, and the number of Voting Members present and not voting in favour of, the implementation of the Modification Proposal;

(d) where it relates to a Self-Governance Modification Proposal, state that fact and whether the Modification Panel or the Regulator determined that such proposal satisfied the Self-Governance Criteria;

(e) state whether the proposal is made in respect of a Significant Code Review by, or at the direction of, the Regulator;

(f) where it relates to a Modification Proposal other than a Self-Governance Modification Proposal and where the Proposer has proposed a timescale for the implementation of the Modification in accordance with paragraph 24.1(c), must include:

(i) two (2) or more Fixed Implementation Dates;

(ii) a Proposed Regulator Decision Date in respect of each Fixed Implementation Date, for the purposes of enabling the Modification to be implemented by the Fixed Implementation Date;

(iii) a Backstop Lead Time; and

(iv) the reasons why it is proposing each date under paragraph 36.1(f)(i), 36.1(f)(ii) and 36.1(f)(iii);

(g) address the implications (if any) of the implementation of such Modification Proposal:

(i) on the operation of the T&S Network; and

(ii) for the T&SCos and each T&SCo, including:

(A) the implications for the operation of the Onshore Transportation System and/or the Offshore Transportation and Storage System; and

(B) the development and capital cost and operating cost implications (if any) for each T&SCo of implementing the Modification Proposal and if there are any such cost implications, the extent to which it is appropriate for each T&SCo and/or the T&SCos to recover the costs, and (to such extent) a proposal for the most appropriate way for the costs to be recovered;

(h) address the implications (if any) of the implementation of the Modification for Users, including:

(i) the administrative and operational implications (if any) of the implementation of the proposal on Users; and

(ii) the capital cost and operating cost implications (if any) for Users of implementing the Modification Proposal;

(i) address the implications (if any) for other relevant persons, including future users who may connect to a T&S Network;

(j) provide a summary of the representations and/or responses of those persons (if any) which the Workgroup consulted, pursuant to the Modification Terms of Reference and paragraph 29.1 and (to the extent that representations are not addressed or otherwise commented upon in the Modification Report) comment, in the context of the Modification Report as a whole, on such representations;

(k) detail the programme for works (if any) required as a consequence of the implementation of the Modification Proposal;

(l) set out a proposed timetable to be followed in respect of the implementation of the Modification (including the date upon which the Modification should become effective);

(m) state whether or not any matter detailed in the Workgroup Report (pursuant to paragraph 29.2(d)) has been addressed or otherwise dealt with and:

(i) if such matter has been so addressed or dealt with, the result; or

(ii) if such matter has not been so addressed or dealt with, an explanation as to why such matter has not been addressed or dealt with; and

(n) set out a high level summary of views expressed in the representations (to the extent that representations are not addressed or otherwise commented upon in the Modification Report), which may be satisfied by stating the number of representatives in favour of, and the number of representatives against the implementation of the Modification Proposal.

36.2 Where two (2) or more Modification Proposals have proceeded through the Modification Procedures together (and neither Modification Proposal has been withdrawn and all work has not been discontinued following a decision of the Modification Panel in respect of either Modification Proposal) the Modification Report must, in addition to the analysis referred to in paragraph 36.1(b), provide an analysis as to which of the Modification Proposals would in the opinion of the Modification Panel better facilitate the achievement of the Relevant Objectives. Where two (2) Modification Proposals were proceeding through the Modification Procedures together and the Modification Panel has determined that only one (1) of the Modification Proposals should proceed, the Modification Report must provide a commentary as to the circumstances in which the Modification Panel made such determination.

36.3 Each Modification Report must be addressed and provided to the Regulator and none of the facts contained or opinions stated in any Modification Report should be relied upon by any other person.

36.4 In preparing any Modification Report, the Secretary must:

(a) do so on the basis set out in these Modification Rules; and

(b) not be required to have regard (other than as expressly provided in these Modification Rules) to the consequences of any Modification on any person.

## 37. Implementation

37.1 Where the Regulator receives a final Modification Report pursuant to paragraph 35.7, the Regulator may determine:

(a) that the final Modification Report provides insufficient detail in order to make a decision, or the Regulator considers that it cannot properly form an opinion on the approval of the Modification Proposal, in which case the Secretary must make the necessary arrangements to address the deficiency and re-submit it to the Modification Panel and paragraph 35.6 shall re-apply; or

(b) whether the proposed Modification shall be implemented and may give notice of its decision to the Secretary, in which case on receipt of such notice from the Regulator:

(i) if the notice confirms the Regulator's determination not to implement the proposed Modification, the Secretary must circulate to each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and each Member a non-implementation notice; and

(ii) if the notice confirms the Regulator's determination to implement the Modification, the Secretary must circulate to each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any), and each Member an implementation notice.

37.2 If, in respect of a Modification Proposal which is the subject of a Modification Report previously submitted to the Regulator by the Secretary in accordance with paragraph 35.7:

(a) the Regulator has not given notice of its decision in respect of that Modification Report within two (2) calendar months (in the case of Urgent Modification Proposals) or four (4) calendar months (in the case of non-Urgent Modification Proposals) from the date upon which the relevant Modification Report was submitted to it; or

(b) the Regulator, or any Voting Member, by notice to the Secretary expresses the reasonable opinion that the circumstances relating to that Modification have materially changed,

the Secretary must place that Modification Proposal on the Agenda for consideration at the next Modification Panel meeting.

37.3 Having considered the circumstances relating to the Modification Proposal which is subject to paragraph 37.2, the Modification Panel may determine that the Secretary should request the Regulator to give an indication of the likely date by which the Regulator's decision shall be made, it being recognised at all times that the Regulator is not obliged, as a result of a request pursuant to this paragraph 37.3, to provide any response or indication.

## 38. Modification

38.1 Subject to paragraph 38.2, the Secretary must modify the Code in accordance with each consent given and each direction made by the Regulator.

38.2 The Secretary shall modify the Code without the consent of the Regulator in accordance with a determination made by the Modification Panel in respect of a Self-Governance Modification Proposal under paragraph 39.2 no less than fifteen (15) Business Days after the date of such determination, provided that:

(a) either:

(i) paragraph 39.3 applies and the Modification Panel has not instructed the Secretary to withdraw the Self-Governance Statement submitted to the Regulator under paragraph 39.7; or

(ii) paragraph 39.10 applies;

(b) the Regulator has not directed that its approval is required in respect of such Modification Proposal under paragraph 39.5(b);

(c) subject to paragraph 38.2(d), no Appeal has been made in accordance with paragraph 40.1 which is still outstanding in respect of such Modification Proposal; or

(d) where an Appeal has been made, the Secretary has sent an implementation notice under paragraph 40.4(a)) or 40.4(b) and the Appealing Party has not made a Regulator Appeal in respect of such Modification Proposal by the end of the period specified in paragraph 40.5.

38.3 The Secretary must, as soon as reasonably practicable:

(a) notify each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and each Member of each Modification; and

(b) publish by notice each Modification on the CCS Network Code Website.

38.4 Each notice under paragraph 38.3 must specify the legal text of the Modification and the date upon which the Modification shall become effective and may provide (for the purposes of information only) an explanatory note (which note should not be relied upon) in respect of the Modification. Each Modification shall become effective upon the date specified in the relevant notice.

## 39. Self-Governance Modifications

39.1 Where the Modification Proposal is a Self-Governance Modification Proposal, paragraphs 35.6, 35.7 and 37.1 shall not apply to such Modification Proposal.

39.2 The Modification Panel must upon receipt of the final Modification Report under paragraph 35.4 or 35.5, in respect of a Self-Governance Modification Proposal:

(a) assess whether the final Modification Report complies with the requirements of the Code, and if it is compliant, must make a determination as to whether or not the Self-Governance Modification Proposal should be implemented, having regard to whether or not the Self-Governance Modification Proposal better facilitates the achievement of the Relevant Objectives than either the status quo or any alternative Self-Governance Modification Proposal;

(b) instruct the Secretary to include such determination and the Modification Panel's reasoning for such determination in the final Modification Report; and

(c) instruct the Secretary to circulate an implementation notice or a non-implementation notice (as the case may be) in respect of such proposal to each T&SCo, each User, each Third Party Participant and each Member.

39.3 Subject to paragraph 39.5, where the Modification Panel under paragraph 28.2 determines that a Modification Proposal satisfies the Self-Governance Criteria, the Secretary must on

behalf of the Modification Panel submit to the Regulator a Self-Governance Statement in respect of such Modification Proposal as soon as reasonably practicable and set a proposed Self-Governance Determination Date.

39.4 The Secretary shall not submit to the Regulator a Self-Governance Statement in respect of a Modification Proposal (or set a proposed Self-Governance Determination Date in relation to it) pursuant to paragraph 39.3 where such Modification Proposal is an alternative Modification Proposal made under paragraph 32.1 or 32.2, in respect of an original Modification Proposal which is not itself a Self-Governance Modification Proposal unless that original Modification Proposal has been withdrawn.

39.5 The Regulator may, at any time before the proposed Self-Governance Determination Date:

(a) reject the Modification Panel's determination that the Self-Governance Criteria have been satisfied; or

(b) direct that its approval is required to implement the Self-Governance Modification Proposal.

39.6 Where the Regulator rejects a Self-Governance Statement in respect of a Modification Proposal or the Secretary is prohibited from submitting to the Regulator a Self-Governance Statement in respect of a Modification Proposal by paragraph 39.3, such Modification Proposal must:

(a) not be a Self-Governance Modification Proposal; and

(b) be subject to the Modification Procedures.

39.7 The Modification Panel may withdraw a Self-Governance Statement that it submits under paragraph 39.3 at any time before the Self-Governance Determination Date in respect of the related Self-Governance Modification Proposal.

39.8 The Modification Panel shall withdraw a Self-Governance Statement in respect of a Self-Governance Modification Proposal where, prior to the Self-Governance Determination Date, an alternative Modification Proposal is made in respect of such Self-Governance Modification Proposal under paragraph 32.1 or 32.2 and:

(a) the Modification Panel determines under paragraph 28.2(a) that such alternative Modification Proposal does not satisfy the Self-Governance Criteria;

(b) the Regulator rejects a Self-Governance Statement in respect of such alternative Modification Proposal; or

(c) the Modification Panel, pursuant to paragraph 39.7, withdraws a Self-Governance Statement in respect of such alternative Modification Proposal.

39.9 Where a Self-Governance Statement in respect of a Modification Proposal is withdrawn pursuant to paragraph 39.7, such Modification Proposal shall, subject to paragraph 39.11, cease to be a Self-Governance Modification Proposal.

39.10 Where the Modification Panel has determined under paragraph 28.2(a) that a Modification Proposal does not satisfy the Self-Governance Criteria or the Modification Panel has withdrawn a Self-Governance Statement in respect of a Modification Proposal under paragraph 39.7, the Regulator may determine that the relevant Modification Proposal satisfies the Self-Governance Criteria and is a Self-Governance Modification Proposal, and, where the Regulator so determines:

(a) its determination shall be effective upon the Regulator giving notice of the same to the Secretary; and

(b) any Self-Governance Statement in respect of any other Modification Proposal that was withdrawn pursuant to paragraph 39.8 as a consequence of the Modification Panel's determination with respect to, or withdrawal of, such relevant Modification Proposal shall be reinstated, and the Secretary must, on behalf of the Modification Panel, resubmit such Self-Governance Statement(s) to the Regulator, and the Modification Proposals to which such Self-Governance Statement(s) relate shall be reinstated as Self-Governance Modification Proposal(s) accordingly.

39.11 Where the Modification Panel determines under paragraph 28.2(a), that the Modification Proposal does not satisfy the Self-Governance Criteria, the Secretary must as soon as reasonably practicable submit to the Regulator a statement on behalf of the Modification Panel in respect of such Modification Proposal setting out why in the opinion of the Modification Panel it could be reasonably expected that the Modification Proposal would have a material impact if implemented.

39.12 Where paragraph 28.2(b) applies but paragraph 28.2(c) does not (i.e. the Modification Proposal satisfies the Fast Track Self-Governance Procedure but the Modification Panel does not determine that it should be implemented immediately), the Modification shall become a Self-Governance Modification Proposal and be further determined by the Modification Panel under paragraph 28.2.

39.13 Where the Modification Panel makes a determination in respect of a Self-Governance Modification Proposal under paragraph 28.2(c) (i.e. in respect of a fast tracked Modification) a Party or the Regulator may object to such determination and the Self-Governance Modification Proposal shall not be implemented. Any such objection shall be received within fifteen (15) Business Days of the implementation notice under paragraph 37.1(b)(ii) being issued.

## 40. Appeal Procedures

40.1 No later than fifteen (15) Business Days after the Self-Governance Determination Date, a User, the T&SCo or Third Party Participant may make an Appeal by giving written notice of the Appeal to the Secretary, such notice to identify:

(a) the Self-Governance Modification Proposal which is the subject of the Appeal;

(b) any representations which the Appealing Party wishes to make in support of the Appeal; and

(c) evidence supporting the Appealing Party's view that it will be unfairly prejudiced by the modification proposed in the relevant Self-Governance Modification Proposal.

40.2 Subject to the Appeal being made within the period referred to in paragraph 40.1, the Secretary must, on receipt of a notice under paragraph 40.1 notify each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and the Regulator that an Appeal has been made and the Secretary must put discussion of the Appeal on the Agenda of the next meeting of the Modification Panel.

40.3 The Modification Panel must decide, at the meeting referred to in paragraph 40.2, whether to confirm or reverse its determination under paragraph 39.2(a) having regard to any representations made by the Appealing Party in support of the Appeal.

40.4 The Modification Panel must, upon deciding whether to confirm or reverse its determination under paragraph 39.2, notify the Secretary and the Appealing Party of its decision as soon as reasonably practicable following receipt of the Appeal, and where the Modification Panel:

(a) confirms its determination under paragraph 40.2 the Secretary must notify each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and the Regulator of the Modification Panel's confirmation of its determination and send each such person an implementation or (as the case may be) non-implementation notice under paragraph 37.1(b) confirming the implementation or (as the case may be) non-implementation of the proposal; or

(b) reverses its determination under paragraph 40.2, the Secretary must notify each T&SCo, each User, each Third Party Participant, each Designated Non-Code Party (if any) and the Regulator of the Modification Panel's determination and send each such person an implementation or (as the case may be) non-implementation notice, which shall have effect in place of the implementation or (as the case may be) non-implementation notice issued pursuant to the Modification Panel's initial determination under paragraph 40.2.

40.5 The Appealing Party may, no later than fifteen (15) Business Days after the Self-Governance Determination Date, make an appeal to the Regulator; such appeal to identify the Self-Governance Modification Proposal which is the subject of the appeal and include any representations which the Appealing Party wishes to make in support of the appeal.

40.6 If the Regulator determines the Regulator Appeal satisfies the Appeal Criteria, the Regulator may consider the Regulator Appeal having regard (without limitation) to:

(a) the Self-Governance Modification Proposal;

(b) the final Modification Report in respect of the Self-Governance Modification Proposal;

(c) any representations made by the Appealing Party in support of the Regulator Appeal; and

(d) the determination made by the Modification Panel under paragraph 40.4(a).

40.7 Following such determination in accordance with paragraph 40.6, the Regulator may:

(a) confirm the Modification Panel's determination under paragraph 40.4(a); or

(b) quash the Modification Panel's determination under paragraph 40.4(a) and rule that the Modification Panel's determination should have no further effect for the purposes of the Modification Rules.

40.8 The Regulator must notify the Secretary and the Appealing Party of its decision under paragraph 40.7 in respect of the Regulator Appeal as soon as reasonably practicable following receipt of the Regulator Appeal, and the decision of the Regulator shall be final and binding.

40.9 Where paragraph 40.7(b) applies, the Regulator may:

(a) remit the Self-Governance Modification Proposal which is the subject of the Modification Panel's quashed determination under paragraph 40.4(a) back to the Modification Panel for reconsideration and redetermination;

(b) determine that the proposed modification to the Code should be made; or

(c) determine that the proposed modification to the Code should not be made.

40.10 Where the Regulator:

(a) confirms the Modification Panel's determination under paragraph 40.4(a), the Secretary must notify each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any) of the Regulator's confirmation of the Modification Panel's determination under paragraph 40.4(a) confirming the implementation or (as the case may be) non-implementation of the proposal; or

(b) quashes the Modification Panel's determination under paragraph 40.4(a), the Secretary must notify each T&SCo, each User, each Member, each Third Party Participant and each Designated Non-Code Party (if any) of the Regulator's decision and send each such person an implementation notice or (as the case may be) non-implementation notice, which shall have effect in place of the Modification Panel's determination under paragraph 40.4(a).

40.11 Where the Secretary, under paragraph 40.7(a) gives notice of the Regulator's confirmation of the Modification Panel's determination under paragraph 40.4(a) confirming the implementation of a proposal or under paragraph 40.9(b) sends an implementation notice, paragraph 38.1 shall apply.

40.12 Where a (fast tracked) Self-Governance Modification Proposal is objected to under paragraph 39.13 then the Self-Governance Modification Proposal shall return to the Modification Panel and be considered as a Modification Proposal under the provisions of paragraph 28.2.

40.13 Where the Modification Panel makes a determination in respect of a Self-Governance Modification Proposal under paragraph 28.2(c), a T&SCo, a User or a Third Party Participant may appeal such determination and the Self-Governance Modification Proposal shall not be implemented until the Modification Panel has made a determination in respect of an appeal

(and where no subsequent appeal has been made to the Regulator) and an implementation notice has been sent.

## 41. Urgent Modification Proposals

41.1 If the Proposer considers that a Modification Proposal should be treated as an Urgent Modification Proposal it shall state so in its Modification Proposal and include reasons as to why the Modification Proposal should be treated as an Urgent Modification Proposal, and the Secretary must as soon as possible send a copy of the Modification Proposal to the Regulator and:

(a) following consultation with the Regulator, the Secretary must recommend the procedure and timetable to be followed in respect of each Urgent Modification Proposal; and

(b) where the Regulator requests the Modification Panel to provide the Regulator with the opinion of the Modification Panel on whether or not the Modification Proposal should be considered as an Urgent Modification:

(i) the Secretary must convene a meeting of the Modification Panel within five (5) Business Days of the Regulator requesting the opinion of the Modification Panel and place such request on the Agenda for that meeting; and

(ii) the Modification Panel must provide the Regulator with its opinion.

41.2 Where the Regulator:

(a) agrees that the Modification Proposal should be treated as an Urgent Modification Proposal:

(i) the Secretary must notify each T&SCo, each User, each Third Party Participant, each Member and each Designated Non-Code Party (if any);

(ii) to the extent that the Regulator agrees with the recommendation made in the procedure and timetable submitted by the Secretary, all or any of the Modification Rules (including consulting with the Modification Panel and seeking representations from each T&SCo, Users, Third-Party Participants and any Designated Non-Code Party or any other person) may be deviated from and any other procedure accepted by the Regulator may be followed; and

(iii) the Secretary must prepare and submit to the Regulator, a Modification Report in a format and in accordance with a timetable accepted by the Regulator; or

(b) does not agree that the Modification Proposal should be treated as an Urgent Modification Proposal, the Secretary must notify the Modification Panel and the standard Modification Rules will apply.

## 42. Time Periods

42.1 Notwithstanding any time periods specified in paragraphs 23 to 42 in respect of any Significant Code Review Modification Proposal, the Regulator may, by direction in writing to a T&SCo, determine to shorten or lengthen the time period within which any (or all) of the Modification Procedures or any other procedure is (or are) to be undertaken. If the Modification Panel shall so determine, the Secretary must, so far as consistent with the Modification Rules and Licence, do all acts and things which these Modification Rules specify as acts and things to be done the Secretary within such shorter or longer period of time so as to give effect to such determination.

42.2 Where the Regulator makes a direction referred to in paragraph 42.1 and such direction specifies:

(a) a timetable in respect of all of the steps specified in paragraphs 23 to 42 as applying to such Modification Proposal, the Modification Proposal shall progress in accordance with the timetable specified in such direction (and not the timetable set out in paragraphs 23 to 42);

(b) a timetable in respect of some (but not all) of the steps specified in these Modification Rules as applying to such Modification Proposal (and does not direct that the steps in respect of which no timetable is directed are not to apply to such Modification Proposal), then such Modification Proposal shall proceed on the basis of the timetable specified in the direction (in respect of the steps specified in the direction) and the timetable set out in paragraphs 23 to 42 (in respect of all other steps specified in these Modification Rules as applying to such Modification Proposal); or

(c) an implementation date in respect of such Modification Proposal but specifies no timetable to apply to such Modification Proposal in relation to these Modification Rules, the T&SCo to whom the direction is made by the Regulator must notify the Secretary of the timetable that the T&SCo reasonably believes ought to apply to such Modification Proposal in order to achieve the directed implementation date, and such notified timetable shall apply for the purposes of paragraphs 23 to 42 in relation to such Modification Proposal.

42.3 Until such time as the Regulator makes a direction referred to in paragraph 42.2, the Modification Proposal shall proceed in accordance with the Modification Procedures set out in this Section B (Governance).

## 43. Representations

43.1 All representations (and any withdrawal of the same) made by each User, each T&SCo, each Third Party Participant or any Non-Code Party pursuant to these Modification Rules must be readily identifiable as representations (or, as the case may be, a withdrawal thereof), must identify the unique reference designation on the Modification Proposal to which they relate and must be sent to the Secretary at an address to be notified on the CCS Network Code Website. The T&SCo, User, Third Party Participant or Designated Non-Code Party may at any time prior to the submission of the Modification Report by notice to the Secretary

withdraw any representation made by it, whether made in writing or at a meeting of Users or Non-Code Parties.

43.2 The Secretary must send to the Regulator copies of all representations, but the Secretary shall not be required to take account of representations received after the expiry of the period established in accordance with these Modification Rules, or of any representations which in the Secretary's reasonable opinion are of no relevance to the subject matter to which they are intended to relate, or from persons who are not likely to be materially affected.

43.3 In submitting representations pursuant to any provision of these Modification Rules, the person making such submission consents to the publication and circulation of such representations by the Secretary for the purposes of these Modification Rules.

## 44. Specific Provisions

44.1 A Modification Proposal in respect of a Specific Provision may only be initiated by:

(a) the T&SCo that owns and operates the T&S Network to which those Specific Provisions apply;

(b) a User that is the holder of a Connection Agreement relating to the T&S Network, or relevant part of the T&S Network, to which those Specific Provisions apply;

(c) the Secretary of State; and

(d) the Regulator where the Modification Proposal is in respect of a Significant Code Review,

provided that where there is no User holding a Connection Agreement for a T&S Network, T&SCo may only initiate a Self-Governance Modification Proposal in respect of a Specific Provision for that T&S Network.

44.2 Where a Modification Proposal in respect of a Specific Provision is initiated, the Secretary must convene a panel comprising:

(a) the T&SCo that owns and operates the T&S Network to which those Specific Provisions apply, being a voting member;

(b) each User that is the holder of a Connection Agreement relating to the T&S Network, or relevant part of the T&S Network, to which those Specific Provisions apply, being voting members;

(c) the Secretary of State, being a non-voting Member;

(d) the Regulator, being a non-voting Member; and

(e) the Panel Chairperson.

44.3 Subject to paragraph 45, Modification Proposals in respect of Specific Provisions must be addressed using a procedure determined by the Panel Chairperson based on the principles of the Modification Procedure, but modified as appropriate to take account of:

(a) the make-up of the panel specified in paragraph 44.2;

(b) the Specific Provisions which are under review; and

(c) the principles for voting rights set out below:

(i) the T&SCo that owns and operates the T&S Network to which the Specific Provisions apply is to be entitled to one (1) vote;

(ii) each User that is a holder of a Connection Agreement relating to the T&S Network (or relevant part of the T&S Network) to which those Specific Provisions apply is to be entitled to one (1) vote; and

(iii) votes shall be weighted such that there shall be an equal number of voting rights as between (1) the T&SCo referenced in paragraph 44.3(c)(i) and (2) the User(s) referenced in paragraph 44.3(c)(ii) (in aggregate).

## 45. Ancillary Agreements

45.1 The Ancillary Agreements, once entered into, may only be amended:

(a) by agreement of the parties to that Ancillary Agreement (unless otherwise specified in the relevant Ancillary Agreement); or

(b) pursuant to a Modification of the Code which is expressly stated to apply to and be incorporated into the Ancillary Agreements.

45.2 The Ancillary Agreement Templates may only be amended pursuant to paragraph 5.5 of Section A (Introduction, Structure and Interpretation).

## 46. Modifications – General

46.1 The Secretary may decide to seek a view from the Regulator on any matter arising (under these Modification Rules or otherwise) from a Modification Proposal that is not a Self-Governance Modification Proposal at any stage prior to the date on which the Secretary finalises the Modification Report.

46.2 If the Secretary decides to seek a view pursuant to paragraph 46.1, the Secretary must:

(a) forward an application to the Regulator setting out the Secretary's views and reasons for seeking a view from the Regulator;

(b) if the Modification Panel shall so determine, suspend (in whole or in part) the consideration of the Modification Proposal by any Workgroup; and

(c) notify each T&SCo, each User, each Third Party Participant and each Designated Non-Code Party (if any) of such decision to seek a view.

46.3 If, in respect of a view sought pursuant to this paragraph 46, the Regulator expresses the view that the Modification Proposal should not proceed, the Modification Proposal shall lapse

and the Secretary must, within five (5) Business Days following receipt by the Secretary of the view, prepare and circulate notification of such lapse.

46.4 If, in respect of a view sought pursuant to this paragraph 46, the Regulator does not express any view as to how the Modification Proposal should proceed or expresses the view that the Modification Proposal should proceed to Workgroup Assessment, the Modification Proposal shall proceed to Workgroup Assessment.

46.5 If the Regulator expresses any other view, the Modification Proposal shall proceed in accordance with such view.

## 47. Secretary of State Modifications during Interim Period

47.1 Where the Secretary of State makes a Modification Proposal during the Interim Period, in addition to making a Modification Proposal pursuant to paragraph 23.1, the Secretary of State may choose to exercise powers in relation to that Modification Proposal in accordance with paragraph 47.3, by way of a direction pursuant to this paragraph 47.

47.2 Where the Secretary of State elects to exercise the powers in paragraph 47.3 in respect of any Modification Proposal, in addition to the requirements of paragraph 24.1, the Secretary shall ensure that any such Modification Proposal clearly indicates that it is a SoS Modification Proposal for the purposes of paragraph 47.3.

47.3 In respect of any Modification Proposal which is made by the Secretary of State during the Interim Period under this paragraph 47.3, (a "**SoS Modification Proposal**"), paragraphs 23 to 42.3 are to have effect with the following modifications until the end of the Interim Period:

(a) in paragraph 23.2 for "Regulator" substitute "Secretary of State" and for "Significant Code Review Modification Proposal" substitute "SoS Modification Proposal";

(b) in paragraph 23.4, for "Regulator" substitute "Secretary of State", for "Significant Code Review" substitute "SoS Modification Proposal", and for "relevant Significant Code Review Phase" substitute "period within which a SoS Modification Proposal has been introduced under paragraph 47.3 but which has not yet been finally determined";

(c) in paragraph 24.1(l), for "Regulator" substitute "Secretary of State" and for "Significant Code Review " substitute "SoS Modification Proposal";

(d) in paragraphs 27.1, 27.2 and 27.3 for "Regulator" substitute "Secretary of State", for "Significant Code Review Modification Proposal" substitute "SoS Modification Proposal", for "Significant Code Review" substitute "SoS Modification Proposal", for "Significant Code Review Phase" substitute "period within which a SoS Modification Proposal has been finally determined", and for "Significant Code Review Suspended Modification Proposal" substitute "SoS Modification Suspended Proposal";

(e) in paragraph 28.3 delete "made by a Proposer other than the Secretary of State during a Significant Code Review Phase" and for "Significant Code Review Phase" substitute "made during the period within which a SoS Modification Proposal has been

finally determined", and for "Significant Code Review" substitute "SoS Modification Proposal";

(f) in paragraph 28.4 for "Regulator" substitute "Secretary of State" and for "Significant Code Review" substitute "SoS Modification Proposal";

(g) in paragraph 38.1 delete "subject to paragraph 38.2" and for "Regulator" substitute "Secretary of State";

(h) in paragraphs 24.1(b), 33.7, 33.8, 35.6, 35.7(b), 36.1(e), 36.3, 37.1, 42.1, 42.2 and 42.3 for "Regulator" substitute "Secretary of State" and for "Significant Code Review Modification Proposal" and "Significant Code Review" substitute "SoS Modification Proposal"; and

(i) in paragraph 24.1(c), in the sentence "except in the case where the Regulator has directed a timetable in accordance with paragraph 42.1 and/or 42.2", substitute "Regulator" for "Secretary of State".

47.4 Where the Secretary of State chooses to exercise rights in relation to an SoS Modification Proposal in accordance with this paragraph 47, the Regulator shall not be required to approve the SoS Modification Proposal in order for it to be implemented.

47.5 The Parties acknowledge and agree that notwithstanding paragraph 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on the Secretary of State under this Section B (Governance).

## 48. Dispute resolution

48.1 The Dispute Parties must at all times deal proactively with any issues through Code governance processes to reduce the scope for Disputes to arise. The Dispute Parties must take all reasonable steps to identify solutions and mitigations that address the concerns of other Parties and at all times to act reasonably to avoid or minimise the scope for Disputes.

48.2 If a Dispute arises, the objective of the Dispute Parties shall be to seek to ensure that the Dispute is resolved as quickly, as efficiently and as cost-effectively as possible. Each Dispute Party shall, at each stage of the Dispute Resolution Procedure, endeavour in good faith to resolve all Disputes through negotiation.

48.3 The Dispute Parties shall continue to observe and perform all of their respective duties, responsibilities and obligations under the Code, the Code Agreement, any Code Accession Agreement, any CDS Accession Agreement and any Ancillary Agreement notwithstanding any Dispute which falls to be resolved in accordance with this paragraph 48.

48.4 Where the relevant Dispute Parties are unable to avoid or resolve a Dispute, the Dispute shall be resolved in accordance with the procedures set out in the Code.

48.5 Unless the Code expressly provides otherwise or the Dispute Parties otherwise agree, the Dispute Parties may refer any and all Disputes to the courts of England for resolution in accordance with paragraph 16 of Section J (General).

48.6 The Secretary appointed in accordance with paragraph 7.1 must perform the administrative functions set out in this paragraph 48.

48.7 If a Dispute arises either Dispute Party may (except where paragraph 51.1 applies, in which event either Party may instead proceed directly to an Expert Determination Notice) give a notice to the other Dispute Party to initiate the Dispute Resolution Procedure (a "**Dispute Notice**"). For the avoidance of doubt, in the event of an Expert Determination commenced pursuant to paragraph 51.1(a), a Dispute Notice and an Expert Determination Notice will be required. A Dispute Notice:

(a) must specify that it is a Dispute Notice;

(b) must include a description of the subject matter of the Dispute and the issues to be resolved;

(c) must include a statement identifying the provision of the Code, Code Agreement, Code Accession Agreement, CDS Accession Agreement or Ancillary Agreement to which the Dispute relates or pursuant to which the Dispute arises;

(d) must include a description of the position the referring Dispute Party considers is correct and the referring Dispute Party's reasons for that position;

(e) must include details of any other dispute or claim known to the referring Dispute Party between:

(i) a T&SCo and a different User;

(ii) a User and a different T&SCo; and/or

(iii) two (2) T&SCos,

which the referring Dispute Party considers should be consolidated with or joined to the Dispute;

(f) may, where the referring Dispute Party considers it appropriate, include copies of any documents on which the referring Dispute Party intends to rely;

(g) must include a statement outlining the relief, determination, remedy or recourse which the referring Dispute Party seeks in relation to the Dispute;

(h) must include a statement as to whether the referring Dispute Party considers that the Dispute should (without a Senior Representatives Settlement being reached) be referred for determination in accordance with the Expert Determination Procedure; and

(i) must include the identity of the referring Party's Senior Representative.

48.8 Following the service by either Dispute Party of a Dispute Notice:

(a) the Dispute Parties shall seek to resolve the Dispute by convening a meeting of the Senior Representatives of the Dispute Parties in accordance with paragraph 50; and

(b) if the Senior Representatives are unable to settle, compromise or resolve the Dispute in accordance with paragraph 50, either Dispute Party may:

(i) if the Dispute Parties agree within the Resolution Period (or such longer period as they may agree) that such Dispute is amenable to determination by an Expert, refer the Dispute to an Expert for determination in accordance with the Expert Determination Procedure pursuant to paragraph 51; or

(ii) refer the Dispute to the courts of England for resolution in accordance with paragraph 16 of Section J (General).

48.9 Where any relevant provision provides or the Dispute Parties have agreed that a Dispute is to be referred to or resolved by Expert Determination:

(a) paragraph 51.1 shall apply; and

(b) subject to paragraph 48.11, no Dispute Party shall commence proceedings in any court of competent jurisdiction in respect of or otherwise in connection with such Dispute.

48.10 The Dispute Parties may agree to refer any Dispute (including such a Dispute as is referred to in paragraph 48.9) to mediation in accordance with paragraph 52.1.

48.11 Nothing in this Section B (Governance) shall prevent any Dispute Party from seeking interim or interlocutory relief in any court of competent jurisdiction.

## 49. Connected Disputes

49.1 With respect to any Dispute to be resolved by Expert Determination, where:

(a) acting reasonably, a T&SCo believes that a Dispute between a T&SCo and a User raises the same or similar issues to a Dispute between that T&SCo and another User (a "**Connected Dispute**");

(b) the Dispute Resolution Procedure has been commenced in relation to the Dispute; and

(c) the Dispute Resolution Procedure has been commenced in relation to the Connected Dispute,

the T&SCo may request consolidation of the Dispute and any Connected Disputes at any time so that the Dispute and Connected Disputes shall be determined together.

49.2 Where the T&SCo wishes to consolidate Connected Disputes pursuant to paragraph 49.1, that T&SCo must give notice in writing to all of the parties to the Connected Disputes (a "**Consolidation Request**").

49.3 A Consolidation Request must:

(a) specify that it is a Consolidation Request;

(b) include a description of the subject matter of the Dispute;

(c) include a description of the Connected Disputes to which the Dispute is connected;

(d) include the reasons why the T&SCo believes the Dispute should be consolidated with the Connected Disputes; and

(e) request that each User to which it is given respond within ten (10) Business Days of receipt, stating whether it agrees to consolidate the Dispute with the Connected Dispute to which it is party.

49.4 Where in response to a Consolidation Notice relating to a Dispute not less than fifty per cent (50%) in number of Users in receipt of such Consolidation Notice agree that the Dispute should be consolidated with the Connected Disputes to which that Consolidation Notice relates, the Dispute shall be consolidated with all the Connected Disputes to which such Consolidation Notice relates.

49.5 If different Experts have been appointed (as relevant) in respect of any Dispute and its Connected Disputes prior to their being consolidated in accordance with the Dispute Resolution Procedure, the Dispute Parties must use reasonable endeavours to agree in writing with each other and the parties to any relevant Connected Dispute, no later than five (5) Business Days after the giving of that notice, which of the Experts shall be the Expert for the consolidated Connected Disputes. If no such agreement can be reached, the parties to the Dispute shall request that the president or vice-president of the LCIA select, no later than five (5) Business Days after such request, which of those Experts shall be the Expert for the consolidated Connected Disputes.

49.6 If the Secretary identifies that a Dispute between a T&SCo and a User(s) raises the same or similar issues to a Dispute between another T&SCo(s) and another User(s), the Secretary may:

(a) notify the relevant T&SCos; and

(b) if agreed by those T&SCos, the T&SCos may issue a Consolidation Request to each affected User in accordance with paragraph 49.2, and the provisions of paragraphs 49.3 to 49.5 shall apply to any such connected dispute as though such dispute was a Connected Dispute.

49.7 Where two (2) or more Users or T&SCos are parties to a dispute, any notice, submission, statement or communication to be given by them may be given by them jointly (and any reference to the party or parties by whom and to whom it is to be given shall be construed accordingly).

## 50. Resolution by Senior Representatives

50.1 The Dispute Parties must procure that their respective Senior Representatives shall meet within ten (10) Business Days of the date of service of the Dispute Notice or Expert Determination Notice (as applicable). If the Senior Representatives of the Dispute Parties:

(a) are able to resolve the Dispute within thirty (30) Business Days of the date of service of the Dispute Notice or Expert Determination Notice (or within such longer period as the Senior Representatives of the Dispute Parties may agree in writing) (the "**Resolution Period**"), the terms of the agreement, compromise, resolution or settlement reached between the Senior Representatives in respect of the Dispute (a "**Senior Representatives Settlement**") must be documented in writing and must be signed by the Senior Representative of each Dispute Party; or

(b) are unable to resolve the Dispute within the Resolution Period (where the Resolution Period follows the issue of a Dispute Notice), either Dispute Party may:

(i) if the Dispute Parties agree within the Resolution Period (or such longer period as they may agree) that such Dispute is amenable to determination by an Expert, refer the Dispute to an Expert for determination in accordance with the Expert Determination Procedure pursuant to paragraph 51; or

(ii) refer the Dispute to the courts of England for resolution in accordance with paragraph 16 of Section J (General); or

(c) are unable to resolve the Dispute within the Resolution Period (where the Resolution Period follows the issue of an Expert Determination Notice), either Dispute Party may refer the Dispute to an Expert for determination in accordance with the Expert Determination Procedure pursuant to paragraph 51.

50.2 If, at any time during the Resolution Period, both Dispute Parties agree in writing that the Senior Representatives of the Dispute Parties will not be able to resolve the Dispute:

(a) either Dispute Party may refer the Dispute either to the courts of England or to Expert Determination (as applicable); and

(b) there shall be no requirement for the Dispute Parties to wait until the expiry of the Resolution Period before making any such reference.

50.3 Neither Dispute Party may commence the Expert Determination Procedure or (subject to paragraph 48.5) refer a Dispute to the courts of England prior to the expiry of the Resolution Period except in the circumstances specified in paragraph 50.2.

50.4 Any statement, concession, waiver or agreement (other than a Senior Representative Settlement) made by a Dispute Party in the course of discussions and meetings pursuant to paragraph 50.1 shall be "without prejudice" to the Dispute unless expressly stated to be "without prejudice save as to costs" or to be made on an open basis, and the details of the discussions and any meetings, minutes and/or statements relating to such meetings shall be inadmissible in any proceedings that may follow (including pursuant to the Expert Determination Procedure), except that those expressly stated to be "without prejudice save as to costs" shall be admissible in respect of the matter of such costs.

## 51. Expert determination

51.1 Either Dispute Party may, subject to paragraph 50, refer a Dispute to be determined by an Expert if either:

(a) the Dispute Parties have agreed in writing that a Dispute is amenable to determination by an Expert pursuant to paragraph 50.1(b) or 50.2(a); or

(b) the Code expressly provides for the relevant Dispute to be determined by an Expert,

and such referral shall be effected by either Dispute Party giving a notice (an "**Expert Determination Notice**") to the other Dispute Party.

51.2 An Expert Determination Notice must:

(a) specify that it is an Expert Determination Notice;

(b) include the information required to be included in a Dispute Notice pursuant to paragraph 48.7; and

(c) include a proposal as to the identity, and terms of appointment, of the Expert and the relevant expertise that the referring Dispute Party considers qualifies the Expert to determine the relevant Expert Dispute.

51.3 Any Expert appointed to determine any Expert Dispute shall be required to have an appropriate level of experience in relation to matters of the same general description as the matter in Dispute.

51.4 The Dispute Party receiving the Expert Determination Notice (the "**Respondent**") must, within ten (10) Business Days of the earlier of (i) the conclusion of the Resolution Period and (ii) the date on which the Dispute Parties agree in writing that the Senior Representatives of the Dispute Parties will not be able to resolve the Dispute pursuant to paragraph 50.2 either:

(a) give notice to the other Dispute Party (the "**Claimant**") in writing that it is willing to appoint the Expert proposed by the Claimant; or

(b) give notice to the Claimant in writing that it is not willing to appoint the Expert proposed by the Claimant, in which case, the Respondent must, in such notice, propose an alternative Expert for consideration by the Claimant.

51.5 If the Dispute Parties have failed to agree on the identity of the Expert within twenty (20) Business Days of the earlier of (i) the conclusion of the Resolution Period and (ii) the date on which the Dispute Parties agree in writing that the Senior Representatives of the Dispute Parties will not be able to resolve the Dispute pursuant to paragraph 50.2, either Dispute Party may request that the Expert be nominated by the LCIA, which shall be requested to choose a suitably qualified and experienced Expert for the Expert Dispute in question. The LCIA's nomination shall be binding on the Dispute Parties.

51.6 The Dispute Parties must:

(a) use reasonable endeavours to procure that within ten (10) Business Days of the Dispute Parties agreeing the identity of the Expert to be appointed (or the LCIA having nominated an Expert in accordance with paragraph 51.5):

(i) the Expert confirms in writing to the Dispute Parties that:

(A) the Expert is willing and available to act in relation to the Expert Dispute; and

(B) the Expert has no conflict of interest which prevents the Expert from determining the Expert Dispute; and

(ii) the terms of appointment of the Expert are agreed between the Dispute Parties and the Expert (and an appointment letter entered into among them), such terms:

(A) to include an undertaking that the Expert shall not disclose to any person any information or documentation disclosed or delivered by a Dispute Party to the Expert in consequence of, or in connection with, their appointment as the Expert; and

(B) to exempt the Expert (and any employee, agent or adviser of or to the Expert) from liability for anything done or omitted in the discharge or purported discharge of the Expert's functions unless such act or omission is fraudulent, negligent or in bad faith;

(b) instruct the Expert:

(i) to act fairly, independently and impartially;

(ii) to take the initiative in ascertaining the facts and the law, including by:

(A) considering any written representations, statements and experts' reports submitted to the Expert by the Dispute Parties;

(B) instructing an expert and/or taking counsel's opinion as to any matter raised in the Expert Determination, provided that the Expert shall not be entitled to delegate any decision to such expert or Counsel; and

(C) requiring the Dispute Parties to produce any information, evidence, supporting documentation or explanations in written or documentary form (except any documents which would be privileged from production in court proceedings);

(iii) to reach their decision in accordance with the applicable laws in relation to the Expert Dispute referred to them; and

(iv) if requested by either Dispute Party in writing, to provide reasons for their decision, which shall be communicated to the Dispute Parties;

(c) afford the Expert the discretion to establish the procedure (including the timetable) for the determination of the Expert Dispute, it being agreed by the Dispute Parties that:

(i) the Expert shall be requested to confirm to the Dispute Parties the proposed procedure for the relevant Expert Dispute as soon as reasonably practicable after the Expert Appointment Date and, in any event, within ten (10) Business Days of the Expert Referral Date and, in so doing, the Dispute Parties agree that:

(A) the Expert shall be requested to afford the Dispute Parties the opportunity to address the Expert in a meeting at which both Dispute Parties shall have the right to be present, either where a Dispute Party requests such a meeting in writing or the Expert otherwise considers it to be necessary or desirable to reach a determination in respect of the relevant Expert Dispute, with the format and procedure applicable to any such meeting being a matter for the Expert to decide in their sole and absolute discretion; and

(B) the Expert may (acting reasonably) modify the time periods provided for in paragraph 51.7 and otherwise modify the procedure contemplated by such paragraph;

(ii) all submissions made by a Dispute Party to the Expert (including all information, evidence, supporting documentation and explanations provided to them) shall be provided to the other Dispute Party contemporaneously with such submissions being made to the Expert; and

(iii) the Dispute Parties must (without prejudice to paragraph 51.6(c)(i)) request the Expert to determine the Expert Dispute within thirty (30) Business Days of the earlier of:

(A) the date on which a Response Submission has been provided by each Dispute Party; and

(B) the date falling thirty (30) Business Days after the First Submission Deadline; and

(d) afford the Expert all information, evidence, supporting documentation, explanations and assistance which the Expert requires to determine the Expert Dispute (and, if a Dispute Party fails to produce any such information, evidence, supporting documentation, explanation or assistance, the Expert may continue the determination process in the absence of that information, evidence, supporting documentation, explanation or assistance).

51.7 Subject to paragraph 51.6(c):

(a) the Claimant must provide the Expert with a copy of the Expert Determination Notice no later than ten (10) Business Days after the Expert Appointment Date (the date on

which the Expert receives the copy of the Expert Determination Notice being the "**Expert Referral Date**");

(b) each Dispute Party may, but is not obliged to, provide a written statement of its case to the Expert (the "**First Submission**") within twenty (20) Business Days of the Expert Referral Date (the "**First Submission Deadline**") and, without limitation, the First Submission may cover any of the matters required to be contained in the relevant Expert Determination Notice pursuant to paragraphs 48.7(c) to 48.7(h) (inclusive) and a copy of such First Submission must be provided to the other Dispute Party at the same time as it is provided to the Expert; and

(c) each Dispute Party may submit a reply to the other Dispute Party's First Submission (a "**Response Submission**") within thirty (30) Business Days of receipt of the First Submission.

51.8 If after their appointment the Expert becomes aware of any interest or duty which conflicts or potentially conflicts with the performance of their duties under their contract with the Dispute Parties, the Expert must notify the parties forthwith of such conflict giving full details thereof.

51.9 Any Dispute Party may within five (5) Business Days of the disclosure of any such conflict or potential conflict pursuant to paragraph 51.8 object to the appointment or continued appointment of an Expert, in which case the Expert shall not be or shall cease to be appointed and a new Expert shall be selected and appointed in accordance with this Section B (Governance) (and the rejected Expert shall not be nominated for such selection).

51.10 No Expert determination shall have the effect of amending the Code.

51.11 The Expert shall not act as an arbitrator nor a mediator and the Arbitration Act 1996 and the law relating to arbitrators and arbitrations shall not apply to the Expert or their determination or the procedure by which they reach their determination.

51.12 The Expert shall be an independent contractor and the relationship of the Dispute Parties and the Expert shall in no event be construed to be that of principal and agent or master and servant.

51.13 If:

(a) the Parties are unable to agree on the terms of the appointment of the Expert under paragraph 51.6(a)(ii);

(b) the Expert is at any time or unable or unwilling act (whether under paragraph 51.6(a)(i) or otherwise); or

(c) the Expert fails to render a determination in accordance with paragraph 51.6(b),

either Dispute Party may proceed to seek the appointment of a replacement Expert as if the Expert Determination Notice had just been served.

51.14 The provisions of the Expert Determination Procedure shall apply *mutatis mutandis* to any replacement Expert and the replacement Expert shall be authorised to determine any Expert

Dispute which was submitted to their predecessor but which their predecessor had not determined at the time when their predecessor became unable or unwilling to act.

51.15 The Expert's final determination shall be final and binding on the Dispute Parties except in the event of fraud, error of law (including an error of interpretation of the Code) or where it is so clearly erroneous on its face that it would be unconscionable for it to stand, in which case another Expert may be appointed in accordance with the provisions of this paragraph 51.

51.16 Except in respect of the application of paragraph 51.15, no Dispute Party shall commence proceedings in respect of or refer to any court any finding by the Expert, whether made at any time after the Expert's appointment or in their determination, as to the Dispute or the construction of or otherwise in respect of the Code, the Code Agreement, any Code Accession Agreement, any CDS Accession Agreement or any Ancillary Agreement.

51.17 Notwithstanding paragraph 51.16, either Dispute Party can seek enforcement of an Expert Determination in the courts of competent jurisdiction.

51.18 The Expert may, in their determination, provide that one (1) or other or both of the Dispute Parties pay the Expert’s fees and each other’s legal costs in such proportions as they may specify on the general principle that costs should reflect the Dispute Parties’ relative success and failure in the Expert Determination Procedure. Without such a direction, each Dispute Party shall bear its own legal costs and the fees and expenses of the Expert shall be paid in equal shares by the Dispute Parties.

## 52. Mediation

52.1 A Dispute which is to be referred to mediation must be referred to a single mediator who shall explore the interests of the Dispute Parties and encourage the Dispute Parties to resolve the Dispute in light of such interests.

**Appointment of mediator**

52.2 Within five (5) Business Days after agreeing to refer a Dispute to mediation, the Dispute Parties must meet and use their best endeavours to agree upon a person to act as mediator.

52.3 Where the Dispute Parties agree upon a mediator they shall request such person to accept appointment as mediator, and must use all reasonable endeavours to agree (between themselves and with the mediator) upon the terms of their appointment.

52.4 A person shall be treated as appointed as a mediator when they have confirmed their acceptance to act as mediator in accordance herewith.

**Procedure and timetable**

52.5 Within five (5) Business Days following their appointment, the mediator shall require each Dispute Party to provide them with a written summary of the dispute, which written summary must not exceed five (5) pages.

52.6 The mediator may in their discretion:

(a) request any Dispute Party to provide them with copies of any documentation or information which the mediator believes will assist to explain any such summary; and

(b) provide any such written summary and/or any information or copy documentation received under paragraph 52.6(a) to the other Dispute Parties.

52.7 Within ten (10) Business Days following their appointment, the mediator must contact the Dispute Parties and must arrange to meet them.

52.8 Each Dispute Party must attend the meeting with the mediator with a maximum of three (3) representatives, one (1) of whom must be a person with decision making authority in relation to the subject matter of the Dispute and one (1) of whom may be the legal adviser of that Dispute Party.

52.9 No additional persons shall attend without the prior written consent of the mediator.

52.10 The mediator may convene more than one (1) meeting with the Dispute Parties but must not convene any meetings later than forty (40) Business Days following their appointment, unless the Dispute Parties agree otherwise.

52.11 The mediator may at their discretion meet each Dispute Party on their own whether during a meeting attended by the other Dispute Parties or otherwise, but they must not disclose to any other Dispute Party matters disclosed to the mediator in such circumstances without the consent of the disclosing Dispute Party.

52.12 At any meeting attended by the Dispute Parties, the mediator may require each Dispute Party to make a brief presentation of its case and the mediator may also require the other Dispute Parties to reply to another Dispute Party's presentation.

52.13 The mediator shall not act as an arbitrator (and accordingly the provisions of the Arbitration Act 1996 and the law relating to arbitrators and arbitrations shall not apply to any mediation).

**Result of mediation**

52.14 No Dispute Party shall be bound to adopt the views or advice expressed or provided by the mediator.

52.15 If the Dispute is resolved or the parties accept the views and advice of the mediator, the Dispute Parties must use their best endeavours, within five (5) Business Days after such resolution or acceptance, to enter into a settlement agreement which must:

(a) set out the terms accepted by the Dispute Parties or on which the Dispute was resolved; and

(b) contain provisions of confidentiality.

**Confidentiality**

52.16 The mediator and the Dispute Parties, their representatives and advisers and any person connected in any way with the mediation must keep confidential the fact that the mediation is taking place, and its outcome, and all documents, submissions, statements, information and

data including anything revealed orally or otherwise during the mediation and any settlement agreement except as may be necessary for implementation or enforcement of the settlement agreement.

52.17 All documents and information prepared by a Dispute Party for and disclosed in the mediation, and all discussions which take place with a Dispute Party during the course of the mediation, shall be treated as confidential, provided that this shall not preclude any document, which may have been disclosed during the mediation but was not prepared solely for use in the mediation, from being discoverable in any proceedings.

**Costs**

52.18 The Dispute Parties must, unless they agree otherwise, bear their own costs and expenses of whatsoever nature of the mediation.

52.19 The Dispute Parties must bear the fees and expenses of the mediator and all administrative costs arising from the mediation equally.

**Further proceedings**

52.20 The mediator shall not act in any subsequent Expert Determination, court proceedings, arbitration or similar proceedings in respect of the Dispute in which they acted as mediator.

52.21 The mediator shall not be held liable for any act or omission unless it shall be shown that they have acted fraudulently or in bad faith.

# CCS Network Code

# Section C – Connection

## 1. Introduction

1.1 This Section C (Connection) sets out the process for connection to a T&S Network by:

(a) prospective Users who seek to apply to connect to a T&S Network; or

(b) existing Users who seek to modify an existing Delivery Point,

after the Code Implementation Date, where:

(c) a T&SCo is already a party to the Code at the time a prospective User becomes an Eligible Applicant; or

(d) a T&SCo is a Prospective T&SCo at the time a prospective User becomes an Eligible Applicant.

1.2 Notwithstanding any other provision of this Section C (Connection), the T&SCo's obligations under this Section C (Connection) are subject to the provisions of Standard Condition B3 (Access to T&S Network) of the Licence.

1.3 The Parties acknowledge and agree that notwithstanding paragraph 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on Eligible Applicants and Prospective T&SCos under this Section C (Connection).

## 2. Application of and rationale for Section C

2.1 This Section C (Connection) reflects the fact that, as at the Code Implementation Date, HM Government is leading the process for:

(a) the selection of T&SCos to develop and operate new T&S Networks;

(b) the selection of new Users to connect to T&S Networks; and

(c) the allocation of Network Capacity to existing and new Users.

2.2 For the reasons described in paragraph 2.1:

(a) the connection process set out in this Section C (Connection); and

(b) the process for allocation of Network Capacity described in Section E (Network Use and Capacity),

are linked to the Selection Process.

2.3 This Section C (Connection) (including the connection dispute provisions in paragraph 15) is intended to apply to applications for connection to a T&S Network (or modification of an existing Delivery Point) until:

(a) HM Government discontinues the Selection Process; or

(b) a new connection process is developed under the Code (whether in response to new regulations being made under the Act or otherwise),

whichever is the earlier.

2.4 It is further intended that where the provisions of this Section C (Connection) are revised (as contemplated by paragraph 2.3) then any new provisions of this Section C (Connection) will include transitional provisions to apply to any applications already commenced under the current version of this Section C (Connection), subject to any Legal Requirements.

## 3. Initial Users

3.1 It is acknowledged that as at the Code Implementation Date:

(a) in accordance with the Track-1 Cluster Sequencing Process, the Initial Users have been selected to connect to a T&S Network; and

(b) each of the Initial Users will accede to the Code Agreement and will enter into a Construction Agreement and a Connection Agreement in accordance with and subject to paragraph 13.

3.2 It is acknowledged that where an Initial User has entered into the Code Agreement, and has entered into a Construction Agreement and a Connection Agreement as at the Code Implementation Date, the provisions of this Section C (Connection) do not apply to that Initial User in relation to the Delivery Point to which that Connection Agreement relates, except for paragraph 15.

3.3 Where an Initial User has not entered into the Code Agreement and/or has not entered into a Construction Agreement and a Connection Agreement as at the Code Implementation Date:

(a) this Section C (Connection) will apply to that Initial User, except that the Initial User and the T&SCo shall not be required to re-start, after the Code Implementation Date, any steps that form part of the connection process set out in this Section C (Connection), to the extent that those steps have already been completed; and

(b) without limiting the generality of paragraph 3.3(a), the T&SCo's obligation to issue a Connection Offer to the Initial User (where a Connection Offer has not yet been issued as at the Code Implementation Date) will be conditional on the Initial User giving the T&SCo a copy of the Final Confirmation Notice in accordance with paragraph 11.

## 4. Compliance with Section C where a T&SCo is a Prospective T&SCo

4.1 From the Code Implementation Date, where as part of a Selection Process, HM Government indicates that it is intended that a Prospective T&SCo will become a party to the Code in accordance with the Licence that will be granted to that T&SCo:

(a) this Section C (Connection) will apply as if the Prospective T&SCo was a party to the Code; and

(b) in paragraphs 5 to 15, a reference to a T&SCo includes a reference to a Prospective T&SCo, unless otherwise specified.

4.2 Where paragraph 4.1 applies, notwithstanding that the Prospective T&SCo is not a party to the Code, it is intended that:

(a) a prospective User seeking a connection to the Prospective T&SCo's T&S Network must make its connection application in accordance with this Section C (Connection);

(b) the Prospective T&SCo must comply with Section C (Connection) in relation to the prospective User's application for a connection; and

(c) a Connection Application may be made to a Prospective T&SCo, notwithstanding the fact that a Prospective T&SCo is not a party to the Code.

4.3 A Prospective T&SCo shall have the right and obligation to accede to the Code, in accordance with the provisions of the Code Agreement, Section A (Introduction, Structure and Interpretation) and its Licence, upon being granted a Licence.

## 5. Eligibility for application for connection

5.1 A prospective User (or an existing User applying to modify an existing Delivery Point) is an "**Eligible Applicant**" for the purposes of this Section C (Connection) where that party:

(a) has been Selected; and

(b) has not been Deselected.

5.2 An Eligible Applicant may apply for:

(a) a connection to a T&S Network at a new (as yet unbuilt) Delivery Point; or

(b) the modification of an existing Delivery Point in relation to which the Eligible Applicant holds a Connection Agreement,

as the case may be, in accordance with this Section C (Connection).

5.3 An Eligible Applicant's eligibility for a connection to a T&S Network or modification of an existing Delivery Point (as the case may be) relates to the T&S Network or Delivery Point that the Eligible Applicant specified in its application under the Selection Process.

## 6. Connection Application

6.1 Where an Eligible Applicant wishes to request:

(a) a connection to the T&S Network at a new (as yet unbuilt) Delivery Point; or

(b) the modification of an existing Delivery Point;

then the Eligible Applicant must complete and submit to the T&SCo an application (in the form prescribed by the T&SCo from time to time) (the "**Connection Application**") and comply with the terms of it.

6.2 Where the Connection Application relates to a new Delivery Point, the T&SCo may require the Eligible Applicant to provide the following information in the Connection Application:

(a) the nature and location of the User Facility to be connected to the T&S Network at the Delivery Point;

(b) the proposed size and location of the Delivery Point being applied for;

(c) the date when the Eligible Applicant proposes to start using the Delivery Point to deliver its carbon dioxide into the T&S Network;

(d) the quantity of Network Capacity provisionally allocated to the Eligible Applicant through the Selection Process;

(e) a forecast of:

(i) the quantity of carbon dioxide (expressed in $tCO_2$) to be delivered to the T&S Network through the Delivery Point; and

(ii) the Eligible Applicant's capacity requirements,

for the following twenty (20) Charging Years;

(f) any Local Requirements relating to the proposed connection to the T&S Network; and

(g) any other information that the T&SCo may reasonably require.

6.3 Where the Connection Application relates to a modification of an existing Delivery Point, the T&SCo may require the Eligible Applicant to provide the following information in the Connection Application:

(a) the nature and location of the User Facility at the Delivery Point;

(b) details of the existing Delivery Point and the modifications being applied for;

(c) the date when the Eligible Applicant proposes to start using the modified Delivery Point to deliver its carbon dioxide into the T&S Network;

(d) the quantity of additional Network Capacity (if any) provisionally allocated to the Eligible Applicant through the Selection Process;

(e) a forecast of:

(iii) the quantity of carbon dioxide (expressed in $tCO_2$) to be delivered to the T&S Network through the Delivery Point; and

(iv) the Eligible Applicant's capacity requirements,

for the following twenty (20) Charging Years;

(f) any Local Requirements relating to the proposed modification of an existing Delivery Point; and

(g) any other information that the T&SCo may reasonably require.

6.4 An Eligible Applicant must provide the following when submitting its Connection Application:

(a) evidence that the Eligible Applicant has been Selected;

(b) the Original Selection Details;

(c) details of any Local Requirements relating to the proposed connection to the T&S Network or modification of an existing Delivery Point (as the case may be); and

(d) copies of any documents/information relating to the proposed connection to the T&S Network or modification of an existing Delivery Point (as the case may be) that were submitted by the Eligible Applicant as part of its application through the Selection Process.

## 7. Validation of Connection Application

7.1 A Connection Application shall be a "**Valid Connection Application**" where:

(a) the application form referred to in paragraph 6.1:

(i) has been correctly and fully completed, and

(ii) is consistent in all respects with the Original Selection Details; and

(b) the Eligible Applicant has provided the documents referred to in paragraph 6.4.

7.2 The T&SCo must:

(a) as soon as reasonably practicable, and in any case no more than five (5) Business Days from the date of receipt of the Connection Application, acknowledge receipt of such Connection Application;

(b) within twenty (20) Business Days of receipt of the Connection Application:

(i) provide notice to the Eligible Applicant that the Connection Application is a Valid Connection Application; or

(ii) where the T&SCo considers that the Connection Application is not a Valid Connection Application:

(A) advise the Eligible Applicant that the Connection Application is not a Valid Connection Application and specify the reasons that the Connection Application is not a Valid Connection Application; and

(B) where the T&SCo considers that further information is required in order for it to consider or progress the Connection Application, request such further information from the Eligible Applicant.

7.3 The Eligible Applicant must provide any additional requested information as soon as reasonably practicable and in any case no more than fifteen (15) Business Days after the date of receipt of the request from the T&SCo.

7.4 Where a submitted Connection Application is not a Valid Connection Application, the Eligible Applicant may resubmit, amend or supplement the Connection Application and the provisions of paragraph 7.2 shall apply in relation to such resubmitted, amended or supplemented Connection Application.

## 8. T&SCo to issue Initial Offer

8.1 Within three (3) months of the date on which the T&SCo notifies the Eligible Applicant that the relevant Connection Application is a Valid Connection Application, the T&SCo must either:

(a) subject to paragraph 8.2, advise the Eligible Applicant that the Connection Applicant's Valid Connection Application has been rejected; or

(b) issue an Initial Offer to the Eligible Applicant.

8.2 The T&SCo may reject an Eligible Applicant's Valid Connection Application or refuse to issue an Initial Offer only where:

(a) the Eligible Applicant has been Deselected; or

(b) the new connection or modification of an existing Delivery Point (as the case may be) is conditional upon:

(i) the T&SCo obtaining a Change in Scope Approval and the Regulator has confirmed that it will not be giving such Change in Scope Approval; or

(ii) any other regulatory approvals or permits being granted to the T&SCo and the T&SCo (acting reasonably) considers that there is no reasonable prospect of such approvals or permits being granted (or such approvals or permits have already been refused); or

(c) there are any other circumstances that fall within the scope of Part C (Exceptions to obligation to offer access) of Standard Condition B3 (Access to T&S Network) of the T&SCo's Licence.

## 9. Contents of Initial Offer

9.1 The T&SCo must include the following documents with the Initial Offer it issues to an Eligible Applicant pursuant to paragraph 8.1:

(a) a draft Construction Agreement, including:

(i) a draft Construction Programme; and

(ii) a draft Commissioning Programme (except where Schedule 6 of the Construction Agreement will apply);

(b) a draft Connection Agreement; and

(c) a draft Code Accession Agreement.

9.2 In providing the Initial Offer, the T&SCo must advise the Eligible Applicant whether the Eligible Applicant is an Onshore User or an Offshore User (for the purposes of Section H (Charges, Invoicing and Payment)).

9.3 The T&SCo must ensure that that the Initial Offer and the draft Construction Agreement and draft Connection Agreement issued with it are consistent with the Original Selection Details and take account of any Local Requirements set out in a Connection Application.

9.4 Where relevant, the Initial Offer will be conditional upon a Change in Scope Approval (and any other regulatory approvals or permits being granted to the T&SCo) and where this is the case, this will be stated in the Initial Offer.

9.5 Where the T&SCo is a Prospective T&SCo, it is intended that the Initial Offer will be conditional upon the grant of a Licence to the Prospective T&SCo.

9.6 The Initial Offer must be substantially in the form of the template letter set out in Exhibit A to this Section C (Connection).

## 10. Acceptance or refusal of Initial Offer

10.1 Subject to paragraph 10.3, the Eligible Applicant must accept or refuse the Initial Offer within one (1) month of the date of the Initial Offer.

10.2 If the Eligible Applicant decides to accept the Initial Offer, the Eligible Applicant must return to the T&SCo a signed copy of the Initial Offer.

10.3 Where the Eligible Applicant has not accepted the Initial Offer within the time period referred to in paragraph 10.1, the Initial Offer will lapse, unless the T&SCo and Eligible Applicant agree to extend the time for acceptance of it by the Eligible Applicant.

10.4 An Eligible Applicant's acceptance of the Initial Offer shall not give rise to a legally binding contract between the Eligible Applicant and the T&SCo.

## 11. Final Confirmation Notice

11.1 The Secretary of State may issue a Final Confirmation Notice to an Eligible Applicant and the Eligible Applicant must give the T&SCo a copy of the Final Confirmation Notice as soon as practicable after it has received it in accordance with the Selection Process.

11.2 The T&SCo agrees with the Secretary of State that it will only make a Connection Offer to an Eligible Applicant in accordance with paragraph 12.1.

11.3 The Parties acknowledge and agree that notwithstanding para 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on the Secretary of State under paragraph 11 of Section C (Connection).

## 12. Connection Offer

12.1 Where an Eligible Applicant has accepted an Initial Offer, the T&SCo must issue a Connection Offer to the Eligible Applicant within thirty (30) Business Days (subject to paragraph 12.2) of the later of:

(a) receipt of the Eligible Applicant's acceptance of the Initial Offer pursuant to paragraph 10; and

(b) receipt of a copy of the Final Confirmation Notice from the Eligible Applicant pursuant to paragraph 11.

12.2 Where, in the reasonable opinion of the T&SCo, having regard to the scope of work that is required to prepare the Connection Offer, more time is required to prepare and issue the Connection Offer to the Eligible Applicant, the T&SCo may extend the time period referred to in paragraph 12.1 by notice, advising the Eligible Applicant why and how much additional time is required for the T&SCo to be able to issue the Connection Offer, provided that:

(a) the time period may be extended by any period of delay in the Eligible Applicant providing information requested pursuant to paragraphs 12.3 and 12.4; and

(b) for any other reason of delay, the T&SCo may only extend on one (1) occasion.

12.3 As part of the process to prepare a Connection Offer, the T&SCo and the Eligible Applicant must:

(a) cooperate with each other;

(b) provide each other with any additional information or clarification as may be reasonably required, and within such timeframes as may be reasonable in the circumstances; and

(c) keep each other updated at regular intervals in relation to matters that are relevant to the Connection Application,

so that the T&SCo can prepare the Connection Offer, including all the information that must be included in the documents referred to in paragraph 12.6.

12.4 Where it is intended that Schedule 6 of the Construction Agreement will apply (such that no Commissioning Programme can be agreed at the time the Construction Agreement is entered into), the Eligible Applicant must provide to the T&SCo information about when the Eligible Applicant is likely to be available to have its connection commissioned and any specific requirements relating to such commissioning.

12.5 Each Party must pay its own costs relating to the preparation of the Connection Offer, including the costs of any technical studies or reports.

12.6 The T&SCo must include the following documents with the Connection Offer it issues to an Eligible Applicant pursuant to paragraph 12.1:

(a) a final Construction Agreement, including:

(i) the Construction Programme; and

(ii) the Commissioning Programme (except where Schedule 6 of the Construction Agreement will apply);

(b) a final Connection Agreement; and

(c) a final Code Accession Agreement.

12.7 The T&SCo must ensure that that the Connection Offer and the Construction Agreement and Connection Agreement issued with it are consistent with the Original Selection Details (as may be amended by the Final Confirmation Notice) and take account of any Local Requirements set out in a Connection Application, subject to any amendments discussed as part of the process to prepare the Connection Offer pursuant to paragraph 12.3.

12.8 Where, in order to be able to connect the User Facility to the T&S Network or modify an existing Delivery Point (as the case may be), the T&SCo is required to obtain a Change in Scope Approval, the agreements referred to in paragraph 12.6 will include this requirement as a condition precedent (including any conditions associated with that Change in Scope Approval), and this will be set out in the Connection Offer.

12.9 Where either the T&SCo or the Eligible Applicant require the agreements referred to in paragraph 12.6 to be subject to any other conditions precedent to a final investment decision by that party (other than the condition precedent referred to in paragraph 12.8) then:

(a) that requirement must be communicated to the other party as part of the Connection Offer preparation process pursuant to paragraph 12.3; and

(b) the agreements referred to in paragraph 12.6 will include any such conditions precedent, and they will be set out in the Connection Offer.

12.10 The T&SCo may refuse to issue a Connection Offer only where:

(a) the applicant has been Deselected; or

(b) the new connection or modification of an existing Delivery Point (as the case may be) is conditional upon:

(i) the T&SCo obtaining a Change in Scope Approval and the Regulator has confirmed that it will not be giving such Change in Scope Approval; or

(ii) any other regulatory approvals or permits being granted to the T&SCo and the T&SCo (acting reasonably) considers that there is no reasonable prospect of such approvals or permits being granted (or such approvals or permits have already been refused); or

(c) there are any other circumstances that fall within the scope of Part C (Exceptions to obligation to offer access) of Standard Condition B3 (Access to T&S Network) of the T&SCo's Licence.

12.11 Where the T&SCo is a Prospective T&SCo, at the time that it makes a Connection Offer, it is intended that the Connection Offer shall be conditional on the Prospective T&SCo becoming a party to the Code upon being awarded a Licence and acceding to the Code Agreement.

12.12 The Connection Offer must be substantially in the form of the template letter set out in Exhibit B to this Section C (Connection).

## 13. Acceptance or refusal of Connection Offer

13.1 Subject to paragraph 13.3, the Eligible Applicant must accept or refuse the Connection Offer within three (3) months of the date of it.

13.2 If the Eligible Applicant decides to accept the Connection Offer, the Eligible Applicant must return to T&SCo duly executed copies of:

(a) the Code Agreement or Code Accession Agreement (as applicable);

(b) the Construction Agreement; and

(d) the Connection Agreement,

in accordance with the instructions set out in the Connection Offer, and subject to:

(e) any conditions precedent, as set out in the Connection Offer in accordance with paragraphs 12.8 and 12.9; and

(f) any conditions precedent set out in the Final Confirmation Notice.

13.3 Where the Eligible Applicant has not accepted the Connection Offer within the time period referred to in paragraph 13.1, the Connection Offer will lapse, unless the T&SCo and Eligible Applicant agree to extend the time for acceptance of it by the Eligible Applicant.

## 14. Information publication requirements

14.1 For the purposes of the Connection Application process, the T&SCo must publish the following information on the T&S Network Portal:

(a) the T&SCo's Connection Application template; and

(b) a succinct guide to the information that must be provided with the Connection Application.

## 15. Connection disputes

15.1 Where a dispute arises in relation to a Connection Application, the directors or other senior representatives of the parties with authority to settle the dispute shall, following a written request from one party to the other, attempt in good faith to resolve the dispute.

15.2 If the dispute cannot be resolved within thirty (30) Business Days of the request referred to in paragraph 15.1, the parties agree to refer the dispute to mediation in accordance with the mediation procedure set out in paragraph 52 of Section B (Governance), as if all the parties had acceded to the Code.

15.3 The process for the parties seeking to resolve a dispute in accordance with paragraphs 15.1 and 15.2 shall be without prejudice to the right of the parties under the Storage of Carbon Dioxide (Access to Infrastructure) Regulations 2011 or the Storage of Carbon Dioxide (Access to Infrastructure) Regulations (Northern Ireland) 2015.

## Exhibit A – Initial Offer

Date [●]

Dear [●]

**INITIAL OFFER – [USER FACILITY] [REFERENCE]**

This is an Initial Offer in relation to your application to [connect to the [***insert name***] T&S Network]/[modify your existing Delivery Point at the [***insert name***] T&S Network].

Please note that words and expressions used in this document have the same meaning as the meaning given to them in Section C (Connection) of the CCS Network Code.

**Enclosed documents**

We enclose the following draft documents with this Initial Offer:

(a) a draft Construction Agreement, including:

(i) a draft Construction Programme; and

(ii) a draft Commissioning Programme (except where Schedule 6 of the Construction Agreement will apply);

(b) a draft Connection Agreement; and

(c) [a draft Code Accession Agreement].

These draft documents have been prepared on the basis of the information available to us, as at the date of this Initial Offer, based on your Connection Application.

**Onshore/Offshore Users**

Based on your Connection Application, you will be an [Onshore]/[Offshore] User for the purposes of Section H (Charges, Invoicing and Payment) of the CCS Network Code.

**[Conditions precedent]**

[The work required to [connect your facility]/[modify your Delivery Point] will involve certain [expansion/enhancement] works, which are subject to the approval of the Regulator pursuant to the Change in Scope mechanism under our Licence (referred to in the CCS Network Code as the Change in Scope Approval). Therefore this Initial Offer is subject to that Change in Scope Approval (including any conditions associated with that Change in Scope Approval).]

[As at the date of this Initial Offer, we have not yet been awarded a Licence. Therefore this Initial Offer is subject to us being awarded a Licence in relation to the T&S Network and acceding to the CCS Network Code.]

**Acceptance or refusal of Initial Offer**

You have one (1) month from the date of this Initial Offer to accept it. If this Initial Offer is not accepted within the aforementioned one (1) month period then, unless we both agree to extend the time for acceptance, it will lapse. If you would like to proceed, please sign the duplicate copy of this Initial Offer and return it to us. We will then proceed to progress your application in accordance with Section C (Connection) of the CCS Network Code.

Yours faithfully

…….
for and on behalf of
[***insert name of T&SCo***]

…….
for and on behalf of
[***insert name of User***]

## Exhibit B – Connection Offer

Date [●]

Dear [●]

**CONNECTION OFFER – [USER FACILITY] [REFERENCE]**

This is a Connection Offer in relation to your application to [connect to the [***insert name***] T&S Network]/[modify your existing Delivery Point at the [***insert name***] T&S Network].

Please note that words and expressions used in this document have the same meaning as the meaning given to them in Section C (Connection) of the CCS Network Code.

**Enclosed documents**

We enclose final, execution versions of the following documents with this Connection Offer:

(a) the Construction Agreement (in duplicate), including:

(i) the Construction Programme (except where Schedule 6 of the Construction Agreement will apply); and

(ii) the Commissioning Programme;

(b) the Connection Agreement (in duplicate); and

(c) the [Code Accession Agreement (in duplicate)].

**[Conditions precedent]**

[The work required to [connect your facility]/[modify your Delivery Point] will involve certain [expansion/enhancement] works, which are subject to the approval of the Regulator pursuant to the Change in Scope mechanism under our Licence (referred to in the CCS Network Code as the Change in Scope Approval). Therefore the agreements enclosed with this Connection Offer are subject to that approval (including any conditions associated with that Change in Scope Approval), and a condition precedent addressing this for our benefit has been included in the agreements to that effect.]

[As at the date of this Connection Offer, we have not yet been awarded a Licence. Therefore the agreements enclosed with this Connection Offer are subject to us being awarded a Licence and acceding to the CCS Network Code, and a condition precedent addressing this for the benefit of us both has been included in the agreements to that effect.]

[As notified by us to you, and you to us, pursuant to the provisions of Section C (Connection) of the CCS Network Code, the agreements are also subject to the following conditions precedent, which have been included in the agreements:]

[***insert any other conditions precedent***]

[It is intended that each party will keep the other updated about the status of these conditions precedent, and the party that has the benefit of the relevant condition precedent can decide to waive it.]

**Acceptance or refusal of Connection Offer**

You have three (3) months from the date of this Connection Offer to accept it. If you do not accept this Connection Offer within the aforementioned three (3) month period then, unless we both agree to extend the time for acceptance, it will lapse. If you would like to proceed, please sign the agreements enclosed (in duplicate) and return the originals to us. We will then countersign these agreements and one (1) original of each will be returned to you for your retention. The agreements are only effective in accordance with their terms once have been countersigned by us, subject to any conditions precedent.

Yours faithfully

…….
for and on behalf of
[***insert name of T&SCo***]

# CCS Network Code

# Section D – Network Structure and Planning

## 1. Network Classification

1.1 Each T&S Network owned and operated by each T&SCo is made up of the following:

(a) the Onshore Transportation System;

(b) the Offshore Pipeline Infrastructure; and

(c) the Storage Site.

## 2. Network Planning

2.1 Subject to paragraph 2.3, for the purposes of assisting the T&SCo in planning the operation and future development of the T&S Network, all Users must, by 1 May of each Charging Year provide to the T&SCo a forecast of:

(a) the quantity of carbon dioxide (expressed in $tCO_2$) to be delivered to the T&S Network through the User's Delivery Point; and

(b) the User's capacity requirements,

for the following twenty (20) Charging Years.

2.2 The data provided pursuant to paragraph 2.1 must be provided in a form specified by the T&SCo and include a periodic breakdown of monthly forecast figures. T&SCo must specify the form for such data to be provided in by no later than 1 February in each Charging Year.

2.3 Subject to paragraph 2.4, any forecast provided by a User to the T&SCo pursuant to paragraph 2.1 shall not be binding on the User and each T&SCo acknowledges that any such forecast shall be used by the T&SCo for planning purposes only.

2.4 Users must use reasonable endeavours to provide accurate forecasts when providing information to the T&SCo under this paragraph 2 and all such forecasts must be provided on a bona fide basis.

2.5 Users must respond promptly to any queries from the T&SCo regarding such forecasts.

## 3. Forum for sharing industry best practice

3.1 The T&SCos must develop and share industry best practice to facilitate the effective development and operation of existing and future carbon dioxide transport and storage networks.

3.2 To achieve the objective set out in paragraph 3.1, the T&SCos must jointly establish a forum for the sharing of such industry best practice (the "**CCS Networks Industry Best Practice Forum**"), which must:

(a) be open to all existing T&SCos and Users, as well as prospective T&SCos and prospective Users, and the wider carbon capture and storage industry; and

(b) meet at least once every twelve (12) months (but with the flexibility to meet more frequently, if it is considered appropriate), with the first meeting to be held within twelve (12) months of the Code Implementation Date.

3.3 The arrangements for meetings of the CCS Networks Industry Best Practice Forum shall be as follows:

(a) the existing T&SCos will take turns to administer all meetings, arranging locations, rooms and remote communication facilities and publish details of agendas, with at least three (3) months notice to be provided of the date of the meeting to give any interested parties the opportunity to propose items for the agenda;

(b) in all cases, the option to join remotely should be provided to prospective attendees;

(c) the existing T&SCos will take turns to chair each meeting and take appropriate minutes which will be published on the CCS Network Code Website; and

(d) any documents and presentations relevant to the CCS Networks Industry Best Practice Forum will be published on the CCS Network Code Website.

3.4 In convening the CCS Networks Industry Best Practice Forum, the T&SCos must ensure that any discussions do not contravene the Competition Act 1998 or any other applicable competition laws. In particular, the T&SCos must take steps to ensure that a reminder on applicable competition law is read out at the start of every meeting, reminding attendees that they should not disclose to any competitors any competitively sensitive information regarding their respective activities.

3.5 Where there is only one (1) T&SCo, references in this paragraph 3 to "the T&SCos" shall be treated as references to the sole T&SCo that is a Party to the Code until such time as another T&SCo accedes to the Code.

# CCS Network Code

# Section E – Network Use and Capacity

## 1. Use of T&S Network and passing of title and risk

1.1 Subject to the provisions of the Code, Users may use the T&S Network by delivering carbon dioxide to the Onshore Transportation System or the Offshore Transportation and Storage System at a Delivery Point for permanent storage in a Storage Site.

1.2 Title and risk in carbon dioxide delivered into the T&S Network at a Delivery Point in accordance with paragraph 1.1 shall pass to the T&SCo at that Delivery Point, subject to the provisions of Section F (Network Design and Specification) dealing with Non-Compliant $CO_2$.

## 2. Network Capacity

2.1 The capacity in the T&S Network for a particular quantity of carbon dioxide to be delivered at one (1) or more Delivery Points is:

(a) referred to as "**Network Capacity**"; and

(b) expressed in $tCO_2$/hour.

2.2 For the purposes of allocation of Network Capacity to Users, Network Capacity is allocated for individual Delivery Periods, where a "**Delivery Period**" is a period of 0.5 hours, with the first Delivery Period of any Day ending at 00:30 hours of that Day and the next Delivery Period of that Day ending at 01:00 hours of that Day.

2.3 There are forty eight (48) Delivery Periods in each Day, except on the following Days:

(a) the last Sunday of March, when there are forty six (46) Delivery Periods, because of the change to British Summer Time; and

(b) the last Sunday of October, when there are fifty (50) Delivery Periods, because of the change to Greenwich Mean Time,

and all provisions of the Code shall apply subject to these exceptions.

2.4 The Network Capacity that the T&SCo must make available to Users in aggregate is equal to the Obligated Network Capacity and subject to the provisions of the Code, being the "**Obligated Network Capacity**" set out in the T&SCo's Licence (or established pursuant to the Licence), expressed as:

(a) a maximum instantaneous flow rate;

(b) a minimum instantaneous flow rate;

(c) an ONC Maximum Annual Cumulative Flow; and

(d) a overall store capacity.

2.5 Users:

(a) must not deliver any carbon dioxide at a Delivery Point, in any Delivery Period, unless they have been allocated and registered as holding Network Capacity at that Delivery Point and for that Delivery Period; and

(b) may apply to be allocated and registered as holding Network Capacity in relation to a particular Delivery Point and for particular Delivery Periods, in accordance with the provisions of the Code.

2.6 The maximum Network Capacity that can be allocated to a User and registered as being held by that User at a Delivery Point can be no greater than the physical limits established by the size of the User's connection at the User's Delivery Point, as characterised by the Delivery Point Size, and the value of which, for each individual User, is set out in the User's Connection Agreement).

2.7 Any Network Capacity that has been allocated and registered to a particular User becomes that User's Registered Capacity, the nature of which is defined in more detail in paragraph 3.

## 3. Nature and scope of Registered Capacity

3.1 A User's "**Registered Capacity**" is the Network Capacity which:

(a) has been allocated to a User in accordance with the Selection Process and provisions of the Code;

(b) upon allocation, the User is registered (in accordance with this Section E (Network Use and Capacity)) as holding at a Delivery Point for a particular Delivery Period or Periods; and

(c) is held at the quantity and for the term set out in the User's Connection Agreement, as adjusted in accordance with the Code and subject to paragraphs 12 to 14 of Section J (General).

3.2 A User's Registered Capacity:

(a) constitutes a User's entitlement (but not an obligation) to deliver carbon dioxide at a Delivery Point in a Delivery Period, subject to the provisions of the Code; and

(b) is expressed in $tCO_2$/hour, constituting the peak maximum instantaneous flow rate of carbon dioxide.

3.3 Consistent with the provisions of paragraph 3.2, each User's peak maximum instantaneous flow rate of carbon dioxide must not exceed an instantaneous flow rate that can be accommodated by the User's Registered Capacity, such that:

(a) where a User's peak maximum instantaneous flow rate of carbon dioxide in a particular Delivery Period is expected to be $xtCO_2$/hour, then

(b) the User's Registered Capacity for that Delivery Period must be no less than $xtCO_2$/hour.

3.4 Where any provision of the Code states that the quantity of carbon dioxide (expressed in $tCO_2$) to be nominated, renominated for, or flowed in a Delivery Period must not exceed the User's Registered Capacity or Available Registered Capacity (as the case may be) for that Delivery Period, this means that the relevant quantity must be capable of being delivered in that Delivery Period at the rate (expressed in $tCO_2$/hour) corresponding to the User's Registered Capacity or Available Registered Capacity (as the case may be) for that Delivery Period.

3.5 Where an Onshore User holds Registered Capacity, unless otherwise specified, that Registered Capacity constitutes Network Capacity in the following parts of the T&S Network:

(a) the Onshore Transportation System; and

(b) the Offshore Transportation and Storage System.

3.6 Where an Offshore User holds Registered Capacity, unless otherwise specified, that Registered Capacity constitutes Network Capacity in the Offshore Transportation and Storage System.

3.7 The Registered Capacity of a User must be recorded:

(a) in the User's Connection Agreement, reflecting the quantity and term of Registered Capacity held by that User as at the date of the Connection Agreement; and

(b) on the T&S Network Portal, reflecting the quantity and term of Registered Capacity held by that User as at the date of the Connection Agreement and as updated from time to time.

## 4. Categories of Network Capacity

4.1 In accordance with paragraph 2.2, the Network Capacity which may be allocated to Users and registered as held by Users (as Registered Capacity) is Network Capacity for each Delivery Period of each Day, but such Network Capacity will be allocated as yearly products, for a term of one (1) or more years ("**Long-term Network Capacity**"), as determined through the Selection Process.

## 5. Allocation of Network Capacity – Initial Users

5.1 It is acknowledged that each of the Initial Users is seeking allocation of Network Capacity in accordance with the Track-1 Cluster Sequencing Process (pending entry into the documents referred to in paragraph 3.1(b) of Section C (Connection) and becoming a User).

## 6. Allocation of Network Capacity – enduring provisions

6.1 Each T&SCo must:

(a) publish on its T&S Network Portal (once the T&S Network Portal is established in accordance with the Code):

(i) information about the quantity of Network Capacity available on the T&S Network on the basis of the T&SCo's Obligated Network Capacity;

(ii) a link to the CCS Network Code Website, as well as any relevant procedures prepared and published pursuant to the provisions of the Code;

(iii) any other technical and operating requirements relating to connection to and use of the T&S Network;

(iv) the Use of System Charging Statement for the current Charging Year and for preceding Charging Years; and

(v) a statement advising Users and prospective Users that if they wish to apply for Network Capacity, they should make that application through the Selection Process; and

(b) keep the information referred to in paragraph 6.1(a) updated at all times.

6.2 Users and prospective Users ("**Capacity Applicants**") shall be invited to apply for Network Capacity (or additional Network Capacity) through a Selection Process.

6.3 The Network Capacity that may be allocated to Capacity Applicants through a Selection Process is Long-term Network Capacity as set out at paragraph 4.1.

6.4 Where a Capacity Applicant already holds Registered Capacity, the Capacity Applicant is entitled to apply for additional Network Capacity through a Selection Process.

6.5 Where Network Capacity has been allocated to a Capacity Applicant in accordance with the CCUS Cluster Sequencing Process or another Selection Process, subject to paragraph 6.6, upon the offer and acceptance of that Network Capacity it shall become that Capacity Applicant's Registered Capacity in accordance with the User's Connection Agreement.

6.6 Where a Capacity Applicant is a prospective User then any Network Capacity that has been allocated to and then offered and accepted by the prospective User shall become Registered Capacity upon that prospective User becoming a User, in accordance with the requirements of the Code.

## 7. Registered Capacity Financial Security

7.1 Any User that:

(a) applies for and is allocated Network Capacity of a duration of more than one (1) Charging Year; or

(b) will, if allocated additional Network Capacity, hold total Registered Capacity of a duration of more than one (1) Charging Year,

must provide Registered Capacity Financial Security for the amount determined in accordance with paragraph 7.2 and in the form set out in paragraph 7.3.

7.2 Until the Code is modified in the future in accordance with Section B (Governance), to protect the T&SCo's ability to fund the operation, maintenance and development of the T&S Network, the amount for which the Registered Capacity Financial Security must be provided shall be equal to zero (0).

7.3 The Registered Capacity Financial Security may be provided in one (1) or more of the forms set out below:

(a) Letter of Credit; and/or

(b) Deposit Deed,

(the "**Registered Capacity Financial Security**").

## 8. Forecasting procedure

8.1 Each User must forecast quantities of carbon dioxide (expressed in $tCO_2$) for delivery at that User's Delivery Point for each Day or for each Delivery Period of each Day in accordance with this paragraph 8 for the purposes of enabling the T&SCo to carry out both longer term and shorter term operational planning.

8.2 The forecasts that Users are required to provide to the T&SCo in accordance with this paragraph 8 are as follows:

(a) Annual Forecasts;

(b) Rolling Three-month Forecasts; and

(c) Weekly Forecasts,

collectively referred to as "**Forecasts**".

8.3 Where a User has more than one (1) Delivery Point, the User must submit separate Forecasts in respect of each of the User's Delivery Points.

8.4 A User's Forecast must not exceed the lower of:

(a) the User's Registered Capacity in relation to the Delivery Point and time period that the Forecast relates to; and

(b) the maximum quantity of carbon dioxide that can be delivered to that Delivery Point, for that Day or any Delivery Period of that Day, under the prevailing Maintenance Programme or because of some other notified Capacity Constraint (being the User's Available Registered Capacity).

8.5 Where a User's Forecast specifies the quantity of carbon dioxide being forecast for any Day within the Forecast, that forecast quantity must:

(a) be based on estimates for each Delivery Period within that Day which do not exceed the User's Available Registered Capacity in $tCO_2$/hour for those Delivery Periods; and

(b) not exceed the User's Available Registered Capacity totalled over the number of Delivery Periods in that Day.

8.6 Where a User's Forecast specifies the quantity of carbon dioxide being forecast for any Delivery Period within the Forecast, that forecast quantity must not exceed the User's Available Registered Capacity in $tCO_2$/hour for that Delivery Period.

8.7 A User must use reasonable endeavours to ensure that each Forecast constitutes an accurate representation of the User's expected delivery of carbon dioxide during the time periods which are the subject of the Forecast.

8.8 A User must provide its:

(a) first Annual Forecast (pursuant to paragraph 9) by 31 October in the Charging Year prior to the Charging Year in which that User's Scheduled Commencement Date falls;

(b) first Rolling Three-month Forecast (pursuant to paragraph 10) in the month before the month within which the User's Scheduled Commencement Date falls; and

(c) first Weekly Forecast (pursuant to paragraph 11) in the week before the week within which the User's Scheduled Commencement Date falls.

## 9. Annual Forecasts

9.1 On an annual basis, a User must provide an Annual Forecast (which may use the same data as is used for the purposes of the forecasting process under paragraph 17 of Section H (Charges, Invoicing and Payment)) for Charging Year t by 31 October of Charging Year t-1.

9.2 Each Annual Forecast provided by a User must specify:

(a) the Charging Year that it relates to;

(b) the identity of the User;

(c) the Delivery Point; and

(d) the quantity of carbon dioxide (expressed in $tCO_2$) forecast for delivery for each and every Day of that Charging Year,

(the **"Annual Forecast"**).

## 10. Rolling Three-month Forecasts

10.1 A User must provide a Rolling Three-month Forecast covering a period of three (3) consecutive months starting on the first day of each month, five (5) Business Days before the start of those three (3) consecutive months, such that, for example:

(a) for the three (3) consecutive months starting on 1 January and ending on 31 March, the Rolling Three-month Forecast must be provided five (5) Business Days before 1 January; and

(b) for the three (3) consecutive months starting on 1 February and ending on 30 April, the Rolling Three-month Forecast must be provided five (5) Business Days before 1 February.

10.2 Each Rolling Three-month Forecast provided by a User must specify:

(a) the three (3) consecutive months that it relates to;

(b) the identity of the User;

(c) the Delivery Point; and

(d) the quantity of carbon dioxide (expressed in $tCO_2$) forecast for delivery for each and every Day of those three (3) consecutive months,

(the **"Rolling Three-month Forecast"**).

## 11. Weekly Forecast

11.1 A User must provide a Weekly Forecast for each Calendar Week by 12:00 hours on Thursday of the preceding Calendar Week.

11.2 Each Weekly Forecast provided by a User must specify:

(a) the Calendar Week that it relates to;

(b) the identity of the User;

(c) the Delivery Point; and

(d) the quantity of carbon dioxide (expressed in $tCO_2$) forecast for delivery for each and every Delivery Period of that Calendar Week,

(the **"Weekly Forecast"**).

## 12. Nominations procedure

12.1 A User must nominate quantities of carbon dioxide (expressed in $tCO_2$) for delivery at a Delivery Point for each Delivery Period of each Day in accordance with the requirements of this Section E (Network Use and Capacity) for the purposes of enabling the T&SCo to:

(a) optimise the use of the T&S Network; and

(b) operate the T&S Network in a safe and efficient manner.

12.2 The procedures for Nominations and Renominations set out in this Section E (Network Use and Capacity) shall not apply to any deliveries of carbon dioxide made by a User prior to that User's Commencement Date and any such deliveries shall instead be governed by any commissioning procedures agreed under that User's Construction Agreement.

## 13. Daily Nominations

13.1 For each Day in relation to which a User holds Registered Capacity, the User must provide a Daily Nomination for each Delivery Period in that Day by the Nomination Close Time.

13.2 The "**Nomination Close Time**" is 13:00 hours on the Day before the Day to which the Daily Nomination relates.

13.3 A Daily Nomination may be submitted no earlier than seventy two (72) hours before the Day to which the Daily Nomination relates.

13.4 At any time before the Nomination Close Time (but not after), a User may change an earlier Daily Nomination already submitted, and where a User does this then:

(a) the last Daily Nomination that it submitted before the Nomination Close Time shall be treated as the User's Daily Nomination for the purposes of this Section E (Network Use and Capacity); and

(b) any earlier Daily Nomination for that Day shall be superseded by that later Daily Nomination.

13.5 Each Daily Nomination made by a User must specify:

(a) the Day that it relates to;

(b) the identity of the User;

(c) the Delivery Point; and

(d) the quantity of carbon dioxide (expressed in $tCO_2$) nominated for delivery for each and every Delivery Period of the Day (the "**Nominated Quantity**"),

(the **"Daily Nomination"**).

## 14. General principles applying to Daily Nominations and Renominations

14.1 A User's Daily Nomination (or Renomination) for each Delivery Period must be the User's best estimate, made in good faith, of the quantity of carbon dioxide (expressed in $tCO_2$) that the User intends to deliver at the Delivery Point for each Delivery Period to which the Daily Nomination (or Renomination) relates.

14.2 A User's Nominated Quantity must not exceed the User's Available Registered Capacity for the Delivery Periods and Delivery Point to which the Nominated Quantity relates.

14.3 Where a User is given notice of a Capacity Constraint in circumstances where:

(a) the Capacity Constraint impacts the User's ability to deliver carbon dioxide at the User's Delivery Point, such that the User's Daily Nomination for any Delivery Period no longer complies with paragraph 14.2; and

(b) the notice has been given less than one (1) hour before Nomination Close Time,

that Daily Nomination shall be deemed to have been amended (through a reduction in the relevant Nominated Quantity) so as to comply with paragraph 14.2.

## 15. Failure to nominate

15.1 If in respect of any Delivery Point and each Delivery Period of a Day a User has not submitted a Daily Nomination, the Nominated Quantity for that Delivery Period (or Delivery Periods) of that Day shall be deemed to be zero (0).

## 16. Confirmation

16.1 The T&SCo must confirm to the User by no later than the Confirmation Close Time whether the User's Daily Nomination for each Delivery Period has been accepted or rejected.

16.2 The "**Confirmation Close Time**" is 15:00 hours on the Day before the Day to which the Daily Nomination relates.

16.3 Where:

(a) the T&SCo has not notified the User by the Confirmation Close Time whether the User's Daily Nomination has been accepted or rejected; or

(b) the Nominated Quantities for every Delivery Period in a User's Daily Nomination are zero (0),

the Daily Nomination shall be deemed to have been accepted.

16.4 Where the T&SCo has accepted (or is deemed to have accepted) the User's Daily Nomination for any Delivery Period, each Nominated Quantity included in the Daily Nomination for that Delivery Period shall be the "**Confirmed Nominated Quantity**".

## 17. Rejection of Daily Nomination

17.1 The T&SCo may reject a User's Daily Nomination for any Delivery Period only where:

(a) as at Nomination Close Time, the Daily Nomination does not comply with the requirements of paragraphs 13.1, 13.5 and/ or 14.2; or

(b) after Nomination Close Time, a Capacity Constraint affects the ability of the T&SCo to accept the whole or part of any Nominated Quantity for that Delivery Period; or

(c) after Nomination Close Time, a Minimum Flow Deficit affects the ability of the T&SCo to accept any Nominated Quantity for that Delivery Period.

17.2 Where the T&SCo has rejected the whole or part of a User's Daily Nomination because of a Capacity Constraint (which is not an ONC Maximum Annual Cumulative Flow Constraint) pursuant to paragraph 17.1(b) (or contrary to the provisions of the Code):

(a) where any whole Nominated Quantity included in the User's Daily Nomination has been rejected, such rejected Nominated Quantity is deemed to be a "**Curtailed Nomination**" for the purposes of the Availability Adjustment; and

(b) where any part of a Nominated Quantity included in the User's Daily Nomination has been rejected, the Curtailed Nomination (for the purposes of the Availability Adjustment) shall be the difference between the Nominated Quantity included in the User's Daily Nomination and the greater of:

(i) any Renominated Constrained Quantity; and

(ii) the actual quantity of carbon dioxide delivered by the User (expressed in $tCO_2$) in that Delivery Period (recognising that a User may flow more carbon dioxide than it has Renominated).

17.3 Where the T&SCo has rejected (or partially rejected) a User's Daily Nomination pursuant to paragraph 17.1(c), the T&SCo must keep the User updated about the extent to which the Nominated Quantities of the User or other Users would be required to increase to meet the Minimum Flow Rate in any Delivery Period affected by a Minimum Flow Deficit, to enable the User to respond to the Minimum Flow Deficit by increasing its Nominated Quantity or Nominated Quantities through a Renomination.

17.4 Where a User has submitted a Daily Nomination that does not comply with the requirements of paragraphs 13.1, 13.5 and/ or 14.2 and that Daily Nomination has not been rejected by Nomination Close Time for reasons outside of the T&SCo's reasonable control, the T&SCo may reject that Daily Nomination after Nomination Close Time, but must do so as soon as reasonably practicable after identifying that the Daily Nomination does not comply with the relevant requirements.

## 18. Renominations – Standard Response Service

18.1 Following the Confirmation Close Time, a User may vary the Nominated Quantities set out in its Daily Nomination by submitting a renomination in accordance with paragraphs 18.3 and 18.4 (a "**Renomination**").

18.2 The "**Standard Response Service**" is the right of a User to be able to Renominate in accordance with this paragraph 18.

18.3 A Renomination can vary one (1) or more of the Nominated Quantities set out in the User's Daily Nomination, provided that:

(a) subject to paragraphs 20 and 21, the Renomination is submitted by the User at least three (3) hours prior to the Delivery Period in relation to which a Nominated Quantity is being amended; and

(b) any Nominated Quantity included in the Renomination does not exceed the restrictions that applied to the User's Daily Nomination:

(i) pursuant to paragraph 14.2 as at Nomination Close Time; or

(ii) subsequently, pursuant to paragraph 43.1.

18.4 Each Renomination made by a User must specify:

(a) the Delivery Period that it relates to;

(b) the identity of the User;

(c) the Delivery Point;

(d) the revised Nominated Quantity; and

(e) whether the User may also be making a Flow Tolerance Request in accordance with paragraph 21 and if so, the reason why the User is making the Flow Tolerance Request.

18.5 Where the T&SCo has received a Renomination from a User in accordance with paragraph 18.1, the T&SCo must confirm to the User within thirty (30) minutes whether it has accepted or rejected the Renomination.

18.6 Subject to the User complying with paragraphs 18.3 and 18.4, where the T&SCo has not confirmed to the User whether it has accepted or rejected the User's Renomination, within the time specified in paragraph 18.5, that Renomination shall be deemed to have been accepted.

18.7 Where the T&SCo has accepted (or is deemed to have accepted) a Renomination, each revised Nominated Quantity included in the Renomination shall be the new Confirmed Nominated Quantity.

18.8 A User may make more than one (1) Renomination in relation to the same Day (or part of a Day) provided that the Renomination complies with the requirements of this Section E (Network Use and Capacity).

18.9 A User may make a Renomination in relation to a Delivery Period even where:

(a) it failed to make a Daily Nomination in relation to that Delivery Period; or

(b) the Daily Nomination in relation to that Delivery Period was rejected or partially rejected,

provided that the Renomination complies in all other respects with this Section E (Network Use and Capacity).

## 19. Rejection of Renomination

19.1 T&SCo may reject a Renomination for any Delivery Period where:

(a) the Renomination does not comply with the requirements of paragraphs 18.3 or 18.4; or

(b) a Capacity Constraint affects the ability of T&SCo to accept the whole or part of any Nominated Quantity for that Delivery Period; or

(c) a Minimum Flow Deficit affects the ability of the T&SCo to accept any Nominated Quantity for that Delivery Period.

19.2 Where the T&SCo has rejected a Renomination pursuant to paragraph 19.1(a), the prevailing Daily Nomination or Renomination shall remain in place.

19.3 Where the T&SCo has rejected the whole or part of a Renomination because of a Capacity Constraint (which is not an ONC Maximum Annual Cumulative Flow Constraint) pursuant to paragraph 19.1(b) or contrary to the provisions of the Code:

(a) where the whole Renomination has been rejected, such rejected Renomination is deemed to be a Curtailed Nomination (for the purposes of the Availability Adjustment); and

(b) where any part of a Nominated Quantity included in the Renomination has been rejected, the Curtailed Nomination (for the purposes of the Availability Adjustment) shall be the difference between the Nominated Quantity included in the Renomination and the greater of:

(i) any Renominated Constrained Quantity; and

(ii) the actual quantity of carbon dioxide delivered by the User (expressed in $tCO_2$) in that Delivery Period (recognising that a User may flow more carbon dioxide than it has Renominated).

19.4 Where the T&SCo has rejected a Renomination for a Delivery Period pursuant to paragraph 19.1(c), the T&SCo must keep the User updated about the extent to which the Nominated Quantities of the User or other Users must increase to meet the Minimum Flow Rate in any Delivery Period affected by a Minimum Flow Deficit, to enable the User to respond to the Minimum Flow Deficit by increasing its Nominated Quantity through a Renomination.

## 20. Renominations – Enhanced Response Service

20.1 Each User may request that the T&SCo provide the Enhanced Response Service in relation to any one (1) or more Delivery Periods, in accordance with this paragraph 20.

20.2 The "**Enhanced Response Service**" is the right for a User to be able to Renominate by submitting a Renomination up to thirty (30) minutes before the start of a Delivery Period, instead of the time referred to in paragraph 18.3(a), in accordance with this paragraph 20.

20.3 Each individual request for the Enhanced Response Service can only relate to one (1) or more Delivery Periods in a particular Day. If the Enhanced Response Service is required in relation to one (1) or more Delivery Periods in different Days, these must be the subject of separate requests for each Day.

20.4 Where a User wishes to request the Enhanced Response Service, the User must:

(a) only request the Enhanced Response Service where it is reasonably required in order for the User to be able to operate its User Facility in a way that a Reasonable and Prudent Operator would;

(b) notify the T&SCo of the reason why the User is requesting the Enhanced Response Service (to allow the T&SCo to keep a record of this for the purposes of paragraphs 36 and 48);

(c) notify the T&SCo if the User may also be making a Flow Tolerance Request in accordance with paragraph 21 and if so, the reason why the User is making the Flow Tolerance Request (with this notification requirement applying at this point in time, instead of pursuant to paragraph 18.4(e));

(d) without limiting the generality of paragraphs 20.4(b) and 20.4(c), notify the T&SCo if the reason the User is seeking a greater degree of responsiveness through the Enhanced Response Service or Flow Tolerance Request is because the User is participating in the Balancing Mechanism;

(e) specify in relation to which Delivery Periods the Enhanced Response Service is being requested;

(f) specify the maximum Nominated Quantity up to which the User may wish to Renominate (the "**Enhanced Response Service Cap**") when utilising the Enhanced Response Service in relation to any Delivery Period (within the Day to which the request relates);

(g) make the request:

(i) no earlier than twenty four (24) hours before the Nomination Close Time for the Day of the Delivery Periods in relation to which the Enhanced Response Service is being requested; and

(ii) no later than three (3) hours before the Delivery Period in relation to which the Enhanced Response Service is being requested; and

(h) notify the T&SCo as soon as practicable if the User no longer needs the Enhanced Response Service in relation to any Delivery Period, having previously requested it, including where the requirement in paragraph 20.4(a) is no longer satisfied.

20.5 Where the Enhanced Response Service is being provided to a User in relation to a Delivery Period:

(a) the time period for making a Renomination for the Delivery Period, pursuant to paragraph 18.3(a), is reduced to thirty (30) minutes;

(b) the T&SCo can only reject that Renomination in accordance with paragraph 19; and

(c) the time period for confirmation by the T&SCo whether a Renomination is accepted or rejected, pursuant to paragraph 18.5, is fifteen (15) minutes, including for the purpose of paragraph 18.6,

to the extent that the amended Nominated Quantity included in any such Renomination does not exceed the Enhanced Response Service Cap for that Delivery Period.

20.6 Save as expressly provided in this paragraph 20, paragraphs 18 and 19 apply to a Renomination under this paragraph 20.

## 21. Flow Tolerance Requests

21.1 In addition to the T&SCo's obligation to accept Renominations in accordance with the Standard Response Service pursuant to paragraph 18 and the Enhanced Response Service pursuant to paragraph 20, the T&SCo must use reasonable endeavours to accept requests from Users to vary the quantity of carbon dioxide to be delivered (expressed in $tCO_2$) in a

Delivery Period on shorter notice (as set out in paragraph 21.2) before the Delivery Period to which the request relates ("**Flow Tolerance Requests**"), to accommodate:

(a) the requirements of Users who, for commercial or operational reasons, need to:

(i) start or increase their operations (resulting in an increased quantity of carbon dioxide) at short notice; or

(ii) stop or decrease their operations (resulting in a decreased quantity of carbon dioxide) at short notice;

(b) the requirements of any Users who, in accordance with paragraph 20.4(d) have notified the T&SCo of an intention to participate in the Balancing Mechanism; or

(c) circumstances where a Renomination has been rejected because of a Minimum Flow Deficit and the User wishes to respond to that Minimum Flow Deficit by increasing its Nominated Quantity.

21.2 The shorter notice period referred to in paragraph 21.1 is:

(a) less than three (3) hours, in the case of Users who are Renominating pursuant to the Standard Response Service; and

(b) less than thirty (30) minutes, in the case of Users who are Renominating pursuant to the Enhanced Response Service.

21.3 When exercising reasonable endeavours to accommodate Flow Tolerance Requests pursuant to paragraph 21.1, the T&SCo:

(a) must respond to the initial request within thirty (30) minutes;

(b) must keep the User updated; and

(c) may reject but then subsequently accept a Flow Tolerance Request (and vice versa), or partially accept or reject it.

21.4 Where a User has requested the Enhanced Response Service pursuant to paragraph 20, but in making a Renomination for a Delivery Period the User is seeking to increase the Nominated Quantity beyond the Enhanced Response Service Cap for that Delivery Period, then the T&SCo's obligation to accommodate the increase beyond the Enhanced Response Service Cap is the same as if it was a Flow Tolerance Request.

21.5 For the purposes of assisting Users to assess whether their Flow Tolerance Request is likely to be accommodated by the T&SCo, the T&SCo must publish on the T&S Network Portal information about the quantity of residual Network Capacity that is available in the current and next six (6) Delivery Periods, where residual Network Capacity means, in relation to that time period:

(a) the Network Capacity available under the operating conditions deployed to accommodate the flows of carbon dioxide expected by the T&SCo; less

(b) the quantity of Network Capacity already committed to be used, based on any existing Final Confirmed Nominated Quantities and any Nominated Quantities that the T&SCo considers are likely to be increased through the Enhanced Response Service.

21.6 Subject to the provisions of this paragraph 21, all other provisions applying to Renominations shall also apply to Flow Tolerance Requests.

21.7 Where the T&SCo rejects (or partially rejects) any Flow Tolerance Request (whether or not it was first accepted), this shall not be considered to be a Curtailed Nomination for the purposes of the Availability Adjustment.

## 22. Minimum Flow Deficits

22.1 Notwithstanding any other provision of this Section E (Network Use and Capacity), the T&SCo may:

(a) reject a Daily Nomination or Renomination in relation to any Delivery Period; or

(b) where the User is already delivering carbon dioxide during a Delivery Period, request that the User ceases to deliver carbon dioxide within the time period specified by the T&SCo,

where the aggregate of Nominated Quantities or actual flow of carbon dioxide (as the case may be) of all Users for that Delivery Period is below the relevant Minimum Flow Rate for all or part of the T&S Network, and the occurrence of such an event is referred to as a "**Minimum Flow Deficit**".

22.2 Where a Minimum Flow Deficit occurs and the T&SCo is required to take the action referred to in paragraph 22.1, the T&SCo must:

(a) notify all Users of the occurrence of the Minimum Flow Deficit as soon as the T&SCo becomes aware of it, together with details of when and for how long the Minimum Flow Deficit is likely to continue; and

(b) use reasonable endeavours to:

(i) mitigate the impact on Users, by declaring a Minimum Flow Deficit only where necessary; and

(ii) notify Users as soon as it becomes apparent that a Minimum Flow Deficit is no longer impacting a Delivery Period.

22.3 Where a Minimum Flow Deficit occurs, Users must keep submitting Daily Nominations and Renominations in accordance with this Section E (Network Use and Capacity) to allow the T&SCo to determine when a Minimum Flow Deficit will no longer be impacting a Delivery Period.

22.4 Where a Minimum Flow Deficit has been caused by a Capacity Constraint (that is, where the Minimum Flow Deficit results from the fact that some Users are not flowing or nominating quantities of carbon dioxide because an insufficient quantity of Registered Capacity is available to them), the Minimum Flow Deficit shall be treated as a Capacity Constraint for the

purposes of calculating the Curtailed Nomination (for the purposes of the Availability Adjustment) under paragraph 17.2 or 19.3 (as applicable).

## 23. Maximum Annual Cumulative Flow Constraints

23.1 Acting as a Reasonable and Prudent Operator, the T&SCo must at all times comply with the provisions of any Storage Permit issued in relation to any Storage Site that forms part of the T&S Network.

23.2 Without limiting the generality of paragraph 23.1, the T&SCo's obligation to accept delivery of carbon dioxide from Users in accordance with the provisions of this Section E (Network Use and Capacity) are subject to the T&SCo's obligation not to exceed the Maximum Annual Cumulative Flow that applies to any Storage Site.

23.3 The T&SCo must publish details of each Maximum Annual Cumulative Flow that applies to each individual Storage Site, as may be updated from time to time in response to any requirements of the NSTA, on its T&S Network Portal.

23.4 The T&SCo must, on an ongoing basis, monitor if and when it is likely that it may exceed the Maximum Annual Cumulative Flow for any individual Storage Site, using the existing and estimated data and information available to it, including:

(a) the quantity of carbon dioxide already delivered into the T&S Network, as measured using Flow Meters in accordance with Section F (Network Design and Specification);

(b) any periods of Programmed Maintenance of the T&S Network;

(c) the Registered Capacity of Users; and

(d) the Forecasts provided by Users pursuant to this Section E (Network Use and Capacity).

23.5 The T&SCo must, on a monthly basis, publish information on the T&S Network Portal, based on the monitoring activities carried out in accordance with paragraph 23.4, about how likely it is that the T&SCo may need to take action pursuant to paragraph 23.6.

23.6 If and when it becomes apparent to the T&SCo, based on the monitoring referred to in paragraph 23.4, and acting as a Reasonable and Prudent Operator, that it will exceed the Maximum Annual Cumulative Flow (or one (1) or more Maximum Annual Cumulative Flows, where the T&S Network includes more than one (1) Storage Site) unless it takes action to reduce the quantity of carbon dioxide being delivered into the T&S Network (such event being referred to as a "**Maximum Annual Cumulative Flow Constraint**"), the T&SCo:

(a) must publish on the T&S Network Portal details of how it has determined that the Maximum Annual Cumulative Flow will be exceeded; and

(b) has the right to reduce the quantity of Registered Capacity available to Users in accordance with the Maximum Annual Cumulative Flow Mitigation Measures to reduce the risk of the Maximum Annual Cumulative Flow being exceeded.

23.7 The "**Maximum Annual Cumulative Flow Mitigation Measures**" are as follows:

(a) the T&SCo must give Users as much notice as reasonably possible of its intention to reduce the quantity of Registered Capacity available to Users because of a Maximum Annual Cumulative Flow Constraint, including details of the Days and Delivery Periods being impacted;

(b) in reducing the Registered Capacity available to be used by Users, the T&SCo and Users shall discuss, in good faith, how to apply the principles set out in paragraph 38 that apply to other Capacity Constraints, recognising that a Maximum Annual Cumulative Flow Constraint can be foreseen with greater notice than other Capacity Constraints and may impact Users over a longer period of time; and

(c) the T&SCo must continue to carry out monitoring activities in accordance with paragraph 23.4 and restore the Registered Capacity available to each User to its full level as soon as reasonably possible.

23.8 Where the T&S Network includes more than one (1) Storage Site, the T&SCo, acting as a Reasonable and Prudent Operator, must use reasonable endeavours to allocate the injection of carbon dioxide between its different Storage Sites to avoid a Maximum Annual Cumulative Flow Constraint arising or, where this is not possible, to reduce the impact on Users.

## 24. Delivery of carbon dioxide in accordance with nomination

24.1 A User's final Confirmed Nominated Quantity, as varied in accordance with any Renomination (including any Renomination made, or deemed to be made, in accordance with the requirements of paragraph 43.1), shall be the "**Final Confirmed Nominated Quantity**".

24.2 A User must use reasonable endeavours to ensure that for every Delivery Period:

(a) the quantity of carbon dioxide (expressed in $tCO_2$) it delivers at a Delivery Point is equal to the Final Confirmed Nominated Quantity (as may be adjusted through a Flow Tolerance Request); and

(b) within the Delivery Period, the rate of flow is not subject to any decreases or increases except where any material variations in the rate of flow are due to unavoidable operational processes which have been notified by the User to the T&SCo in advance, including any ramping up or ramping down of the User Facility.

24.3 Where the T&SCo has accepted the whole or part of a Daily Nomination or Renomination but (subject to paragraphs 4 and 12 of Section F (Network Design and Specification)) subsequently constrains the delivery of part of the relevant Final Confirmed Nominated Quantity during the relevant Delivery Period, the Curtailed Nomination for the purposes of the Availability Adjustment shall be the difference between:

(a) the lower of:

(i) the User's pro-rated pre-constraint flow of carbon dioxide in the Delivery Period (defined as the number of tonnes of carbon dioxide delivered by the User before it was notified of a constraint, pro-rated for the full Delivery Period); and

(ii) the Final Confirmed Nominated Quantity plus the Over Variation Limit of the Final Confirmed Nominated Quantity; and

(b) the User's actual flow of carbon dioxide (being the number of tonnes of carbon dioxide flowed) in that Delivery Period.

## 25. Non-conformity with Final Confirmed Nominated Quantity

25.1 Where, notwithstanding the obligation on the User pursuant to paragraph 24.2(a), a User is delivering a quantity of carbon dioxide that is not equal to its Final Confirmed Nominated Quantity (as adjusted through any Flow Tolerance Request) for a Delivery Period, subject to paragraph 25.3, the User must use reasonable endeavours to ensure that the quantity of carbon dioxide being delivered:

(a) is not lower than the Final Confirmed Nominated Quantity by more than the Under Variation Limit; and

(b) is not higher than the Final Confirmed Nominated Quantity by more than the Over Variation Limit.

25.2 Where a User is delivering a quantity of carbon dioxide in a Delivery Period that is outside of the bounds set out in paragraph 25.1 (including at a rate that is higher or lower than the instantaneous flow rate that corresponds to those bounds) (referred to as an "**Exceedance Event**"):

(a) the User must notify the T&SCo of the Exceedance Event as soon as reasonably practicable, together with the reasons for such Exceedance Event, and use reasonable endeavours to adjust its delivery of carbon dioxide so as to be within those limits; and

(b) the T&SCo must use reasonable endeavours to accommodate the User's delivery of carbon dioxide, except where the User has not complied with paragraph 25.3.

25.3 The flow of carbon dioxide being delivered by a User during a Delivery Period must not exceed the User's Available Registered Capacity for that Delivery Period.

25.4 Where:

(a) a User falls within the scope of paragraph 25.2 and, notwithstanding the T&SCo's obligation under paragraph 25.2(b), the T&SCo considers that accommodating the User's flow of carbon dioxide will have an adverse effect on the safe and reliable operation of the T&S Network and/or result in a Capacity Constraint affecting other Users; or

(b) the User is in breach of paragraph 25.3,

the T&SCo can require the User to reduce or stop its flow of carbon dioxide to align with its Final Confirmed Nominated Quantity.

25.5 In deciding what action to take pursuant to this paragraph 25, the T&SCo must actively communicate with the User.

25.6 Other than where the Final Confirmed Nominated Quantity is zero (0) (in which case paragraph 25.7 applies), where a User falls within the scope of paragraph 25.2 but:

(a) the User's Final Confirmed Nominated Quantity for a Delivery Period was less than fifteen per cent (15%) of the User's Registered Capacity for that Delivery Period; and

(b) the quantity of carbon dioxide being delivered in that Delivery Period is equivalent to less than fifteen per cent (15%) of the User's Registered Capacity for that Delivery Period,

for the purposes of the T&SCo's record keeping obligations under paragraph 36, this event shall be recorded as a "**Low Nomination and Flow Exceedance Event**".

25.7 Where a Final Confirmed Nominated Quantity was zero (0) for a Delivery Period, but the User is delivering carbon dioxide in that Delivery Period:

(a) where the quantity of carbon dioxide being delivered in that Delivery Period is equivalent to more than five per cent (5%) of the User's Registered Capacity for that Delivery Period:

(i) this is deemed to be an Exceedance Event for the purposes of this paragraph 25; and

(ii) for the purposes of the T&SCo's record keeping obligations under paragraph 36, it shall be recorded as a "**Zero Nomination Exceedance Event**"; and

(b) where the quantity of carbon dioxide being delivered in that Delivery Period is equivalent to five per cent (5%) or less of the User's Registered Capacity for that Delivery Period:

(i) this is deemed to not be an Exceedance Event for the purposes of this paragraph 25; and

(ii) for the purposes of the T&SCo's record keeping obligations under paragraph 36, it shall be recorded as a "**Zero Nomination Low Flow Event**".

25.8 Without limiting any other rights of the T&SCo under other Sections of the Code or any Legal Requirement, the T&SCo, acting as a Reasonable and Prudent Operator, may take action to stop the flow of a User's carbon dioxide into the T&S Network where the T&SCo has notified the User of any requirement to reduce or stop its flow pursuant to paragraph 25.4 and the User has failed to respond to such a requirement within a reasonable time having regard to all the circumstances.

25.9 Where the T&SCo has taken action in accordance with paragraph 25.8:

(a) the T&SCo must restore the User's ability to flow carbon dioxide as soon as is reasonably practicable; and

(b) the T&SCo and the relevant User must meet within one (1) month to discuss and prepare a joint report which sets out the facts that led to the T&SCo exercising its right under paragraph 25.8, actions taken by the T&SCo, actions taken in response by the User and a detailed summary of lessons learned and the steps to be taken in the future to avoid the T&SCo being required to act pursuant to paragraph 25.8.

25.10 Once the T&SCo and the relevant User have finalised the joint report pursuant to paragraph 25.9, the T&SCo must:

(a) send it to the Regulator; and

(b) publish it on the T&S Network Portal.

25.11 This paragraph 25 sets out the rights and remedies available to the T&SCo where a User is not flowing carbon dioxide in conformity with the requirement to flow carbon dioxide in any Delivery Period in conformity with the Final Confirmed Nominated Quantity for that Delivery Period. The T&SCo shall not be entitled to issue a Warning Notice or a Default Notice to a User in accordance with Section J (General) where a User is not in compliance with paragraph 24 or paragraph 25 (other than where a User is not in compliance with paragraph 25.4).

## 26. Communication of Forecasts and Nominations

Subject to paragraph 2 of Section J (General) and any requirements for real-time "operator to operator" communications, unless otherwise specified, all other communications and notifications between a User and a T&SCo, including all Forecasts and Nominations, requests for the Enhanced Response Service and Flow Tolerance Requests, shall be made through the T&S Network Portal.

## 27. Surrender of Registered Capacity

27.1 Users may offer to surrender Registered Capacity:

(a) for a Charging Year; or

(b) for the remainder of the period of the User's Registered Capacity where that Registered Capacity is Long-term Network Capacity.

27.2 An offer (a "**Capacity Offer**") to surrender Registered Capacity pursuant to paragraph 27.1 must specify:

(a) the identity of the User;

(b) the Delivery Point;

(c) the time period for which the Registered Capacity is offered for surrender;

(d) the quantity of Registered Capacity offered for surrender; and

(e) the minimum quantity of Registered Capacity for which the User is willing to have the offer accepted.

27.3 A User may make a Capacity Offer at any time, but that Capacity Offer shall only be:

(a) considered as part of Network Capacity allocation during the next Selection Process relating to that T&S Network that follows the making of the Capacity Offer by the User; and

(b) accepted where such Registered Capacity can be re-allocated to another User or prospective User.

27.4 A User shall remain liable for Capacity Charges for any surrendered Registered Capacity until such Registered Capacity is transferred and becomes registered to another User.

## 28. Maintenance Planning – general principles

28.1 The T&SCo must plan the maintenance of the T&S Network and prepare Maintenance Programmes, acting as a Reasonable and Prudent Operator, in order that, so far as is reasonably practicable and having regard to:

(a) the nature and urgency of the requirements for such maintenance;

(b) any Legal Requirements applying to the operation of the T&S Network; and

(c) the T&SCo's normal working practices,

it coordinates the timing of such maintenance to maximise the quantity of carbon dioxide that can be transported and stored.

28.2 References in the Code to maintenance (of a T&S Network or any part of it) include:

(a) maintenance, inspection, repair, replacement, reinstatement and recommissioning of a T&S Network or such part of it;

(b) Network Expansion Works; and

(c) any inspection, testing and commissioning of works within paragraphs 28.2(a) and 28.2(b), and works preparatory thereto, and any works required for bringing any new or existing part of the T&S Network into or back into service.

## 29. Users' planning and forecasting information

29.1 In each Charging Year, each User must provide to the T&SCo, not later than 1 May of Charging Year t-1, for the purposes of the Maintenance Programme, an estimate in respect of each week in the Planning Period commencing in Charging Year t, of the following:

(a) the quantities of carbon dioxide (expressed in $tCO_2$) expected to be delivered to the T&S Network on a Day (in each such week) at each Delivery Point;

(b) details of the times and periods for which maintenance of relevant User Facilities is planned during the relevant Planning Period which may affect the delivery of carbon dioxide to the Delivery Point; and

(c) such further information (if any) as the T&SCo may reasonably require for the purposes of this Section E (Network Use and Capacity).

29.2 A User must provide the information referred to in paragraph 29.1 by the earlier of 1 May or six (6) months before that User's Scheduled Commencement Date.

29.3 A User must, as soon as reasonably practicable upon becoming aware of any requirement to perform maintenance of User Facilities (where such maintenance will have an impact on the User's delivery of carbon dioxide to the T&S Network), notify the T&SCo of such maintenance, together with details of the times and periods of such maintenance and the anticipated impact on its delivery of carbon dioxide to the T&S Network, where such requirement was not known and therefore not notified by the User at the time that the information was provided by the User under paragraph 29.1.

29.4 A User must use reasonable endeavours to co-ordinate the maintenance of relevant User Facilities with any Programmed Maintenance of the T&S Network which may affect the delivery of carbon dioxide at the Delivery Point in order to maximise the quantity of carbon dioxide that can be transported and stored.

## 30. Scope of T&SCo's Maintenance Programme

30.1 Subject to paragraph 30.2, the T&SCo must prepare and publish on its T&S Network Portal an updated Maintenance Programme for the Planning Period ahead, by 16 October of the Charging Year immediately before the start of the Planning Period (the "**Relevant Year**").

30.2 Where a T&SCo has acceded to the Code and has not yet reached the Commercial Operations Date for its T&S Network, it must publish its first (1st) Maintenance Programme by the date which is twenty four (24) weeks before the Scheduled Commercial Operations Date of its T&S Network.

30.3 The Maintenance Programme referred to in paragraph 30.1 is intended to always cover the Planning Period ahead, but the information published for that Planning Period is to be updated when the next annual Maintenance Programme is published, such that, for example:

(a) a Maintenance Programme is published for Charging Years t, t+1, t+2, t+3 and t+4; and

(b) when the next Maintenance Programme is published for Charging Years t+1 to t+5, the information originally published for Charging Years t+1 to t+4 will be updated in accordance with the requirements of this Section E (Network Use and Capacity).

30.4 A Maintenance Programme must identify:

(a) the Delivery Points at which the ability of the T&SCo to accept delivery of carbon dioxide will be constrained by Programmed Maintenance of the T&S Network;

(b) the periods for which such Delivery Points will be so affected;

(c) whether the T&SCo expects that it will continue within such period (or part thereof) to be able to accept delivery of carbon dioxide at any such Delivery Point, but (by reason of such maintenance) on a restricted basis, and if so, an indicative estimate of the maximum rate at which the T&SCo expects to be able to accept delivery of carbon dioxide;

(d) relevant maintenance activities to be performed by Users in accordance with information provided by Users under paragraph 29.1; and

(e) such other information as the T&SCo shall reasonably decide to include.

## 31. Publication of draft Maintenance Programme

31.1 Before publishing the Maintenance Programme in accordance with paragraph 30.1, the T&SCo must:

(a) publish on its T&S Network Portal a draft of the Maintenance Programme by 29 May of the Relevant Year; and

(b) convene a meeting (an "**Annual Maintenance Meeting**") for review of the timing of planned maintenance of the T&S Network under such draft Maintenance Programme, the date of which:

(i) must be no later than 18 September of the Relevant Year (to allow the T&SCo to first consider information provided by Users pursuant to paragraph 31.2); and

(ii) is communicated to Users with not less than eight (8) weeks' notice.

31.2 Users may, by 24 July of the Relevant Year, submit to the T&SCo details of the dates and periods of maintenance planned in respect of any relevant User Facilities and/or comments in relation to the timing of any planned maintenance of the User Facilities under the draft Maintenance Programme.

31.3 Before holding the Annual Maintenance Meeting(s) the T&SCo must discuss with each User, to such extent as it deems appropriate, the details and comments submitted to it by that User under paragraph 31.2.

31.4 Subject to paragraphs 28.1 and 32.1, Maintenance Programme decisions shall be taken by T&SCo in its sole discretion, after liaising with Users in accordance with paragraphs 31.1, 31.2 and 31.3.

## 32. Co-ordination of maintenance between different T&SCos

32.1 In preparing their draft Maintenance Programme, the T&SCos of different T&S Networks must consult each other with a view to seeking to minimise any adverse impacts on the T&SCos and Users (collectively) of maintenance activities.

## 33. Carrying out maintenance

33.1 Subject to paragraphs 33.2 and 33.3, the T&SCo must, so far as is reasonably practicable, carry out all maintenance of the T&S Network in accordance with the dates and periods provided for in the applicable Maintenance Programme, as updated on an annual basis.

33.2 If the T&SCo identifies the need to carry out Reactive Maintenance then it must:

(a) notify any Affected Users as soon as it identifies the need to carry out the Reactive Maintenance; and

(b) schedule the carrying out of the Reactive Maintenance with a view to giving the Affected Users as much notice as is reasonably possible in the circumstances.

33.3 The notice given by the T&SCo to Affected Users in accordance with paragraph 33.2 must include the following information:

(a) the date on which the Reactive Maintenance is to commence and its likely duration; and

(b) the impact of the Reactive Maintenance on the Affected Users.

## 34. Changes to Programmed Maintenance

34.1 If the T&SCo becomes aware that the commencement date or duration of any Programmed Maintenance needs to be changed, outside of the annual review of the Maintenance Programme, the T&SCo must:

(a) notify the Affected Users as soon as is reasonably practicable that the Programmed Maintenance is no longer going ahead at the previously scheduled time/date; and

(b) give the Affected Users not less than twenty (20) Business Days' notice of the new time and date for the carrying out of the Programmed Maintenance, or such lesser period of notice as the Affected Users may agree.

34.2 The T&SCo must use reasonable endeavours to avoid making any changes to Programmed Maintenance under paragraph 34.1.

34.3 The T&SCo must notify Affected Users, by way of reminder, of the carrying out of Programmed Maintenance (as revised under paragraph 34.1) not less than five (5) Business Days before the commencement of such maintenance, provided that no accidental failure to notify a User shall prejudice the T&SCo's rights to carry out maintenance.

34.4 The T&SCo must comply with its notification and reporting obligations to ensure that Affected Users have ongoing updates about the progress of any activities under the Maintenance Programme and when any Capacity Constraint arising from maintenance will conclude.

## 35. Capacity Constraints – general principles

35.1 A "**Capacity Constraint**" is a constraint in or affecting any part of the T&S Network at any time, as a result of which the capacity to accept delivery of carbon dioxide in any part of the T&S Network is less than the Affected Users' aggregate Registered Capacity.

35.2 A Delivery Point is "affected" by a Capacity Constraint where the T&SCo is unable to accept delivery of a quantity of carbon dioxide (expressed in $tCO_2$) at that Delivery Point in any Delivery Period that is equal to a User's Registered Capacity at that Delivery Point for that Delivery Period, or the T&SCo's ability to do so is impaired, by reason of a Capacity Constraint.

35.3 A Capacity Constraint includes (but is not limited to) a constraint which arises by reason of:

(a) Programmed Maintenance;

(b) Reactive Maintenance;

(c) an Emergency; or

(d) a Maximum Annual Cumulative Flow Constraint, as set out in paragraph 23.

## 36. Record keeping and publication obligations

36.1 In addition to the T&SCo's notification obligations under paragraphs 37.1 and 37.2, the T&SCo must keep written records of any Capacity Constraints that have taken place, after the fact, including information relating to:

(a) the nature and cause of the Capacity Constraint;

(b) the Delivery Points affected by the Capacity Constraint;

(c) the action which the T&SCo has taken to address the Capacity Constraint;

(d) whether and how a Pro-rata Reduction and/or the Constrained Capacity Optimisation Principles were applied to reduce the Registered Capacity available to Constrained Users; and

(e) the magnitude and duration of the Capacity Constraint.

36.2 The T&SCo must publish on its T&S Network Portal the information referred to in paragraph 36.1 as soon as is reasonably practicable after the event to which is relates.

36.3 The T&SCo must also keep records, including for the purposes of any Section E Review, of the following:

(a) any requests for the Enhanced Response Service and the reasons for them;

(b) any Flow Tolerance Requests, the reasons for them, and the T&SCo's ability to accommodate such Flow Tolerance Requests;

(c) any Exceedance Events, including which Exceedance Events are recorded as Low Nomination and Flow Exceedance Events or Zero Nomination Exceedance Events, and the reasons for them;

(d) any Zero Nomination Low Flow Events and the reasons for them;

(e) what action the T&SCo needed to take (if any) to respond to the events referred to in paragraphs 36.3(c) and 36.3(d); and

(f) any Minimum Flow Deficits.

36.4 The T&SCo must publish on its T&S Network Portal details of the matters referred to in paragraph 36.3 by 30 November each Charging Year.

## 37. Response to Capacity Constraints

37.1 To the extent not already provided in accordance with paragraph 30, as soon as is practicable after the T&SCo becomes aware that a Capacity Constraint has arisen or will arise, the T&SCo must take the following actions:

(a) the T&SCo must publish information about the Capacity Constraint on the T&S Network Portal;

(b) the T&SCo must send notification of the Capacity Constraint to all Users of Delivery Points affected by the Capacity Constraint (and such affected Users are referred to as "**Constrained Users**"); and

(c) the T&SCo must keep the information referred to in paragraphs 37.1(a) and 37.1(b) reasonably updated, including information about the anticipated conclusion of the Capacity Constraint.

37.2 The information about the Capacity Constraint, which T&SCo must publish and notify to Users in accordance with paragraph 37.1 includes:

(a) the nature and cause of the Capacity Constraint;

(b) the Delivery Points affected by the Capacity Constraint;

(c) the action which the T&SCo is intending to take to address the Capacity Constraint; and

(d) the magnitude and expected duration of the Capacity Constraint.

37.3 Where a Capacity Constraint arises the T&SCo must:

(a) identify the Constrained Users; and

(b) unless the Capacity Constraint arises by reason of an Emergency (under paragraph 39.1) or where paragraph 40.1 applies, the T&SCo must apply the Pro-rata Reduction to the Registered Capacity of those Constrained Users.

## 38. Pro-rata Reduction

38.1 Pro-rata Reduction, where it is triggered pursuant to paragraph 37.3, means that the quantity of Registered Capacity available to a Constrained User is reduced on a pro-rata basis, such that the Available Registered Capacity is calculated according to the following formula:

$$\frac{Available\ Capacity}{\sum CURC} \times RURC$$

where:

"**Available Capacity**" is the total quantity of Network Capacity still available to all Constrained Users during the Capacity Constraint;

"**CURC**" is the Registered Capacity of all the Constrained Users; and

"**RURC**" is the Registered Capacity of the particular Constrained User.

38.2 Once a User is notified of the Available Registered Capacity allocated to the User in accordance with paragraph 38.1, the User must notify the T&SCo as soon as reasonably possible whether or not the User will be able to or intends to use that Available Registered Capacity.

38.3 Where:

(a) the T&SCo has applied a Pro-rata Reduction to the Registered Capacity of Constrained Users; and

(b) one (1) or more Constrained Users have notified the T&SCo that they are unable to use the Available Registered Capacity (or part of it) allocated to them,

the T&SCo must seek to allocate the Available Registered Capacity referred to in paragraph 38.3(b) (being the "**Surplus Available Capacity**") in accordance with the Constrained Capacity Optimisation Principles set out in paragraph 41.2.

38.4 Any Surplus Available Capacity to be allocated as referred to in paragraph 38.3, may be allocated to any Constrained User, even if it would mean that the proportion of Available Capacity allocated to that Constrained User is greater than that of other Constrained Users, provided the T&SCo has applied the Constrained Capacity Optimisation Principles.

## 39. Reduction of Registered Capacity during Emergencies

39.1 Where a Capacity Constraint is caused by an Emergency then, unless it is safe and practicable for the T&SCo, acting as a Reasonable and Prudent Operator, to immediately apply a Pro-Rata Reduction to the Registered Capacity of Constrained Users, the T&SCo may respond to the Emergency by applying:

(a) the Emergency Procedure (where relevant to the Emergency in question); and

(b) the Constrained Capacity Optimisation Principles set out in paragraph 41.2.

## 40. Reduction of Registered Capacity in exceptional circumstances other than an Emergency

40.1 Where:

(a) a Capacity Constraint arises by reason other than an Emergency; and

(b) notwithstanding the fact that there is no Emergency, the circumstances are such that, as set out in the Emergency Procedure, responding to the Capacity Constraint by applying Pro-rata Reduction to the Registered Capacity of Constrained Users would be likely to jeopardise the safety, integrity or operability of the T&S Network,

the T&SCo may respond to the Capacity Constraint by applying the Constrained Capacity Optimisation Principles to reduce the Registered Capacity of Constrained Users.

## 41. Constrained Capacity Optimisation Principles

41.1 Where:

(a) the T&SCo is unable to apply Pro-rata Reduction due to the circumstances set out in paragraph 39.1 or paragraph 40.1; or

(b) there is Surplus Available Capacity as set out in paragraph 38.3,

the T&SCo must allocate the Available Capacity to Constrained Users, by applying the Constrained Capacity Optimisation Principles to determine the Available Registered Capacity that can be allocated to each Constrained User.

41.2 The **"Constrained Capacity Optimisation Principles"** are as follows:

(a) the T&SCo must act with the primary objective to:

(i) only reduce a Constrained User's ability to deliver carbon dioxide at the Constrained User's Delivery Point as a last resort; and

(ii) allow the maximum quantity of carbon dioxide to be stored;

(b) in achieving the primary objective referred to in paragraph 41.2(a), the T&SCo must:

(i) endeavour to maximise the number of Constrained Users that are able to deliver carbon dioxide into the T&S Network;

(ii) take into consideration the operational features and requirements of individual Constrained Users, including (but not limited to) each Constrained User's Minimum Turndown Rate, Minimum and Maximum Ramp Rates, any requirements for a minimum quantity of Network Capacity over a minimum period of time, and any maintenance that will be carried out by the Constrained User; and

(iii) take into consideration the Minimum Flow Rate of the T&S Network; and

(c) the T&SCo must actively communicate with all Constrained Users, to allow the principles set out in paragraphs 41.2(a) and 41.2(b) to be effectively implemented.

41.3 Where the T&SCo applies the Constrained Capacity Optimisation Principles to reduce the Registered Capacity of Constrained Users, either:

(a) pursuant to paragraph 39.1 (to respond to an Emergency); or

(b) pursuant to paragraph 40.1 (other circumstances where a Pro-rata Reduction cannot be immediately utilised to respond to a Capacity Constraint),

then:

(c) the T&SCo must transition to applying Pro-rata Reduction to continue to respond to the Capacity Constraint as soon as it is reasonably practicable; and

(d) after a Pro-rata Reduction is applied, the T&SCo must allocate any Surplus Available Capacity in accordance with paragraph 38.3.

## 42. Constrained Registered Capacity

42.1 Where, in the period up to Nomination Close Time, a Constrained User's Registered Capacity has been reduced:

(a) by a Pro-Rata Reduction in accordance with paragraph 38; and/or

(b) in accordance with the Constrained Capacity Optimisation Principles at paragraph 41,

the difference between the Constrained User's Registered Capacity and the Available Registered Capacity is the "**Constrained Registered Capacity**", for the purposes of the Availability Adjustment, except to the extent this was done in response to an ONC Maximum Annual Cumulative Flow Constraint.

## 43. Renominated Constrained Quantity

43.1 Subject to paragraph 43.2, where the quantity of Registered Capacity available to a Constrained User is reduced or increased after Nomination Close Time:

(a) the Constrained User must amend any Nominated Quantities included in a Daily Nomination or Renomination, through a Renomination, so that no Nominated Quantity exceeds the Constrained User's Available Registered Capacity (but no Renomination is required where no Nominated Quantity exceeds the Available Registered Capacity);

(b) the T&SCo must accept or reject the Renomination in accordance with the principles applying to Renominations set out in this Section E (Network Use and Capacity); and

(c) any amended Nominated Quantity nominated under paragraph 43.1(a) shall be the Constrained User's "**Renominated Constrained Quantity**".

43.2 Where a Constrained User has failed to amend any Daily Nomination or Renomination, through a Renomination in accordance with paragraph 43.1(a), the Constrained User shall

be deemed to have done so and the Constrained User's Renominated Constrained Quantity shall be deemed to be equal to the Constrained User's Available Registered Capacity for that Delivery Period.

43.3 Where a Constrained User has insufficient notice of its Available Registered Capacity in order to be able to comply with the requirements of paragraph 43.1:

(a) the T&SCo and the User must in good faith communicate and cooperate, both acting as Reasonable and Prudent Operators, and the User must endeavour to comply as soon as it is reasonably possible; and

(b) for that Delivery Period, the User's Renominated Constrained Quantity and Final Confirmed Nominated Quantity, for the purposes of calculating the Curtailed Nomination (for the purposes of the Availability Adjustment) under paragraph 17.2 or paragraph 19.3 (as applicable), shall be deemed to be the User's actual flow of carbon dioxide in that Delivery Period.

## 44. No obligation to accept delivery of carbon dioxide

44.1 Without prejudice to any other right the T&SCo may have under the Code to reject the delivery of carbon dioxide (including under Section F (Network Design and Specification)), the T&SCo will be relieved of its obligation to accept delivery of any quantity of carbon dioxide from a User holding Registered Capacity that corresponds to that quantity, to the extent that it is not feasible to do so by reason of a Capacity Constraint.

## 45. Payment of Charges

45.1 Subject to paragraph 45.2, a Constrained User will remain liable to pay Capacity Charges and Network Charges in respect of its Registered Capacity, notwithstanding that the T&SCo is unable to take delivery of carbon dioxide at the quantity of its Registered Capacity at its Delivery Point by reason of a Capacity Constraint.

45.2 Where:

(a) a Capacity Constraint arises for reasons other than Programmed Maintenance;

(b) a Constrained User is unable to utilise the whole or any part of its Registered Capacity by reason of the Capacity Constraint, for a continuous period of more than the waiting period under the relevant insurances; and

(c) the event that caused the Capacity Constraint results from an Insured Risk or property damage on the T&S Network (an "**Insured Event**") which has caused a Capacity Constraint,

the Capacity Charges and Network Charges payable by the Constrained User become provisional and must be reduced for the period for which the relevant insurers are liable (which may commence prior to the time from which it is agreed in writing by the relevant insurers or it has been determined under the relevant insurances that the insurers are liable under the relevant insurance), by an amount equal to the Business Interruption Proceeds referrable to the Constrained User's Capacity Charges and Network Charges.

45.3 The T&SCo must provide notice to the User as soon as reasonably practicable following the date when it has been agreed in writing by the relevant insurers or it has been determined under the relevant insurances that the insurers are liable under the relevant insurances, setting out the level of Business Interruption Proceeds that are referable to the Capacity Charges and Network Charges payable by the Constrained User.

## 46. Capacity Constraints caused or contributed to by Users

46.1 Where the T&SCo considers that any Capacity Constraint has been caused or contributed to by any act or omission of a User, the T&SCo must notify the User within ten (10) Business Days of the alleged act or omission, with full details of the relevant Capacity Constraint and how the User is alleged to have caused it or contributed to it.

46.2 Where a User has received a notification from the T&SCo pursuant to paragraph 46.1, any response that the User wishes to make to the T&SCo must be made within ten (10) Business Days of the date of the notification.

46.3 The T&SCo must notify the Regulator of any alleged act or omission by a User, with full details of the relevant Capacity Constraint and how the User caused it or contributed to it together with, where the T&SCo has received a response from the User pursuant to paragraph 46.2, a copy of that response, within fifteen (15) Business Days of the date of T&SCo's notification to the User pursuant to paragraph 46.1.

## 47. General obligations of Users

47.1 Where a User's flow of carbon dioxide is in any way not in conformity with the provisions of the Code (whether in terms of conformity with the quantity of Registered Capacity available to a User, conformity with nominations or otherwise):

(a) the User must notify the T&SCo as soon as reasonably practicable after becoming aware of such non-conformity;

(b) the User must engage in a dialogue with the T&SCo to determine what, if any, action the User must take in response; and

(c) if a User fails to respond to any direction given by the T&SCo in response to the non-conformity, the T&SCo may take steps to prevent the User from delivering carbon dioxide to the Delivery Point, acting as a Reasonable and Prudent Operator, to minimise any adverse impact on the relevant User Facility.

47.2 In an Emergency, every User must follow any directions of the T&SCo in accordance with the Emergency Procedure.

## 48. Section E Reviews

48.1 Each T&SCo must carry out reviews of certain operational matters relating to its T&S Network (the "**Section E Reviews**") in accordance with Part L of Standard Condition B5 (CCS Network Code) of the Licence and this paragraph 48, once there is sufficient operational data available from use of the T&S Network by Users of each different User Type among the Users who were Selected under the Track-1 Cluster Sequencing Process and

which shall be no earlier than the date that is twelve (12) months after the date of commercial operations of the last of the Users who were Selected under the Track-1 Cluster Sequencing Process to achieve commercial operations (provided that where there are multiple Users of a single User Type using a T&S Network, only the first User of that User Type is required to have achieved commercial operations for the purposes of the review under this paragraph 48.1).

48.2 The Section E Reviews must take place no later than thirty-six (36) months following commencement of commercial operations of the T&S Network and, where it is reasonably apparent that the conditions under paragraph 48.1 will not be satisfied by this date due to the discontinuation or imminent discontinuation of a User who was Selected under the Track-1 Cluster Sequencing Process (or the fact that an Initial User has elected not to accede to the Code), the timeline for carrying out the Section E Reviews pursuant to paragraph 48.1 shall be adjusted to exclude such User such that the Section E Reviews may be carried out prior to the thirty six (36) month longstop.

48.3 Following the carrying out of the first round of Section E Reviews, the Section E Reviews must continue to be carried out on an annual basis.

48.4 The Section E Reviews are as follows:

(a) a review of:

(i) the appropriateness of the levels of the Over Variation Limit and the Under Variation Limit;

(ii) the frequency of and reasons for Exceedance Events, including Exceedance Events which are Low Nomination and Flow Exceedance Events or Zero Nomination Exceedance Events;

(iii) the ability of the T&SCo to accommodate such Exceedance Events;

(iv) the extent to which Exceedance Events impact on the cost of operating the T&S Network, and on the safe and reliable operation of the T&S Network and the needs of all Users; and

(v) the frequency of, and reasons for, Users making Flow Tolerance Requests and the ability of the T&SCo to accommodate such Flow Tolerance Requests,

(the **"Exceedance Events and Flow Tolerance Requests Review"**);

(b) a review of:

(i) the frequency of and reasons for requests by Users for the provision of the Enhanced Response Service;

(ii) the level of responsiveness being provided by the Enhanced Response Service; and

(iii) the impact of the provision of the Enhanced Response Service on the cost of operating the T&S Network, and on the safe and reliable operation of the T&S Network and the needs of all Users,

(the "**Network Responsiveness Review**"); and

(c) a review of the efficacy of the provisions dealing with Nominations and Renominations (including the length of Delivery Periods and implementation timelines and deadlines) as set out in this Section E (Network Use and Capacity) in meeting the needs of Users in an effective, economic and efficient manner (the "**Nominations Review**").

48.5 In carrying out each of the Section E Reviews (that is, the Exceedance Events and Flow Tolerance Requests Review, the Network Responsiveness Review and the Nominations Review), the T&SCo must:

(a) review all relevant operational data and records maintained in accordance with this Section E (Network Use and Capacity) and publish a summary of its findings based on that data and records on the T&S Network Portal;

(b) having made the summary referred to in paragraph 48.5(a) available to Users (together with the relevant operational data and records it is based on), invite the Users of its T&S Network to provide feedback on the subject matter of the relevant review; and

(c) engage with the Users of its T&S Network and use reasonable endeavours to agree with the Users on a set of recommendations in relation to the subject matter of each of the reviews.

48.6 Within six (6) months of commencement of a Section E Review, the T&SCo must publish and provide to the Regulator and the Secretary of State a report setting out a summary of its findings and:

(a) where the T&SCo was able to agree on a set of recommendations with the Users of its T&S Network, the agreed recommendations; and

(b) where the T&SCo and the Users were not able to agree on a set of recommendations, the different views of the T&SCo and the Users of its T&S Network.

48.7 Each Section E Review must be carried out separately, with its subject matter clearly defined, but the findings may be published in a single report.

# CCS Network Code

# Section F – Network Design and Specification

## 1. Introduction

1.1 This Section F (Network Design and Specification) sets out requirements for:

(a) the delivery of carbon dioxide by Users to the T&S Network at Delivery Points;

(b) the installation, operation and maintenance of Measurement Equipment for the purposes of measuring carbon dioxide flows (including impurities) from a User at the Delivery Point to the T&S Network, and certain related issues; and

(c) carbon dioxide re-use where the Re-use Service is being provided to a User.

1.2 Users delivering carbon dioxide to any part of the T&S Network at a Delivery Point shall comply with the requirements of this Section F (Network Design and Specification).

1.3 A "**User Facility"** is a single facility or several facilities operated by a User or Eligible Applicant (where such facilities share a single Delivery Point) including, following connection to the T&S Network, the pipeline(s) and all related equipment connecting such facility or facilities to the T&S Network at a Delivery Point.

## 2. Existence of a Connection Agreement

2.1 A User may not deliver carbon dioxide into the T&S Network at any Delivery Point unless there is in force a Connection Agreement between the User and the T&SCo which, among other things:

(a) identifies the User Facility;

(b) identifies the Delivery Point; and

(c) specifies the Entry Provisions applicable to that Delivery Point.

## 3. Entry Provisions

3.1 The "**Entry Provisions**" for each Delivery Point are:

(a) the Carbon Dioxide Specifications, as defined in paragraph 3.2;

(b) the Measurement Requirements, as defined in paragraph 3.5; and

(c) the Local Requirements, as defined in paragraph 3.8.

3.2 The "**Carbon Dioxide Specifications**" are specific to each individual T&S Network and are set out in parts for each T&S Network in Annexure B (Carbon Dioxide Specifications – T&S Networks).

3.3 The Carbon Dioxide Specifications must at all times conform to the following key principles:

(a) the primary purpose of the Carbon Dioxide Specifications is to ensure the safety, protection and operability of the T&S Network; and

(b) the Carbon Dioxide Specifications shall achieve the following aims:

(i) protection of health and safety;

(ii) corrosion management and avoidance;

(iii) environmental protection;

(iv) operational control assured by maintaining predictable flow conditions; and

(v) management of reservoir impacts.

3.4 In order to achieve the aims set out in paragraph 3.3(b), the Carbon Dioxide Specifications must at all times comply with the requirements set out in Annexure A (Carbon Dioxide Specifications (General)).

3.5 The "**Measurement Requirements**" means the requirements for the Measurement Equipment, including the procedures methods and standards by which compositional analysis, Flow Rate, temperature and pressure will be measured, sampled and analysed and parameters regarding accuracy/regularity of checks, control systems, operation data transmission and quality assurance (including validation of Measurement Equipment) and includes the requirements set out in the $CO_2$ Quality Monitoring Procedure.

3.6 The Measurement Requirements which are specific to each individual T&S Network are set out in Parts for each T&S Network in Annexure C (Measurement Requirements – T&S Networks).

3.7 The Measurement Requirements shall at all times conform to the following principles:

(a) the Measurement Equipment must determine the quantity (measured in $tCO_2$) of all the carbon dioxide delivered by a User at a Delivery Point; and

(b) the components within the carbon dioxide stream shall be:

(i) sampled and monitored to be representative of the carbon dioxide stream and ensure that compliance with the Carbon Dioxide Specifications is maintained; and

(ii) measured regularly at a frequency to be agreed with the T&SCo and must follow a risk assessment process,

including impurities where an exceedance may result in an imminent downstream impact. This may include water, oxygen, oxides of nitrogen, oxides of sulphur, hydrogen sulphide, ammonia and, for dense and multi-phase applications, hydrogen and nitrogen;

(c) the pressure and temperature within the carbon dioxide stream shall be measured continuously;

(d) the calibration range, accuracy and measurement uncertainty of the Measurement Equipment shall be appropriate to the:

(i) permissible levels of impurity; and

(ii) stream operating condition and flowrates,

with sufficient capacity to retain information to enable subsequent investigation in the event of an exceedance; and

(e) monitoring data should be available simultaneously to both the User and the T&SCo, and records retained for a sufficient length of time, which must be for a period no less than the period specified in paragraph 11.3, to enable trends to be identified and for historical information to be interrogated in the event of an impact on the T&S Network infrastructure being identified.

3.8 The "**Local Requirements**" are additional requirements to the Measurement Requirements and Carbon Dioxide Specifications, that apply to a User's Delivery Point and/or the Measurement Equipment at the User's Delivery Point which shall be specified in a User's Connection Agreement, and may include:

(a) any User-specific Carbon Dioxide Specifications requirements;

(b) any User-specific measurement requirements; and

(c) any User-specific carbon dioxide monitoring requirements.

3.9 Each T&SCo acknowledges that:

(a) Users are required to comply with the User Requirements;

(b) the T&SCo must adapt the Local Requirements in order to accommodate the User Requirements, but not to otherwise change any provisions that would otherwise apply to the User under the Code; and

(c) the T&SCo must take into account the Local Requirements set out in a Connection Application when developing the $CO_2$ Quality Monitoring Procedure.

3.10 Each User acknowledges that:

(a) the T&SCo is required to comply with the Regulatory Requirements in relation to the T&S Network; and

(b) in developing the Entry Provisions, T&SCo has had regard to the Regulatory Requirements.

3.11 Notwithstanding any other provision in this Section F (Network Design and Specification), if any aspect of the Entry Provisions cause the T&SCo to be in breach of the Regulatory Requirements:

(a) the T&SCo will give notice to each User specifying any changes required to the Entry Provisions to ensure that the T&SCo is compliant with the Regulatory Requirements;

(b) as soon as reasonably practicable and in any event within ten (10) Business Days of receipt of the notice of Entry Provision changes, each User must notify the T&SCo of any comments on the proposed changes, including:

(i) information about the User (company, registered office, etc.) and about at least one (1) reference person (name, telephone number, fax number, e-mail address, etc.) who can be contacted with respect to that User's comments;

(ii) the reasons why that User believes its comments should be incorporated; and

(iii) any documentation (analyses, reports, etc.) to support the request;

(c) the T&SCo must give reasonable consideration to any comments provided by a User pursuant to paragraph 3.11(b); and

(d) once all comments have been received and considered by the T&SCo in accordance with paragraph 3.11(c), the T&SCo must:

(i) deliver to each User, the LCCC and the Regulator the updated changes to the Entry Provisions; and

(ii) put forward the revised Entry Provisions as a Modification Proposal under the Modification Procedure in Section B (Governance).

3.12 For the purposes of paragraphs 3.8 to 3.11, references to Users shall be treated as including references to Eligible Applicants.

3.13 The Parties acknowledge and agree that notwithstanding paragraph 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on Eligible Applicants under paragraphs 3.8 to 3.11.

## 4. Compliance with Carbon Dioxide Specifications

4.1 Each User must ensure that:

(a) the carbon dioxide delivered at the Delivery Point by the User is compliant with the Entry Provisions; and

(b) sufficient processes are established by the User to detect Non-Compliant $CO_2$ in any carbon dioxide flows tendered for delivery by the User.

4.2 Notwithstanding paragraphs 4.8 and 4.9, if a User becomes aware of Non-Compliant $CO_2$, it must:

(a) immediately commence the procedure to cease delivery of Non-Compliant $CO_2$ (as set out in the Isolation Procedure and the $CO_2$ Quality Monitoring Procedure); and

(b) promptly notify the T&SCo thereof and include in its notification all relevant information relating to the Non-Compliant $CO_2$, including the specifications thereof.

4.3 Where, prior to a User becoming aware of Non-Compliant $CO_2$, a User has reason to believe that there will be a temporary deviation of a component of carbon dioxide that might result in Non-Compliant $CO_2$, such User:

(a) will provide the T&SCo with advanced notification thereof and include in its notification all relevant information relating to such matter; and

(b) where such a notification has been made, the T&SCo shall consider at its discretion providing such User with advanced notice of relief from the requirement to immediately commence the procedure to cease delivery of Non-Compliant $CO_2$ upon receipt of a notice from a User under paragraph 4.2(b) in relation to the delivery of Non-Compliant $CO_2$ as notified under paragraph 4.3(a).

4.4 The T&SCo must notify the User no later than one (1) hour after receiving a notification under:

(a) paragraph 4.3(a) of its decision to provide advanced notice of relief or not from the requirement to immediately commence the procedure to cease delivery of Non-Compliant $CO_2$ under paragraph 4.2(a) where the User becomes aware of it; or

(b) paragraph 4.2 of its decision to either accept or reject the Non-Compliant $CO_2$ (on the basis of the specifications notified by the User to T&SCo in accordance with paragraph 4.2(b) or paragraph 4.3(a) (as applicable)) in whole or at a partially reduced flow,

it being understood that any such decision may be subject to certain conditions and will apply for the limited period of time specified by the T&SCo and any carbon dioxide flow that does not comply with such conditions and/or time limit shall be deemed to have been rejected.

4.5 Any Non-Compliant $CO_2$ notified to the T&SCo or temporary deviations of a component of carbon dioxide notified to the T&SCo under this paragraph 4 which is not acknowledged by the T&SCo within the required period set out in paragraph 4.4 will not be deemed to be accepted by the T&SCo.

4.6 If and to the extent that the T&SCo has accepted Non-Compliant $CO_2$ (whether or not subject to certain conditions), the User shall be entitled to resume the delivery of carbon dioxide at the Delivery Point to enable the accepted Non-Compliant $CO_2$ to enter the T&S Network for the period of time specified by the T&SCo in accordance with paragraph 4.4.

4.7 If, in relation to Non-Compliant $CO_2$ accepted by the T&SCo, the User:

(a) becomes aware of one (1) or more further deviations from the specifications of such Non-Compliant $CO_2$; or

(b) has reason to believe that there will be one (1) or more further temporary deviations of a component of carbon dioxide that might result in Non-Compliant $CO_2$,

to that notified by the User to the T&SCo in its latest notification in accordance with paragraph 4.2(b) or 4.3, the User must make a new notification under paragraphs 4.2(b) or 4.3 (as applicable) and paragraph 4.2 shall apply *mutatis mutandis* (i.e. the User must

promptly notify the T&SCo of the deviation(s) following which the T&SCo must decide to either accept or reject the Non-Compliant $CO_2$) until the expiry of the period specified by the T&SCo under paragraph 4.4.

4.8 Where the T&SCo has reason to believe or becomes aware of Non-Compliant $CO_2$ being tendered for delivery to the T&S Network at a Delivery Point, the T&SCo:

(a) must promptly notify the relevant User about the suspected or actual non-compliance; and

(b) until such time as the relevant non-compliance is rectified where it has been determined that Non-Compliant $CO_2$ has been tendered for delivery at a Delivery Point pursuant to the Measurement Requirements, retains the right in its discretion (but subject to the Measurement Requirements and Isolation Procedure) to:

(i) refuse to accept delivery or continued delivery of such Non-Compliant $CO_2$;

(ii) accept such delivery in full or accept such delivery of part only of what is tendered for delivery; and/or

(iii) apply any reasonable (additional) technical or operational conditions to the acceptance of any Non-Compliant $CO_2$ in accordance with the Measurement Requirements.

4.9 The T&SCo shall be entitled to take any reasonable steps available to it to limit the rate at which Non-Compliant $CO_2$ is delivered to the T&S Network or to secure that such Non-Compliant $CO_2$ is not so delivered, including closing a valve at the Delivery Point with, where reasonably possible, prior warning by telephone to the User.

4.10 Any Non-Compliant $CO_2$ accepted by the T&SCo under this paragraph 4 shall be deemed to comply with all relevant Entry Provisions and shall not be Non-Compliant $CO_2$ with effect from the time such carbon dioxide was delivered to the T&S Network, provided that where such acceptance was subject to certain technical or operational conditions, only that part of the carbon dioxide stream that complies with such conditions shall be deemed to comply with all relevant Entry Provisions and any carbon dioxide that is not compliant with such conditions shall be Non-Compliant $CO_2$.

4.11 If all relevant Entry Provisions in connection with the flow of carbon dioxide, in particular relating to the detection, monitoring, sampling and testing of carbon dioxide components and Flow Rate:

(a) have been complied with by the User, any Non-Compliant $CO_2$ delivered to the T&S Network prior to the time that the T&SCo and/or User became aware of it shall be deemed to comply with all relevant Entry Provisions and shall not be Non-Compliant $CO_2$ with effect from the time such carbon dioxide was delivered to the T&S Network until the time that such Party became aware of it; or

(b) have not been complied with by the User, Non-Compliant $CO_2$ shall be deemed to have been delivered by the User with effect from the time at which the User did not comply with the relevant Entry Provisions.

4.12 For the purposes of this paragraph 4, a Party is "aware" of Non-Compliant $CO_2$ on and from the time the results of the monitoring are received.

## 5. General Measurement Provisions

5.1 In this Section F (Network Design and Specification), "**Measurement Equipment**" means:

(a) all equipment and installations (including associated metering, sensors, sampling and analysis equipment, inlet and outlet pipework, instruments, regulator, filters, valves, sample lines, seals, and structures within which such equipment is housed or mounted) to be installed by a User used to:

(i) determine mass flow of carbon dioxide for fiscal purposes;

(ii) measure the critical components, stream quality and composition of carbon dioxide delivered at a Delivery Point as against the Carbon Dioxide Specifications; and

(iii) measure temperature and pressure of the carbon dioxide stream delivered to the T&S Network; and

(b) any system (forming part of or connected to any of the foregoing) for converting or otherwise processing data or signals obtained from any such device or instrumentation so as to derive the quantities which are to be provided in accordance with this Section F (Network Design and Specification).

**Installation of Measurement Equipment**

5.2 A User may not deliver any carbon dioxide at a Delivery Point until and unless Measurement Equipment which complies with the requirements of this Section F (Network Design and Specification) has been installed, commissioned, operated and maintained in proper working order by the User at the Delivery Point.

5.3 The User must:

(a) obtain T&SCo's prior approval in relation to the siting, specifications and installation of the Measurement Equipment;

(b) ensure that the Measurement Equipment is installed, operated and maintained to the standard of a Reasonable and Prudent Operator;

(c) ensure that any such installation and commissioning shall, to the extent relevant, comply with the Measurement Requirements and the Local Requirements;

(d) ensure that the Measurement Equipment is installed so as to measure the relevant property or characteristic of carbon dioxide flowing at, or as nearly as practicable at, the Delivery Point; and

(e) ensure that the Measurement Equipment installed is designed, installed, operated and maintained so as to be capable of complying with the requirements of the Data

Transfer Procedures (e.g. so as to provide telemetry signals in respect of identified points of telemetry).

5.4 Prior to commissioning, all relevant components of the Measurement Equipment shall be calibrated in compliance with the requirements specified in the Measurement Requirements. Such calibration shall demonstrate conformity with relevant product standards applicable to the class index of each component of the Measurement Equipment (where available).

5.5 The User must procure the calibration certificates which include the actual errors of each component of the Measurement Equipment across its operating range. Such certificates shall be retained by the User in accordance Annexure K (Retained Data) and shall be made available, on request, to the T&SCo.

5.6 Without prejudice to paragraph 5.5, the User must provide such evidence as the T&SCo may require to confirm that, following its commissioning, the Measurement Equipment meets the requirements of this Section F (Network Design and Specification). This evidence shall be traceable and dated.

5.7 Subject to paragraph 5.8 and unless otherwise specified in the Measurement Requirements, each component of the Measurement Equipment must comply with the Applicable Standards specified in the Measurement Requirements which are current at the Code Implementation Date.

5.8 If, following the Code Implementation Date, any component of the Measurement Equipment is calibrated, tested, installed or commissioned, the calibration, testing, installation or commissioning of such component must be carried out in accordance with and comply with the latest version of the Applicable Standards specified in the Measurement Requirements prevailing at the time of such calibration, testing, installation or commissioning.

## 6. Validation of Measurement Equipment

6.1 The T&SCo must at its cost, ensure that the Measurement Equipment is validated by the Independent Verifier in accordance with, and for compliance with, the Measurement Requirements:

(a) prior to any carbon dioxide being allowed to be delivered at a Delivery Point to flow in the T&S Network; and

(b) at least once per calendar year thereafter.

6.2 The User shall be entitled, but shall not be obliged, at its own cost to attend and witness any validation carried out by the Independent Verifier in accordance with this paragraph 6.

6.3 The T&SCo must give the User reasonable prior notice of the date, time, place and nature of every validation carried out pursuant to paragraph 6.1.

6.4 An Independent Verifier shall be entitled to assume that all required consents have been obtained for the relevant validation until such time as it is notified to the contrary.

6.5 The T&SCo must procure the preparation of a report (the "**Validation Report**") of each validation carried out pursuant to this paragraph 6, setting out:

(a) the methodology used for the validation;

(b) the results of the validation;

(c) the steps taken or which are to be taken in accordance with paragraph 6.8 or 6.9 for adjustment or replacement of Measurement Equipment as a result of such validation; and

(d) any other matter required pursuant to the Measurement Requirements.

6.6 The T&SCo must provide the Validation Report to the User no later than fourteen (14) Days after the delivery of the Validation Report to the T&SCo.

6.7 Unless disputed by the User in accordance with paragraph 6.11, the results of the Validation Report shall be binding on both Parties.

6.8 Upon or immediately following delivery of the Validation Report to the User pursuant to paragraph 6.6, if required under paragraph 6.5(c) the User must:

(a) at its own cost ensure that the Measurement Equipment (or the relevant component thereof) is adjusted or replaced as necessary so that the Measurement Equipment (or such component) complies with the Measurement Requirements; and

(b) notwithstanding any dispute commenced by a User relating to the results of a Validation Report, unless otherwise agreed by the T&SCo, immediately commence the procedure to cease delivery of carbon dioxide (as set out in the Isolation Procedure) until such adjustment or replacement has occurred.

6.9 Where the User is unable to ensure the adjustment or replacement of the Measurement Equipment (or any component thereof) upon or immediately following delivery of the Validation Report pursuant to paragraph 6.8, the User must:

(a) submit to the T&SCo proposals for initiating and carrying any required rectification works to address any faults or errors identified in the Validation Report (and which necessitated the recommendation for adjustment or replacement of the Measurement Equipment);

(b) ensure such rectification as soon as reasonably practicable and in accordance with the User's proposals and to the T&SCo's reasonable satisfaction; and

(c) unless otherwise agreed by the T&SCo, immediately commence the procedure to cease delivery of carbon dioxide (as set out in the Isolation Procedure) until the fault has been rectified to the T&SCo's reasonable satisfaction.

6.10 All costs incurred in respect of the Measurement Equipment outside of the validation undertaken under paragraph 6.1 shall be payable by the User.

6.11 The User shall be entitled to dispute the accuracy of any Validation Report by giving notice to the T&SCo not later than fourteen (14) Days after receipt of the same.

6.12 The Parties must, as soon as reasonably practicable after the date of the User's notice in accordance with paragraph 6.11 and in any event within twenty (20) Business Days from the date of such notice, consult together in good faith and use their reasonable endeavours to settle the dispute.

6.13 Where the Parties are unable to resolve the dispute within twenty (20) Business Days from the date of the notice in accordance with paragraph 6.12, either of them shall be entitled to refer the dispute to an Expert for determination in accordance with paragraph 51 of Section B (Governance).

## 7. Measuring Carbon Dioxide Characteristics

7.1 The User must at its own cost install, commission, operate and maintain Measurement Equipment to determine the characteristics defined in the Carbon Dioxide Specifications of any carbon dioxide that is delivered at a Delivery Point. Such Measurement Equipment must be of a type, standard of design and accuracy so as to comply with the Measurement Requirements and must, as a minimum, meet the following criteria:

(a) all measurement biases must as far as is practicable be eliminated or compensated for;

(b) measurement must be such that the risk is minimised to both the User and T&SCo that there may be carbon dioxide flowing of which either or both of them are unaware;

(c) the sampling system used to obtain the composition sample of carbon dioxide for quality measurements must ensure that the sample is representative of the carbon dioxide delivered at a Delivery Point and that no change to the carbon dioxide composition occurs between the sample point and the analytical instrument or that compensation or correction for any such change is fully accommodated within the Measurement Equipment; and

(d) measurements and validation of equipment to make such measurement must, where feasible, be traceable to national or international standards and be in accordance with the Measurement Requirements.

## 8. Measuring quantity of carbon dioxide

8.1 The User must at its own cost install, commission, operate and maintain flow Measurement Equipment to determine the quantity of carbon dioxide (measured in $tCO_2$) flowing into the T&S Network on (or in any period within) a Day at a Delivery Point such that:

(a) all mass flows of carbon dioxide into the T&S Network must comply with this paragraph 8.1; and

(b) the measurement of quantity of mass must be without bias and with an uncertainty of equal to or less than that specified in the Measurement Requirements and any Local Requirements.

## 9. Operation of Measurement Equipment

9.1 The operation and maintenance of Measurement Equipment must include:

(a) all activities associated with meter-reading including, reading, calibration and filing of all data provided by the Measurement Equipment; and

(b) provision of access to real time data to the T&SCo in accordance with the Data Transfer Procedures.

9.2 The User must:

(a) at its own cost and expense, ensure that the Measurement Equipment is kept in good working order, repair and condition in accordance with the Measurement Requirements to the extent necessary to allow the correct registration, recording and transmission of the Measurement Data by the relevant component of the Measurement Equipment;

(b) ensure that the Measurement Equipment is operated so as to:

(i) enable the User to provide Measurement Data in accordance with any applicable Data Transfer Procedures; and

(ii) enable the CDS to have access to the data from the Flow Meter and the Re-Use Service Meter (where relevant) to enable the CDS to perform its functions as contemplated under Section H (Charges, Invoicing and Payment) and Section I (Data), and in particular to prepare a Processed Flow Meter Data Statement for each Billing Period for each User;

(c) ensure that the T&SCo is provided with sufficient operator permissions to enable it to exercise its rights as set out under the Code to reject or refuse the delivery of carbon dioxide at a User's Delivery Point and/or close the Delivery Point; and

(d) seek the T&SCo's consent before making any changes to any installed Measurement Equipment (unless such change is a like for like instrument swap).

## 10. Access to Measurement Equipment, Delivery Point and pipeline infrastructure

10.1 Where:

(a) any part of the Measurement Equipment is located at a site owned or controlled by the User; or

(b) in relation to any pipeline infrastructure owned by a User between the Metering Point and the Delivery Point:

(i) a fault or damage or suspected fault or damage is identified by the T&SCo; or

(ii) the T&SCo wishes to check that the pipeline infrastructure is properly maintained; or

(c) any part of the pipeline infrastructure, Measurement Equipment or the Delivery Point is located at a site owned or controlled by the T&SCo,

the relevant site owner or controller must:

(d) permit the other Party and its agents, subcontractors and representatives (including in the case of the T&SCo, the Independent Verifier) to access any part of the relevant property from time to time in accordance with this paragraph 10; and

(e) grant the other Party and its agents, subcontractors and representatives (including in the case of the T&SCo, the Independent Verifier) full rights to carry out such tasks and do all such acts as are necessary for the purpose of performing audits, tests, reviews and checks from time to time under this Section F (Network Design and Specification), including full rights to carry out such tests (including to obtain samples of the User's carbon dioxide) on any component of the Measurement Equipment or any such pipeline infrastructure,

provided that:

(f) reasonable notice is provided in writing to the other Party of any such access required;

(g) the person responsible for carrying out such tests is or are competent in the operation of such components; and

(h) the Party requiring access takes reasonable steps to procure that such person at all times observes and performs any such arrangements and provisions (or directions or regulations issued pursuant thereto) as may be made by the other Party in accordance with paragraph 10.3.

10.2 The rights and permissions referred to in paragraph 10.1 are:

(a) full rights to enter upon and through and remain upon the relevant property or do any other act contemplated by this Section F (Network Design and Specification); and

(b) full rights to undertake on-site tests and checks in relation to the Measurement Equipment and/or pipeline infrastructure and to report on:

(i) the Measurement Equipment in relation to its compliance with this Section F (Network Design and Specification); and/or

(ii) the pipeline infrastructure in relation to its compliance with this Section F (Network Design and Specification), provided that where T&SCo is seeking access, such rights are for the purposes of paragraph 4.7 of Section J (General),

but in each case only to the extent such rights are necessary for the purposes of this Section F (Network Design and Specification), paragraph 4.7 of Section J (General) and subject to the other provisions of this Section F (Network Design and Specification).

10.3 The Party providing access must use all reasonable endeavours to procure that all reasonable arrangements and provisions are made, and revised from time to time, as and when necessary or desirable to facilitate the safe exercise by the other Party, its agents, subcontractors and representatives (including in the case of T&SCo, the Independent Verifier) of any right of access granted pursuant to paragraphs 10.1 and 10.2 with the minimum of disruption, disturbance and inconvenience to such persons.

10.4 The arrangements and provisions referred to in paragraph 10.3 may, to the extent that the same are reasonable, limit or restrict the exercise of such right of access granted pursuant to paragraphs 10.1 and 10.2 and/or provide for the Party providing access to make directions or regulations from time to time in relation to a specified matter.

10.5 Matters to be covered by the arrangements and/or provisions referred to in paragraph 10.3 include:

(a) provision of a site safety induction;

(b) supply of all necessary personal protective equipment;

(c) a method of identifying any relevant component of the Measurement Equipment;

(d) the particular access routes applicable to the relevant property having particular regard to the weight and size limits on those routes;

(e) any limitations on times of exercise of the right of access;

(f) any requirements as to prior notification and as to authorisation or security clearance of individuals exercising the right of access and procedures for obtaining the same;

(g) the means of communication by the Party granting access (to all individuals exercising the right of access) of any relevant directions or regulations made by such Party;

(h) the availability of all site personnel that the individuals exercising the right of access may wish to liaise with during the exercise of the right of access granted pursuant to paragraphs 10.1 and 10.2;

(i) the identification of any arrangements applicable to the individuals exercising the right of access granted pursuant to paragraphs 10.1 and 10.2; and

(j) disclosure of any known hazards on the site.

10.6 Subject to paragraph 4.2 of Section J (General), the Party requiring access must take all reasonable steps to procure that all personnel, agents, subcontractors and representatives (including in the case of the T&SCo, the Independent Verifier) of it take all reasonable steps in the exercise of any right of access pursuant to paragraphs 10.1 and 10.2, in order to:

(a) avoid or minimise damage in relation to any relevant property; and

(b) cause as little disturbance and inconvenience as possible to any third party or other occupier of any relevant property,

and that each person makes good any damage caused to such property in the course of the exercise of such rights as soon as practicable.

10.7 If and to the extent that the site is not owned by the Party to which access is being requested, such Party must ensure that the relevant owner grants the other Party a right of access in accordance with paragraph 10.1.

10.8 If:

(a) any Measurement Equipment is found to not comply with the requirements of this Section F (Network Design and Specification); and/or

(b) the T&SCo is prevented from exercising its access rights under this paragraph 10,

the T&SCo may require the User to cease delivery of carbon dioxide at the User's Delivery Point and the User must immediately commence the procedure to cease delivery of carbon dioxide (as set out in the Isolation Procedure).

10.9 The User must, at its own cost and expense, repair or replace (any part of) the Measurement Equipment that is not functioning in accordance with the Measurement Requirements or otherwise in accordance with this Section F (Network Design and Specification).

10.10 The User must, at its own cost and expense, ensure that any pipeline infrastructure owned by a User between the Metering Point and the Delivery Point is maintained and inspected by the User acting as a Reasonable and Prudent Operator, and the User must comply with any reasonable requests from the T&SCo for copies of records of any such maintenance or inspection.

10.11 Except in the case of a Downstream Venting Event, the User must ensure that any carbon dioxide flowing through the Metering Point is subsequently delivered by the User at the Delivery Point, and that no carbon dioxide is off-taken or added by the User or any other party between the Metering Point and the Delivery Point.

10.12 Where:

(a) in accordance with the provisions of paragraphs 4.1 to 4.12 a User is required to cease delivery of Non-Compliant $CO_2$;

(b) at the time when the User is required to commence any procedures to cease delivery of Non-Compliant $CO_2$ (whether in whole or in part, as the case may be), there is Non-Compliant $CO_2$ in the pipeline infrastructure between the Metering Point and the Delivery Point; and

(c) the only technically viable way for the User to comply with the obligations referred to in paragraph 10.12(a) is to vent the Non-Compliant $CO_2$ referred to in paragraph 10.12(b),

**Or**

(d) the User needs to remove carbon dioxide from the pipeline infrastructure between the Metering Point and the Delivery Point for the purpose of routine or emergency maintenance,

then the User is permitted to vent carbon dioxide from a Downstream Vent (referred to here as a “Downstream Venting Event”), provided that in carrying out the Downstream Venting Event the User, acting as a Reasonable and Prudent Operator:

(i) must not vent more carbon dioxide than is required to comply with the obligations referred to in paragraph 10.12(a) to 10.12(d), being the quantity of carbon dioxide contained and isolated in the section of the pipeline infrastructure between the Metering Point and the Delivery Point at the time of the Downstream Venting Event; and

(ii) may remove a quantity of carbon dioxide that is compliant with the Entry Provisions in addition to the Non-Compliant $CO_2$, but only to the extent required to purge any residual impurities as part of the Non-Compliant $CO_2$ venting process.

10.13 Where a User has a Downstream Vent, the User must;

(a) only use the Downstream Vent for the purpose described in paragraph 10.12; and

(b) design the Downstream Vent to minimise the risk of leakage of carbon dioxide and ensure that the risk of leakage of carbon dioxide due to the presence of a Downstream Vent or a temporary vent connection point remains minimal during normal operations.

10.14 Where the User has carried out a Downstream Venting Event, the User must;

(a) notify the T&SCo when the Downstream Venting Event is complete and the User is able to recommence delivery of carbon dioxide in compliance with the Entry Provisions;

(b) determine the quantity of carbon dioxide vented (the "Vented Quantity"), expressed in $tCO_2$, using a method that is compliant with ETS Legislation and Guidance and is documented in the Isolation Procedure;

(c) as soon as reasonably practicable and in any event no later than twenty-four (24) hours after the end of the Downstream Venting Event, provide to the T&SCo:

(i) the Vented Quantity; and

(ii) a statement confirming that the Vented Quantity has been prepared in accordance with the method documented in the Isolation Procedure;

(d) provide to the T&SCo all information reasonably required (in accordance with the Isolation Procedure) by the T&SCo to enable the T&SCo to:

(i) comply with its obligations under the ETS Legislation and Guidance; and

(ii) determine the ETS Liabilities, with respect to the carbon dioxide that has been vented.

10.15 T&SCo will notify the Vented Quantity to the CDS within two (2) Business Days of receipt of it from the User.

## 11. Measurement Records

11.1 The User must record all Measurement Data (including corrected and estimated data) at the intervals and in the format and otherwise as provided in the Measurement Requirements and the Data Transfer Procedures.

11.2 The User must prepare and maintain auditable, complete and accurate records relating to the installation, maintenance, testing, operation, calibration, setting and validation of Measurement Equipment, including:

(a) the configuration of flow computers and programmable devices forming part of the Measurement Equipment; and

(b) the results of all tests and validations carried out in relation to the Measurement Equipment,

and provide a copy of such records to the T&SCo promptly upon request.

11.3 The User must retain all records of Measurement Data for a period of no less than ten (10) years after the last Day to which such Measurement Data relates.

11.4 The records required to be maintained and retained under this paragraph 11 shall be stored in electronic format.

11.5 Records stored in electronic format must be stored so as:

(a) to be capable of immediate access or retrieval within a period of not less than twelve (12) months after the Day to which such records relate; and

(b) thereafter, to be retrievable from archive within five (5) Business Days after a request to retrieve such data.

11.6 The User must, as soon as reasonably practicable and without charge, provide to the T&SCo on request a copy of the records maintained in accordance with this paragraph 11 (provided that if the T&SCo requires more than one (1) copy, or a copy on more than one (1) occasion, of records relating to the same matter, the User may charge the T&SCo the costs incurred in providing such additional or further copies).

11.7 The T&SCo must be entitled at any time, upon giving five (5) Business Days prior notice to the User, to inspect the records of the Measurement Data for any Day or Days within the preceding twelve (12) months.

## 12. Measurement Equipment Destruction, Damage or Errors

12.1 The User must, at its cost, take measures to enable it to identify Measurement Equipment Errors in accordance with the standard of a Reasonable and Prudent Operator.

12.2 If at any time any component of the Measurement Equipment is destroyed or damaged or the User identifies a Measurement Equipment Error, the User must:

(a) promptly notify the T&SCo thereof and include in its notification all relevant information relating to nature of the destruction, damage or Measurement Equipment Error; and

(b) without prejudice to paragraph 12.14, unless otherwise agreed by the T&SCo (acting as a Reasonable and Prudent Operator), immediately commence the procedure to cease delivery of carbon dioxide (as set out in the Isolation Procedure) through the User's Delivery Point until such time as is specified by the T&SCo under paragraph 12.10(a).

12.3 The User must:

(a) investigate the cause of such destruction, damage or Measurement Equipment Error within two (2) Business Days of becoming aware of the same; and

(b) as soon as possible provide the T&SCo with all relevant information relating to such cause(s).

12.4 If the User employs a third party agent or representative to investigate the relevant component of the Measurement Equipment under paragraph 12.3, the User must procure such investigation takes place within five (5) Business Days of becoming aware of the destruction, damage or Measurement Equipment Error.

12.5 The User must use all reasonable endeavours to rectify the destruction, damage or Measurement Equipment Error, including by repairing or replacing any defective component so as to ensure that such component is back in service and is operating in accordance with the Measurement Requirements as soon as reasonably practicable, and in any event within ten (10) Business Days of the date on which the destruction, damage or Measurement Equipment Error is discovered by or notified to the User.

12.6 If the destruction, damage or Measurement Equipment Error has not been rectified within the required ten (10) Business Day period, the User must notify the T&SCo on the Business Day immediately following such ten (10) Business Day period with a proposal setting out how and the time period within which it intends to rectify the matter.

12.7 The User must notify the T&SCo within two (2) Business Days of rectifying the relevant destruction, damage or Measurement Equipment Error.

12.8 The T&SCo shall be entitled to attend any investigation of the destruction, damage or Measurement Equipment Error and the reasonable costs of such attendance shall be borne by the User.

12.9 Where a T&SCo believes that there has been a Measurement Equipment Error (or a Measurement Equipment Error has been identified as part of the validation carried out under paragraph 6.1), the T&SCo must notify the User of the nature of such error within one (1) Business Day of becoming aware of the same.

12.10 Without prejudice to paragraphs 12.2 to 12.8, where a notification has been made under paragraph 12.2 or 12.9:

(a) the T&SCo must, as soon as reasonably practicable and at the latest within (1) hour of being notified of a rectification under paragraph 12.7, notify the User of when the User will be entitled to recommence delivery of carbon dioxide;

(b) the Parties must meet to discuss the matter; and

(c) the Parties shall (if required) consult together in good faith and use their reasonable endeavours to agree any Measurement Adjustment.

12.11 If the Parties are unable to reach agreement under paragraph 12.10 as to any Measurement Adjustment within thirty (30) Days then, subject to paragraph 13.2, either Party shall be entitled to have (any part of) the Measurement Equipment inspected by the Independent Verifier, upon reasonable notice to the other Party, and the other Party shall be entitled to have its employees, agents or representatives present during any such inspection.

12.12 The Parties must accept the result of any inspection by the Independent Verifier as a final determination of any Measurement Equipment Error (including the Independent Verifier's decision regarding any Measurement Adjustment).

12.13 The costs of the inspection under paragraph 12.11 shall be borne by the Party requiring the inspection, unless the inspection demonstrates that (the relevant part of) the Measurement Equipment was not functioning in accordance with the Measurement Requirements or otherwise in accordance with this Section F (Network Design and Specification), in which case the costs shall be borne by the User.

12.14 Where a Measurement Equipment Error has been notified under this paragraph 12, the T&SCo may require the User to immediately commence the procedure to cease delivery of carbon dioxide (as set out in the Isolation Procedure) at the User's Delivery Point until such time as a Measurement Adjustment has been completed.

12.15 The T&SCo must notify the User no later than one (1) hour after receiving a notification under paragraph 12.2(a) or 12.9 of its decision to either accept or reject carbon dioxide through the User's Delivery Point in whole or at a partially reduced flow, it being understood that:

(a) such acceptance may be subject to certain conditions and will be for the limited period of time specified by the T&SCo; and

(b) if the carbon dioxide is accepted in part, the remaining part shall be deemed to have been rejected.

12.16 Any carbon dioxide accepted by the T&SCo under this paragraph 12 shall be deemed to comply with all relevant Entry Provisions and shall not be Non-Compliant $CO_2$ with effect from the time such carbon dioxide was delivered to the T&S Network, provided that where such acceptance was subject to certain technical or operational conditions, only that part of the carbon dioxide stream that complies with such conditions shall be deemed to comply with all relevant Entry Provisions and carbon dioxide which is not compliant with such conditions shall be rejected.

12.17 The T&SCo will not be deemed to accept any Non-Compliant $CO_2$ delivered to a User's Delivery Point following a notification under paragraph 12.2(a) or 12.9 where the T&SCo has not acknowledged such notification and accepted such carbon dioxide within the required period set out in paragraph 12.15.

12.18 If and to the extent that the T&SCo has accepted carbon dioxide under paragraph 12.15 (whether or not subject to certain conditions), the User shall be entitled to resume the delivery of carbon dioxide at the Delivery Point to enable the accepted carbon dioxide to enter the T&S Network for the period of time specified by the T&SCo in accordance with paragraph 12.15.

## 13. Flow Meter Errors

13.1 Where any Measurement Adjustment in respect of a Flow Meter Error is agreed or determined under paragraph 12.10 or 12.11, such agreement or determination must set out:

(a) the period within which any adjustments to the flow rate measurement are to be made ("**Adjustment Period**");

(b) the amount by which it is agreed or determined that the Flow Meter has over- or under-registered the quantity of carbon dioxide delivered at the relevant Delivery Point;

(c) the adjusted raw data for the Adjustment Period; and

(d) the adjusted Daily Quantity for the Adjustment Period.

13.2 Where a Flow Meter Error results from a total failure of the Flow Meter such that there is no available Flow Rate data for a period, provided that the Parties have failed to reach agreement as to the Measurement Adjustment to be applied during such period under paragraph 13.1(b), the Measurement Adjustment for the relevant period shall substitute the Flow Rate data for the relevant period with the User's Registered Capacity for that period.

13.3 T&SCo will provide the results of any Flow Meter Adjustment to the CDS for the purposes of paragraph 19.1 of Section H (Charges, Invoicing and Payment), within two (2) Business Days of such Flow Meter Adjustment being determined.

## 14. Re-use Service

**Nature of Re-use Service**

14.1 Carbon dioxide re-use (the "**Re-use Service**") involves an Onshore User:

(a) taking delivery of carbon dioxide from the T&S Network, at a Re-use Delivery Point; and

(b) subject to all other provisions of the Code relating to the User's rights to deliver carbon dioxide at the User's Delivery Point, re-delivering an equivalent quantity of carbon dioxide into the T&S Network at the User's Delivery Point,

where the taking delivery of the carbon dioxide pursuant to paragraph 14.1(a) is:

(c) for a Re-use Purpose; and

(d) only temporary,

on the basis that the User's objective is that any carbon dioxide it has taken delivery of should be returned into the T&S Network in accordance with paragraph 14.1(b).

**User right to request Re-use Service**

14.2 An Onshore User (including a prospective Onshore User applying for a connection under Section C (Connection)) may at any time request the T&SCo to provide a Re-use Service to the User.

14.3 Where a User wishes to request the T&SCo to provide the Re-use Service, the User must provide the request to the T&SCo in writing, setting out:

(a) the technical and operational reasons why it is requesting the Re-use Service; and

(b) the date on which it requires the Re-use Service to commence.

**Circumstances where T&SCo must offer the Re-use Service**

14.4 Within twenty (20) Business Days of receiving a request from a User in accordance with paragraph 14.3, the T&SCo must notify the User of its initial view as to whether the T&SCo will be able to offer the Re-Use Service.

14.5 Where the T&SCo has notified the User that it is of the view that it is not able to offer the Re-Use Service to the User, the T&SCo must provide reasons to the User.

14.6 The T&SCo must offer the Re-Use Service if requested by a User where the T&SCo, acting as a Reasonable and Prudent Operator, considers that:

(a) it is technically possible to install the required Re-use Service Infrastructure and provide the Re-use Service to the User; and

(b) the installation of the Re-use Service Infrastructure and provision of the Re-use Service to the User will not adversely impact the operation of the T&S Network and/or the ability of other Users to deliver carbon dioxide at their Delivery Points.

14.7 Where the T&SCo has notified the User that it is of the view that it will be able to offer the Re-Use Service to the User, the T&SCo must:

(a) advise the User what additional technical information it requires; and

(b) within twenty (20) Business Days of the date of its notification to the User under paragraph 14.4, make an offer to the User in writing setting out details of:

(i) the Re-Use Service Infrastructure and owners of such infrastructure;

(ii) the Re-Use Service Infrastructure Works and responsibilities of the Parties for carrying out such works;

(iii) the estimated capital cost of the Re-Use Service Infrastructure Works; and

(iv) the proposed programme to carry out the Re-Use Infrastructure Works.

**Carrying out of works**

14.8 Where a User has requested the Re-use Service in accordance with paragraph 14.3 and the T&SCo has offered to provide the Re-use Service, the User shall be responsible for the cost of the Re-use Service Infrastructure and the Re-use Service Infrastructure Works.

14.9 The carrying out of the Re-use Service Infrastructure Works shall be governed by the Construction Agreement and the Parties shall agree which parts of the Re-use Service Infrastructure Works shall be:

(a) carried out by the T&SCo, and therefore be "T&SCo Works" for the purposes of the Construction Agreement; and

(b) carried out by the User, and therefore the "User Works" for the purposes of the Construction Agreement.

14.10 Where any Re-use Service Infrastructure Works are agreed to be "T&SCo Works" for the purposes of the Construction Agreement:

(a) the Construction Agreement shall include a provision requiring the User to pay for the cost of the T&SCo carrying out such Re-use Service Infrastructure Works; and

(b) such cost shall be determined on a cost reflective basis (the methodology for which is to be applied consistently to all Users requiring the Re-use Service) and set out in the Construction Agreement.

14.11 Where the User has requested the provision of the Re-use Service after the construction and commissioning of the Delivery Point to which the Re-user Service relates:

(a) the Parties shall enter into a deed of amendment of the User's existing Construction Agreement or enter into a further Construction Agreement (as may be appropriate in the circumstances) to govern the construction and commissioning works, as provided for in paragraph 14.9; and

(b) the Parties shall enter into a deed of amendment of the User's existing Connection Agreement to document the matters provided for in paragraph 15.3.

## 15. Terms for provision of the Re-Use Service

**Application of Code to the Re-use Service**

15.1 Where the Re-use Service is being provided to a User, the provisions of the Code shall apply as follows:

(a) title and risk (including carbon dioxide compositional risk) in carbon dioxide delivered to the User Facility at a Re-use Delivery Point shall pass to the User at that Re-use Delivery Point upon delivery;

(b) the provisions of Section J (General) relating to liabilities, default and suspension shall apply;

(c) the provisions of Section F (Network Design and Specification) relating to Measurement Equipment (including the application of the Measurement Requirements, validation of Measurement Equipment and the process for resolving Measurement Equipment Errors) shall apply to the Re-use Meter at the Re-use Delivery Point in the same way as the Flow Meter at the User's Delivery Point;

(d) the quantity of carbon dioxide being delivered back to the User at the Re-use Delivery Point shall be measured using the Re-use Meter in accordance with Section F (Network Design and Specification) and that quantity, expressed in $tCO_2$/Day, is referred to as the Re-use Daily Quantity;

(e) when the User takes delivery of a quantity of carbon dioxide at the Re-use Delivery Point and then re-delivers an equivalent quantity of carbon dioxide at the User's Delivery Point, the User must have sufficient Registered Capacity for that quantity and must ensure that quantity is included in the Daily Nominations and Re-nominations made by the User in accordance with Section E (Network Use and Capacity);

(f) the User will be required to pay the Re-use Service Charge in accordance with Section H (Charges, Invoicing and Payment); and

(g) the provisions of Section I (Data) relating to the CDS Contract shall apply to enable the CDS to take into account any quantities of carbon dioxide delivered to the User Facility at a Re-use Delivery Point for the purposes of preparing the Processed Flow Meter Data Statement.

15.2 The T&SCo and the User must agree on the operational procedures (the "**Re-use Service Operational Procedures**") that are to govern the arrangements for the User to take deliveries of carbon dioxide at the Re-use Delivery Point, such as:

(a) any restrictions on the quantities of carbon dioxide that the User may take delivery of; and

(b) any forecasts and nominations that must be provided by the User to give the T&SCo notice of when quantities of carbon dioxide will be required by the User.

**Connection Agreement**

15.3 Where the Re-use Service is being provided to the User, the following details shall be set out in Schedule 4 of the User's Connection Agreement:

(a) the description of the Re-use Delivery Point, including a schematic showing the location of the Re-use Delivery Point;

(b) details of the Re-use Meter;

(c) details of the Re-use Service Operational Procedures agreed by the Parties;

(d) any details of the size of the Re-use Delivery Point; and

(e) where any part of the equipment/infrastructure associated with the Re-use Service is located at a site owned or controlled by the T&SCo, provision for the T&SCo to grant, upon reasonable notice and subject to any site safety or other rules regarding access, the User and its agents, subcontractors and representatives access to such equipment/infrastructure to inspect it.

# CCS Network Code

# Section G – Common Interface Procedures

## 1. Key Principles

1.1 Each T&SCo must:

(a) establish, maintain and from time to time modify the Common Interface Procedures in accordance with this Section G (Common Interface Procedures); and

(b) ensure that each User at all times has an up-to-date version of such Common Interface Procedures.

1.2 The scope of Common Interface Procedures are procedures that:

(a) impact both the T&SCo and User(s) across defined site boundaries; and/or

(b) require a co-ordinated action or response between the T&SCo and User(s); and/or

(c) require the T&SCo and/or User(s) to communicate operational or emergency events, issues or actions that may impact one another.

1.3 Each T&SCo must ensure that the Common Interface Procedures for its applicable T&S Network at all times conform to the following key principles:

(a) the Common Interface Procedures shall be designed to:

(i) ensure a uniform approach is taken in relation to procedures that:

(A) affect more than one (1) User; and

(B) are related to topics which are likely to impact a User's cost base, maintenance or other operational processes;

(ii) ensure safe conduct of all operations;

(iii) minimise any detrimental impact to the environment;

(iv) minimise disruption to the operation of the T&S Network;

(v) meet the needs of both the T&SCo and Users; and

(vi) support the safe economic, efficient and effective capture, transport and storage of carbon dioxide;

(b) the Common Interface Procedures must comply with Legal Requirements;

(c) the Common Interface Procedures must be:

(i) transparent; and

(ii) non-discriminatory as between Users and in accordance with paragraph 6.4 of Standard Condition B6 (Conduct of T&S Business) of the Licence;

(d) the Common Interface Procedures must be aligned with the aims of the Code and HM Government ambitions for carbon capture and storage in the United Kingdom; and

(e) the Common Interface Procedures must be consistent with the provisions of the Code.

1.4 For the purposes of this Section G (Common Interface Procedure), references to Users shall be treated as including references to Eligible Applicants.

## 2. Compliance

2.1 All Users and the T&SCos are required to comply with the Common Interface Procedures to be developed in accordance with the provisions of this Section G (Common Interface Procedures).

## 3. List of Procedures

3.1 The following procedures comprise the Common Interface Procedures:

(a) Emergency Procedure;

(b) Start-up and Shut-down Procedure;

(c) Isolation Procedure; and

(d) $CO_2$ Quality Monitoring Procedure.

3.2 The Implementation Date for each Common Interface Procedure is as follows:

(a) Emergency Procedure: Scheduled Commercial Operations Date;

(b) Start-up and Shut-down Procedure: Scheduled Commercial Operations Date;

(c) Isolation Procedure: Scheduled Commercial Operations Date; and

(d) $CO_2$ Quality Monitoring Procedure: the date that is three (3) months after the date that the T&SCo has become a Party to the Code, or such earlier or later date as the T&SCo and the Users on its T&S Network agree, acting reasonably.

## 4. Preparation

4.1 Each T&SCo must develop, finalise and implement the Common Interface Procedures listed in paragraph 3.2 for the applicable T&S Network.

4.2 Each T&SCo must engage in sharing best practice with other T&SCos and Prospective T&SCos when developing and finalising the Common Interface Procedures in accordance with paragraph 4.1.

4.3 In developing the Common Interface Procedures in accordance with paragraph 4.1, each T&SCo is required to ensure that the Common Interface Procedures:

(a) comply with the key principles set out in paragraph 1; and

(b) comply with the Terms of Reference for each Common Interface Procedure as set out in Annexure D ($CO_2$ Quality Monitoring Procedure Terms of Reference), Annexure F (Emergency Procedure Terms of Reference), Annexure G (Start-up and Shut-down Procedure Terms of Reference) and Annexure H (Isolation Procedure Terms of Reference).

4.4 No later than eighteen (18) months prior to the Scheduled Commercial Operations Date, the T&SCo must deliver to:

(a) each User; and

(b) the Regulator,

the first draft Common Interface Procedures required to be developed pursuant to paragraph 4.1 (other than the $CO_2$ Quality Monitoring Procedure which shall be delivered in accordance with paragraph 4.5) for review and, in the case of each User, comment in accordance with paragraphs 5.1 to 5.6.

4.5 As soon as reasonably practicable after the date that the T&SCo has become a Party to the Code, the T&SCo must deliver to:

(a) each User;

(b) the Regulator; and

(c) the Secretary,

the first draft $CO_2$ Quality Monitoring Procedure required to be developed pursuant to paragraph 4.1 for review and, in the case of each User, comment in accordance with paragraphs 5.1 to 5.6.

## 5. Review Procedure

5.1 As soon as reasonably practicable and in any event within twenty (20) Business Days of receipt of any draft Common Interface Procedure, each User must notify the T&SCo of any comments it has on the draft Common Interface Procedure.

5.2 When providing comments to the T&SCo in accordance with paragraph 5.1, each User is required to provide the following:

(a) information about the User:

(i) including but not limited to the company name and the address of its registered office; and

(ii) the name, telephone number, and e-mail address (as applicable) of at least one (1) reference person who can be contacted with respect to the User comments;

(b) the reasons why the User believes the User comments on the draft Common Interface Procedure should be incorporated; and

(c) any documentation (such as any applicable analyses and reports) to support the request.

5.3 Before preparing any updated draft of a Common Interface Procedure, the T&SCo must convene a meeting with Users in order to discuss any User comments provided in accordance with paragraph 5.1, the date of which must be communicated to Users with not less than ten (10) Business Days notice.

5.4 In preparing the updated draft of any Common Interface Procedure, the T&SCo must:

(a) give reasonable consideration to any comments provided by a User pursuant to paragraphs 5.1 and 5.3;

(b) ensure that the draft:

(i) provides for and does not have an adverse impact on the safe and efficient operation of the T&S Network or the User Facility; and

(ii) balances the commercial interests between the T&SCo and Users with respect to the cost and risk of operation of the T&S Network and User Facility; and

(c) prepare a report to be circulated to all Users collectively prior to delivery of the updated draft of the Common Interface Procedure pursuant to paragraph 5.6 detailing:

(i) where the T&SCo has taken on board or incorporated any comments provided by Users pursuant to paragraphs 5.1 and 5.3; and/or

(ii) where the T&SCo does not take on board or incorporate any comments provided by a User pursuant to paragraphs 5.1 and 5.3, an explanation of the reasons for this decision; and

(iii) an explanation of the criteria taken into account in developing the updated draft Common Interface Procedure.

5.5 It shall be reasonable for the T&SCo to not incorporate comments made by a User in relation to a draft Common Interface Procedure where such comments, if incorporated, would affect the safe operation of the T&S Network.

5.6 Subject to paragraph 7.2, within twenty (20) Business Days of all comments having been received and considered pursuant to the process set out in paragraphs 5.1 to 5.5, the T&SCo must deliver to:

(a) each User; and

(b) the Regulator,

the updated draft of the Common Interface Procedure.

5.7 Subject to paragraph 5.8 and 5.9, the T&SCo may review and/or revise any draft Common Interface Procedure previously issued to Users and the Regulator:

(a) when the T&SCo considers it is necessary to do so;

(b) upon request by a User; or

(c) in order to resolve a dispute under paragraph 7,

provided that any such revision is in accordance with the procedure set out in this paragraph 5.

5.8 No later than six (6) months prior to the Scheduled Commercial Operations Date, the T&SCo must finalise and deliver to:

(a) each User; and

(b) the Regulator,

the final version of each Common Interface Procedure (other than the $CO_2$ Quality Monitoring Procedure which shall be delivered in accordance with paragraph 5.9), along with confirmation of the Implementation Date.

5.9 No later than three (3) months after the date that the T&SCo has become a Party to the Code or such earlier or later date as the T&SCo and the Users on its T&S Network agree, acting reasonably, the T&SCo must finalise and deliver to:

(a) each User;

(b) the Regulator; and

(c) the Secretary,

the final version of the $CO_2$ Quality Monitoring Procedure, along with confirmation of the Implementation Date.

5.10 Subject to paragraph 7.2, once the final version of the $CO_2$ Quality Monitoring Procedure has been delivered in accordance with paragraph 5.9:

(a) the Code shall be modified by insertion of the final version of the $CO_2$ Quality Monitoring Procedure as a new section of the part of the Annexure C – Measurement Requirements that are applicable to the T&S Network to which the $CO_2$ Quality Monitoring Procedure relates and such Modification shall not be subject to the Modification Rules; and

(b) the Secretary must publish such final version by notice on the CCS Network Code Website.

## 6. Revisions

6.1 The T&SCo may review and/or revise the final version of any Common Interface Procedure (other than the CO2 Quality Monitoring Procedure which shall only be modified in accordance with paragraph 6.4):

(a) when the T&SCo considers it is necessary to do so;

(b) upon request by a User; or

(c) in order to resolve a dispute under paragraph 7,

provided that any such revision is in accordance with the procedure set out in paragraph 5, and subject always to paragraph 6.2.

6.2 The T&SCo shall not be required to follow the procedure set out in paragraph 5 in relation to revisions to Common Interface Procedures where any such revision relates to the $CO_2$ Quality Monitoring Procedure or is:

(a) of a routine nature;

(b) does not place new obligations onto Users; and

(c) does not have a material impact on a User's cost base, maintenance or other operational processes.

6.3 Revisions or additions to the list of Common Interface Procedures set out in paragraph 3.1 (and any associated terms of reference) (as distinct from revisions to the text of the Common Interface Procedures themselves, other than the $CO_2$ Quality Monitoring Procedure), shall be raised as a Modification Proposal pursuant to the Modification Procedure set out in Section B (Governance).

6.4 Revisions to the $CO_2$ Quality Monitoring Procedure shall be raised as a Modification Proposal pursuant to the Modification Procedure set out in Section B (Governance).

6.5 Where the T&SCo revises a Common Interface Procedure in accordance with paragraph 6.2, it must deliver to the Regulator and each User the final version of the revised Common Interface Procedure.

6.6 Where a majority of Users consider that a revision made by the T&SCo in accordance with paragraph 6.1 should not have been made, such matter may be referred by any one of the Users who considers that the revision should not have been made to dispute resolution in accordance with the provisions of Section B (Governance), including to an Expert for determination in accordance with the provisions of paragraph 51 of Section B (Governance).

## 7. Disputes

7.1 Where:

(a) a User comment provided pursuant to paragraphs 5.1 and/or 5.3 of this Section G (Common Interface Procedures) was not included by the T&SCo in the final version of

any Common Interface Procedure and a majority of Users consider that such comment should have been incorporated by the T&SCo; or

(b) a majority of Users consider that the final Common Interface Procedure delivered by the T&SCo in accordance with paragraph 5.8 or 5.9 does not reflect the principles set out in paragraph 5.4(b),

then such matter may be referred by any User who considers that such comment should have been incorporated by the T&SCo or that the principles set out in paragraph 5.4(b) have not been reflected to dispute resolution in accordance with the provisions of Section B (Governance), including to an Expert for determination in accordance with paragraph 51 of Section B (Governance).

7.2 Where any matter is referred to dispute resolution under paragraph 6.6 or 7.1, the T&SCo must not finalise and implement the Common Interface Procedure until such dispute has been resolved in accordance with the provisions of Section B (Governance).

7.3 The Parties acknowledge and agree that notwithstanding paragraph 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on Eligible Applicants and Prospective T&SCos under this Section G (Common Interface Procedure).

## 8. CCS Network Code provisions to prevail

8.1 In the event that any Common Interface Procedure is inconsistent with the provisions of the Code (notwithstanding paragraph 1.3(e)), the provisions of the Code shall prevail, subject to, in all cases, the rights and obligations of T&SCo to prevent imminent danger to the health and safety of any persons or imminent and avoidable physical damage or environmental harm.

# CCS Network Code

# Section H – Charges, Invoicing and Payment

# Part 1 – Use of System Charging Methodology

## 1. Introduction to Use of System Charging Methodology

1.1 Part 1 of this Section H (Charges, Invoicing and Payment) sets out the Use of System Charging Methodology that is required to be maintained by each T&SCo pursuant to Special Condition H25 (Use of System Charging Methodology) of the Licence, for determining Use of System Charges payable by Users under the Code.

1.2 The Use of System Charges are intended, subject to the Mutualisation Cap, to recover the Allowed Revenue of the T&SCo, as determined by the Regulator in accordance with the conditions of the T&SCo's Licence.

1.3 Any costs incurred by the T&SCo relating to the connection of new Users to the T&S Network, or relating to the modification of existing Delivery Points, are also to be recovered through the Use of System Charges, instead of separate connection charges.

## 2. Structure of Use of System Charges

2.1 The "**Use of System Charges**" comprise the following:

(a) the Onshore Flow Charge, calculated using the rate determined in accordance with paragraph 10.1;

(b) the Offshore Flow Charge, calculated using the rate determined in accordance with paragraph 11.1;

(c) the Re-use Service Charge, calculated using the rate determined in accordance with paragraph 12.1;

(d) the Onshore Capacity Charge, calculated using the rate determined in accordance with paragraph 13.1;

(e) the Offshore Capacity Charge, calculated using the rate determined in accordance with paragraph 14.1;

(f) the Onshore Network Charge, calculated using the rate determined in accordance with paragraph 15.1; and

(g) the Offshore Network Charge, calculated using the rate determined in accordance with paragraph 16.1.

## 3. Payment of Use of System Charges

3.1 Each User agrees to pay to the T&SCo the Use of System Charges calculated in accordance with this Section H (Charges, Invoicing and Payment).

3.2 A User is not liable to pay Use of System Charges until the Commencement Date (as defined in the User's Connection Agreement), which is the date when commissioning has been completed in accordance with the Construction Agreement.

3.3 Where a User's Commencement Date or User Discontinuance Date arises part way through a Charging Year, the Use of System Charges payable by the User must be adjusted on a pro rata basis.

## 4. Flow Charges

4.1 A User must pay to deliver carbon dioxide to the T&S Network, at the User's Delivery Point, on the following basis:

(a) an Onshore User must pay (in relation to each Day of delivery):

(i) the Onshore Flow Charge Rate multiplied by the User's Daily Quantity for that Day (the "**Onshore Flow Charge**"); and

(ii) the Offshore Flow Charge Rate multiplied by the User's Daily Quantity for that Day (the "**Offshore Flow Charge**"); and

(b) an Offshore User must pay (in relation to each Day) the Offshore Flow Charge Rate multiplied by the User's Daily Quantity for that Day (the "**Offshore Flow Charge**").

4.2 A User's "**Daily Quantity"** is the quantity of carbon dioxide that the User delivers each Day at the User's Delivery Point expressed in $tCO_2$:

(a) less the User's Re-use Daily Quantity (if any);

(b) as measured in accordance with Section F (Network Design and Specification); and

(c) as set out in the Processed Flow Meter Data Statement prepared by the CDS for each Billing Period.

## 5. Re-use Service Charge

5.1 Where an Onshore User is being provided with the Re-use Service by the T&SCo, in accordance with the provisions of Section F (Network Design and Specification), the User must pay to take delivery of carbon dioxide from the T&S Network, at the User's Re-use Delivery Point, on the following basis:

(a) the Onshore User must pay (in relation to each Day of delivery), the Re-use Service Charge Rate multiplied by the Onshore User's Re-use Daily Quantity for that Day (the "**Re-use Service Charge**"); and

(b) the Onshore User's "**Re-use Daily Quantity**" is the quantity of carbon dioxide being delivered back to the Onshore User at the User's Re-use Delivery Point expressed in $tCO_2$:

(i) as measured in accordance with Section F (Network Design and Specification); and

(ii) as set out in the Processed Flow Meter Data Statement prepared by the CDS for each Billing Period.

## 6. Capacity Charges

6.1 A User must pay for its Registered Capacity on the following basis:

(a) an Onshore User must pay:

(i) the Onshore Capacity Charge Rate multiplied by the User's Registered Capacity (the "**Onshore Capacity Charge**"); and

(ii) the Offshore Capacity Charge Rate multiplied by the User's Registered Capacity (the "**Offshore Capacity Charge**"); and

(b) an Offshore User must pay the Offshore Capacity Charge Rate multiplied by the User's Registered Capacity (the "**Offshore Capacity Charge**").

6.2 Unless otherwise provided in the Code, a User must pay Capacity Charges irrespective of whether the User utilises its Registered Capacity by delivering carbon dioxide at its Delivery Point.

## 7. Network Charges

7.1 A User must pay charges in respect of certain residual amounts of the proportion of the Allowed Revenue which is recoverable from the User, but which is not recovered under the Flow Charges or Capacity Charges, on the following basis:

(a) an Onshore User must pay:

(i) the Onshore Network Charge Rate multiplied by the User's Delivery Point Size ("**Onshore Network Charge**"); and

(ii) the Offshore Network Charge Rate multiplied by the User's Delivery Point Size ("**Offshore Network Charge**"); and

(b) an Offshore User must pay the Offshore Network Charge.

7.2 A "**User's Onshore Proportionate Network Charge**" is the Onshore Proportionate Network Charge Rate multiplied by the User's Delivery Point Size.

7.3 A "**User's Offshore Proportionate Network Charge**" is the Offshore Proportionate Network Charge Rate multiplied by the User's Delivery Point Size.

7.4 A User's "**Delivery Point Size**" is, in relation to a User's Delivery Point, the maximum throughput of carbon dioxide at that Delivery Point for which the T&SCo's installed Delivery Point assets have been designed, as set out in the User's Connection Agreement on the date it becomes effective or as amended following acceptance of a separate Connection Offer relating to modification of the User's Delivery Point in accordance with Section C (Connection) through a subsequent Selection Process, expressed in $tCO_2$/hour.

7.5 Unless otherwise provided in the Code, a User must pay Network Charges irrespective of whether the User utilises its Registered Capacity by delivering carbon dioxide at its Delivery Point.

## 8. Charges relating to the Storage Site

8.1 The Offshore Capacity Charge, the Offshore Flow Charge and the Offshore Network Charge cover any costs relating to the Storage Site.

## 9. Onshore Users and Offshore Users

9.1 When a prospective User applies for a connection under Section C (Connection), the T&SCo must determine, in accordance with the Code, whether the User is an Onshore User or an Offshore User, and this must be recorded in the User's Connection Agreement.

## 10. Calculation of Onshore Flow Charge Rate

10.1 The "**Onshore Flow Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{AOnFR_t}{TFOnF_t}$$

where:

(a) "$AOnFR_t$" is the "**Allowed Onshore Flow Revenue**" being the amount allowed for Variable Opex for the Onshore Transportation System within the determination of the Allowed Revenue by the Regulator under the Licence for Charging Year t; and

(b) "$TFOnF_t$" is the total forecast flow of carbon dioxide to be delivered to and transported through the Onshore Transportation System in Charging Year t using the Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

## 11. Calculation of Offshore Flow Charge Rate

11.1 The "**Offshore Flow Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{AOfFR_t}{TFOfF_t}$$

where:

(a) "$AOfFR_t$" is the "**Allowed Offshore Flow Revenue**" being the amount allowed for Variable Opex for the Offshore Transportation and Storage System within the determination of the Allowed Revenue by the Regulator under the Licence for Charging Year t; and

(b) "$TFOfF_t$" is the total forecast flow of carbon dioxide to be delivered to and transported through the Offshore Transportation and Storage System in Charging Year t using the Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

## 12. Calculation of the Re-use Service Charge Rate

12.1 The "**Re-use Service Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{AReUSRt_t}{TFReUSF_t}$$

where:

(a) "$AReUSR_t$" is the "**Allowed Re-use Service Revenue**" being the amount allowed for the Re-use Service Opex within the determination of the Allowed Revenue by the Regulator under the Licence for Charging Year t;

(b) "**Re-use Service Opex"** means that part of the Opex (as that term is defined in the Licence) which relates to the provision of the Re-use Service by the T&SCo; and

(c) "$TFReUSF_t$" is the total forecast flow of carbon dioxide to be taken from the Onshore Transportation System by Users using the Re-use Service in Charging Year t, using the Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

## 13. Calculation of Onshore Capacity Charge Rate

13.1 The "**Onshore Capacity Charge Rate"** for Charging Year t is calculated as follows:

$$\frac{AOnCR_t}{OnRNC_t}$$

where:

(a) "$AOnCR_t$" is the "**Allowed Onshore Capacity Revenue**" being the amount allowed for Depreciation Building Block and WACC for the Onshore Transportation System within the determination of the Allowed Revenue by the Regulator in accordance with the T&SCo's Licence for Charging Year t; and

(b) "$OnRNC_t$" is the relevant Network Capacity for the T&S Network for Charging Year t, which shall be the greater of:

(i) the ONC Maximum Annual Cumulative Flow divided by the number of hours in Charging Year t, expressed as $tCO_2$/hour; and

(ii) the aggregate Registered Capacity of all Onshore Users for Charging Year t, expressed as $tCO_2$/hour,

expressed as £[x]/$tCO_2$/hour.

## 14. Calculation of Offshore Capacity Charge Rate

14.1 The "**Offshore Capacity Charge Rate"** for Charging Year t is calculated as follows:

$$\frac{AOfCR_t}{OfRNC_t}$$

where:

(a) "$AOfCR_t$" is the "**Allowed Offshore Capacity Revenue**" being the amount allowed for the Depreciation Building Block and WACC for the Offshore Transportation and Storage System within the determination of the Allowed Revenue by the Regulator in accordance with the T&SCo's Licence for Charging Year t; and

(b) "$OfRNC_t$" is the relevant Network Capacity for the T&S Network for Charging Year t, which shall be the greater of:

(i) the ONC Maximum Annual Cumulative Flow divided by the number of hours in Charging Year t, expressed as $tCO_2$/hour; and

(ii) the aggregate Registered Capacity of all Users for Charging Year t, expressed as $tCO_2$/hour,

expressed as £[x]/$tCO_2$/hour.

## 15. Calculation of Onshore Network Charge Rate

15.1 The "**Onshore Network Charge Rate**" for Charging Year t is calculated as follows:

$$OnPNCR_t + OnMNCR_t$$

where:

(a) "$OnPNCR_t$" is the "**Onshore Proportionate Network Charge Rate**" for Charging Year t, calculated in accordance with paragraph 15.2; and

(b) "$OnMNCR_t$" is the "**Onshore Mutualised Network Charge Rate**" for Charging Year t, calculated in accordance with paragraphs 15.3 to 15.13.

15.2 The "**Onshore Proportionate Network Charge Rate"** for Charging Year t is calculated as follows:

$$\frac{AOnNCR_t}{OnRDP_t}$$

where:

(a) "$AOnNCR_t$" is the Allowed Onshore Network Charge Revenue for Charging Year t, calculated as follows:

$$Allowed\ Onshore\ Revenue - AOnFR_{t-} - AReUSRt - AOnCR_t$$

where:

(i) the "**Allowed Onshore Revenue**" is the amount of Allowed Revenue for the Onshore Transportation System for Charging Year t as determined by the Regulator in accordance with the T&SCo's Licence;

(ii) "$AOnFR_t$" is the Allowed Onshore Flow Revenue and has the meaning given in paragraph 10.1(a);

(iii) " $AReUSR_t$" is the Allowed Re-use Service Revenue and has the meaning given in paragraph 12.1(a); and

(iv) "$AOnCR_t$" is the Allowed Onshore Capacity Revenue and has the meaning given in paragraph 13.1(a); and

(b) "$OnRDP_t$" is the relevant Network Capacity for the T&S Network for Charging Year t, which shall be the greater of:

(i) the ONC Maximum Annual Cumulative Flow divided by the number of hours in Charging Year t, expressed as $tCO_2$/hour; and

(ii) the aggregate of the Delivery Point Sizes of all Delivery Points to the Onshore Transportation System, expressed as $tCO_2$/hour,

expressed as £[x]/$tCO_2$/hour.

**Onshore T&S Network Mutualisation Check**

15.3 The calculation of the Onshore Mutualised Network Charge Rate for each User is subject to an iterative process which is set out in paragraphs 15.4 to 15.13 (inclusive).

15.4 The "**Onshore T&S Charge**" for the T&S Network which will be recovered from all Onshore Users of the T&S Network through the application of the Onshore Flow Charge, the Re-use Service Charge, the Onshore Capacity Charge and the User's Onshore Proportionate Network Charge for each User (OnRt) for Charging Year t is calculated as follows:

$$OnFCt + ReUSCt + OnCCt + OnPNCt$$

where:

(a) "OnFCt" is the total of all Users' forecast Onshore Flow Charges;

(b) "ReUSCt" is the total of all Users' forecast Re-use Service Charges;

(c) "OnCCt" is the total of all Users' Onshore Capacity Charges; and

(d) "OnPNCt" is the total of all Users' Onshore Proportionate Network Charges,

using each Users' Charges Forecast for Charging Year t and expressed as £[x]/$tCO_2$.

15.5 If the Onshore T&S Charge is less than the Allowed Onshore Revenue, the T&SCo must carry out mutualisation, starting with calculation of the Onshore Network Charges Cap in accordance with paragraph 15.6, followed by calculation of the Onshore User T&S Charge in accordance with paragraph 15.7 and calculation of the Provisional Onshore Mutualised Network Charge in accordance with paragraph 15.9.

**Onshore Network Charges Cap Calculation**

15.6 The "**Onshore Network Charges Cap**" is equal to the Onshore Proportion of the Mutualisation Cap, where:

(a) "**Onshore Proportion**", expressed as a percentage, is calculated as follows:

$$\frac{Allowed\ Onshore\ Revenue\ for\ Charging\ Year\ t}{Allowed\ Revenue\ for\ Charging\ Year\ t} \times 100$$

where the Allowed Onshore Revenue is the amount of Allowed Revenue for the Onshore Transportation System as determined by the Regulator in accordance with the T&SCo's Licence; and

(b) "**Mutualisation Cap**" for Charging Year t means a cap, expressed in £[x]/$tCO_2$, equal to the average of the daily average price observed, as at 31 October of Charging Year t-1, for the March t-1, December t, and March t UK Emissions Trading Scheme futures contract (UKA Futures Contract), published by ICE Futures Europe, over the preceding three (3) month period.

**Onshore User T&S Charge Calculation**

15.7 The "**Onshore User T&S Charge**" for each User for Charging Year t is calculated as follows:

$$\frac{UOnRt}{UFOnFt}$$

where:

(a) "UonRt" is the total revenue for Charging Year t which will be recovered from the User through the application of the Onshore Flow Charge, the Re-Use Service Charge, the Onshore Capacity Charge and the User's Onshore Proportionate Network Charge, to be calculated as follows:

$$UOnFCt + UReUSCt + UOnCCt + UOnPNCt$$

where:

(i) "UOnFCt" is the User's forecast Onshore Flow Charge;

(ii) "UReUSCt" is the User's forecast Re-use Service Charge;

(iii) "UOnCCt" is the User's Onshore Capacity Charge; and

(iv) "UOnPNCt" is the User's Onshore Proportionate Network Charge,

calculated using the User's Charges Forecast for Charging Year t; and

(b) "UFOnFt" is a User's forecast flow of carbon dioxide to be delivered by the User to and transported through the Onshore Transportation System, calculated using that Users' Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

**Onshore User T&S Charge Check**

15.8 If the Onshore Network Charges Cap for Charging Year t:

(a) is below the Onshore User T&S Charge for a User, the Onshore Mutualised Network Charge Rate shall be deemed to be zero (0) for that User; or

(b) is above the Onshore User T&S Charge for a User, the Onshore User's Mutualised Network Charge Rate shall be calculated in accordance with paragraphs 15.9 to 15.11.

**Provisional Onshore Mutualised Network Charge Rate Calculation**

15.9 The "**Provisional Onshore Mutualised Network Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{UAOnRt}{OnUDPt}$$

where:

(a) "$UAOnR_t$" is the Allowed Onshore Revenue which will not be recovered through the application of the Onshore Flow Charge, the Re-use Service Charge and the revenue from the Onshore Capacity Charge and User's Onshore Proportionate Network Charge that the T&SCo expects to recover from Users, to be calculated as follows:

$$AOnRt - AOnFRt - AReUSRt - (OnCCRt\ x\ TFOnRCt) - (OnPNCRt\ x\ OnUDPt)$$

where:

(i) "$AOnR_t$" is the Allowed Onshore Revenue and has the meaning given in paragraph 15.2(a);

(ii) "AOnFRt" is the Allowed Onshore Flow Revenue and has the meaning given in paragraph 10.1(a);

(iii) "$AReUSR_t$" is the Allowed Re-use Service Revenue and has the meaning given in paragraph 12.1(a);

(iv) "OnCCRt" is the Onshore Capacity Charge Rate for Charging Year t calculated in accordance with paragraph 13.1;

(v) "TFOnRCt" is the total Registered Capacity in the Onshore Transportation System in Charging Year t;

(vi) "$OnPNCR_t$" is the Onshore Proportionate Network Charge Rate calculated in accordance with paragraph 15.2 (or Onshore Network Charge Rate, as applicable in subsequent rounds of mutualisation); and

(vii) "$OnUDP_t$" is the aggregate of the Delivery Point Sizes of Onshore Users for which the Onshore Network Charges Cap is above each of those Users' Onshore User T&S Charge (or Updated Onshore User T&S Charge, as applicable in subsequent rounds of mutualisation); and

(b) "$OnUDP_t$" has the meaning given to it in paragraph 15.9(a)(vii),

expressed as £[x]/$tCO_2$/hour.

**Updated Onshore User T&S Charge Calculation**

15.10 After the first round of mutualisation is carried out in accordance with paragraphs 15.8(b) and 15.9, the T&SCo must re-calculate the Onshore User T&S Charge for each relevant User to include the Provisional Onshore Mutualised Network Charge Rate that was calculated in accordance with paragraph 15.9 (the "**Updated Onshore User T&S Charge**"), to be calculated as follows:

$$\frac{UMOnRt}{UFOnFt}$$

where:

(a) "UMOnRt" is the onshore revenue for Charging Year t which will be recovered from the User through the application of the Onshore Flow Charge, the Re-Use Service Charge, the Onshore Capacity Charge and the Onshore Network Charge, to be calculated as follows:

$$UOnFCt + UReUSCt + UOnCCt + UOnNCt$$

where:

(i) "UOnFCt" is the User's forecast Onshore Flow Charge;

(ii) "UReUSCt" is the User's forecast Re-use Service Charge;

(iii) "UOnCCt" is the User's Onshore Capacity Charge; and

(iv) "UOnNCt" is the User's Onshore Network Charge,

calculated using the User's Charges Forecast for Charging Year t; and

(b) "UFOnFt" is a User's forecast flow of carbon dioxide to be delivered by the User to and transported through the Onshore Transportation System, calculated using that User's Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

**Onshore Mutualised Network Charge Rate Calculation**

15.11 If the Provisional Onshore Mutualised Network Charge Rate for a User calculated in accordance with paragraph 15.9, results in the Updated Onshore User T&S Charge calculated in accordance with paragraph 15.10 for that User:

(a) exceeding the Onshore Network Charges Cap, the Onshore Mutualised Network Charge Rate for that User will be set at a level that results in the Onshore User T&S Charge equalling the Onshore Network Charges Cap; or

(b) not exceeding the Onshore Network Charges Cap, the Onshore Mutualised Network Charge Rate for that User will be set at the Provisional Onshore Mutualised Network Charge Rate.

**T&S Network Mutualisation – Further Rounds**

15.12 After the first round of mutualisation, the T&SCo must re-calculate the Onshore T&S Charge to include the Updated Onshore User T&S Charge for each relevant User (the "**Updated Onshore T&S Charge**").

15.13 If, after the first round of mutualisation:

(a) the Allowed Onshore Revenue less the Updated Onshore T&S Charge is zero (£0/$tCO_2$), no further mutualisation is required; or

(b) the:

(i) Allowed Onshore Revenue less the Updated Onshore T&S Charge is above zero (£0/$tCO_2$); and

(ii) Updated Onshore User T&S Charge remains below the Onshore Network Charges Cap for at least one (1) User,

the T&SCo must proceed to repeat the process for Users with an Updated Onshore User T&S Charge that remains below the Onshore Network Charges Cap at paragraphs 15.7 to 15.13 in iterative rounds until the earlier of:

(A) the Allowed Onshore Revenue is recovered; or

(B) all Users' Onshore User T&S Charges are equal to the Onshore Network Charges Cap.

## 16. Calculation of Offshore Network Charge Rate

16.1 The "**Offshore Network Charge Rate**" for Charging Year t is calculated as follows:

$$OfPNCR_t + OfMNCR_t$$

where:

(a) "$OfPNCR_t$" is the "**Offshore Proportionate Network Charge Rate**" for Charging Year t, calculated in accordance with paragraph 16.2; and

(b) "$OfMNCR_t$" is the "**Offshore Mutualised Network Charge Rate**" for Charging Year t, calculated in accordance with paragraphs 16.3 to 16.13.

16.2 The "**Offshore Proportionate Network Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{AOfNCR_t}{OfRDPt}$$

where:

(a) "$AOfNCR_t$" is the Allowed Offshore Network Charge Revenue for Charging Year t, calculated as follows:

$$Allowed\ Offshore\ Revenu - -AOfFR_{t-} - AOfCR_t$$

where:

(i) the "**Allowed Offshore Revenue**" is the amount of Allowed Revenue for the Offshore Transportation and Storage System for Charging Year t as determined by the Regulator in accordance with the T&SCo's Licence;

(ii) "$AOfFR_t$" is the Allowed Offshore Flow Revenue and has the meaning given in paragraph 11.1(a);and

(iii) "$AOfCR_t$" is the Allowed Offshore Capacity Revenue and has the meaning given in paragraph 14.1(a); and

(b) "$OfRDP_t$" is the relevant Network Capacity for the T&S Network for Charging Year t, which shall be the greater of:

(i) the ONC Maximum Annual Cumulative Flow divided by the number of hours in Charging Year t, expressed as $tCO_2$/hour; and

(ii) the aggregate of the Delivery Point Sizes of all Delivery Points to the T&S Network, expressed as $tCO_2$/hour,

expressed as £[x]/$tCO_2$/hour.

**Offshore T&S Network Mutualisation Check**

16.3 The calculation of the Offshore Mutualised Network Charge Rate for each User is subject to an iterative process which is set out in paragraphs 16.4 to 16.13 (inclusive).

16.4 The "**Offshore T&S Charge**" for the T&S Network which will be recovered from all Offshore Users of the T&S Network through the application of the Offshore Flow Charge, the Offshore Capacity Charge and the User's Offshore Proportionate Network Charge for each User (OnRt) for Charging Year t is calculated as follows:

$$OfFCt + OfCCt + OfPNCt$$

where:

(a) "OfFCt" is the total of all Users' forecast Offshore Flow Charges;

(b) "OfCCt" is the total of all Users' Offshore Capacity Charges; and

(c) "OfPNCt" is the total of all Users' Offshore Proportionate Network Charges,

using each Users' Charges Forecast for Charging Year t and expressed as £[x]/$tCO_2$.

16.5 If the Offshore T&S Charge is less than the Allowed Offshore Revenue, the T&SCo must carry out mutualisation, starting with calculation of the Offshore Network Charges Cap in accordance with paragraph 16.6, followed by calculation of the Offshore User T&S Charge in accordance with paragraph 16.7 and calculation of the Provisional Offshore Mutualised Network Charge in accordance with paragraph 16.9.

**Offshore Network Charges Cap Calculation**

16.6 The "**Offshore Network Charges Cap**" is equal to the Offshore Proportion of the Mutualisation Cap, where:

(a) "**Offshore Proportion**", expressed as a percentage, is calculated as follows:

$$\frac{Allowed\ Offshore\ Revenue\ for\ Charging\ Year\ t}{Allowed\ Revenue\ for\ Charging\ Year\ t} \times 100$$

where the "**Allowed Offshore Revenue**" for Charging Year t is the amount of Allowed Revenue for the Offshore Transportation and Storage System as determined by the Regulator in accordance with the T&SCo's Licence; and

(b) "**Mutualisation Cap**" for Charging Year t means a cap, expressed in £[x]/$tCO_2$, equal to the average of the daily average price observed, as at 31 October of Charging Year t-1, for the March t-1, December t, and March t UK Emissions Trading Scheme futures contract (UKA Futures Contract), published by ICE Futures Europe, over the preceding three (3) -month period.

**Offshore User T&S Charge Calculation**

16.7 The "**Offshore User T&S Charge**" for each User for Charging Year t is calculated as follows:

$$\frac{UOfRt}{UFOfFt}$$

where:

(a) "UofRt" is the total revenue for Charging Year t which will be recovered from the User through the application of the Offshore Flow Charge, the Offshore Capacity Charge and the User's Offshore Proportionate Network Charge, to be calculated as follows:

$$UOfFCt + UOfCCt + UOfPNCt$$

where:

(i) "UofFCt" is the User's forecast Offshore Flow Charge;

(ii) "UOfCCt" is the User's Offshore Capacity Charge; and

(iii) "UOfPNCt" is the User's Offshore Proportionate Network Charge,

calculated using the User's Charges Forecast for Charging Year t; and

(b) "UFOfFt" is a User's forecast flow of carbon dioxide to be delivered by the User to and transported through the Offshore Transportation and Storage System, calculated using that Users' Charges Forecast for Charging Year t,

expressed as £[x]/$tCO_2$.

**Offshore User T&S Charge Check**

16.8 If the Offshore Network Charges Cap for Charging Year t:

(a) is below the Offshore User T&S Charge for a User, the Offshore Mutualised Network Charge Rate shall be deemed to be zero (0) for that User; or

(b) is above the Offshore User T&S Charge for a User, the Offshore User's Mutualised Network Charge Rate shall be calculated in accordance with paragraphs 16.9 to 16.11.

**Provisional Offshore Mutualised Network Charge Rate Calculation**

16.9 The "**Provisional Offshore Mutualised Network Charge Rate**" for Charging Year t is calculated as follows:

$$\frac{UAOfRt}{OfUDPt}$$

where:

(a) "UAOfRt" is the Allowed Offshore Revenue which will not be recovered through the application of the Offshore Flow Charge and the revenue from the Offshore Capacity Charge and the User's Offshore Proportionate Network Charges that the T&SCo expects to recover from Users, to be calculated as follows:

$$AOfRt - AOfFRt - (OfCCRt\ x\ TFOfRCt) - (OfPNCRt\ x\ OfUDPt)$$

where:

(i) "$AOfR_t$" is the Allowed Offshore Revenue and has the meaning given in paragraph 16.2(a);

(ii) "AOfFRt" is the Allowed Offshore Flow Revenue and has the meaning given in paragraph 11.1(a);

(iii) "OfCCRt" is the Offshore Capacity Charge Rate for Charging Year t, calculated in accordance with paragraph 14.1;

(iv) "TFOfRCt" is the total Registered Capacity in the Offshore Transportation System in Charging Year t;

(v) "$OfPNCR_t$" is the Offshore Proportionate Network Charge Rate calculated in accordance with paragraph 16.2 (or Offshore Network Charge Rate, as applicable in subsequent rounds of mutualisation); and

(vi) "$OfUDP_t$" is the aggregate of the Delivery Point Sizes of Offshore Users for which the Offshore Network Charges Cap is above each of those Users' Offshore User T&S Charge (or Updated Offshore User T&S Charge, as applicable in subsequent rounds of mutualisation; and

(b) "$OfUDP_t$" has the meaning given to it in paragraph 16.9(a)(vi),

expressed as £[x]/$tCO_2$/hour.

**Updated Offshore User T&S Charge Calculation**

16.10 After the first round of mutualisation is carried out in accordance with paragraphs 16.8(b) and 16.9, the T&SCo must re-calculate the Offshore User T&S Charge for each relevant User to include the Provisional Offshore Mutualised Network Charge Rate that was calculated in accordance with paragraph 16.9 (the "**Updated Offshore User T&S Charge**"), to be calculated as follows:

$$\frac{UMOfRt}{UFOfFt}$$

where:

(a) "UMOfRt" is the offshore revenue for Charging Year t which will be recovered from the User through the application of the Offshore Flow Charge, the Offshore Capacity Charge and the Offshore Network Charge, to be calculated as follows:

$$UOfFCt + UOfCCt + UOfNCt$$

where:

(i) "UOfFCt" is the User's forecast Offshore Flow Charge;

(ii) "UOfCCt" is the User's Offshore Capacity Charge; and

(iii) "UofNCt" is the User's Offshore Network Charge,

calculated using the User's Charges Forecast for Charging Year t; and

(b) "UFOfFt" is a User's forecast flow of carbon dioxide to be delivered by the User to and transported through the Offshore Transportation and Storage System, calculated using that User's Charges Forecast for Charging Year t,

expressed as £[x]/t$CO_2$.

**Offshore Mutualised Network Charge Rate Calculation**

16.11 If the Provisional Offshore Mutualised Network Charge Rate for a User calculated in accordance with paragraph 16.9, results in the Updated Offshore User T&S Charge calculated in accordance with paragraph 16.10 for that User:

(a) exceeding the Offshore Network Charges Cap, the Offshore Mutualised Network Charge Rate for that User will be set at a level that results in the Offshore User T&S Charge equalling the Offshore Network Charges Cap; or

(b) not exceeding the Offshore Network Charges Cap, the Offshore Mutualised Network Charge Rate for that User will be set at the Provisional Offshore Mutualised Network Charge Rate.

**T&S Network Mutualisation – Further Rounds**

16.12 After the first round of mutualisation, the T&SCo must re-calculate the Offshore T&S Charge to include the Updated Offshore User T&S Charge for each relevant User (the "**Updated Offshore T&S Charge**").

16.13 If, after the first round of mutualisation:

(a) the Allowed Offshore Revenue less the Updated Offshore T&S Charge is zero (£0/$tCO_2$), no further mutualisation is required; or

(b) the:

(i) Allowed Offshore Revenue less the Updated Offshore T&S Charge is above zero (£0/$tCO_2$); and

(ii) Updated Offshore User T&S Charge remains below the Offshore Network Charges Cap for at least one (1) User,

the T&SCo must proceed to repeat the process for Users with an Updated Offshore User T&S Charge that remains below the Offshore Network Charges Cap at paragraphs 16.7 to 16.13 in iterative rounds until the earlier of:

(A) the Allowed Offshore Revenue is recovered; or

(B) all Users' Offshore User T&S Charges are equal to the Offshore Network Charges Cap.

## 17. Forecasting for the purposes of calculation of Use of System Charges

17.1 The T&SCo will use forecasts provided by Users in relation to:

(a) the quantity of carbon dioxide to be delivered to the T&S Network through the User's Delivery Point;

(b) for Users being provided with the Re-use Service, the quantity of carbon dioxide to be taken from the T&S Network through the User's Re-use Delivery Point; and

(c) the User's Registered Capacity (including any Network Capacity that is due to become the User's Registered Capacity in Charging Year t),

to calculate the Use of System Charges, in accordance with this Use of System Charging Methodology, for each Charging Year.

17.2 For the purpose of Users providing the forecasts set out at paragraph 17.1, the T&SCo will prepare a template document setting out the information to be provided by each User Type for the relevant T&S Network (the "**Forecasting Pro Forma**").

17.3 Subject to paragraph 17.4, by 1 October of Charging Year t-1, the T&SCo must send the Forecasting Pro Forma to Users.

17.4 The T&SCo must send the Forecasting Pro-Forma, for the first time, to Users by 1 October of the Charging Year prior to the Charging Year in which the T&SCo's Scheduled Commercial Operations Date falls.

17.5 Each User must:

(a) complete the Forecasting Pro Forma by providing the required information for Charging Year t, Charging Year t+1 and Charging Year t+2; and

(b) send the completed Forecasting Pro Forma to the T&SCo by 31 October of Charging Year t-1 ("**Charges Forecast for Charging Year t**").

17.6 The T&SCo must review each of the Charges Forecast for Charging Year t to check for any readily apparent anomalies or errors and may submit requests for further information from Users.

17.7 Users must use reasonable endeavours to provide an accurate Charges Forecast for Charging Year t and must provide such forecast on a bona fide basis.

17.8 Users must respond promptly and within ten (10) Business Days to any queries from the T&SCo regarding a Charges Forecast for Charging Year t and shall submit a revised Charges Forecast for Charging Year t where reasonably requested by the T&SCo.

17.9 A User must provide its first Charges Forecast for Charging Year t by 31 October in the Charging Year prior to the Charging Year in which that User's Scheduled Commencement Date falls.

## 18. Preparation and publication of Use of System Charging Statement

18.1 For each Charging Year, the T&SCo must prepare a statement of:

(a) the rates for each of the Use of System Charges that apply in Charging Year t, as calculated in accordance with the Use of System Charging Methodology; and

(b) the calculations used to determine each of the rates referred to in paragraph 18.1(a) for each of the Use of System Charges that apply in Charging Year t using the Use of System Charging Methodology, including the Charges Forecast for Charging Year t which have been used by the T&SCo for the purposes of such calculations,

(the "**Use of System Charging Statement**").

18.2 The T&SCo must prepare the Use of System Charging Statement in a form approved by the Regulator.

18.3 The T&SCo must calculate Use of System Charges payable by each User during each Charging Year t using the rates set out in the Use of System Charging Statement prepared and published by the T&SCo in accordance with its Licence and this paragraph 18.

18.4 The T&SCo must prepare and publish the Use of System Charging Statement by 30 November of Charging Year t-1.

18.5 The T&SCo must prepare and publish a draft Use of System Charging Statement for Charging Years t+1 and t+2, by 30 November of Charging Year t-1, which must:

(a) set out estimates of the rates for each of the Use of System Charges that apply in Charging Years t+1 and t+2, calculated in accordance with the Use of System Charging Methodology; and

(b) be subject to revision and shall be provided to Users for information purposes only.

18.6 The T&SCo must prepare and publish its first Use of System Charging Statement by:

(a) 30 November in the Charging Year prior to the Charging Year in which that T&SCo's Scheduled Commercial Operations Date falls; or

(b) as soon as reasonably practicable following the Regulator's calculation of the T&SCo's Allowed Revenue under Special Condition G16.8 (Post Construction Review) of the Licence,

whichever is the later.

# Part 2 – Payments and invoicing

## 19. Introduction to payments and invoicing

19.1 Part 2 of this Section H (Charges, Invoicing and Payment) sets out provisions relating to the obligation of Users to pay Use of System Charges, including security requirements, payment obligations and invoicing.

19.2 The amounts payable by Users to the T&SCo and by the T&SCo to Users in accordance with the Code will be invoiced and payable in accordance with this Section H (Charges, Invoicing and Payment).

## 20. Required Security

20.1 A User must provide the Required Security to the T&SCo by 31 January of each Charging Year t-1 and thereafter maintain the Required Security.

20.2 The "**Required Security**" must:

(a) be in the form of:

(i) a Letter of Credit; or

(ii) a Deposit Deed;

(b) be for the Required Security Amount, as calculated in accordance with paragraph 20.3; and

(c) provide for the rights of the T&SCo required by paragraph 29.

20.3 The "**Required Security Amount**" is the amount of financial security required to be provided by each User to the T&SCo for Charging Year t, calculated as:

$$UoSC1 + UoSC2$$

where:

(a) "UoSC1" is the value of the Use of System Charges expected to be payable by a User for the Billing Period in which the quantity of carbon dioxide to be delivered to the T&S Network through the User's Delivery Point is the highest for Charging Year t, as set out in the Charges Forecast for Charging Year t; and

(b) "UoSC2" is the value of the Use of System Charges expected to be payable by a User for the Billing Period in which the quantity of carbon dioxide to be delivered to the T&S Network through the User's Delivery Point is the second highest for Charging Year t, as set out in the Charges Forecast for Charging Year t.

20.4 The T&SCo must notify each User of the Required Security Amount by 30 November of Charging Year t-1.

20.5 If at any time a User fails to comply with paragraph 20.1, the T&SCo may issue a notice ("**Security Default Notice**") requiring the User to rectify such non-compliance within ten (10) Business Days.

20.6 Where a User has not rectified its non-compliance with paragraph 20.1 within five (5) Business Days of receipt of a Security Default Notice, the T&SCo is entitled to reject or refuse to accept all or any of the following by the User:

(a) delivery of carbon dioxide at the User's Delivery Point;

(b) taking delivery of carbon dioxide at the User's Re-use Delivery Point; or

(c) an application for Registered Capacity or increased Registered Capacity at any Delivery Point under Section C (Connection),

with effect until such time as the relevant User has provided the Required Security.

20.7 A User remains liable to pay Capacity Charges and Network Charges during any period in which the T&SCo has exercised its rights under paragraph 20.6.

## 21. Issue of Invoice Document

21.1 The Parties agree and acknowledge that the T&SCo must use the Processed Flow Meter Data set out in the Processed Flow Meter Data Statement, prepared by the CDS in accordance with the CDS Contract, for the purposes of calculating the Onshore Flow Charge, the Offshore Flow Charge and the Re-Use Service Charge.

***Note:*** *provision will be made for fixed decimalisation and rounding in the CDS Contract and the Data Transfer Procedures. This is subject to determining the levels of metering accuracy.*

21.2 No later than five (5) Business Days after the last Day of a Billing Period, the T&SCo must submit to each User:

(a) the Processed Flow Meter Data Statement, setting out the Processed Flow Meter Data (as adjusted to take into account any Vented Quantities) which:

(i) relates to the actual quantity of carbon dioxide:

(A) delivered by the User into the T&S Network during that Billing Period; and

(B) where the User is being provided with the Re-use Service, taken from the T&S Network during that Billing Period; and

(ii) has been used to calculate the Onshore Flow Charge, the Offshore Flow Charge and the Re-use Service Charge (if applicable) payable by the User in relation to that Billing Period; and

(b) the Invoice Document.

***Note:*** *the timing for the issue of the Invoice Document remains subject to review in the context of both the CDS Contract process and User Requirements.*

21.3 Where a User delivers carbon dioxide at more than one (1) Delivery Point then the T&SCo must issue to that User a separate Invoice Document in relation to each Delivery Point.

## 22. Content of Invoice Document

22.1 For each Billing Period, the Invoice Document submitted by the T&SCo to each User under paragraph 21.2 must separately identify the following:

(a) the Onshore Flow Charge (if applicable);

(b) the Offshore Flow Charge;

(c) the Re-use Service Charge (if applicable);

(d) the Onshore Capacity Charge (if applicable);

(e) the Offshore Capacity Charge;

(f) the Onshore Network Charge (if applicable);

(g) the Offshore Network Charge; and

(h) the costs of any ETS Liabilities that the User is liable for pursuant to paragraph 4.7 of Section J (General); and

(i) any other charges or amounts that may become due and payable under the Code or any Ancillary Agreement.

22.2 Each Invoice Document must be set out on the T&SCo's letterhead and it must include the following information:

(a) the identity of the User;

(b) the Delivery Point to which the Invoice Document relates;

(c) the Re-use Delivery Point to which the Invoice Document relates (if applicable);

(d) the Billing Period to which the Invoice Document relates;

(e) the Invoice Amount;

(f) the unique number by which the Invoice Document may be identified;

(g) the amount of Value Added Tax (if any) payable;

(h) the Value Added Tax registration number of both the User and the T&SCo;

(i) the date of the Invoice Document;

(j) the credit terms and beneficiary bank details; and

(k) the currency of the Invoice Amount.

22.3 An Invoice Document may contain an adjustment by way of a credit or a debit in respect of:

(a) an Invoice Amount in another Invoice Document; and

(b) any other amount which is agreed or determined to be payable by a User to the T&SCo or by the T&SCo to a User under or in connection with the Code (including any adjustment required as a result of any reduction in Capacity Charges and Network Charges payable by a User in accordance with paragraph 45.2 of Section E (Network Use and Capacity).

22.4 Any amounts payable by the T&SCo to a User under or in connection with the Code, as set out in paragraph 22.3(b), shall be paid by way of an adjustment to the next Invoice Document due to be submitted after the amount becomes payable, and where any balance is still payable to the User, that amount shall be paid by the T&SCo to the User when that amount is due or at the same time as the Invoice Document is submitted to the User, whichever is the later.

22.5 Invoice Documents must be submitted to Users through the T&S Network Portal.

22.6 An Invoice Document will not be invalid solely by reason of it not being accompanied by any particular item of supporting data, but any lack of supporting data may be queried through the Invoice Dispute process.

## 23. Value Added Tax

23.1 All amounts expressed as payable by a User or the T&SCo pursuant to the Code are exclusive (unless expressly otherwise stated) of any applicable Value Added Tax, and accordingly Value Added Tax must be paid by the paying party where payable in respect of any such amount.

## 24. Invoice payment

24.1 Where an Invoice Document has been submitted to a User by the T&SCo in accordance with this Section H (Charges, Invoicing and Payment), the User must pay the Invoice Amount set out in the Invoice Document to the T&SCo:

(a) on or before the Invoice Due Date; and

(b) by wire transfer of immediately available funds.

24.2 The "**Invoice Due Date**" is the date falling twenty five (25) Business Days from the date of the Invoice Document.

24.3 Amounts payable under the Code must be paid:

(a) free and clear of any restriction, reservation or condition; and

(b) except to the extent (if any) required by law, without deduction or withholding in respect of tax or on account of any amount due or to become due to the paying party, whether by way of set off counterclaim or otherwise, other than by way of adjustment as set out in paragraphs 22.3(b) and 22.4.

## 25. Termination and insolvency

25.1 Notwithstanding paragraphs 21 and 24, the T&SCo may, at any time (whether before or after the User Discontinuance Date) after the T&SCo submits to a User a Termination Notice under Section J (General), submit to that User any Invoice Document in respect of any Billing Period or part of a Billing Period ending at or before the time at which the T&SCo submits such Invoice Document.

25.2 Where the T&SCo has submitted a Termination Notice to a User, all amounts payable by that User to the T&SCo or by the T&SCo to the User (whether the Invoice Document in which such amounts are shown was submitted before or after the date of the Termination Notice) shall be immediately payable notwithstanding paragraph 24.

25.3 Notwithstanding paragraphs 21 or 25.1, the T&SCo may, at any time on or following the occurrence of an Insolvency Default in relation to any User, submit to that User any Invoice Document in respect of any Billing Period or part of a Billing Period ending at or before the time at which the T&SCo submits such Invoice Document.

25.4 In relation to a User, on the occurrence of an Insolvency Default, all amounts payable to the T&SCo (whether the Invoice Document in which such amounts are shown was submitted before or after the date of the occurrence of the Insolvency Default) shall be immediately payable notwithstanding paragraph 24.1.

## 26. Invoice Disputes and amended Invoice Documents

26.1 An "**Invoice Dispute**" is any question or dispute as to the proper calculation of any amount shown as payable by a User under an Invoice Document or as to whether any such amount is or was properly payable, where that question or dispute is not a CDS Data Dispute or in relation to a Flow Meter Error.

26.2 References to the amount of an Invoice Dispute are to the amount by which the User submitting the Invoice Dispute considers the Invoice Amount to be incorrect.

26.3 Where an Invoice Dispute has been raised:

(a) the User must provide to the T&SCo in writing all relevant details of the Invoice Dispute, including the amount of the Invoice Dispute; and

(b) the T&SCo and the relevant User must endeavour to resolve the Invoice Dispute by agreement.

26.4 Without prejudice to any obligation of Users pursuant to this Section H (Charges, Invoicing and Payment), the T&SCo agrees that it will make available such resources as are in its reasonable opinion reasonably adequate to deal reasonably promptly with the Invoice Dispute.

26.5 Where a User raises an Invoice Dispute it must pay the amount of the Invoice Dispute on the Invoice Due Date notwithstanding the Invoice Dispute.

26.6 Where the Parties are unable to resolve the Invoice Dispute within twenty (20) Business Days of the Invoice Dispute being raised, either of them shall be entitled to refer the Invoice Dispute to an Expert for determination, in accordance with paragraph 51 of Section B (Governance).

26.7 As soon as reasonably practicable after any Invoice Dispute is resolved, and in any event within twenty (20) Business Days, the T&SCo must prepare and submit to the relevant User an appropriate Invoice Document in respect of the amount (if any) agreed or determined to be payable or repayable by the T&SCo or the relevant User, in accordance with paragraph 21.

## 27. Consequences of resolution of Flow Meter Errors and CDS Data Disputes and notification of any Vented Quantities

27.1 Where:

(a) a CDS Data Dispute has been finally resolved in accordance with Expert Determination under paragraph 51 of Section B (Governance); or

(b) a Flow Meter Error has been finally resolved in accordance with Section F (Network Design and Specification),

the T&SCo must instruct the CDS to re-process the applicable data (including any new data provided pursuant to paragraphs 11.1, 13.1 or 13.2 of Section F (Network Design and Specification)) for the relevant Billing Period and re-issue the Processed Flow Meter Data Statement for the relevant Billing Period(s) within ten (10) Business Days of being notified of the outcome of the CDS Data Dispute or the Flow Meter Adjustment, as the case may be.

27.2 Where the T&SCo has notified a Vented Quantity to the CDS pursuant to paragraph 10.15 of Section F (Network Design and Specification), then:

(a) where the Vented Quantity is notified to the CDS before the end of the Billing Period in which the Vented Quantity was vented, the T&SCo must instruct the CDS to take the Vented Quantity into account when preparing the Processed Flow Meter Data Statement for that Billing Period; or

(b) where the Vented Quantity is notified to the CDS after the end of the Billing Period in which the Vented Quantity was vented, the T&SCo must instruct the CDS to take the Vented Quantity into account and re-issue the Processed Flow Meter Data Statement for the relevant Billing Period within ten (10) Business Days of being notified of the Vented Quantity.

27.3 Upon being re-issued with a Processed Flow Meter Data Statement pursuant to paragraph 27.1 or paragraph 27.2 (b), the T&SCo must, within five (5) Business Days, re-submit the Invoice Document(s) to the User in accordance with paragraph 21.

## 28. Payment of Invoice Amounts which may be impacted by another dispute

28.1 Where a User considers that the Invoice Amount payable under an Invoice Document may be incorrect because of matters which are the subject of a CDS Data Dispute or because of a Flow Meter Error, the User must pay the Invoice Amount on the Invoice Due Date notwithstanding the CDS Data Dispute or the alleged Flow Meter Error (as applicable).

## 29. Late payment

29.1 Where any amount payable under an Invoice Document is not paid on or before the fifth Business Day after the Invoice Due Date, the T&SCo is entitled to issue a notice of demand for payment of the outstanding amount ("**Late Payment Notice**").

29.2 Where a Party has not made payment of an amount that is the subject of a Late Payment Notice within five (5) Business Days of such Late Payment Notice, the T&SCo is entitled to have recourse to the Required Security to discharge the debt due, following which the User must, within ten (10) Business Days following such drawdown, ensure that the Required Security is replenished to the Required Security Amount.

29.3 Where any amount payable under an Invoice Document is not paid on or before the Invoice Due Date, the User must pay interest at the Applicable Interest Rate on the unpaid amount from the Invoice Due Date until the Day on which payment is made.

29.4 The "**Applicable Interest Rate**" is the rate of interest:

(a) expressed as a percentage rate per annum, payable in respect of amounts overdue for payment, or subject to repayment, under the Code; and

(b) set for the relevant period as the statutory interest rate for the purposes of the Late Payment of Commercial Debts (Interest) Act 1998.

# CCS Network Code

# Section I – Data

## 1. Information sharing

1.1 Where any provision of the Code requires or entitles a T&SCo (or the T&SCo's) to "publish" any information or document, the T&SCo must provide such information or document to each Party, any other person to whom the T&SCo may (pursuant to its Licence or any other Legal Requirement or any provision of the Code) be required to provide such information and (subject to any confidentiality restrictions under the Code) such other persons as the T&SCo thinks fit.

## 2. Liability

2.1 Unless expressly provided otherwise in the Code, no Party shall have any liability to any other Party in the event that any data or information exchanged or provided pursuant to the Code is found to be inaccurate, in the absence of wilful misconduct by the Party providing such information or data.

## 3. Definitions and interpretation

3.1 "**Measurement Data**" means all data which (as the context may require) is, has been or is required to be measured by Measurement Equipment installed pursuant to paragraph 5 of Section F (Network Design and Specification) and provided to or accessed by the T&SCo pursuant to the Data Transfer Procedures, and includes data calculated or otherwise derived by the operation of any component of the Measurement Equipment, which is not User-Specific Data.

3.2 "**Protected Information**" means:

(a) for the purposes of the T&SCo's obligations under paragraph 4.1:

(i) any information relating to the affairs of a User or another T&SCo which is obtained by the T&SCo pursuant to or in the course of implementation or performance of the Code, the Code Agreement or any Ancillary Agreement to which that User is party; and

(ii) the terms of any Ancillary Agreement; and

(b) for the purposes of a User's obligations under paragraph 4.2:

(i) any information relating to the affairs of the T&SCo or of another User which is obtained by the User pursuant to or in the course of the negotiation, implementation or performance of the Code, the Code Agreement or any Ancillary Agreement to which the User and (in relation to another User) that other User are party; and

(ii) the terms of any Ancillary Agreement to which that User is party.

3.3 "**Receiving Party**" and "**Protected Party**" shall be construed as follows:

(a) for the purposes of the T&SCo's obligations under paragraph 4.1, the Receiving Party is the T&SCo and the Protected Party is the Party (either the User or another T&SCo) to whose affairs any Protected Information relates; and

(b) for the purposes of a User's obligations under paragraph 4.2, the Receiving Party is the User and the Protected Party is the Party (either the T&SCo or another User) to whose affairs any Protected Information relates.

3.4 "**T&S Network Data**" means all data related to the T&S Network which is not User Specific Data or Measurement Data.

3.5 "**User-Specific Data**" means all data:

(a) held by the T&SCo in relation to a specific User, including:

(i) User's Registered Capacity;

(ii) accepted and rejected Nominations and Renominations;

(iii) Invoice Documents;

(iv) metered quantities;

(v) outages affecting specific Users;

(vi) information required to be provided by the User to a Revenue Support Contract counterparty (pursuant to its Revenue Support Contract) or any other body pursuant to Legal Requirements;

(vii) the User's Measurement Equipment;

(viii) the User Type; and

(ix) the User's contact details; and

(b) held by a User about User networks and/or User Facilities, including:

(i) details of planned maintenance/outages in relation to User Facilities;

(ii) forecast flow data;

(iii) actual flow data;

(iv) Nominations and Renominations;

(v) capacity bookings; and

(vi) any information which is required to be provided by the T&SCo to the Regulator (pursuant to its Licence), the North Sea Transition Authority (pursuant to its licence/permit) or any other body pursuant to Legal Requirements.

## 4. Information and confidentiality

**T&SCo obligation**

4.1 The T&SCo must preserve the confidentiality of Protected Information and ensure that Protected Information is not:

(a) disclosed, revealed, reported or published or transferred to any person other than:

(i) an officer or employee of the T&SCo or its Affiliates or Related Undertakings who is required to have access to the information for the purposes of their duties;

(ii) a professional adviser, agent of or consultant or contractor to the T&SCo or those of its Affiliates or Related Undertakings; or

(iii) operators appointed by the T&SCo to operate the T&S network,

who, before the Protected Information had been disclosed to them by the T&SCo, had been informed of the nature and effect of this paragraph 4.1; and

(b) used by the T&SCo for the purpose of carrying on any activities other than carrying out its activities in relation to the T&S Network in accordance with the Code and the Licence,

except in the circumstances set out in paragraph 4.8.

**User obligation**

4.2 Each User must preserve the confidentiality of Protected Information and ensure that Protected Information is not:

(a) disclosed, revealed, reported, published or transferred to any person other than:

(i) an officer or employee of the User or its Affiliates or Related Undertakings who is required to have access to the information for the purposes of their duties; or

(ii) a professional adviser, agent of or consultant or contractor to the User or those of its Affiliates or Related Undertakings; or

(b) used by such User for any purpose other than one expressly contemplated by the Code or any Ancillary Agreement to which such User is party.

except in the circumstances set out in paragraph 4.8.

**Protected Information**

4.3 The Receiving Party shall:

(a) immediately notify the Protected Party in writing if it suspects or becomes aware of any unauthorised access, copying, use or disclosure in any form of any Protected Information; and

(b) use reasonable endeavours to recover and limit further onward dissemination of such Protected Information.

**Terms of permitted disclosure**

4.4 Where Protected Information is disclosed by the T&SCo as permitted under paragraph 4.1 or by a User as permitted under paragraph 4.2, the Receiving Party shall (without prejudice to its obligations under paragraph 4.1 or 4.2) take all reasonable steps to secure that the person to whom the Protected Information is disclosed:

(a) is aware of the Receiving Party's obligations under paragraph 4.1 or 4.2; and

(b) does not use or disclose the Protected Information other than as is permitted for the Receiving Party in accordance with paragraph 4.1 or 4.2.

4.5 The Receiving Party shall adopt procedures within its organisation for ensuring compliance with paragraphs 4.1 and 4.2. These procedures shall ensure that:

(a) the Protected Information will be disseminated to persons within the Receiving Party only on a "need to know" basis;

(b) employees, officers, directors, agents, consultants, contractors and professional advisers of the Receiving Party or those of its Affiliates or Related Undertakings in receipt of Protected Information will be made fully aware of the Receiving Party's obligations under paragraph 4.1 and 4.2; and

(c) any copies of the Protected Information, whether in hard copy or computerised form, will clearly identify the Protected Information as confidential.

4.6 The Receiving Party shall procure that its Affiliates, Related Undertakings, agents, consultants, contractors and professional advisers observe the restrictions set out in this paragraph 4 (as if references to “User” or "T&SCo" were references to such Affiliates, Related Undertakings, agents, consultants, contractors and professional advisers) and shall be responsible under the Code for any failure by such persons to observe such restrictions.

4.7 Protected Information which any Party is permitted or obliged to disclose or publish to any other Party pursuant to the Code shall not solely be regarded as being in the public domain by reason of being so disclosed or published.

**Exceptions**

4.8 Nothing in paragraph 4.1 or 4.2 shall apply:

(a) to the disclosure or use by the Receiving Party of Protected Information to the extent otherwise expressly permitted by the Code;

(b) to the disclosure or use by the Receiving Party of Protected Information to which the Protected Party has consented in writing;

(c) to any Protected Information which:

(i) before it is obtained by the Receiving Party is in the public domain; or

(ii) after it is obtained by the Receiving Party enters the public domain,

in either case other than as a result of a breach by the Receiving Party of its obligations under paragraph 4.1 or 4.2;

(d) to the disclosure of any Protected Information to any person if and to the extent that the Receiving Party is required to make such disclosure to such person:

(i) in compliance with the duties of the Receiving Party under the Act or any other requirement of a Competent Authority;

(ii) in compliance with the conditions of the Licence held by the Receiving Party or any document referred to in such Licence with which the Receiving Party is required by virtue of the Act or such Licence to comply;

(iii) in compliance with any other Legal Requirements;

(iv) in response to a requirement of any stock exchange or regulatory authority or the Panel on Take-overs and Mergers; or

(v) pursuant to any judicial or other arbitral process or tribunal having jurisdiction in relation to the Receiving Party;

(e) to any Protected Information to the extent that the Receiving Party is expressly permitted or required to disclose that Protected Information under the terms of any agreement or arrangement with the Party to whose affairs such Protected Information relates;

(f) to the disclosure of Protected Information to any lending or other financial institution or investment entity proposing to provide or arrange the provision of finance or equity investment to the Receiving Party or an Affiliate or Related Undertaking of the Receiving Party, where and to the extent that the disclosure of such information is reasonably required for the purposes of the provision or arrangement of such finance or equity investment and provided that the person to whom the information is disclosed undertakes in writing to, and in terms reasonably satisfactory to the Protected Party, maintain the confidentiality of such Protected Information;

(g) to the disclosure of any Protected Information to the Regulator, where the Receiving Party considers in good faith that the Protected Party may be in breach of a condition of the Licence, to the extent reasonably necessary to draw such possible breach to the attention of the Regulator;

(h) to the disclosure of any Protected Information to any person proposing to make a connection to the T&S Network, where and to the extent that the disclosure of such information is reasonably required for the purposes of supporting the T&SCo's Use of System Charges or requirement to allow such proposed connection to the T&S Network to be made and provided that the person to whom the information is to be disclosed is informed in writing of the confidentiality of such information and that prior

to disclosure, such person has entered into a confidentiality agreement with the T&SCo which prohibits the use or disclosure of such Protected Information on terms no less onerous than those set out in this Section I (Data); or

(i) where Protected Information is provided by the Receiving Party to its Affiliates or Related Undertakings or to the employees, directors, agents, consultants, contractors and professional advisors of the Receiving Party or those of its Affiliates or Related Undertakings, in each case on the basis set out in paragraph 4.6.

4.9 The T&SCo may use all and any information or data supplied to or acquired by it, from or in relation to Users and other T&Scos in performing its activities in relation to the T&S Network in accordance with the Code and the Licence, including for the following purposes:

(a) the operation and planning of the T&S Network; and

(b) the calculation of Use of System Charges and preparation of offers of terms for connection to or use of the T&S Network.

4.10 Without prejudice to the other provisions of this paragraph 4, the Receiving Party shall procure that any additional copies made of the Protected Information whether in hard copy or computerised form, will clearly identify the Protected Information as confidential.

**Survival**

4.11 The provisions of paragraphs 4.1 to 4.10 shall continue for a period of three (3) years after the User Discontinuance Date, to bind a Discontinuing User and (as respects the Discontinuing User) the T&SCo and each other User, notwithstanding that the Discontinuing User has ceased to be a User and irrespective of the reason for such cessation.

**Licence**

4.12 Nothing in the Code, the Code Agreement or any Ancillary Agreement shall be construed as requiring the T&SCo to disclose or use any information in breach of any requirement of the T&SCo's Licence.

## 5. Specific disclosure requirements

5.1 Without prejudice to the generality of paragraph 4, the Parties acknowledge that a User may be required to make disclosures of Protected Information, User-Specific Data and T&S Network Data to the LCCC pursuant to the User Requirements.

5.2 The T&SCo must make available to Users any information that they may reasonably request to enable them to comply with their reporting obligations under their User Requirements.

## 6. Access to Data

**Data Transfer Procedures**

6.1 Each T&SCo must establish, document, implement and maintain written procedures to address exchange of and access to User-Specific Data and Measurement Data between the T&SCo and Users for their respective T&S Networks ("**Data Transfer Procedures**").

6.2 The Users and each T&SCo must comply at all times with the Data Transfer Procedures applicable to the relevant T&S Network.

6.3 The Data Transfer Procedures shall be established and published by the T&SCos on the T&S Network Portal no later than twelve (12) months prior to the Scheduled Commercial Operations Date for each T&S Network and shall, as a minimum set out the following content in relation to different User-Specific Data and Measurement Data:

(a) methods of data acquisition (e.g. SCADA, email accounts, web-based platforms etc);

(b) template format for data provision and reporting;

(c) minimum data transfer intervals;

(d) level of granularity within datasets;

(e) naming protocols for specific datasets; and

(f) means of transfer (e.g. email, telemetry, application programming interface, etc).

**Minimum content requirements**

6.4 The Data Transfer Procedures shall at all times comply with the requirements for format, naming and minimum data transfer intervals in relation to the User-Specific Data and the Measurement Data set out in Annexure I (Minimum Documentation Requirements).

**Preparation of Data Annexures**

6.5 No later than twenty four (24) months prior to the earliest Scheduled Commercial Operations Date, the T&SCos shall jointly develop and deliver to:

(a) each User; and

(b) the Regulator,

the proposed draft of Annexure I (Minimum Documentation Requirements), Annexure J (Information Publication Requirements) and Annexure K (Retained Data) (together, the "**Draft Data Annexures**") for review and comment in accordance with paragraphs 6.6 to 6.8.

6.6 As soon as reasonably practicable and in any event within twenty (20) Business Days of receipt of the Draft Data Annexures, each User must notify the T&SCos of any comments on the Draft Data Annexures. Such comments may include further requested content or revisions to existing content, including principles regarding data aggregation or collation to inform the content of the Data Transfer Procedures.

6.7 When providing comments to the T&SCos in accordance with paragraph 6.6, each User must provide the following:

(a) information about the User (company, registered office, etc.) and about at least one (1) reference person (name, telephone number, e-mail address, etc.) who can be contacted with respect to that User's comments;

(b) the reasons why the User believes the User's comments should be incorporated and, to the extent any specific content is requested, the text of such content; and

(c) any documentation (analyses, reports, etc.) to support the request.

6.8 Before preparing the final version of Annexure I (Minimum Documentation Requirements), Annexure J (Information Publication Requirements) and Annexure K (Retained Data) (the "**Data Annexures**"), the T&SCos must convene a meeting with Users in order to discuss any User comments provided in accordance with paragraph 6.6, the date of which must be communicated to Users with not less than ten (10) Business Days notice.

6.9 In preparing the final versions of the Data Annexures, the T&SCos shall:

(a) give reasonable consideration to any comments provided by a User pursuant to paragraph 6.6; and

(b) prepare a report to be circulated to all Users collectively prior to delivery of the final versions of the Data Annexures pursuant to paragraph 6.11 detailing:

(i) where the T&SCos have taken on board or incorporated any comments provided by Users pursuant to paragraph 6.6; and/or

(ii) where the T&SCos have not taken on board or incorporated any comments provided by a User pursuant to paragraph 6.6, an explanation of the reasons for this decision.

6.10 It shall be reasonable for the T&SCos to not incorporate comments made by a User in relation to the Draft Data Annexures into the final version of the Data Annexures where such comments, if incorporated, would affect the safe operation of the T&S Network.

6.11 Subject to paragraph 6.17, once all comments have been received and considered pursuant to the process set out in paragraph 6.8, no later than eighteen (18) months prior to the earliest Scheduled Commercial Operations Date, the T&SCos shall deliver to:

(a) each User;

(b) the Regulator; and

(c) the Secretary,

the final versions the Data Annexures and shall proceed to develop the Data Transfer Procedures for the relevant T&S Network in accordance with paragraph 6.1 based on the final versions of the Data Annexures.

6.12 Once the final versions of the Data Annexures have been delivered to each User, the Regulator and the Secretary in accordance with paragraph 6.11, the Code shall be modified by insertion of the final version of the Data Annexures and such Modification shall not be subject to the Modification Rules.

6.13 Once the Secretary has received the final versions of the Data Annexures, the Secretary must publish such final versions by notice on the CCS Network Code Website.

**Revisions**

6.14 Once the final versions of the Data Annexures have been delivered pursuant to paragraph 6.11, the T&SCos may review and/or revise the contents of the Data Annexures:

(a) when the T&SCos consider it is necessary to do so;

(b) upon request by a User; or

(c) in order to resolve a dispute under paragraph 6.17,

provided that any such revision shall be subject to the Modification Rules.

6.15 Any revisions or amendments to the Data Transfer Procedures for a T&S Network will be implemented by the T&SCo upon reasonable notice to enable each User of that T&S Network to adjust its systems (if required) following a Code Modification to reflect the revised Data Annexures.

**Disputes**

6.16 Where:

(a) a User comment provided pursuant to paragraph 6.6 was not included by the T&SCos in the final versions of the Data Annexures; and

(b) a majority of Users consider that such comment should have been incorporated by the T&SCo,

such matter may be referred by a User to dispute resolution in accordance with the provisions of paragraph 48 of Section B (Governance).

6.17 Where any matter is referred to dispute resolution under paragraph 6.16, the T&SCo must not finalise the Data Transfer Procedures for the relevant T&S Network until such dispute has been resolved in accordance with the provisions of paragraph 48 of Section B (Governance).

**T&S Network Data**

6.18 Subject to paragraph 6.21, each T&SCo must procure that amongst others, the following T&S Network Data is publicly accessible at all times via the T&S Network Portal once established, subject to operational availability:

(a) existing connections and new Connection Applications;

(b) Network Capacity available (in accordance with the requirements of paragraph 6.1(a) of Section E (Network Use and Capacity));

(c) annual Maintenance Programme;

(d) information on Capacity Constraints, use of the Enhanced Response Service, Flow Tolerance Requests, Exceedance Events, Zero Nomination Low Flow Events and Minimum flow Deficits (in accordance with the requirements of paragraphs 36.4 and 37.1(a) of Section E (Network Use and Capacity));

(e) network expansion and development information;

(f) process and timelines for Network Capacity releases;

(g) aggregate Registered Capacity of all Users;

(h) daily aggregate physical flow (gross);

(i) aggregate metered quantities of all Users per calendar month;

(j) Use of System Charges; and

(k) certain historic data in respect of the above.

6.19 The publication of T&S Network Data in accordance with paragraph 6.18 shall comply with the formatting and frequency requirements set out in Annexure J (Information Publication Requirements).

6.20 Prior to establishment of the T&S Network Portal or in the case of unavailability of the T&S Network Portal, the T&SCo must endeavour to provide the information set out in paragraph 6.18 to Users and the LCCC by other means available to the T&SCo.

6.21 The T&SCo must not make any T&S Network Data publicly accessible where to do so would contravene any confidentiality obligations under the Code, the T&SCo's Licence or any relevant Legal Requirements.

6.22 Where there is only one (1) T&SCo, references in this paragraph 6 to "the T&SCos" shall be treated as references to the sole T&SCo that is a Party to the Code until such time as another T&SCo accedes to the Code.

6.23 For the purposes of this paragraph 6, references to Users shall be treated as including references to Eligible Applicants.

6.24 The Parties acknowledge and agree that notwithstanding paragraph 17.1 of Section J (General), the Contracts (Rights of Third Parties) Act 1999 shall apply to the rights conferred on Eligible Applicants under this paragraph 6.

## 7. Storage of Data

The T&SCo must keep records of all relevant data and information, including the information listed in Annexure K (Retained Data), for at least ten (10) years.

## 8. Data ownership

8.1 Subject to paragraph 8.2(a), all data which is processed by a T&SCo shall belong for the purposes of the Code to the T&SCo which owns or operates the T&S Network (or part of the T&S Network) to which such data relates; and subject to paragraph 8.2(b), the T&SCo may, but without prejudice to paragraph 3 or any other requirement of the Code, use and deal with such data as it thinks fit.

8.2 Where pursuant to the Code, a User provides or arranges for the provision of data to a T&SCo:

(a) such data (as provided to the T&SCo by the User) shall belong to the User and all intellectual property relating to such data shall at all times vest in the User; and

(b) the User hereby grants to the T&SCo (its successors, assigns, agents and contractors) a perpetual, non-exclusive, royalty-free licence (which shall survive the User Discontinuance Date) in respect of such data and all intellectual property rights therein to use, copy, adapt and deal with such data for the purposes of performance and implementation of the Code and for other purposes contemplated by the Code, but not otherwise.

## 9. Central Data Service

**Procurement**

9.1 The T&SCos must, acting jointly:

(a) to procure an independent Central Data Service Provider ("**CDS"**) under a contract ("**CDS Contract**"); and

(b) to ensure that the CDS is appointed under the CDS Contract by the date which is no later than six (6) months prior to the earliest Scheduled Commercial Operations Date.

9.2 The scope of the CDS Contract shall include:

(a) provision of a data processing and management service for the processing of data from the Flow Meter and the Re-use Meter (if applicable) at each User's Delivery Point or Re-use Delivery Point (as applicable);

(b) delivery of a statement to the T&SCos and the LCCC representing the quantity of carbon dioxide delivered by each User at that User's Delivery Point or Re-Use Delivery Point (as applicable) into the T&S Network during a Billing Period ("**Processed Flow Meter Data Statement**"); and

(c) coverage across all T&S Networks.

9.3 The CDS shall act on its own account and not as agent of any Party in the provision of the services under the CDS Contract.

9.4 Each T&SCo must provide the CDS with such information relating to their respective T&S Networks as it reasonably requires for the purpose of performing its functions under the CDS Contract and such assistance as it may reasonably require in interpreting such information.

9.5 The terms of the CDS Contract must comply with the terms of reference set out in Annexure L (CDS Terms of Reference).

9.6 The T&SCos shall be required to:

(a) jointly manage the CDS Contract and performance by the CDS of its obligations under the CDS Contract;

(b) bear the fees incurred under the CDS Contract equally between each T&SCo; and

(c) ensure that a CDS is in place at all times.

9.7 Each T&SCo undertakes that it will act and exercise its rights and powers under the CDS Contract in relation to the CDS so as jointly to control and govern the CDS on an economic, efficient and effective basis.

9.8 Where the CDS Contract expires or is otherwise terminated in accordance with its terms, the T&SCos shall ensure that any replacement CDS is procured in accordance with paragraphs 9.2 and 9.3 and so as to maintain continuous coverage in accordance with the principle set out in paragraph 9.6(c).

9.9 The Parties acknowledge and agree, in connection with the services to be performed by the CDS under the CDS Contract, that:

(a) the CDS Terms of Reference set out or describe the functions of the CDS as obligations of the CDS (as if the CDS were a party to the Code);

(b) the CDS is not a Party, and is not bound by any Code Agreement to comply with the Code; and

(c) accordingly the CDS Contract operates to bind the CDS to perform those functions assigned to it under the CDS Terms of Reference.

9.10 The rights and obligations of the Parties under the Code shall not be affected by any failure or delay on the part of the CDS in performing the services under the CDS Contract, so far as such rights and obligations are capable of being construed and determined notwithstanding such failure or delay, but without prejudice to any provision of the Code which expressly addresses any such failure or delay or the consequences thereof.

9.11 In the event of any conflict between the provisions of the Code and the provisions of the CDS Contract:

(a) as between the Parties, the provisions of the Code shall prevail; and

(b) any Party may propose (in accordance with paragraph 12) an amendment to the CDS Terms of Reference to remove such conflict).

9.12 Each User authorises the CDS to provide the Processed Flow Meter Data Statement to the T&SCo and LCCC in accordance with the CDS Contract.

9.13 Where there is only one (1) T&SCo, references in this paragraph 9 to "the T&SCos" shall be treated as references to the sole T&SCo that is a Party to the Code until such time as another T&SCo accedes to the Code.

**CDS Data Disputes**

9.14 Where a Party wishes to dispute the content of a Processed Flow Meter Data Statement ("**CDS Data Dispute**"), it shall be entitled to refer the dispute to an Expert for determination, in accordance with paragraph 51 of Section B (Governance).

## 10. Independent Verifier

**Procurement**

10.1 Each T&SCo must:

(a) procure an independent third party verifier (the "**Independent Verifier**") under a contract (the "**Independent Verifier Appointment**") to carry out the validation activities for each respective T&S Network required by paragraphs 6.1 and 12.11 of Section F (Network Design and Specification) with the aim of providing a verification report that concludes with reasonable assurance that the Measurement Equipment at each Delivery Point (and, if applicable, the Re-Use Meter at the Re-Use Delivery Point) in the applicable T&S Network complies with the Measurement Requirements; and

(b) ensure that the Independent Verifier is appointed by the date which is no later than six (6) months prior to the Scheduled Commercial Operations Date for the applicable T&S Network.

10.2 The terms of the Independent Verifier Appointment must comply with the terms of reference set out in Annexure M (Independent Verifier Terms of Reference).

10.3 Each T&SCo must:

(a) manage the Independent Verifier Appointment and performance by the Independent Verifier of its obligations under the Independent Verifier Appointment;

(b) subject to paragraph 12.13 of Section F (Network Design and Specification), bear the fees incurred under the Independent Verifier Appointment; and

(c) ensure that an Independent Verifier is in place at all times.

10.4 Where the Independent Verifier Appointment expires or is otherwise terminated in accordance with its terms, the T&SCos shall ensure that any replacement Independent Verifier is procured in accordance with paragraph 10.1 and so as to maintain the principle of continuous coverage in accordance with paragraph 10.3(c).

## 11. T&S Network Portal

11.1 Each T&SCo must:

(a) at its cost establish and maintain a web-based portal to publish information, issue communications and receive communication relating to the operation of its T&S Network (the "**T&S Network Portal**"); and

(b) ensure that its T&S Network Portal is fully operational six (6) months prior to the Scheduled Commercial Operations Date for its T&S Network.

11.2 The T&SCo must ensure that its T&S Network Portal:

(a) is in place at all times; and

(b) has at least the features and functionalities set out in the T&S Network Portal Minimum Specification.

## 12. Revisions to Terms of Reference

12.1 Where a Party (the "**Proposing Party**"), wishes to revise:

(a) the CDS Terms of Reference; or

(b) the Independent Verifier Terms of Reference,

any such revision shall be subject to the procedure set out in paragraphs 12.2 to 12.9.

12.2 The Proposing Party shall develop and deliver to:

(a) each other Party;

(b) the LCCC; and

(c) the Regulator,

the proposed amendments to the applicable Terms of Reference ("**ToR Proposal**") for review and comment in accordance with paragraphs 12.3 to 12.5.

12.3 As soon as reasonably practicable and in any event within twenty (20) Business Days of receipt of a ToR Proposal, each Party shall notify the Proposing Party of any comments on the ToR Proposal.

12.4 When providing comments to the Proposing Party in accordance with paragraph 12.3, each Party must to provide the following:

(a) information about the Party (company, registered office, etc.) and about at least one (1) reference person (name, telephone number, fax number, e-mail address, etc.) who can be contacted with respect to that Party's comments;

(b) the reasons why that Party believes its comments should be incorporated; and

(c) any documentation (analyses, reports, etc.) to support the request.

12.5 The Proposing Party shall:

(a) give reasonable consideration to any comments provided by a Party pursuant to paragraph 12.3; and

(b) where the Proposing Party does not take on board or incorporate any comments provided by a Party pursuant to paragraph 12.3, provide an explanation to the Party of the reasons for this decision.

12.6 Once all comments have been received and considered pursuant to the process set out in paragraphs 12.3 to 12.5, the Proposing Party shall deliver to:

(a) each other Party;

(b) the LCCC; and

(c) the Regulator,

the final draft of the revised Terms of Reference ("**Revised Terms of Reference**").

12.7 Subject to paragraph 12.8, any Revised Terms of Reference agreed under this paragraph 12, shall be put forward by the Proposing Party as a Modification Proposal under the Modification Procedure in Section B (Governance).

**Disputes**

12.8 Where:

(a) a Party's comment provided pursuant to paragraph 12.3 was not included in the Revised Terms of Reference; and

(b) a majority of other Parties consider that such comment should have been incorporated by the Proposing Party,

such matter may be referred by the Party who made the original comment to dispute resolution in accordance with the provisions of paragraph 48 of Section B (Governance).

12.9 Where any matter is referred to dispute resolution under paragraph 12.8, the Proposing Party shall not raise a Modification Proposal until such dispute has been resolved in accordance with the provisions of paragraph 48 of Section B (Governance).

# CCS Network Code

# Section J – General

## 1. Notices and communications

1.1 Except where the means by which a particular Communication is to be given is specified in the Code, Communications must be given by Conventional Notice.

1.2 "**Conventional Notice**" :

(a) includes any Communication or other notice to be given by one (1) Party to another under the Code or an Ancillary Agreement, other than one which is given by means of the T&S Network Portal or by telephone, which satisfies the requirements of paragraph 1; and

(b) must be in writing and must be addressed to the recipient Party at the recipient Party's address or e-mail address notified pursuant to paragraph 1.3 (and where there is more than one (1) address and/or representative specified pursuant to paragraph 1.6, all such addresses and representatives) and marked for the attention of the relevant representative (identified by name or title) in accordance with paragraph 1.3.

1.3 The initial address, e-mail address and details of the representative for whose attention notices are to be marked shall be as specified in a Connection Agreement and any changes must be communicated in writing by each Party to the other Party before taking effect.

1.4 A Conventional Notice given by letter must be delivered by hand, and any Conventional Notice given by post must be sent by first class prepaid post (airmail if overseas).

1.5 Any Conventional Notice shall be deemed to have been received:

(a) in case of delivery by hand, when delivered; or

(b) in the case of first class prepaid post, on the second Day following the Day of posting (or, if sent airmail overseas or from overseas, on the fifth Day following the Day of posting); or

(c) in the case of e-mail, subject to paragraph 1.7, one (1) hour after being sent in the absence of any undeliverable return receipt being sent to the sender during that period.

1.6 A Party may specify different addresses and representatives for the purposes of Conventional Notices of different kinds or relating to different matters.

1.7 If the time at which any Conventional Notice sent by e-mail is deemed to have been received falls after 1700 hours on a Day, the Conventional Notice shall be deemed to have been received at the start of the next Business Day.

1.8 Where a Conventional Notice is sent by e-mail, the Party giving the Conventional Notice shall (but without prejudice to paragraph 1.5(c)) if requested by the recipient Party, resend as soon as reasonably practicable the Conventional Notice by email.

1.9 Where any provision of the Code or any Ancillary Agreement specifies any requirement to be complied with by any Party in respect of any specific Communication, such requirement shall be in addition to (and, to the extent inconsistent, in substitution for) the provisions of this paragraph 1.

## 2. Communication by telephone

2.1 For the purposes of enabling Communications to be given (where required or permitted to be so given) by telephone:

(a) each Party must provide to the other Party not more than three (3) (or such other number as they may agree) telephone numbers and details (by name or title) of the representative(s) to whom the Party giving such a Communication should speak;

(b) each Party must use reasonable endeavours to ensure that a Party seeking to give such Communication will at any time be able to contact a representative (of the first Party) by means of one (1) of such telephone numbers; and

(c) the Parties must, if either of them shall so request, establish such further procedures as may be reasonable and appropriate for the purposes of ensuring:

(i) that a Communication being given by telephone may be identified by the recipient as such; and/or

(ii) that such Communication may be given securely, without delay and effectively.

2.2 Where a Party seeking to give a Communication by telephone is unable to contact a representative of the receiving Party, such Party must give the Communication by e-mail and the Communication will not be deemed to have been received except in accordance with paragraph 1.5(c).

2.3 Unless otherwise agreed between the relevant Parties, a telephone notice may not be given as a message recorded on a telephone answering device.

2.4 Where a Communication is given by telephone:

(a) the Party giving the Communication will promptly after the telephone Communication is completed, make and keep a record in which the time and content of the telephone Communication is logged, but may do so by recording the telephone Communication where it has notified the recipient Party on the occasion or on a standing basis, of its intention to do so; and

(b) the Communication shall be treated as given at the time at which the telephone Communication is completed.

2.5 A Party may specify different telephone numbers and representatives pursuant to paragraph 2.1 for the purposes of receiving by telephone Communications of different kinds or relating to different matters.

## 3. Alternative means of communication

3.1 Where:

(a) the Code specifies that any Communication or other notice is to be provided by a User to the T&SCo, or by the T&SCo to the User, by means of the T&S Network Portal; and

(b) as a result of a technical fault or other circumstance the T&S Network Portal is not functioning or one (1) of the Parties is, through unforeseen circumstances, unable to access the T&S Network Portal,

the Party experiencing the difficulties specified in paragraph 3.1(b) shall make the relevant Communication or notice by means of telephone or e-mail (depending on which is most appropriate in the circumstances) using the other Party's Alternative Operational Communication Contact Details.

3.2 The T&SCo must provide to Users, and each User must provide to the T&SCo in writing, the "**Alternative Operational Communication Contact Details**", which must consist of:

(a) an e-mail address; and

(b) a telephone number,

which will be closely monitored by the Parties for the purposes of receiving any Communications or other notices made in accordance with paragraph 3.1.

3.3 Any changes to a Party's Alternative Operational Communication Contact Details must be notified to the other Party or Parties as soon as is reasonably practicable.

## 4. Liability between the T&SCo and a User

4.1 For the purposes of this paragraph 4, each of:

(a) the T&SCo;

(b) the User that is a counterparty to the T&SCo under a Connection Agreement;

(c) an Eligible Applicant; and

(d) a Prospective T&SCo,

shall be a "**Counterparty**".

4.2 Subject to the remainder of this paragraph 4 and any other express provision to the contrary, no Party shall be liable to its Counterparty for any claims, losses, damages, costs, expenses or liabilities arising from any default, negligence or breach of duty (whether statutory or

otherwise) or any breach of the Code or an Ancillary Agreement (or the Party's performance of its obligations under the Code or an Ancillary Agreement), except for any such claims, losses, damages, costs, expenses or liabilities directly resulting from such default, negligence or breach and which was reasonably foreseeable as not unlikely to occur in the ordinary course of events from such default, negligence or breach in respect of:

(a) physical damage to the property of the Counterparty; and/or

(b) the liability (in law) of the Counterparty to any third party for loss related to physical damage to the property of that third party.

4.3 Where the T&SCo elects to accept delivery of carbon dioxide which does not comply with the Entry Provisions pursuant to paragraph 4 or 12 of Section F (Network Design and Specification), it thereby takes responsibility for the impact of such carbon dioxide on the T&S Network.

4.4 Paragraph 4.3 is without prejudice to any liability of a User to a T&SCo where the T&SCo does not accept delivery of carbon dioxide which does not comply with the Entry Provisions pursuant to paragraph 4 or 12 of Section F (Network Design and Specification).

4.5 The amount or amounts for which a Party may be liable to a Counterparty pursuant to paragraph 4.2 in respect of any one (1) event or circumstance shall not exceed:

(a) in respect of the liability of the T&SCo to any one (1) User or of any one (1) User to the T&SCo, twenty million pounds sterling (£20,000,000); or

(b) in respect of the liability in aggregate of the T&SCo to more than one (1) User, one hundred million pounds sterling (£100,000,000).

4.6 Subject to paragraph 4.7, no Party shall in any circumstance be liable in respect of any breach of the Code or any Ancillary Agreement (or the Party's performance of its obligations under the Code or any Ancillary Agreement) to any Counterparty for:

(a) any loss of profit, loss of revenue, loss of use, loss of contract, loss of goodwill, or increased cost of working;

(b) any indirect or consequential loss, including any ETS Liabilities; or

(c) except as provided in paragraphs 4.2(b) and 4.8, loss resulting from the liability of any Counterparty to any other person howsoever and whensoever arising.

4.7 Where:

(a) a fault or damage in the infrastructure owned by a User between the Metering Point and the Delivery Point arises and;

(i) such fault or damage results in carbon dioxide losses by way of leakage and/or venting;

(ii) a T&SCo ETS Liability arises as a result of such leakage and/or venting; and

(iii) the T&SCo establishes (pursuant to its investigation and audit rights under Section F (Network Design and Specification)) that such fault or damage arose on the infrastructure on the side of the Delivery Point owned by the User, or

(b) a User has vented carbon dioxide through a Downstream Vent in accordance with the provisions of paragraph 10.12 of Section F and a T&SCo ETS Liability arises as a result of the Downstream Venting Event,

such User shall be liable to compensate the T&SCo for all costs associated with such ETS Liabilities.

4.8 Nothing in the Code or any Ancillary Agreement excludes or limits the liability of any Party:

(a) for death or personal injury resulting from the negligence of such Party; or

(b) where such a limitation or exclusion would be contrary to applicable law.

4.9 Paragraph 4.2 is without prejudice to any provision of the Code or any Ancillary Agreement which provides for a Party to make a payment to a Counterparty.

4.10 Nothing in the Code or any Ancillary Agreement shall prevent any T&SCo or User from seeking injunctive relief, specific performance or other equitable relief.

4.11 Subject to paragraph 4.4, the rights and remedies of the Parties pursuant to the Code and any Ancillary Agreement exclude and are in place of any rights or remedies of any Party in tort (including negligence and nuisance) or misrepresentation in respect of the subject matter of the Code or such Ancillary Agreement and accordingly, but without prejudice to paragraphs 4.8, each Party (to the fullest extent permitted by law):

(a) waives any such rights or remedies; and

(b) releases the Counterparty from any duties or liabilities arising in tort or misrepresentation in respect of the subject matter of the Code or such Ancillary Agreement.

4.12 Without prejudice to paragraph 4.11, where any provision of the Code or any Ancillary Agreement provides for any amount to be payable by a Party upon or in respect of that Party's breach of any provision of the Code or any Ancillary Agreement, each Party agrees and acknowledges that the remedy conferred by such provision is exclusive of and is in substitution for any remedy in damages in respect of such breach or the event or circumstance giving rise thereto.

4.13 Nothing in this paragraph 4 shall prevent any Party from or restrict it in enforcing any obligation owed to it under or pursuant to the Code, the Code Agreement or any Ancillary Agreement.

4.14 Each provision of this paragraph 4 shall be construed as a separate and severable contract term, and shall as respects any Discontinuing User, survive that Discontinuing User ceasing to be a User.

## 5. Liabilities between Users, between T&SCos and cross-network liabilities

5.1 Unless otherwise provided, nothing in the Code or any Ancillary Agreement creates contractual rights or liabilities:

(a) between Users inter se;

(b) between T&SCos inter se; or

(c) between Users of a T&S Network and the T&SCo of another T&S Network.

5.2 Each:

(a) T&SCo:

(i) waives any rights or remedies against any:

(A) other T&SCo; and

(B) User other than the User which is its Connection Agreement counterparty; and

(ii) releases:

(A) each other T&SCo; and

(B) each User other than the User which is its Connection Agreement counterparty; and

(b) User:

(i) waives any rights or remedies against any:

(A) other User; and

(B) T&SCo other than the T&SCo which is its Connection Agreement counterparty; and

(ii) releases:

(A) each other User; and

(B) T&SCo other than the T&SCo which is its Connection Agreement counterparty,

from any duties or liabilities arising in tort (including negligence and nuisance) or misrepresentation in respect of the subject matter of the Code or any Ancillary Agreement.

## 6. Warning notices

6.1 Where:

(a) a User is in material or persistent breach of the Code; and

(b) such breach is not a Payment Default or Insolvency Default,

the T&SCo may give a warning notice of such material or persistent breach to the User (the "**Warning Notice**") which:

(i) requires the User to desist from failing to comply with the Code;

(ii) includes details of how the User has materially or persistently failed to comply with the requirements of the Code; and

(iii) requires the User to take steps to remedy the breach in all material respects, where the breach is capable of remedy within the grace period set out in paragraph 6.2.

6.2 The User shall be permitted a "grace period" of fourteen (14) Days from the date of a Warning Notice to take steps to remedy the relevant breach in all material respects.

6.3 Any non-compliance with the Code by the User during the grace period referred to in paragraph 6.2 shall not entitle the T&SCo to serve another Warning Notice on the User.

6.4 Regardless of whether a breach is remedied during the grace period referred to in paragraph 6.2, any Warning Notice issued under paragraph 6.2 shall continue to apply for the purposes of paragraph 7.1.

6.5 For the purposes of paragraph 6.1, the following breaches are excluded:

(a) a breach which results from a breach by the T&SCo of the Code or an Ancillary Agreement; or

(b) a breach other than a wilful breach of a provision of the Code where the Code specifically provides some other remedy for such breach and such other remedy may reasonably be considered to be adequate in the circumstances.

## 7. Default and remedy

7.1 Where, having received at least three (3) Warning Notices within the preceding twelve (12) months, the material or persistent breach identified in such Warning Notices remains unremedied in any material respect by the User, the T&SCo may give notice of such breach to the User ("**Default Notice**").

7.2 Within fourteen (14) Days of receipt of a Default Notice, the User must:

(a) where the breach is reasonably capable of remedy within such period of fourteen (14) Days, remedy the breach in all material respects;

(b) where the breach is capable of remedy but not within such period of fourteen (14) Days, provide to the T&SCo a remediation plan setting out the steps to be taken by the User and the timetable for taking such steps for the remedy of the breach as soon as is reasonably practicable; or

(c) where the breach is not capable of remedy, provide a remediation plan setting out:

(i) the steps to be taken by the User and the timetable for taking such steps to mitigate the impact of the breach so far as is reasonably practicable; and

(ii) the steps to be taken to prevent the recurrence or re-occurrence of the relevant breach so far as is reasonably practicable.

7.3 Where, notwithstanding the reasonable diligence of the User, it is not reasonably practicable for the User to remedy the breach in accordance with a remediation plan provided pursuant to paragraph 7.2(b), the User may provide to the T&SCo a revised remediation plan setting out the steps to be taken by the User and the timetable for taking such steps for the remedy of the breach as soon as is reasonably practicable (provided that the User shall have the opportunity to provide only one revised remediation plan to address the breach).

7.4 Where, notwithstanding the reasonable diligence of the User, it is not reasonably practicable for the User to comply in all material respects with a remediation plan provided under paragraph 7.2(c), the User may provide to the T&SCo a revised remediation plan setting out the matters in paragraph 7.2(c) (provided that the User shall have the opportunity to provide only one (1) revised remediation plan to address the breach).

## 8. General Default

8.1 A "**General Default**" occurs when a Default Notice has been issued and:

(a) paragraph 7.2(a) applies and the breach remains unremedied in any material respect after the expiry of seven (7) Days after a further notice by the T&SCo to the User to the effect that the User has not complied with paragraph 7.2(a); or

(b) paragraph 7.2(b) or 7.3 applies and the User does not remedy the breach in all material respects with all reasonable diligence and so far as reasonably practicable in accordance with the remediation plan provided under paragraph 7.2(b) or a revised remediation plan pursuant to paragraph 7.3 (where a revised remediation plan has been provided) and such failure remains unremedied in any material respect after the expiry of seven (7) Days after a further notice by the T&SCo to the User to the effect that the User has not complied with this paragraph 8.1(b);

(c) paragraph 7.2(c) or 7.4 applies and:

(i) the User does not comply in all material respects with the remediation plan provided under paragraph 7.2(c) or a revised remediation plan pursuant to paragraph 7.4 (where a revised remediation plan has been provided) and such failure remains unremedied in any material respect after the expiry of seven (7) Days after a further notice by the T&SCo to the User to the effect that the User has not complied with this paragraph 8.1(c); or

(ii) at any time within the period of twelve (12) months following the Default Notice, there occurs a further material breach by the User of the same provision of the Code; and the T&SCo has given a notice of such further breach to the User and a period of seven (7) Days has expired following such notice.

## 9. Insolvency Default

9.1 An "**Insolvency Default**" occurs when a User:

(a) is dissolved (other than pursuant to a solvent consolidation, amalgamation or merger) or becomes insolvent or unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986;

(b) has an order made or resolution passed for its winding-up or liquidation (other than pursuant to a solvent consolidation, amalgamation or merger); or

(c) is subject to any event with respect to it which, pursuant to the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in paragraph 9.1(a) or 9.1(b).

## 10. Payment Default

A "**Payment Default**" occurs where an amount (or amounts in aggregate) of not less than ten thousand pounds sterling (£10,000) has become due for payment by the User under the Code and:

(a) the T&SCo has issued a Late Payment Notice for the outstanding amount and the User has not paid such amount in full by the thirtieth Day after the date of the Late Payment Notice; or

(b) the T&SCo has issued a notice of non-payment in respect of such amount (where it relates to an amount that is not the subject of a Late Payment Notice) (a **"Non-Payment Notice**") and the User has not paid such amount in full by the thirtieth (30th) Day after the date of the Non-Payment Notice.

## 11. Right to suspend

11.1 Without prejudice to any other rights of the T&SCo under the Code, during any period in which a Default Notice, Late Payment Notice or Non-Payment Notice has been issued and such breach of the Code or failure to pay is subsisting, or during any period while an Insolvency Default is subsisting, the T&SCo shall be entitled to reject or refuse to accept all or any of the following by the relevant User:

(a) delivery of carbon dioxide at the User's Delivery Point;

(b) taking delivery of carbon dioxide at the User's Re-Use Delivery Point; or

(c) an application for Registered Capacity or increased Registered Capacity at any Delivery Point under Section C (Connection).

11.2 A User remains liable to pay Capacity Charges and Network Charges during any period in which paragraph 11.1 applies.

## 12. Default Termination

12.1 Following the occurrence of a User Default, the T&SCo may give notice (a "**Termination Notice**") to the defaulting User to the effect that the User will cease to be a User of or in relation to the T&S Network with effect from the date specified in the Termination Notice (which must be on or following the date of the Termination Notice in respect of an Insolvency Default or be no less than seven (7) Days after the date of issue of the Termination Notice in respect of any other User Default).

12.2 Where the T&SCo gives a Termination Notice to a User, with effect from the date specified in the Termination Notice, the User will cease to be a User of the T&S Network and paragraph 14.2 shall apply.

12.3 The giving of a Termination Notice and the application of paragraph 12.2 shall not affect the rights and obligations of the T&SCo and the User under the Code or any Ancillary Agreement (including rights and obligations in respect of the User Default, and in respect of amounts including interest payable by either Party, and rights and obligations arising pursuant to any provision of the Code in respect of the User ceasing to be a User) accrued up to the date referred to in paragraph 12.2, which shall continue to be enforceable notwithstanding that paragraph 12.2.

12.4 Where the T&SCo has given a Termination Notice it shall be entitled to notify such persons as it thinks fit (including another T&SCo) that it has done so and it shall notify the CDS that it has done so.

## 13. User exit

13.1 Subject to the satisfaction of the requirements of paragraph 13.2, a User may by giving notice (a "**User Exit Notice**") to the T&SCo, cease to be a User of or in relation to the T&SCo Network:

(a) where it no longer intends to hold Registered Capacity;

(b) while a Construction Longstop Default affecting the User is subsisting in respect of a failure of the T&SCo to complete the relevant T&SCo Works; or

(c) where a Capacity Constraint Default affecting the User is subsisting in respect of a Capacity Constraint.

13.2 A User may not cease to be a User under this paragraph 13 until such time as:

(a) where paragraph 13.1(a) applies, the earlier of:

(i) the date that the User's Registered Capacity has expired;

(ii) where paragraph 14.3(a)(i) applies, the later of:

(A) the date that is three (3) years after the date of a User Exit Notice; and

(B) the date that the User has paid all Capacity Charges and Network Charges due in respect of the three (3) year period after the date of issue of the User Exit Notice in full; or

(iii) where paragraph 14.3(c) applies, the date that the User's Registered Capacity has been surrendered and registered to another User;

(b) subject to paragraph 14.3(a), all amounts payable or (other than in respect of any recurrent charge becoming payable by reason only of the lapse of time after the date on which the last of the other requirements of this paragraph 13.2 is satisfied) which may become payable by the User to the T&SCo pursuant to any provision of the Code or any Ancillary Agreement have been paid in full;

(c) any requirements under any Ancillary Agreement in respect of termination have been complied with; and

(d) any outstanding breach, being a breach capable of remedy and of which the T&SCo has given notice to the User, by the User of any provision of the Code or any Ancillary Agreement has been remedied.

13.3 Where a User has given a User Exit Notice, the User and the T&SCo remain bound by the Code and any Ancillary Agreement to which the User is party until the requirements of paragraphs 13.2 and 13.4 are satisfied.

13.4 Where a User has given a User Exit Notice after the satisfaction of the last of the requirements of paragraph 13.2 to be satisfied:

(a) with effect from the fifth Business Day following such satisfaction, the User will cease to be a User; and

(b) without prejudice to paragraph 13.5, the T&SCo must as soon as reasonably practicable (and where possible before such date) notify the User of the date on which it ceases to be a User under paragraph 13.4(a).

13.5 Notwithstanding paragraph 13.3, the T&SCo or (as the case may be) the User remains liable, subject to and in accordance with the Code, to the other after the User Discontinuance Date:

(a) for any amount which was or becomes payable under the Code or any Ancillary Agreement in respect of any period before the User Discontinuance Date; and

(b) in respect of any outstanding breach of any provision of the Code or any Ancillary Agreement where such breach was not (for the purposes of paragraph 13.2(d)) capable of remedy or (notwithstanding that paragraph) was capable of remedy but was not remedied.

## 14. Discontinuing Users and termination

14.1 A User may cease to be a User of or in relation to a T&S Network pursuant to paragraph 12 or 13. A:

(a) "**Discontinuing User**" is a User who so ceases to be a User; and

(b) "**User Discontinuance Date**" is the date with effect from which (in accordance with paragraph 12 or 13) a Discontinuing User ceases to be a User.

14.2 Upon the User Discontinuance Date:

(a) subject to any provision of the Code expressed to survive termination and to paragraph 12.3, the Code Agreement shall cease to bind the Discontinuing User and (solely in connection with the Discontinuing User) the T&SCo; and

(b) each Ancillary Agreement to which a Discontinuing User is party shall, unless otherwise provided in such Ancillary Agreement, terminate with effect from the User Discontinuance Date.

14.3 A Discontinuing User's Registered Capacity shall not be reduced or cancelled (and the User will remain liable for payment of Capacity Charges in respect of its Registered Capacity but may (subject to agreement with the T&SCo) elect to make prepayment of the Capacity Charges in full discharge of such liability) other than:

(a) Registered Capacity after the date which is three (3) years from the:

(i) date of a User Exit Notice; or

(ii) User Discontinuance Date where a Termination Notice has been issued and this paragraph 14.3(a)(ii) shall survive the User Discontinuance Date;

(b) Registered Capacity from the User Discontinuance Date, where a User Exit Notice has been issued under paragraph 13.1(b) or 13.1(c); or

(c) by agreement with the T&SCo, where a full surrender of Registered Capacity has occurred under paragraph 27 of Section E (Network Use and Capacity) and such capacity has become registered to another User.

14.4 A Discontinuing User will remain liable for payment of Network Charges for the period in which it is liable for Capacity Charges in accordance with paragraph 14.3.

14.5 Following the User Discontinuance Date, each Party shall bear responsibility for:

(a) the safe decommissioning of the connection assets owned by that Party; and

(b) all decommissioning costs and liabilities (including any such liabilities arising under relevant Legal Requirements) associated with the decommissioning of such assets,

based on the boundaries of ownership set out in the Connection Agreement between the T&SCo and the Discontinuing User.

## 15. Governing law

The Code, the Code Agreement, every Code Accession Agreement, every CDS Accession Agreement and every Ancillary Agreement, and any dispute, controversy, proceeding or

claim of whatever nature arising out of or in any way relating to the Code, the Code Agreement, any Code Accession Agreement, any CDS Accession Agreement or any Ancillary Agreement or their formation (including any non-contractual disputes or claims), shall be governed by and construed in accordance with English law.

## 16. Jurisdiction

16.1 Subject and without prejudice to the provisions providing for mediation and expert determination in Section B (Governance), all the Parties irrevocably agree that the courts of England shall have exclusive jurisdiction to hear, settle and/or determine any dispute, controversy or claim (including any non-contractual dispute, controversy or claim) arising out of or in connection with the Code, the Code Agreement, any Code Accession Agreement, any CDS Accession Agreement or any Ancillary Agreement, including any question regarding its existence, validity, formation or termination. For these purposes, each Party irrevocably submits to the jurisdiction of the English courts.

16.2 Any User which is not a company incorporated under the Companies Act 1985 shall provide to each T&SCo an address in England or Wales for service of process on its behalf in any proceedings.

## 17. Third party rights

17.1 Unless expressly provided otherwise, the Parties do not intend that any term of any Code Document shall be enforceable solely by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person who is not a Party and, subject to paragraph 47.5 of Section B (Governance), paragraphs 1.3 and 11.3 of Section C (Connection), paragraph 3.13 of Section F (Network Design and Specification), paragraph 7.3 of Section G (Common Interface Procedures) and paragraph 6.24 of Section I (Data), the operation of the Contracts (Rights of Third Parties) Act 1999 is hereby excluded.

17.2 Notwithstanding any express provision of the Code pursuant to which paragraph 17.1 is disapplied in relation to a term of any Code Document, the Parties may, to the extent otherwise permitted under the Code, rescind, vary, waive, release, assign, novate or otherwise dispose of all or any of their respective rights or obligations under the Code or a Code Document without the consent of any person who is not a Party.

## 18. Severance

18.1 If any provision of the Code, the Code Agreement, any of the Code Accession Agreements, any of the CDS Accession Agreements or any of the Ancillary Agreements (the "**Code Documents**") is or becomes (whether or not pursuant to any judgment or otherwise) invalid, illegal or unenforceable in any respect under the law of any jurisdiction:

(a) the validity, legality and enforceability under the law of that jurisdiction of any other provision; and

(b) the validity, legality and enforceability under the law of any other jurisdiction of that or any other provision,

shall not be affected or impaired in any way thereby.

18.2 If any provision of any Code Document shall be held to be void or declared illegal, invalid or unenforceable for any reason whatsoever, such provision shall be divisible from the Code Document and shall be deemed to be deleted from the Code Document and the validity, legality and enforceability of the remaining provisions shall not be affected.

## 19. Entire agreement

19.1 Each of the Code Documents represents the entire understanding, and constitutes the whole agreement of the Parties in relation to the subject matter thereof and supersedes any and all previous agreements or understandings between the Parties with respect thereto and, to the fullest extent practicable under the relevant law, and without prejudice to the generality of the foregoing, exclude any warranty, condition or other undertaking implied at law or by custom.

19.2 Each Party acknowledges that in entering into any Ancillary Agreement, any Code Agreement, any Code Accession Agreement or any CDS Accession Agreement, it does not rely on any representation, warranty or other understanding not expressly contained in the Code, any Ancillary Agreement, any Code Agreement, any Code Accession Agreement or any CDS Accession Agreement.

19.3 Nothing contained in a document (other than an Ancillary Agreement) referred to in the Code, beyond what is expressly contemplated by the Code as being contained in such document or is necessary for the purposes of giving effect to a provision of the Code, shall modify or have any effect for the purposes of the Code or be construed as relevant to the interpretation of the Code.

## 20. Waiver

20.1 No delay by or omission of any Party in exercising any right, power, privilege or remedy under any Code Documents shall operate to impair such right, power, privilege or remedy or be construed as a waiver thereof.

20.2 Any single or partial exercise of any right, power, privilege or remedy shall not preclude any other or future exercise thereof or the exercise of any other right, power, privilege or remedy.

20.3 No breach of any provision of any Code Document shall be waived or discharged except with the express written consent of the Parties.

20.4 The rights and remedies herein provided are cumulative with and not exclusive of any rights or remedies provided by law.

## 21. Language

Every communication or notice to be given by one Party to another under any Code Document shall be in the English language.

## 22. Assignment and transfer

22.1 Neither Party shall assign or transfer its rights and/or obligations under the Code and any Ancillary Agreement except in accordance with the provisions of paragraphs 22.2 and 22.3.

22.2 A User is only entitled to assign or transfer its rights and/or obligations under the Code and any Ancillary Agreement to a third party:

(a) where the User assigns all (but not part only) of its rights and benefits under the Code by way of security to or in favour of a Lender; or

(b) where:

(i) the User also assigns or transfers the ownership and operation of the User Facility to the third party;

(ii) the User has obtained the prior written consent of the T&SCo, which shall not be unreasonably withheld; and

(iii) the third party becomes bound by the Code by entering into a Code Accession Agreement.

22.3 A T&SCo is only entitled to assign or transfer its rights and/or obligations under the Code and any Ancillary Agreement to a third party where:

(a) the T&SCo also assigns or transfers the ownership and operation of the T&S Network to the third party who also holds a Licence;

(b) the third party becomes bound by the Code by entering into a Code Accession Agreement; and

(c) the third party becomes bound by the CDS Contract by entering into a CDS Accession Agreement.

22.4 Where a Party transfers its obligations under the Code or any Ancillary Agreement to a person, that Party shall be released from its obligations under the Code and any such Ancillary Agreement arising after the time at which the transfer is effective, but shall remain liable for any obligations accruing up to such time.

22.5 Any reference in the Code or any Ancillary Agreement to any Party shall include a reference to that Party's successors and assigns.

# CCS Network Code

# Section K – Glossary

In the Code, the following words and expressions shall have the following meanings, unless the context otherwise requires:

| Term | Meaning |
|---|---|
| **Act** | means the Energy Act 2023. |
| **Adjustment Period** | has the meaning given in paragraph 13.1 of Section F (Network Design and Specification). |
| **Affected User** | means a User likely to be affected by Programmed Maintenance or Reactive Maintenance. |
| **Affiliate** | has the meaning given to in paragraph 6.6 in Section A (Introduction, Structure and Interpretation). |
| **Agenda** | means an agenda detailing (amongst other things) the nature of the matters and materials to be discussed at the meeting of the Modification Panel to which the agenda relates. |
| **Allowed Offshore Capacity Revenue** | has the meaning given in in accordance with paragraph 14.1(a) of Section H (Charges, Invoicing and Payment). |
| **Allowed Offshore Flow Revenue** | has the meaning given in paragraph 11.1(a) of Section H (Charges, Invoicing and Payment). |
| **Allowed Offshore Revenue** | has the meaning given in paragraph 16.2(a)(i) of Section H (Charges, Invoicing and Payment). |
| **Allowed Onshore Capacity Revenue** | has the meaning given in paragraph 13.1(a) of Section H (Charges, Invoicing and Payment). |
| **Allowed Onshore Flow Revenue** | has the meaning given in paragraph 10.1(a) of Section H (Charges, Invoicing and Payment). |
| **Allowed Onshore Revenue** | has the meaning given in paragraph 15.2(a)(i) of Section H (Charges, Invoicing and Payment). |
| **Allowed Re-use Service Revenue** | has the meaning given in paragraph 12.1(a) of Section H (Charges, Invoicing and Payment). |
| **Allowed Revenue** | means the amount that T&SCo is entitled to recover in accordance with its Licence, as defined in the Licence. |

| Term | Meaning |
|---|---|
| **Alternative Operational Communication Contact Details** | means the alternative contact details to be provided in accordance with paragraph 3.2 of Section J (General). |
| **Ancillary Agreements** | means the Construction Agreement and the Connection Agreement. |
| **Ancillary Agreement Templates** | has the meaning given in paragraph 5.4 of Section A (Introduction, Structure and Interpretation). |
| **Annual Forecast** | has the meaning given in paragraphs 9.2 of Section E (Network Use and Capacity). |
| **Annual Maintenance Meeting** | has the meaning given in paragraph 31.1(b) of Section E (Network Use and Capacity). |
| **Appeal** | means an appeal made by an Appealing Party to the Modification Panel of a determination by the Modification Panel under paragraph 39 of Section B (Governance) in respect of a Self-Governance Modification Proposal. |
| **Appeal Criteria** | means the following criteria in respect of a Regulator Appeal:<br>(a) the Regulator Appeal has been made within the time specified in the Code;<br>(b) in the opinion of the Regulator:<br>(i) the Appealing Party is, or is likely to be, unfairly prejudiced by the implementation or non-implementation of the Self-Governance Modification Proposal;<br>(ii) the Regulator Appeal has been made on the grounds that the Appealing Party reasonably believes that:<br>(A) where the Modification Panel has made the determination to implement the proposal, the proposal does not better facilitate the achievement of at least one (1) of the Relevant Objectives; or<br>(B) where the Modification Panel has made the determination not to implement the proposal, the proposal does better |

| Term | Meaning |
|---|---|
| | facilitate the achievement of at least one (1) of the Relevant Objectives; and<br><br>(iii) the Regulator Appeal has not been made for reasons that are trivial, frivolous or vexatious; and<br><br>(iv) the Regulator Appeal has a reasonable prospect of success. |
| **Appealing Party** | means in relation to an Appeal or a Regulator Appeal, the User, the T&SCo or the Third Party Participant making such appeal. |
| **Applicable Interest Rate** | has the meaning given in paragraph 29.4 of Section H (Charges, Invoicing and Payment). |
| **Applicable Standards** | has the meaning given in the Measurement Requirements. |
| **Appointment Period** | has the meaning given in paragraph 8.1 of Section B (Governance). |
| **Associate** | has the meaning given in the Licence, provided that for the purposes of the Code, a reference in that definition to "Licensee" shall be construed as a reference to the relevant organisation under paragraph 10.4 of Section B (Governance). |
| **Availability Adjustment** | means an adjustment to the T&SCo's Allowed Revenue under the Licence which is intended to incentivise the T&SCo to maintain availability of the T&S Network. |
| **Available Capacity** | has the meaning given in paragraph 38.1 of Section E (Network Use and Capacity). |
| **Available Registered Capacity** | means the Registered Capacity of a User, as reduced pursuant to paragraph 8.4(b) or paragraphs 38.1 to 41 of Section E (Network Use and Capacity). |
| **Backstop Lead Time** | means where the Regulator Decision Date is later than the last Proposed Regulator Decision Date, the proposed period of time (commencing on the Regulator Decision Date) required to enable the Modification to be implemented. |
| **Balancing Mechanism** | means the Balancing Mechanism within the meaning of the Balancing and Settlement Code, as may be replaced by any equivalent mechanism requiring electricity generators to respond to the electricity system operator at short notice. |
| **Billing Period** | means a calendar month. |

| Term | Meaning |
|---|---|
| **Budget Forecast** | means a budget forecast that meets the requirements of paragraph 7.12 of Section B (Governance). |
| **Business Day** | has the meaning given in paragraph 7(b) of Section A (Introduction, Structure and Interpretation). |
| **Business Interruption Proceeds** | has the meaning given in the Licence. |
| **Calendar Week** | has the meaning given in paragraph 7(c) of Section A (Introduction, Structure and Interpretation). |
| **Capacity Applicant** | has the meaning given in paragraph 6.2 of Section E (Network Use and Capacity). |
| **Capacity Charges** | means the Onshore Capacity Charge and/or the Offshore Capacity Charge. |
| **Capacity Constraint** | has the meaning given to that term in paragraph 35.1 of Section E (Network Use and Capacity). |
| **Capacity Constraint Default** | means:<br>(a) in the case of a Supported User, the occurrence of a T&SCo Prolonged Unavailability Event (as such term is defined under that User's Revenue Support Contract), which has resulted in termination of its Revenue Support Contract; and<br>(b) in the case of any other User, the occurrence of a T&SCo Prolonged Unavailability Event which has not been remedied within three (3) years of that occurrence or which the Regulator determined will not be capable of remedying by the T&SCo (or any replacement of the T&SCo). |
| **Capacity Offer** | has the meaning given in paragraph 27.2 of Section E (Network Use and Capacity). |
| **carbon dioxide** | unless the context otherwise requires, means a stream consisting overwhelmingly of carbon dioxide ($CO_2$) molecules, and other components and as such, references to carbon dioxide being delivered by a User to the T&S Network assume that the total mass being delivered is carbon dioxide. |
| **Carbon Dioxide Specifications** | has the meaning given in paragraph 3.2 of Section F (Network Design and Specification). |

| Term | Meaning |
|---|---|
| **Casting Vote** | means a vote exercisable by the Panel Chairperson in favour of or against any matter to be determined by the Modification Panel, except the making of a recommendation under paragraph 33.1(b) or 35.6(a) of Section B (Governance). |
| **CCS Network Code Website** | means the website to be established by the Secretary under paragraph 7.7(a) of Section B (Governance). |
| **CCUS** | means carbon capture, use and storage. |
| **CCUS Cluster Sequencing Process** | means the programme(s) by that name implemented by HM Government to select:<br>(a) prospective T&S Networks and prospective Users of those T&S Networks; and/or<br>(b) prospective or existing Users for allocation of Network Capacity in existing or prospective T&S Networks. |
| **CDS** | has the meaning given in paragraph 9.1 of Section I (Data). |
| **CDS Accession Agreement** | means an agreement in the form set out in Exhibit D pursuant to which a T&SCo accedes to the CDS Contract. |
| **CDS Contract** | has the meaning given in paragraph 9.1(a) of Section I (Data). |
| **CDS Data Dispute** | has the meaning given in paragraph 9.14 of Section I (Data). |
| **CDS Terms of Reference** | has the meaning given in paragraph 9.5 of Section I (Data). |
| **Change in Scope Approval** | means the approval of the Regulator under the Change in Scope (as that term is defined in the T&SCo's Licence) mechanism, where that approval is required by the T&SCo to proceed with an expansion or enhancement to the T&SCo's T&S Network which:<br>(a) is required to accommodate a new Delivery Point (or a modification to an existing Delivery Point) in accordance with Section C (Connection); and<br>(b) which if granted by the Regulator, is sufficient to enable the T&SCo to proceed with the relevant Connection Application. |
| **Charges** | means each of the charges listed in paragraph 2.1 of Section H (Charges, Invoicing and Payment). |
| **Charges Forecast for Charging Year t** | has the meaning given in paragraph 17.5(b) of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Charging Year** | means the period from 1 April in any year until and including 31 March in the following year. |
| **Claimant** | has the meaning given in paragraph 51.4(a) of Section B (Governance). |
| **$CO_2$ Quality Monitoring Procedure** | means a Common Interface Procedure established and maintained in accordance with Section G (Common Interface Procedures), as more particularly described in that Section. |
| **Code** | has the meaning given in paragraph 1.1 of Section A (Introduction, Structure and Interpretation). |
| **Code Accession Agreement** | means an agreement in the form set out in Exhibit A pursuant to which a User or a T&SCo accedes to the Code Agreement. |
| **Code Agreement** | means the agreement which makes the Code binding on a T&SCo or a User. |
| **Code Document** | has the meaning given in paragraph 18.1 of Section J (General). |
| **Code Implementation Date** | means the effective date of the Code Agreement (specified in the Code Agreement) when the CCS Network Code is given legal effect. |
| **Commencement Date** | means, in relation to each User, the Commencement Date determined in accordance with that User's Connection Agreement. |
| **Commercial Operations Date** | has the meaning given in the T&SCo's Licence with respect to a particular T&SCo. |
| **Commissioning Programme** | has the meaning given to that term in the Construction Agreement, being a commissioning programme agreed by the parties to the Construction Agreement. |
| **Common Interface Procedures** | means the list of procedures set out at paragraph 3 of Section G (Common Interface Procedures). |
| **Communication** | means any operational communication from a User to the T&SCo, or from the T&SCo to a User, including any forecasts, reports, Nominations, Renominations, notifications of Capacity Constraints, Minimum Flow Deficits and Emergencies. |
| **Competent Authority** | means the Regulator, or any local, national or supra-national agency, authority, department, inspectorate, minister, official, court, tribunal or public or statutory person (whether autonomous or not) of the United Kingdom (or the government thereof) which has |

| Term | Meaning |
|---|---|
| | jurisdiction over the T&SCo or a User or the subject matter of the Code. |
| **Confirmation Close Time** | has the meaning given in paragraph 16.2 of Section E (Network Use and Capacity). |
| **Confirmed Nominated Quantity** | has the meaning given in paragraph 16.4 of Section E (Network Use and Capacity). |
| **Conflicting Appointment** | has the meaning given in paragraph 10.4 of Section B (Governance). |
| **Connected Dispute** | has the meaning given in paragraph 49.1(a) of Section B (Governance). |
| **Connection Agreement** | means an agreement between a T&SCo and a User substantially in the form set out in Exhibit C. |
| **Connection Application** | has the meaning given to that term in paragraph 6.1 of Section C (Connection). |
| **Connection Offer** | means a connection offer that complies with the requirements of paragraph 12 of Section C (Connection), in a written format determined by T&SCo. |
| **Consolidation Request** | has the meaning given in paragraph 49.2 of Section B (Governance). |
| **Constrained Capacity Optimisation Principles** | has the meaning given in paragraph 41.2 of Section E (Network Use and Capacity). |
| **Constrained Registered Capacity** | has the meaning given in paragraph 42.1 of Section E (Network Use and Capacity). |
| **Constrained User** | has the meaning given in paragraph 37.1(b) of Section E (Network Use and Capacity). |
| **Construction Agreement** | means an agreement between a T&SCo and a User substantially in the form set out in Exhibit B. |
| **Construction Longstop Default** | means a failure by T&SCo to complete the T&SCo Works or the User to complete the User Works by the Longstop Date (as extended in accordance with the Construction Agreement) in accordance with clause 17 or clause 11 of Schedule 6 of the Construction Agreement (as applicable). |

| Term | Meaning |
|---|---|
| **Construction Programme** | has the meaning given to that term in the Construction Agreement, being a construction programme agreed by the parties to the Construction Agreement. |
| **Consultation** | means the consultation process described in paragraph 35 of Section B (Governance). |
| **Conventional Notice** | has the meaning given in paragraph 1.2 of Section J (General). |
| **Counterparty** | has the meaning given in paragraph 4.1 of Section J (General). |
| **Credit Rating Agency** | means:<br>(a) Fitch Ratings;<br>(b) Moody's Investment Service and Standard; and/or<br>(c) Poor's Rating Group and any of their subsidiaries. |
| **Curtailed Nomination** | has the meaning given in paragraphs 17.2 and 19.3 of Section E (Network Use and Capacity). |
| **CURC** | has the meaning has the meaning given in paragraph 38.1 of Section E (Network Use and Capacity). |
| **Daily Nomination** | has the meaning given in paragraphs 13.5 of Section E (Network Use and Capacity). |
| **Daily Quantity** | has the meaning given in paragraph 4.2 of Section H (Charges, Invoicing and Payment). |
| **Data Annexures** | has the meaning given in paragraph 6.8 of Section I (Data). |
| **Data Transfer Procedures** | has the meaning given in paragraph 6.1 of Section I (Data). |
| **Day** | has the meaning given in paragraph 7(a) of Section A (Introduction, Structure and Interpretation). |
| **Default Notice** | has the meaning given in paragraph 7.1 of Section J (General). |
| **Delivery Period** | has the meaning given in paragraph 2.2 of Section E (Network Use and Capacity). |
| **Delivery Point** | means the point of connection between a User Facility and the T&S Network at which point a User will deliver carbon dioxide into the T&S Network. |
| **Delivery Point Size** | has the meaning given in paragraph 7.4 of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Deposit Deed** | means an agreement that is Enforceable and in such form as provided to the User from time to time by T&SCo enabling the deposit of cash as security. |
| **Depreciation Building Block** | has the meaning given in the Licence. |
| **Deputy Panel Chairperson** | means the person appointed by the Members pursuant to paragraph 2.1(b) of Section B (Governance) to take on the Panel Chairperson's duties if the Panel Chairperson is absent for any reason. |
| **Deselected** | means that an Eligible Applicant, having first been Selected, has been advised by the Secretary of State through the Selection Process that it is no longer eligible for:<br>(a) award of a Revenue Support Contract; or<br>(b) connection to a T&S Network; or<br>(c) modification of its existing Delivery Point. |
| **Designated Non-Code Party** | means a Non-Code Party that the Regulator designates in accordance with Standard Condition B5.9 (CCS Network Code) of the Licence as being a Non-Code Party to whom copies of documents relating to Modification Proposals should be sent. |
| **Directive** | means 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. |
| **Discontinuing User** | has the meaning given in paragraph 14.1(a) of Section J (General). |
| **Dispute** | means any dispute, controversy or claim (including any non-contractual dispute, controversy or claim) arising out of or in connection with the Code, the Code Agreement, any Code Accession Agreement, any CDS Accession Agreement or any Ancillary Agreement, including any question regarding its existence, validity, formation or termination. |
| **Dispute Notice** | has the meaning given in paragraph 48.7 of Section B (Governance). |
| **Dispute Parties** | means the T&SCo(s) and/or the User(s) and/or any third party who is a party to a Dispute. |

| Term | Meaning |
|---|---|
| **Dispute Resolution Procedure** | means the procedure to be followed in paragraph 48 of Section B (Governance). |
| **Downstream Vent** | means a vent (whether temporarily or permanently installed) located in any pipeline infrastructure owned by a User between the Metering Point and the Delivery Point. |
| **Downstream Venting Event** | has the meaning given in paragraph 10.12 of Section F (Network Design and Specification). |
| **Draft Data Annexures** | has the meaning given in paragraph 6.5 of Section I (Data). |
| **Draft Statement of Expenses** | has the meaning given in paragraph 7.15 of Section B (Governance). |
| **Eligible Applicant** | has the meaning given to that term in paragraph 5.1 of Section C (Connection). |
| **Emergency** | means a situation where T&SCo in its judgment considers that action must be taken without delay to:<br>(a) avert or reduce danger to life or property; or<br>(b) secure the safety of the T&S Network or a part of the T&S Network or the safe transportation of carbon dioxide by it or reducing the risk to it. |
| **Emergency Procedure** | means a Common Interface Procedure established and maintained in accordance with Section G (Common Interface Procedures), as more particularly described in that Section. |
| **Enforceable** | means T&SCo (acting reasonably) is satisfied that the instrument of security or surety is legally enforceable and in this respect, where surety is provided by a company registered outside of England and Wales, the country of residence of such company must have a sovereign credit rating of a Qualifying Company (where such ratings conflict, the lower of the ratings will be used) and the User must at its own expense, provide such legal opinion as the T&SCo may reasonably require. |
| **Enhanced Response Service** | has the meaning give in paragraph 20.2 of Section E (Network Use and Capacity). |
| **Enhanced Response Service Cap** | has the meaning given in paragraph 20.4(f) of Section E (Network Use and Capacity). |
| **Entry Provisions** | has the meaning given in paragraph 3.1 of Section F (Network Design and Specification). |

| Term | Meaning |
|---|---|
| **ETS Legislation and Guidance** | means the Greenhouse Gas Emissions Trading Scheme Order 2020 and any other legislation and guidance relating to the UK Emissions Trading Scheme established under that Order, including any guidance on measurement and reporting. |
| **ETS Liabilities** | means any costs or liabilities of a Party relating to that Party's liabilities or obligations under the UK Emissions Trading Scheme established under the Greenhouse Gas Emissions Trading Scheme Order 2020. |
| **Exceedance Event** | has the meaning given in paragraph 25.2 of Section E (Network Use and Capacity). |
| **Expenses Dispute Notification** | has the meaning given in paragraph 7.16 of Section B (Governance). |
| **Expert** | means any person appointed in accordance with the Expert Determination Procedure to determine an Expert Dispute. |
| **Expert Appointment Date** | means the date on which an Expert is appointed to determine an Expert Dispute by means of an appointment letter entered into by such Expert and each of the Parties. |
| **Expert Determination** | means the process for determination of a dispute by Experts in accordance with paragraph 51 of Section B (Governance). |
| **Expert Determination Notice** | has the meaning given in paragraph 51.1 of Section B (Governance). |
| **Expert Determination Procedure** | means the rules, obligations and procedures set out in paragraph 51 of Section B (Governance). |
| **Expert Dispute** | means a Dispute which is referred for determination in accordance with the Expert Determination Procedure. |
| **Expert Referral Date** | has the meaning given in paragraph 51.7(a) of Section B (Governance). |
| **Fast Track Self-Governance Procedure** | means that a proposal, if implemented:<br>(a) would meet the Self-Governance Criteria; and<br>(b) is properly a housekeeping modification required as a result of some error or factual change, including:<br>(i) updating names or addresses listed in the Code;<br>(ii) correcting minor typographical errors; |

| Term | Meaning |
|---|---|
| | (iii) correcting formatting and consistency errors, such as paragraph numbering; or<br><br>(iv) updating out of date references to other documents or paragraphs. |
| **Final Confirmation Notice** | means a notice issued by the Secretary of State as part of a Selection Process:<br><br>(a) to an Eligible Applicant, applying for a connection to a T&S Network through the Selection Process; or<br><br>(b) to a User applying for a modification of an existing Delivery Point through the Selection Process,<br><br>confirming the following details:<br><br>(c) that all necessary due diligence and any other steps that are a part of the Selection Process have been completed;<br><br>(d) the amount of Network Capacity being allocated to that User or Eligible Applicant, to be its Registered Capacity at the relevant Delivery Point; and<br><br>(e) any conditions precedent specified by the Secretary of State in relation to the Final Confirmation Notice taking effect. |
| **Final Confirmed Nominated Quantity** | has the meaning given in paragraph 24.1 of Section E (Network Use and Capacity). |
| **Final Statement of Expenses** | has the meaning given in paragraph 7.17 of Section B (Governance). |
| **First Submission** | has the meaning given in paragraph 51.7(b) of Section B (Governance). |
| **First Submission Deadline** | has the meaning given in paragraph 51.7(b) of Section B (Governance). |
| **Fixed Implementation Date** | means the proposed implementation date of a Modification, such date being included in accordance with paragraph 24.1(c) of Section B (Governance) and, except where the Modification Proposal is a Self-Governance Modification Proposal, paragraph 23.1(c) of Section B (Governance). |
| **Flow Charges** | means the Onshore Flow Charge and/or the Offshore Flow Charge. |

| Term | Meaning |
|---|---|
| **Flow Meter** | means one (1) or more flow meter(s) (including ancillary instrumentation) for measuring the mass flow rate of carbon dioxide delivered by a User, expressed in ($tCO_2$/hour) to the Delivery Point. |
| **Flow Meter Adjustment** | means a Measurement Adjustment made in accordance with paragraph 13.1 or 13.2 of Section F (Network Design and Specification). |
| **Flow Meter Error** | means a Measurement Equipment Error relating to the Flow Meter. |
| **Flow Rate** | means the total instantaneous flow rate, in the form of carbon dioxide, expressed in $tCO_2$/hour, that is being delivered at the Delivery Point. |
| **Flow Tolerance Request** | has the meaning given in paragraph 21.1 of Section E (Network Use and Capacity). |
| **Forecast** | has the meaning given in paragraph 8.2 of Section E (Network Use and Capacity). |
| **Forecasting Pro-Forma** | means the pro-forma document issued by the T&SCo identifying the information to be provided by Users in accordance with paragraph 17 of Section H (Charges, Invoicing and Payment). |
| **General Default** | has the meaning given in paragraph 8 of Section J (General). |
| **Hour** | means a period of 60 minutes, with the first Hour of each Day starting at 00:00 hours. |
| **Implementation Date** | means the date upon which a Common Interface Procedure is to be implemented. |
| **Independent Verifier** | has the meaning given in paragraph 10.1 of Section I (Data). |
| **Independent Verifier Appointment** | has the meaning given in paragraph 10.1 of Section I (Data). |
| **Independent Verifier Terms of Reference** | has the meaning given in paragraph 10.2 of Section I (Data). |
| **Initial Offer** | means an initial offer that complies with the requirements of paragraph 9 of Section C (Connection), in a written format determined by T&SCo. |
| **Initial User** | means an Eligible Applicant who was Selected through the Track-1 Cluster Sequencing Process and has not become a User. |
| **Insolvency Default** | has the meaning given in paragraph 9.1 of Section J (General). |

| Term | Meaning |
|---|---|
| **Insured Event** | has the meaning given in paragraph 45.2(c) of Section E (Network Use and Capacity). |
| **Insured Risk** | has the meaning given in the Supplemental Compensation Agreement. |
| **Interim Period** | has the meaning given in the Act. |
| **Invoice Amount** | means the amount shown as payable by the User or T&SCo in respect of that item under the relevant Invoice Document. |
| **Invoice Dispute** | has the meaning given in paragraph 26.1 of Section H (Charges, Invoicing and Payment). |
| **Invoice Document** | means an invoice document submitted by T&SCo to a User pursuant to Section H (Charges, Invoicing and Payment). |
| **Invoice Due Date** | has the meaning given in paragraph 24.2 of Section H (Charges, Invoicing and Payment). |
| **Isolation Procedure** | means a Common Interface Procedure established and maintained in accordance with Section G (Common Interface Procedures), as more particularly described in that Section. |
| **Late Payment Notice** | has the meaning given in paragraph 29.1 of Section H (Charges, Invoicing and Payment). |
| **LCCC** | means the Low Carbon Contracts Company or any successor or equivalent body. |
| **LCIA** | means the London Court of International Arbitration. |
| **Legal Requirement** | means any Act of Parliament, regulation, licence or Directive of a Competent Authority. |
| **Lender** | means any bank or financial institution (excluding any direct or indirect shareholder of the User) which provides debt financing or refinancing in relation to the User Facility. |
| **Letter of Credit** | means an unconditional irrevocable standby letter of credit in such form as reasonably provided to the User from time to time by the T&SCo from such bank as the T&SCo may approve, (provided that payment may be made at a United Kingdom branch of such issuing bank) with a long-term debt rating of not less than that of a Qualifying Company (where such ratings conflict, the lower of the ratings will be used). |

| Term | Meaning |
|---|---|
| **Licence** | means the licence granted to each T&SCo under section 7 of the Act. |
| **Local Requirements** | has the meaning given in paragraph 3.8 of Section F (Network Design and Specification). |
| **Long-term Network Capacity** | has the meaning given in paragraph 4.1 of Section E (Network Use and Capacity). |
| **Low Nomination and Flow Exceedance Event** | has the meaning given in paragraph 25.6 of Section E (Network Use and Capacity). |
| **Maintenance Programme** | means the programme of planned maintenance of the T&S Network, containing in relation to the relevant Planning Period the information specified in paragraph 30 of Section E (Network Use and Capacity). |
| **Maximum Annual Cumulative Flow** | means the maximum quantity of carbon dioxide (i.e. a cumulative flow cap) that the T&SCo is permitted to inject into a Storage Site in any period of twelve (12) consecutive months, in accordance with the Storage Permit issued in relation to that Storage Site, as may be amended by the NSTA from time to time. |
| **Maximum Annual Cumulative Flow Constraint** | has the meaning given in paragraph 23.6 of Section E (Network Use and Capacity). |
| **Maximum Annual Cumulative Flow Mitigation Measures** | has the meaning given in paragraph 23.7 of Section E (Network Use and Capacity). |
| **Maximum Ramp Rate** | means the maximum unconstrained Ramp Rate that is technically achievable by the User Facility, as specified by the User and recorded in the User's Connection Agreement. |
| **Measurement Adjustment** | means any action or adjustment which is required to correct any Measurement Equipment Error. |
| **Measurement Data** | has the meaning given in 3.1 of Section I (Data). |
| **Measurement Equipment** | has the meaning given in paragraph 5.1 of Section F (Network Design and Specification). |
| **Measurement Equipment Error** | means where the Measurement Equipment (or any part of it) is or has been:<br>(a) faulty; |

| Term | Meaning |
|---|---|
| | (b) registering erroneously; or<br><br>(c) not functioning in accordance with the Measurement Requirements or otherwise in accordance with Section F (Network Design and Specification). |
| **Measurement Requirements** | has the meaning given in paragraph 3.5 of Section F (Network Design and Specification). |
| **Member** | means any individual for the time being appointed to the Modification Panel. |
| **Metering Point** | means the point, co-located with the User's Delivery Point or located between the User Facility and the Delivery Point, where the Measurement Equipment is located. |
| **Minimum Flow Deficit** | has the meaning give in paragraph 22.1 of Section E (Network Use and Capacity). |
| **Minimum Flow Rate** | means the minimum flow required for the reliable and safe operation of the T&S Network, as set out in the Technical Parameters for that T&S Network. |
| **Minimum Ramp Rate** | means the minimum unconstrained Ramp Rate that is technically achievable by the User Facility, as specified by the User and recorded in the User's Connection Agreement. |
| **Minimum Turndown Rate** | means the User's Flow Rate, in $tCO_2$/hour (as specified by the User and as set out in the User's Connection Agreement), when the User is operating the User Facility at its lowest operational level, to represent the lowest amount of Network Capacity that the User can make use of when its Registered Capacity is constrained in accordance with Section E (Network Use and Capacity). |
| **Modification** | means any modification of the Code made pursuant to the Modification Rules. |
| **Modification Panel** | means the panel comprised in accordance with paragraph 1.3 of Section B (Governance) which is to perform the functions described in paragraph 1.2 of Section B (Governance). |
| **Modification Procedures** | means the provisions relating to Modifications and Modification Proposals set out in paragraphs 1 and 2 to 47 of Section B (Governance) and, as the context may require, any of those provisions. |

| Term | Meaning |
|---|---|
| **Modification Proposal** | means a proposal for a Modification which meets the requirements of the Code. |
| **Modification Report** | means a draft, final or amended final report prepared in accordance with paragraph 36.1 of Section B (Governance). |
| **Modification Rules** | means the rules set out in paragraphs 1 and 2 to 47 of Section B (Governance). |
| **Modification Terms of Reference** | means those terms of reference in relation to a Modification Proposal referred to a Workgroup by the Modification Panel, pursuant to paragraph 28.2(d) of Section B (Governance), finalised by the Secretary under paragraphs 28.1 and 39 of Section B (Governance) and as may be amended pursuant to paragraph 40.3 of Section B (Governance). |
| **Mutualisation Cap** | has the meaning given in paragraph 15.6(b) and 16.6(b) of Section H (Charges, Invoicing and Payment). |
| **Network Capacity** | has the meaning given in paragraph 2.1(a) of Section E (Network Use and Capacity). |
| **Network Charges** | means the Onshore Network Charge and/or the Offshore Network Charge. |
| **Network Expansion Works** | means works for the expansion, reinforcement or extension of a T&S Network, including:<br>(a) works in relation to existing parts of a T&S Network; and<br>(b) works required to connect a User or a prospective User to the T&S Network,<br>(including taking any part of a T&S Network out of service, whether on a provisional or permanent basis) to enable such works to be carried out. |
| **Network Responsiveness Review** | has the meaning give in paragraph 48.4(b) of Section E (Network Use and Capacity). |
| **New T&SCo** | has the meaning given in paragraph 4.1(b) of Section A (Introduction, Structure and Interpretation). |
| **New Code Party** | has the meaning given in paragraph 4.1 of Section A (Introduction, Structure and Interpretation). |
| **New User** | has the meaning given in paragraph 4.1(a) of Section A (Introduction, Structure and Interpretation). |

| Term | Meaning |
|---|---|
| **Nominated Quantity** | has the meaning given in paragraph 13.5(d) of Section E (Network Use and Capacity). |
| **Nomination** | means a nomination by a User in respect of a quantity of carbon dioxide to be delivered to the T&S Network on a Day. |
| **Nomination Close Time** | has the meaning given in paragraph 13.2 of Section E (Network Use and Capacity). |
| **Nominations Review** | has the meaning give in paragraph 48.4(c) of Section E (Network Use and Capacity). |
| **Non-Code Party** | means any person that is not a party to the Code, other than a Third Party Participant, the Regulator or the Secretary of State. |
| **Non-Compliant $CO_2$** | means carbon dioxide which does not comply with the requirements regarding the specification of carbon dioxide under the Entry Provisions, as set out in the Measurement Requirements. |
| **Non-Payment Notice** | has the meaning given in paragraph 10(b) of Section J (General). |
| **NSTA** | means the North Sea Transition Authority, which is the business name of the Oil and Gas Authority, which is the regulatory authority for offshore carbon dioxide storage, responsible for permitting and licensing. |
| **Obligated Network Capacity** | has the meaning given in paragraph 2.4 of Section E (Network Use and Capacity). |
| **Offshore Capacity Charge** | has the meaning given in paragraph 6.1(a)(ii) of Section H (Charges, Invoicing and Payment). |
| **Offshore Capacity Charge Rate** | means the rate determined in accordance with paragraph 14.1 of Section H (Charges, Invoicing and Payment). |
| **Offshore Flow Charge** | has the meaning given in paragraph 4.1(b) of Section H (Charges, Invoicing and Payment). |
| **Offshore Flow Charge Rate** | means the rate determined in accordance with paragraph 11.1 of Section H (Charges, Invoicing and Payment). |
| **Offshore Mutualised Network Charge Rate** | means the rate determined in accordance with paragraph 16.3 to 16.12 of Section H (Charges, Invoicing and Payment). |
| **Offshore Network Charge** | has the meaning given in paragraph 7.1(a)(ii) of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Offshore Network Charges Cap** | has the meaning given in paragraph 16.6 of Section H (Charges, Invoicing and Payment). |
| **Offshore Network Charge Rate** | means the rate determined in accordance with paragraph 16.1 of Section H (Charges, Invoicing and Payment). |
| **Offshore Proportion** | has the meaning given in paragraph 16.6(a) of Section H (Charges, Invoicing and Payment). |
| **Offshore Proportionate Network Charge Rate** | means the rate determined in accordance with paragraph 16.2 of Section H (Charges, Invoicing and Payment). |
| **Offshore Pipeline Infrastructure** | means that part of the T&S Network which is offshore, being the pipelines and related infrastructure from the pig trap(s) at the outlet(s) of the Terminal(s) to the pig trap(s) or manifold entry flange(s) at the entry to the Storage Site. |
| **Offshore T&S Charge** | has the meaning given in paragraph 16.4 of Section H (Charges, Invoicing and Payment). |
| **Offshore Transportation and Storage System** | means:<br>(a) the Offshore Pipeline Infrastructure;<br>(b) the Storage Site(s); and<br>(c) the Terminal(s). |
| **Offshore User** | means a User with a Delivery Point which connects to the T&S Network at the Offshore Transportation and Storage System. |
| **Offshore User T&S Charge** | has the meaning given in paragraph 16.7 of Section H (Charges, Invoicing and Payment). |
| **ONC Maximum Annual Cumulative Flow** | means the Maximum Annual Cumulative Flow defined (in terms of the quantity) by the T&SCo's Obligated Network Capacity as set out in the T&SCo's Licence (or established pursuant to the Licence). |
| **ONC Maximum Annual Cumulative Flow Constraint** | means a Maximum Annual Cumulative Flow Constraint to the extent that any action taken by the T&SCo pursuant to paragraph 23.4(b) of Section E (Network Use and Capacity) is taken in relation to an ONC Maximum Annual Cumulative Flow. |
| **Onshore Capacity Charge** | has the meaning given in paragraph 6.1(a)(i) of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Onshore Capacity Charge Rate** | means the rate determined in accordance with paragraph 13.1 of Section H (Charges, Invoicing and Payment). |
| **Onshore Flow Charge** | has the meaning given in paragraph 4.1(a)(i) of Section H (Charges, Invoicing and Payment). |
| **Onshore Flow Charge Rate** | means the rate determined in accordance with paragraph 10.1 of Section H (Charges, Invoicing and Payment). |
| **Onshore Mutualised Network Charge Rate** | means the rate determined in accordance with paragraph 15.3 to 15.12 of Section H (Charges, Invoicing and Payment). |
| **Onshore Network Charge** | has the meaning given in paragraph 7.1(a)(i) of Section H (Charges, Invoicing and Payment). |
| **Onshore Network Charges Cap** | has the meaning given in paragraph 15.6 of Section H (Charges, Invoicing and Payment). |
| **Onshore Network Charge Rate** | means the rate determined in accordance with paragraph 15.1 of Section H (Charges, Invoicing and Payment). |
| **Onshore Proportion** | has the meaning given in paragraph 15.6(a) of Section H (Charges, Invoicing and Payment). |
| **Onshore Proportionate Network Charge Rate** | means the rate determined in accordance with paragraph 15.2 of Section H (Charges, Invoicing and Payment). |
| **Onshore Transportation System** | means those part(s) of the T&S Network which are located onshore, including the pipelines and related infrastructure from the User(s) boundary fence to a pipeline entry pig trap at the entry to a Terminal, but excluding any part(s) of the T&S Network which constitute the Offshore Transportation and Storage System. |
| **Onshore T&S Charge** | has the meaning given in paragraph 15.4 of Section H (Charges, Invoicing and Payment). |
| **Onshore User** | means a User with a Delivery Point which connects to the T&S Network at the Onshore Transportation System, including any User with an emergency shutdown valve upstream of any high pressure compression or pumping inlet header at the Terminal. |
| **Original Selection Details** | means the final commercial and technical details which formed the basis on which an Eligible Applicant has been Selected (through a Selection Process) such as:<br>(a) the location and key characteristics (including User Type) of the User Facility; |

| Term | Meaning |
|---|---|
| | (b) the proposed location of the Delivery Point; and<br>(c) the amount of Network Capacity that will be required by the User. |
| **Over Variation Limit** | means the percentage set out in the Technical Parameters for a T&S Network. |
| **Panel Chairperson** | means the chairperson of the Modification Panel, appointed under paragraph 2 of Section B (Governance). |
| **Panel Constituency** | has the meaning given in paragraph 1.3 of Section B (Governance). |
| **Panel Majority** | has the meaning given in paragraph 12.2 of Section B (Governance). |
| **Party** | has the meaning given in paragraph 2.1(c) of Section A (Introduction, Structure and Interpretation). |
| **Payment Default** | has the meaning given in paragraph 10 of Section J (General). |
| **Planning Period** | means a period of five (5) Charging Years commencing on 1 April. |
| **Processed Flow Meter Data** | means, in relation to each User and that User's Flow Meter, data from that Flow Meter that has been processed by the CDS. |
| **Processed Flow Meter Data Statement** | has the meaning given in paragraph 9.2(b) of Section I (Data). |
| **Programmed Maintenance** | means maintenance performed in accordance with the prevailing Maintenance Programme. |
| **Project-Specific Document** | has the meaning given to it in the T&SCo's Licence. |
| **Proposer** | means the person that submitted a Modification Proposal. |
| **Proposed Regulator Decision Date** | means the proposed date by which the Regulator shall give notice to the Secretary in accordance with paragraph 24.1(c)(ii) of Section B (Governance) of its determination to implement the Modification, such date being included in accordance with paragraph 24.1(c)(ii) and, except where the Proposal is a Self-Governance Modification Proposal, paragraph 36.1(f)(ii). |
| **Proposing Party** | has the meaning given in paragraph 12.1 of Section I (Data). |
| **Pro-rata Reduction** | has the meaning given in paragraph 38.1 of Section E (Network Use and Capacity). |

| Term | Meaning |
|---|---|
| **Prospective T&SCo** | means a T&SCo who:<br>(a) has been selected through the CCUS Cluster Sequencing Process (or another Selection Process) to build and operate a new T&S Network; and<br>(b) will become a party to the Code upon being awarded a Licence and acceding to the Code Agreement. |
| **Protected Information** | has the meaning given in paragraph 3.2 of Section I (Data). |
| **Protected Party** | has the meaning given in paragraph 3.3 of Section I (Data). |
| **Provisional Offshore Mutualised Network Charge Rate** | means the rate determined in accordance with paragraph 16.9 of Section H (Charges, Invoicing and Payment). |
| **Provisional Onshore Mutualised Network Charge Rate** | means the rate determined in accordance with paragraph 15.9 of Section H (Charges, Invoicing and Payment). |
| **Qualifying Company** | means:<br>(a) in the case of a company registered in England and Wales a public or private company within the meaning of section 1(3) of the Companies Act 1985 with a long-term debt rating of at least A provided by a Credit Rating Agency (where such ratings conflict, the lower of the ratings will be used); or<br>(b) in the case of an entity registered outside of England and Wales, such equivalent entity to paragraph (a) above that is acceptable to the T&SCo, acting reasonably. |
| **Ramp Rate** | means the rate (expressed in $tCO_2$/hour per minute) at which the User is able to increase or decrease its Flow Rate. |
| **Reactive Maintenance** | means any maintenance which is not Programmed Maintenance but which T&SCo considers, acting as a Reasonable and Prudent Operator, needs to be scheduled before the next update to the Maintenance Programme to avoid an Emergency or Capacity Constraints of greater magnitude than the Capacity Constraints caused by the carrying out of the maintenance itself. |
| **Reasonable and Prudent Operator** | means a person seeking, in good faith, to perform its contractual obligations and, in so doing and in the general conduct of its undertaking, exercising that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a |

| Term | Meaning |
|---|---|
| | skilled and experienced operator complying with all applicable Legal Requirements engaged in the same type of undertaking in similar circumstances and conditions. |
| **Receiving Party** | has the meaning given in paragraph 3.3 of Section I (Data). |
| **Recoverable** | means recoverable by the T&SCo acting in compliance with Special Condition H27 (Insurance) of the Licence. |
| **Registered Capacity** | has the meaning given in paragraph 3.1 of Section E (Network Use and Capacity). |
| **Registered Capacity Financial Security** | has the meaning given in paragraph 7.3 of Section E (Network Use and Capacity). |
| **Regulator** | means the Office of Gas and Electricity Markets, in its capacity as the economic regulator pursuant to Section 1 of the Act. |
| **Regulator Appeal** | means an appeal to the Regulator made by the Appealing Party under paragraph 40.6 of Section B (Governance). |
| **Regulatory Requirements** | means various laws, regulations, permits and licences relating to the operation of the T&S Network, as well as orders and directions issued by relevant regulators under these instruments, including (but not limited to) the Storage Permit held by T&SCo. |
| **Related Undertaking** | means any undertaking in which the T&SCo or User (as applicable) has a participating interest as defined by section 260(1) of the Companies Act 1985 as substituted by section 22 of the Companies Act 1989. |
| **Relevant Objectives** | has the meaning given in the Standard Conditions. |
| **Relevant Year** | has the meaning given in paragraph 30.1 of Section E (Network Use and Capacity). |
| **Renominate** | means to make a Renomination. |
| **Renominated Constrained Quantity** | has the meaning given in paragraph 43.1(c) of Section E (Network Use and Capacity). |
| **Renomination** | has the meaning given in paragraph 18.1 of Section E (Network Use and Capacity). |
| **Required Security** | has the meaning given in paragraph 20.2 of Section H (Charges, Invoicing and Payment). |
| **Required Security Amount** | has the meaning given in paragraph 20.3 of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Resolution Period** | has the meaning given in paragraph 50.1(a) of Section B (Governance). |
| **Resource Plan** | means a plan satisfying the requirements of paragraph 7.11 of Section B (Governance). |
| **Resource Plan and Budget Forecast** | has the meaning given in paragraph 7.10 of Section B (Governance). |
| **Respondent** | has the meaning given in paragraph 51.4 of Section B (Governance). |
| **Response Submission** | has the meaning given in paragraph 51.7(c) of Section B (Governance). |
| **Re-use Daily Quantity** | has the meaning given in paragraph 15.1(d) of Section F (Network Design and Specification). |
| **Re-use Delivery Point** | means the point of connection between a User Facility and the T&S Network at which point a User, who is being provided with the Re-use Service, will take delivery of carbon dioxide from the T&S Network, on a temporary basis. |
| **Re-use Meter** | means any additional Flow Meter required to measure the flow of carbon dioxide being delivered to a User at the User's Re-use Delivery Point. |
| **Re-use Purpose** | means the use of carbon dioxide by the User at the User Facility for the re-pressurisation of an LP compressor during a plant start up sequence. |
| **Re-use Service** | has the meaning given in paragraph 14.1 of Section F (Network Design and Specification). |
| **Re-use Service Charge** | has the meaning given in paragraph 5.1(a) of Section H (Charges, Invoicing and Payment). |
| **Re-use Service Charge Rate** | has the meaning given in paragraph 12.1 of Section H (Charges, Invoicing and Payment). |
| **Re-use Service Infrastructure** | means the infrastructure and equipment required to allow the Re-use Service to be offered to the User, including any additional pipework, valves, compressors and Re-use Meters. |
| **Re-use Service Infrastructure Works** | means all the work required for the provision of the Re-use Service, including the installation of the Re-use Service Infrastructure, but not including any Works (as that term is defined in the Construction |

| Term | Meaning |
|---|---|
| | Agreement) that are required to connect the User Facility to the T&S Network. |
| **Re-use Service Operational Procedures** | has the meaning given in paragraph 15.2 of Section F (Network Design and Specification). |
| **Re-use Service Opex** | has the meaning given in paragraph 12.1(b) of Section H (Charges, Invoicing and Payment). |
| **Revenue Support Contract** | means a revenue support contract granted to a transport and storage network user pursuant to Part 2 of the Act or a Contract for Difference granted to a transport and storage network user pursuant to Chapter 2 of Part 2 of the Energy Act 2013. |
| **Revised Terms of Reference** | has the meaning given in paragraph 12.6 of Section I (Data). |
| **Rolling Three-month Forecast** | has the meaning given in paragraph 10.2 of Section E (Network Use and Capacity). |
| **RURC** | has the meaning given in paragraph 38.1 of Section E (Network Use and Capacity). |
| **Scheduled Commencement Date** | has the meaning given in each User's Connection Agreement. |
| **Scheduled Commercial Operations Date** | means, in relation to the T&S Network of a T&SCo, Scheduled COD (as that term is defined in that T&SCo's Licence). |
| **Secretary** | means the individual appointed under paragraph 7.1 of Section B (Governance). |
| **Secretary Expenditure** | means the costs and expenditure incurred by the Secretary in the carrying out of the various tasks and duties assigned to it in Section B (Governance). |
| **Secretary of State** | means the Secretary of State, acting in that capacity, unless otherwise expressly stated or the context otherwise requires. |
| **Secretary's Expenses Claim** | has the meaning given in paragraph 7.14 of Section B (Governance). |
| **Section E Reviews** | has the meaning give in paragraph 48.1 of Section E (Network Use and Capacity). |
| **Security Default Notice** | has the meaning given in paragraph 20.5 of Section H (Charges, Invoicing and Payment). |

| Term | Meaning |
|---|---|
| **Selected** | means that where a User or a prospective User has applied, through the Selection Process, for the potential:<br>(a) award of a Revenue Support Contract; or<br>(b) connection to a T&S Network; or<br>(c) modification of its existing Delivery Point,<br>that prospective User has been notified by the Secretary of State that it has been selected for the final stage of the process, subject only to any final requirements specified as part of the Selection Process and acknowledging that such status shall end on the date that the matters in paragraph 13 of Section C (Connection) are satisfied in respect of that application, and the word **Selection** shall be construed accordingly. |
| **Selection Process** | means a Government-led process for the selection of new Users to connect to T&S Networks, the selection of existing Users who wish to modify their existing connection and/or the allocation of Network Capacity, which shall be held from time to time as determined by HM Government. |
| **Self-Governance Criteria** | means that a Modification Proposal, if implemented:<br>(a) is unlikely to have a material effect on:<br>(i) existing or future Users;<br>(ii) competition in the pipeline transportation and storage of carbon dioxide or any commercial activities connected with the pipeline transportation and storage of carbon dioxide;<br>(iii) matters relating to the operation of the T&S Network, including emergencies; and<br>(iv) the Modification Rules; and<br>(b) is unlikely to discriminate between different classes of parties to the Code. |
| **Self-Governance Determination Date** | means the date on which the Modification Panel makes a determination whether to implement or not to implement a Self-Governance Modification Proposal. |
| **Self-Governance Modification Proposal** | means a Modification Proposal which: |

| Term | Meaning |
|---|---|
| | (a) the Modification Panel has determined satisfies the Self-Governance Criteria and in respect of which the Secretary has submitted to the Regulator a Self-Governance Statement (which has not been rejected by the Regulator by the proposed Self-Governance Determination Date); or<br>(b) the Regulator has determined satisfies the Self-Governance Criteria under paragraph 39.12 of Section B (Governance). |
| **Self-Governance Statement** | means a statement complying with the requirements of the Code which identifies the proposed Self-Governance Determination Date. |
| **Senior Representatives** | means one (1) or more senior employees or officers selected by a Party to represent it in relation to paragraph 50 of Section B (Governance). |
| **Senior Representatives Settlement** | has the meaning given in paragraph 50.1(a) of Section B (Governance). |
| **Significant Code Review** | has the meaning given in the Standard Conditions in Part II of the Licence. |
| **Significant Code Review Modification Proposal** | means a Modification Proposal made by:<br>(a) the Regulator in respect of a Significant Code Review; or<br>(b) a T&SCo pursuant to a direction of the Regulator which is made further to a Significant Code Review. |
| **Significant Code Review Phase** | has the meaning given to that term in the Standard Conditions. |
| **Significant Code Review Suspended Modification Proposal** | means, unless paragraph 27.3 of Section B (Governance) applies, a Modification Proposal in respect of which the application of the Modification Procedures is suspended pursuant to paragraph 27.2 of Section B (Governance) until the end of the Significant Code Review Phase. |
| **SoS Modification Proposal** | has the meaning given in paragraph 47.3 of Section B (Governance). |
| **SoS Modification Suspended Proposal** | means, unless paragraph 27.3 of Section B (Governance) (as amended by paragraph 47.3(d) of Section B (Governance)) applies, a Modification Proposal in respect of which the application of the Modification Procedures is suspended pursuant to paragraph 27.2 of Section B (Governance) (as amended by paragraph 47.3(d) |

| Term | Meaning |
|---|---|
| | of Section B (Governance)) until the end of the period within which a SoS Modification Proposal has been finally determined. |
| **Special Conditions** | means the special conditions of the Licence. |
| **Specific Provisions** | has the meaning given in paragraph 5.3 of Section A (Introduction, Structure and Interpretation). |
| **Standard Conditions** | means the standard conditions of the Licence. |
| **Standard Response Service** | has the meaning given in paragraph 18.2 of Section E (Network Use and Capacity). |
| **Start-up and Shut-down Procedure** | means a Common Interface Procedure established and maintained in accordance with Section G (Common Interface Procedures), as more particularly described in that Section. |
| **Storage Permit** | means a storage permit issued to the T&SCo by the NSTA in relation to a Storage Site that forms part of the T&SCo's T&S Network. |
| **Storage Site** | has the meaning given in the Storage of Carbon Dioxide (Licensing etc.) Regulations 2010 and, for the purposes of the Code, is the Storage Site that forms part of the T&S Network, and unless the context otherwise requires, where the T&S Network of a T&SCo includes more than one (1) Storage Site, the term "Storage Site" shall be interpreted to refer to all those Storage Sites. |
| **Supplemental Compensation Agreement** | has the meaning given in the Licence. |
| **Supported User** | means a User who has been awarded a Revenue Support Contract. |
| **Surplus Available Capacity** | has the meaning given in paragraph 38.3 of Section E (Network Use and Capacity). |
| **T&SCo** | has the meaning given in paragraph 2.1(a) of Section A (Introduction, Structure and Interpretation). |
| **T&S Network** | means a pipeline system for the transportation and storage of carbon dioxide, which may include the Onshore Transportation System and the Offshore Transportation and Storage System. |
| **T&S Network Data** | has the meaning given in paragraph 3.4 of Section I (Data). |
| **T&S Network Portal** | has the meaning given in paragraph 11.1 of Section I (Data). |

| Term | Meaning |
|---|---|
| **T&S Network Portal Minimum Specification** | means the specification set out in Annexure N (T&S Network Portal Minimum Specification). |
| **T&SCo Prolonged Unavailability Event** | means:<br>(a) in the case of a Supported User, a T&SCo Prolonged Unavailability Event (as such term is defined in that User's Revenue Support Contract);<br>(b) in the case of any other User:<br>(i) a delay in achievement of T&SCo Commercial Operations Date which has been continuing for a continuous period of at least six (6) Months;<br>(ii) an event or circumstance affecting the relevant T&S Network which prevents the User Facility from accessing and exporting any captured carbon dioxide to such T&S Network (including as a result of technical feasibility) which has not arisen out of or in connection with any act, omission, breach or default by the User and which has been continuing for a continuous period of at least six (6) Months; or<br>(iii) the occurrence of any of the following:<br>(A) a notice of discontinuation is issued by the Secretary of State to the relevant T&SCo pursuant to a discontinuation agreement entered into between the relevant T&SCo and the Secretary of State; or<br>(B) the relevant T&SCo's Licence to operate the relevant T&S Network is: (i) revoked; and (ii) is not transferred to a substitute T&SCo, such that the relevant T&S Network ceases to operate or the User is no longer able to connect to that T&S Network. |
| **T&SCo Representative** | means a representative of a T&SCo or T&SCos appointed to the Modification Panel. |
| **$tCO_2$** | means tonnes of carbon dioxide. |

| Term | Meaning |
|---|---|
| **Technical Parameters** | means the Technical Parameters for each individual T&S Network, as set out in Parts for each T&S Network in Annexure E (Technical Parameters – T&S Network). |
| **Terminal** | means an onshore terminal facility and all ancillaries between the pig trap(s) at the outlet of the Onshore Transportation System(s) and the pipeline pig trap(s) at the inlet(s) of the Offshore Pipeline Infrastructure, which is deemed to form part of the Offshore Transportation and Storage System and not form part of the Onshore Transportation System. |
| **Termination Notice** | has the meaning given in paragraph 12.1 of Section J (General). |
| **Terms of Reference** | means:<br>(a) Annexure D – $CO_2$ Quality Monitoring Procedure Terms of Reference; and/or<br>(b) Annexure F – Emergency Procedure Terms of Reference; and/or<br>(c) Annexure G – Start-up and Shut-down Terms of Reference; and/or<br>(d) Annexure H – Isolation Procedure Terms of Reference; and/or<br>(e) Annexure L – CDS Terms of Reference; and/or<br>(f) Annexure M – Independent Verifier Terms of Reference. |
| **Third Party Participant** | has the meaning given in paragraph 22.1 of Section B (Governance). |
| **ToR Proposal** | has the meaning given in paragraph 12.2 of Section I (Data). |
| **Track-1 Cluster Sequencing Process** | means the CCUS Cluster Sequencing Process comprising Phase 1, launched on 7 May 2021 and Phase 2, launched on 8 November 2021. |
| **Unanimously** | means in respect of a meeting of the Modification Panel, a determination made with the agreement of all Voting Members participating in the meeting. |
| **Under Variation Limit** | means the percentage set out in the Technical Parameters for a T&S Network. |

| Term | Meaning |
|---|---|
| **Uniform Provisions** | has the meaning given in paragraph 5.2 of Section A (Introduction, Structure and Interpretation). |
| **Updated Onshore T&S Charge** | has the meaning given in paragraph 15.12 of Section H (Charges, Invoicing and Payment). |
| **Updated Onshore User T&S Charge** | has the meaning given in paragraph 15.10 of Section H (Charges, Invoicing and Payment). |
| **Updated Offshore T&S Charge** | has the meaning given in paragraph 16.12 of Section H (Charges, Invoicing and Payment). |
| **Updated Offshore User T&S Charge** | has the meaning given in paragraph in 16.10 of Section H (Charges, Invoicing and Payment). |
| **Urgent Modification** | means a Modification made pursuant to an Urgent Modification Proposal. |
| **Urgent Modification Proposal** | means a Modification Proposal which the Regulator agrees or determines should be treated as an Urgent Modification Proposal. |
| **Use of System Charges** | has the meaning given in paragraph 2.1 of Section H (Charges, Invoicing and Payment). |
| **Use of System Charging Methodology** | means the methodology for the calculation of Use of System Charges, as set out in Part 1 of Section H (Charges, Invoicing and Payment). |
| **Use of System Charging Statement** | has the meaning given in paragraph 18.1 of Section H (Charges, Invoicing and Payment). |
| **User** | has the meaning given in paragraph 2.1(b) of Section A (Introduction, Structure and Interpretation). |
| **User Default** | means a:<br>(a) General Default;<br>(b) Payment Default.<br>(c) Insolvency Default; or<br>(d) Construction Longstop Default relating to the User's failure to complete the User Works by the Longstop Date (as extended in accordance with the Construction Agreement) in accordance with paragraph 13 of the Construction Agreement. |

| Term | Meaning |
|---|---|
| **User Discontinuance Date** | means the date determined under paragraph 14.1(b) of Section J (General). |
| **User Exit Notice** | has the meaning given in paragraph 13.1 of Section J (General). |
| **User Facility** | has the meaning given paragraph 1.3 of Section F (Network Design and Specification). |
| **User's Offshore Proportionate Network Charge** | has the meaning given in paragraph 7.3 of Section H (Charges, Invoicing and Payment). |
| **User's Onshore Proportionate Network Charge** | has the meaning given in paragraph 7.2 of Section H (Charges, Invoicing and Payment). |
| **User Representative** | means a representative of a User or Users appointed to the Modification Panel. |
| **User Requirements** | means the requirements that arise from legal obligations of the User and, in the case of a Supported User, its Revenue Support Contract. |
| **User-Specific Data** | has the meaning given in paragraph 3.5 of Section I (Data). |
| **User Type** | means a User falling into one (1) (and not more than one (1)) of the following categories:<br>(a) hydrogen production;<br>(b) industry (other than waste);<br>(c) waste; and<br>(d) dispatchable power,<br>or any other category identified as part of the Selection Process. |
| **Valid Connection Application** | has the meaning given in paragraph 7.1 of the Section C (Connection). |
| **Validation Report** | has the meaning given in paragraph 6.5 of Section F (Network Design and Specification). |
| **Variable Opex** | means that part of the Opex (as that term is defined in the Licence) which varies with each tonne of carbon dioxide delivered into the T&S Network. |

| Term | Meaning |
|---|---|
| **Variation Request** | has the meaning given in paragraph 33.1(c) of Section B (Governance). |
| **Vented Quantity** | has the meaning given in paragraph 10.14(b) of Section F (Network Design and Specification). |
| **Voting Member** | means a T&SCo Representative or User Representative appointed as a Voting Member, and the Chair, where the Chair elects to exercise a Casting Vote. |
| **WACC** | has the meaning given in the Licence. |
| **Warning Notice** | has the meaning given in paragraph 6 of Section J (General). |
| **Weekly Forecast** | has the meaning given in paragraph 11.2 of Section E (Network Use and Capacity). |
| **Workgroup** | means a group constituted of T&SCos, Users and Third Party Participants which is convened for the general purposes of consideration and discussion of matters relating to the Code or a Modification Proposal in accordance with its Terms of Reference. |
| **Workgroup Assessment** | means an assessment of a Modification Proposal by a Workgroup in accordance with paragraphs 28.1 to 28.5 of Section B (Governance). |
| **Workgroup Report** | means the report of a Workgroup in relation to a Modification Proposal referred to it by the Modification Panel prepared pursuant to paragraph 28.2 of Section B (Governance). |
| **Zero Nomination Exceedance Event** | has the meaning given to it in paragraph 25.7(a) of Section E (Network Use and Capacity). |
| **Zero Nomination Low Flow Event** | has the meaning given to it in paragraph 25.7(b) of Section E (Network Use and Capacity). |

# CCS Network Code
# Exhibit A
# Code Accession Agreement

[T&SCo]

and

[New User / New T&SCo]

20[●]

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**THIS CODE ACCESSION AGREEMENT** is made on [●] 20[●]

**BETWEEN:**

(1) [T&SCO] (Company no. [●]) whose registered office is at [●], (the "T&SCo" which expression includes its legal successors in title and permitted assignees); and

(2) [NEW T&SCO/NEW USER] (Company no. [●]) whose registered office is at [●], (the [New User/ New T&SCo] which expression includes its legal successors in title and permitted assignees),

each a "Party" and together, the "Parties".

**RECITALS:**

(A) The Code Agreement dated [●], attached to this Code Accession Agreement as an exhibit, gives legal effect to the CCS Network Code and makes the Parties legally bound by it.

(B) The [New User/New T&SCo] wishes to be admitted as a Party under the Code Agreement.

(C) [The T&SCo is already a Party under the Code Agreement and has been nominated by the Regulator and authorised by the existing Parties to the Code Agreement to enter into this Code Accession Agreement with the New T&SCo.]

(D) [The T&SCo is already a Party under the Code Agreement and, being the T&SCo that owns and operates the T&S Network (or part of it) that the New User is connecting to, has been authorised by the existing Parties to enter into this Code Accession Agreement with the New User.]

**THE PARTIES AGREE AS FOLLOWS:**

1. **Interpretation**

1.1 Capitalised terms used in this Code Accession Agreement shall have the meaning given to them in the Code Agreement and the CCS Network Code.

1.2 Paragraphs 15 to 22 of Section J (General) of the CCS Network Code apply to this Code Accession Agreement as if they were set out in this Code Accession Agreement.

2. **Admission as a Party**

2.1 The T&SCo, acting on its own behalf and on behalf of each of the other existing Parties to the Code Agreement, admits the [New User/New T&SCo] as a Party under the Code Agreement.

2.2 The [New User/New T&SCo] accepts its admission as a Party and undertakes to perform and to be bound by the Code Agreement as a Party from the date of this Code Accession Agreement.

2.3 This Code Accession Agreement and the Code Agreement shall be read and construed as one (1) document and references (in or pursuant to the Code Agreement) to the Code Agreement should be read and construed as references to the Code Agreement and this Code Accession Agreement.

2.4 [The Carbon Dioxide Specifications, Measurement Requirements and Technical Parameters that apply to the New T&SCo's T&S Network, and that will become new annexures to the CCS Network Code upon the New T&SCo becoming a Party to the CCS Network Code, are set out in in the Schedule to this Code Accession Agreement.]

3. **Counterparts**

This Code Accession Agreement may be executed in any number of counterparts and all of those counterparts taken together will be deemed to constitute one and the same instrument.

**THIS CODE ACCESSION AGREEMENT** has been entered into on the date first above written.

## Signatures

# Schedule 1

# [New T&SCo's Carbon Dioxide Specifications, Measurement Requirements and Technical Parameters]

# Exhibit 1
# Code Agreement

# CCS Network Code
# Exhibit B
# Construction Agreement

[Name of T&SCo]

[Name of User]

20●

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**THIS AGREEMENT/DEED** is made on [●] 20[●]

**BETWEEN:**

(1) [**INSERT T&SCO**] (Company no. [●] ) whose registered office is at [●], (the "**T&SCo**" which expression includes its legal successors in title and permitted assignees); and

(2) [**INSERT USER**] (Company no. [●] ) whose registered office is at [●], (the "**User**" which expression includes its legal successors in title and permitted assignees),

each a '**Party**' and together, the '**Parties**'.

**RECITALS:**

(A) Pursuant to Standard Condition B5 (CCS Network Code) of the Licence, the T&SCo is required to maintain a CCS Network Code setting out the terms of the arrangements for connection to and use of the T&S Network.

(B) The User has applied for connection to and use of the T&S Network and pursuant to Standard Condition B3 (Access to T&S Network) of the Licence, the T&SCo is required to offer terms in accordance with the Code in this respect.

(C) The T&SCo and the User are parties to the [Code Agreement/Accession Agreement] (being an agreement by which the Code is made contractually binding between the parties).

(D) Certain works are required to be carried out and performed by the T&SCo and the User to connect the User Facility to the T&S Network.

(E) Certain works are also required to commission the Works.

(F) This Construction Agreement is entered into pursuant to the terms of the Code.

**THE PARTIES AGREE AS FOLLOWS:**

## 1. Definitions and Interpretation

1.1 Unless the subject matter or context otherwise requires or is inconsistent therewith, terms and expressions defined in Section K (Glossary) of the Code and in the Connection Agreement have the same meanings, interpretations or construction in this Construction Agreement.

1.2 The following terms shall have the following meanings:

**Commissioned**, in relation to the Works, means that all works and activities required to be carried out in accordance with the Commissioning Programme or T&S Network Commissioning Programme (as applicable) have been carried out;

**Commissioning Programme** means the sequence of operations and/or tests necessary to connect the User Facility and Works to the T&S Network as set out in Schedule 4 for the purpose of making the Delivery Point operable;

**Commissioning Programme Commencement Date** means the date for the commencement of the Commissioning Programme as specified in the Commissioning Programme in Schedule 4 or any substituted date fixed under the terms of this Construction Agreement;

**Completion Date** means the date for completion of the Works (including that the Works are Commissioned) as specified in the Construction Programme in Schedule 3 or any substituted date fixed under the terms of this Construction Agreement;

**Conditions Precedent** means the conditions precedent set out in Schedule 8;

**Consents** means:

(a) all such planning and other statutory consents; and

(b) all wayleaves, easements, rights over or interests in land or any other property consent; or

(c) permission of any kind as shall be necessary for the construction of the Works and for commencement and carrying on of any activity proposed to be undertaken at or from such Works when completed;

**Construction Longstop Default** has the meaning given in clause 17;

**Construction Programme** means the agreed programme for the Works to be carried out by or on behalf of the T&SCo and the User as set out in Schedule 3 or as amended from time to time in accordance with the express terms of this Construction Agreement;

**Force Majeure Event** means:

(a) any event or combination of events or circumstance (other than the lack, nonreceipt or unavailability of financial resources or funds) which is beyond the control of a Party acting and having acted as a Reasonable and Prudent Operator, and which prevents that Party from or causes hindrance, delay or impediment to that Party in fulfilling all or any of its obligations under this Construction Agreement; unforeseen adverse weather conditions shall not constitute a Force Majeure Event; and

(b) any failure by the Party to perform its obligations hereunder to the extent that such failure was caused by any change in the law or cancellation of any consent, approval or licence rendering it unlawful for a Party to comply with its obligations hereunder after the date of this Construction Agreement unless such change or cancellation would not have occurred except for any act or omission of the Party concerned in relation to such law, consent, approval or licence unless itself caused by the Force Majeure Event;

**Liquidated Damages** means the sums specified in or calculated pursuant to Schedule 5;

**Longstop Date** means [to be agreed on a case by case basis];

**Safety Rules** means the rules relating to occupational health and safety that seek to ensure that persons working on plant and/or apparatus owned or operated by the T&SCo or User (as applicable) to which the rules apply are safeguarded from hazards arising from such plant or apparatus;

**T&S Network Commissioning Programme** has the meaning set out in Schedule 6;

**T&SCo Commissioning Activities** has the meaning given to 'Commissioning Activities' in the T&SCo's Licence;

**T&SCo Conditions Precedent** has the meaning set out in Schedule 8;

**T&SCo Works** means those Works specified in the Schedule 1 for which the T&SCo is responsible;

**User Facility** means [●];

**User Conditions Precedent** has the meaning set out in Schedule 8;

**User Commissioning Activities** means the operations and/or tests necessary to commission the connection of the User Facility to the T&S Network, as set out in the construction agreement relating to the User Facility;

**User Works** means those Works specified in Schedule 2 for which the User is responsible; and

**Works** means the works required to be carried out and performed by the T&SCo and the User to connect the User Facility to the T&S Network.

## 2. Commencement and Term

2.1 Subject to clause 25, this Construction Agreement becomes effective on the date of its execution.

2.2 This Construction Agreement shall continue to be in force until it is terminated in accordance with the provisions of Section J (General) of the Code.

## 3. T&SCo Works

3.1 The T&SCo Works, to be carried out by the T&SCo, are those works required to connect the User Facility to the T&S Network, up to the boundary of the User Facility, as more particularly described in Schedule 1.

3.2 The T&SCo shall be responsible for all costs associated with carrying out the T&SCo Works.

## 4. User Works

4.1 The User Works, to be carried out by the User, are those works required to connect the User Facility to the T&S Network, within boundary of the User Facility, as more particularly described in Schedule 2.

4.2 The User is responsible for all costs associated with carrying out the User Works.

## 5. Design of the Works

5.1 Without prejudice to the Parties' obligations to ensure that the Works comply with the requirements of this Construction Agreement:

(a) the User must, at regular intervals, and in any case, no less than once every three (3) months from the date of this Construction Agreement until the User's designs for the

User Works are finalised, provide the T&SCo with the opportunity to review the User's designs for the User Works; and

(b) the T&SCo must, at regular intervals, and in any case, no less than once every three (3) months from the date of this Construction Agreement until the T&SCo designs for the T&SCo Works are finalised, provide the User with the opportunity to review the T&SCo's designs for the T&SCo Works.

5.2 The T&SCo shall have the right to comment on the designs submitted to it under clause 5.1 where it considers, acting as a Reasonable and Prudent Operator, that such designs may prevent the User Works from complying with the requirements of this Construction Agreement or the Code.

5.3 The User must incorporate any comments provided by the T&SCo under clause 5.2 within two (2) calendar months of receipt of the same, and resubmit the designs to the T&SCo, indicating how they have addressed the T&SCo comments.

## 6. Consents for the Works

6.1 Subject to clauses 6.2 and 6.3, following the date of this Construction Agreement the T&SCo must use its best endeavours to obtain in relation to the T&SCo Works, and the User must use its best endeavours to obtain in relation to the User Works, all outstanding Consents. Each Party shall give advice and assistance to the other to the extent reasonably required by the other in the furtherance of these obligations. Further, each Party shall, so far as it is legally able to do so, grant to the other all such wayleaves, easements, servitude rights, rights over or interests (but not estates as regards land in England and Wales and not heritable or leasehold interests as regards land in Scotland) in land or any other Consents reasonably required by the other in order to enable, without prejudice to clause 9, the Works to be expeditiously completed and to enable that other to carry out its obligations to the other under this Construction Agreement and in all cases subject to such terms and conditions as are reasonable.

6.2 Each Party shall provide copies of any relevant correspondence and keep the other Party regularly updated in writing or by such other means as the parties may agree as to the progress made from time to time in the obtaining of relevant Consents.

6.3 The following additional provisions shall apply in respect of the Consents and the Works:

(a) all dates specified in this Construction Agreement are subject to the T&SCo obtaining Consents for the T&SCo Works and the User obtaining Consents for the User Works in a form acceptable to it within the time required to carry out the T&SCo Works or the User Works (as applicable) in accordance with the Construction Programme;

(b) in the event of:

(i) the Consents not being obtained by the required date;

(ii) the Consents being subject to conditions which affect the dates; or

(iii) the T&SCo or the User wishing to amend the T&SCo Works, the User Works, the T&SCo Commissioning Activities, the User Commissioning Activities or the Commissioning Programme to facilitate the granting of the Consents,

either Party shall be entitled to raise a request for this Construction Agreement to be varied in accordance with clause 24 to revise the T&SCo Works or User Works (as applicable) and/or the dates specified in this Construction Agreement.

## 7. Carrying out the Works

7.1 Forthwith following the date of this Construction Agreement, the User and the T&SCo must agree the Safety Rules to apply to the User Works and the Safety Rules to apply to the T&S Works during the Construction Programme and Commissioning Programme. Failing agreement within three (3) months of the date of this Construction Agreement, the Parties shall be entitled to refer the dispute to an Expert for determination, in accordance with paragraph 51 of Section B (Governance).

7.2 The T&SCo must, acting as a Reasonable and Prudent Operator and subject to the terms and conditions of this Construction Agreement, carry out the T&SCo Works in accordance with the Construction Programme.

7.3 The User must, acting as a Reasonable and Prudent Operator and subject to the terms and conditions of this Construction Agreement, carry out the User Works in accordance with the Construction Programme.

7.4 Each Party shall, in carrying out the User Works and the T&SCo Works (as applicable), comply with the applicable Safety Rules and any reasonable directions issued by the other Party.

7.5 Both Parties shall be entitled to contract or sub-contract for the carrying out of their respective parts of the Works. The User or any contractor on its behalf shall be responsible for commencing and for carrying out the User Works to such stage of completion as shall render them capable of being Commissioned and the T&SCo or any contractor on its behalf shall be responsible for commencing and carrying out the T&SCo Works to such stage of completion as shall render them capable of being Commissioned.

7.6 It is hereby agreed and declared for the purposes of the Construction (Design and Management) Regulations 2015 that the User is the only client in respect of the User Works and the T&SCo is the only client in respect of the T&SCo Works and each of the User and the T&SCo must accordingly discharge all the duties of clients under the said Regulations.

7.7 If at any time prior to the Completion Date it is necessary for a Party to make any addition to or omission from or amendment to the Works in relation to that Party as a result of an order or direction made in accordance with any Regulatory Requirements, that Party shall be entitled to raise a request for this Construction Agreement to be varied in accordance with clause 24.

## 8. Liaison

8.1 The Parties shall continuously liaise throughout the Construction Programme and the Commissioning Programme and each Party shall provide to the other all information relating to:

(a) in the case of the User, the User Works; and

(b) in the case of the T&SCo, the T&SCo Works,

as is reasonably necessary to assist the other Party in performance of that other Party's part of the Works, and shall use all reasonable endeavours to coordinate and integrate their respective part of the Works.

8.2 There shall be on-site meetings between representatives of the Parties at intervals to be agreed between the Parties.

8.3 Each Party shall deliver to the other Party a written report of progress during each calendar quarter within seven (7) Days of the end of that quarter.

## 9. Shared access

9.1 During the period of and at the times and as otherwise provided in the Construction Programme and the Commissioning Programme, the User must provide the T&SCo with necessary access to the site of the User Works, and the T&SCo must provide the User with necessary access to the site of the T&SCo Works (and each case that access rights shall be extended to that Party' employees, agents, suppliers and contractors) but not so as to disrupt or delay the construction and completion of the other's Works on the said sites or the operation of the other's plant and apparatus located thereon.

9.2 Any access under clause 9.1 shall be exercised only:

(a) where it is reasonably necessary for the purposes of carrying out of the Works;

(b) with the prior approval of the other Party (which should not be unreasonably withheld); and

(c) in accordance with any reasonable requirements (including the Safety Rules) of the owner of the site relating to such access.

## 10. Construction Programme

10.1 An agreed Construction Programme for the Works is set out in Schedule 3, subject to any changes to that Construction Programme in accordance with this Construction Agreement.

*Note: where Schedule 6 applies, clauses 11, 12, 13, 14, 15, 17, 18 and 19 will not apply.*

## 11. Commissioning Programme

An agreed Commissioning Programme for the Works is set out in Schedule 4, subject to any changes to that Commissioning Programme in accordance with this Construction Agreement.

## 12. Commissioning

12.1 Each Party shall give written notice to the other declaring its readiness to commence the Commissioning Programme.

12.2 The Commissioning Programme shall commence forthwith once both Parties have given written notice to the other under clause 12.1.

The Works shall be deemed to have been Commissioned on the date that the T&SCo certifies in writing to that effect.

## 13. Delays

13.1 If either Party shall have reason to believe that it is being delayed or will be delayed in carrying out that Party's Works for any reason (whether it is one entitling it to an adjustment to the Completion Date and/or the fixing of a new date under clause 13.2 of this Construction Agreement or not) it shall forthwith notify the other Party in writing of the circumstances giving rise to the delay and of the extent of the actual and/or anticipated delay.

13.2 If, prior to the Completion Date, a Party (in this clause 13.2 the "**Affected Party**") shall be delayed in carrying out any of the Affected Party's Works (including their commissioning) by reason of:

(a) any act, default or omission on the part of the other Party (in this paragraph the "**Defaulting Party**") or the Defaulting Party's employees, agents, contractors or sub-contractors; or

(b) a Force Majeure Event,

the Affected Party shall be entitled to have any dates in the Construction Programme and/or the Commissioning Programme (including the Completion Date and the Commissioning Programme Commencement Date) and the Longstop Date (as the case may be) amended as may be fair and reasonable in the circumstances provided that it shall have notified the other Party in writing of such event within twenty eight (28) Days of it becoming aware of the occurrence giving rise to the delay together with an estimate of the proposed delay which it will cause the Affected Party.

## 14. Consequences of T&SCo delays

### Delayed commencement of commissioning

14.1 In the event that the actual date of commencement of the Commissioning Programme is later than the Commissioning Programme Commencement Date, the T&SCo (if and to the extent that it is responsible for delayed commissioning beyond the Commissioning Programme Commencement Date) shall be liable to pay the User Liquidated Damages for each Day that the actual date of commencement of the Commissioning Programme is later than the Commissioning Programme Commencement Date.

14.2 Such Liquidated Damages shall cease to be payable in respect of any period after the date of actual commencement of the Commissioning Programme.

### Delayed completion of commissioning

14.3 In the event that the actual date on which the T&SCo Works are Commissioned in accordance with the Commissioning Programme is later than the Completion Date the T&SCo (if and to the extent that it is responsible for delayed completion beyond the Completion Date) shall be liable to pay the User Liquidated Damages for each day that the actual date on which the T&SCo Works are Commissioned is later than the Completion Date.

Such Liquidated Damages shall cease to be payable in respect of any period after completion of the T&SCo Works.

## 15. Consequences of User delays

### Delayed commencement of commissioning

15.1 In the event that the actual date of commencement of the Commissioning Programme is later than the Commissioning Programme Commencement Date, the User (if and to the extent that it is responsible for delayed commissioning beyond the Commissioning Programme Commencement Date), shall be liable to pay the T&SCo Liquidated Damages for each day that the actual date of commencement of the Commissioning Programme is later than the Commissioning Programme Commencement Date.

15.2 Such Liquidated Damages shall cease to be payable in respect of any period after the date of actual commencement of the Commissioning Programme.

### Delayed completion of commissioning

15.3 In the event that the actual date on which the User Works are Commissioned is later than the Completion Date, the User (if and to the extent that it is responsible for delayed completion beyond the Completion Date) shall be liable to pay the T&SCo Liquidated Damages for each day that the actual date on which the User Works are Commissioned is later than the Completion Date.

Such Liquidated Damages shall cease to be payable in respect of any period after completion of the User Works.

## 16. Payment of Liquidated Damages

16.1 Liquidated Damages payable under this Construction Agreement shall accrue on a daily basis but shall be payable monthly.

16.2 On or before the fifteenth Day of each month the Party entitled to receive the payment of the Liquidated Damages shall send to the other Party a statement of the Liquidated Damages which have accrued in the previous calendar month.

16.3 The Party receiving such statement shall in the absence of manifest error pay the Liquidated Damages shown on the statement within twenty eight (28) Days of the date upon which the statement is received.

16.4 The payment or allowance of Liquidated Damages pursuant to:

(a) clauses 14 and 15 shall be in full satisfaction of each Party's liability for failure to perform its obligations by the Commissioning Programme Commencement Date and/or the Completion Date as appropriate; or

(b) clauses 8 and 9 of Part C to Schedule 6 shall be in full satisfaction of each Party's liability for failure to perform its relevant obligations by the corresponding dates from which Liquidated Damages begin to accrue under clauses 8 and 9 of Part C to Schedule 6,

(as applicable).

## 17. Longstop date

In the event that the T&SCo or the User have failed, in circumstances not entitling it to the fixing of a new Longstop Date pursuant to clause 13.2, to complete the T&S Works or User Works (as applicable) by the Longstop Date, such failure shall constitute a Construction Longstop Default and paragraph 12 or paragraph 13 (as applicable) of Section J (General) of the Code shall apply.

## 18. Requirements in preparation for commissioning

18.1 Not later than three (3) months prior to the expected Commissioning Programme Commencement Date or by such other time as may be agreed between the Parties, the Parties shall provide to each other:

(a) any technical drawings and other details relating to each other's Works;

(b) contact details of key personnel to be involved in the carrying out of the Commissioning Programme; and

in the case of the User, all information that the User is required to provide to the T&SCo pursuant to the Code and the Common Interface Procedures in order for the User to be able to commence delivery of carbon dioxide at the Delivery Point.

## 19. Becoming operational

19.1 Once:

(a) the T&SCo has certified that the Works have been Commissioned pursuant to clause 12.3; and

(b) the User has complied with the requirements of clause 18.1(c),

the T&SCo must forthwith notify the User in writing that the connection at the Delivery Point has become operational.

## 20. T&S Network Commissioning

20.1 Schedule 6 has effect under this Construction Agreement.

***Drafting instruction****: Schedule 6 applies (i) where this Construction Agreement is being entered into prior to System Acceptance of the T&S Network, where System Acceptance means when the Regulator has confirmed, in accordance with the T&SCo's Licence, that the T&SCo has completed T&S Network commissioning as required in order to be able to commence commercial operation of the T&S Network and (ii) completion of construction and commissioning of the User Facility and User Works is anticipated to align with System Acceptance, such that the User will be a commissioning User of the T&S Network . Where Schedule 6 is not applicable, then clause 20 should be deleted.*

## 21. Works relating to Re-use Service

21.1 Schedule 7 has effect under this Construction Agreement.

***Drafting instruction****: Schedule 7 applies where this Construction Agreement also covers any Works relating to the Re-use Service which may be provided to some Users under Section F (Network Design and Specification) of the Code, and where details, such as the payment by the User for any part of the T&SCo Works relating to the Re-use Service, need to be set out in the Construction Agreement. Where Schedule 7 is not applicable, then this clause 21 should be deleted.*

## 22. Termination Events

22.1 This Construction Agreement the associated Connection Agreement and the Code Agreement (in respect of the User) shall be coterminous such that upon termination of this Construction Agreement, the associated Connection Agreement and the Code Agreement shall also terminate.

## 23. General provisions

23.1 Paragraphs 15 to 22 of Section J (General) of the Code apply to this Construction Agreement as if they were set out in this Construction Agreement.

## 24. Variations

24.1 Subject to clause 24.4, no variation to this Construction Agreement shall be effective unless made in writing and signed by or on behalf of both the T&SCo and the User.

24.2 Where a Party has raised a request for this Construction Agreement to be varied in accordance with clause 6.3 or clause 7.7, the other Party shall be required to review and consider in good faith any such request and (subject to clause 24.3) act reasonably in its consideration of whether to accept the proposed variation.

24.3 The Parties acknowledge and agree that in considering whether to accept a proposed variation to this Construction Agreement under clause 24.2, it will be reasonable to refuse such a request where any such variation would adversely impact the reviewing Party's ability to deliver the Works and/or where such variation would cause one of the Parties to be in breach of the terms of any contract or agreement that it is a party to at the time such variation is requested.

24.4 The T&SCo and the User must effect any amendment required to be made to this Construction Agreement as a result of a Modification to the Code, including as a result of any modifications to or directions issued by the Regulator in connection with the Licence or any Project-Specific Document referred to in the T&SCo's Licence.

24.5 The User authorises and instructs the T&SCo to make any amendment required under clause 24.4 on its behalf and undertakes not to withdraw, qualify or revoke such authority or instruction at any time.

## 25. Conditions Precedent

25.1 The provisions of, and the rights and obligations of the Parties pursuant to, this Construction Agreement (other than this clause 25) are conditional upon the Conditions Precedent being:

(a) fulfilled by the T&SCo, in the case of the T&SCo Conditions Precedent;

(b) fulfilled by the User, in the case of the User Conditions Precedent; or

(c) waived by the Party for whose benefit the relevant Condition Precedent has been included (as specified in Schedule 8).

25.2 The T&SCo must use reasonable endeavours to fulfil or procure the fulfilment of the T&SCo Conditions Precedent as soon as reasonably practicable, and in any event no later than the date specified in Schedule 8,

25.3 The User must use reasonable endeavours to fulfil or procure the fulfilment of the User Conditions Precedent as soon as reasonably practicable, and in any event no later than the date specified in Schedule 8.

25.4 The Parties shall keep each other informed about the status of the Conditions Precedent and each Party shall notify the other Party when a Condition Precedent has been fulfilled.

## 26. [Anti-bribery and corruption]

26.1 [The Parties acknowledge that the intent behind this Construction Agreement is to ensure consistency with Legal Requirements relating to:

(a) the prevention of corruption and bribery ("**ABC Laws**"); and

(b) anti-money laundering ("**Anti-money Laundering Laws**").

26.2 In performing its obligations and activities in accordance with this Construction Agreement and the Code, each Party must comply with all applicable ABC Laws and Anti-money Laundering Laws.

26.3 Each Party represents, warrants and undertakes to the other Party that it has not, directly or indirectly, engaged in any bribery or corruption or other act that may contravene any ABC Laws or Anti-Bribery Laws.]

***Drafting instruction****: this clause 26 (Anti-Bribery and Corruption) is optional for inclusion by the Parties. It is anticipated that the Parties may agree alternative provisions regulating the subject matter contained within this clause 26.*

## 27. [Human rights]

27.1 [In performing its obligations and activities in accordance with this Construction Agreement and the Code, each Party must:

(a) comply with all applicable Human Rights Laws; and

(b) take reasonable steps to ensure its contractors and consultants comply with all applicable Human Rights Laws in performing any obligations and activities in connection with this Construction Agreement and the Code,

where "**Human Rights Laws**" means all Legal Requirements regarding respecting human rights, the use of labour (including the terms and conditions of employment), prevention of smuggling and trafficking of human beings and modern slavery and immigration.]

***Drafting instruction****: this clause 27 (Human Rights) is optional for inclusion by the Parties. It is anticipated that the Parties may agree alternative provisions regulating the subject matter contained within this clause 27.*

# Schedule 1

# T&SCo Works

***Note**: details of the T&SCo Works, including design specifications to be included. The T&SCo Works are intended to include any physical works for which the T&SCo is responsible and which are required to be carried out by the T&SCo on its side of the Delivery Point boundary to facilitate the connection of the User Facility to the T&S Network.*

# Schedule 2

# User Works

*Note: details of the User Works, including design specifications to be included. The User Works are intended to include any physical works for which the User is responsible and which are required to be carried out by the User on its side of the Delivery Point boundary to facilitate the connection of the User Facility to the T&S Network.*

# Schedule 3

# Construction Programme

**Key dates of Construction Programme**

**Completion Date**: [*agreed date to be inserted*]

*Note: other dates and details to be inserted.*

# Schedule 4

# Commissioning Programme

**Key dates of Commissioning Programme**

**Commissioning Programme Commencement Date**: [*agreed date to be inserted*]

*Note: other dates and details to be inserted.*

# Schedule 5

# Liquidated Damages

| | | |
|---|---|---|
| 1. | **User Liquidated Damages** | £[x] |
| 2. | **T&SCo Liquidated Damages** | £[x] |

***Drafting instruction**: in relation to any Construction Agreement entered into in the First Regulatory Period under T&SCo's Licence, the User Liquidated Damages and T&SCo Liquidated Damages shall be set at £0.*

# Schedule 6

# T&S Network Commissioning

## Part A Scope of this Schedule 6

### 1. Scope of this Schedule 6

1.1 This Schedule 6 applies where this Construction Agreement has been entered into prior to System Acceptance of the T&S Network, where "**System Acceptance**" means when the Regulator has confirmed, in accordance with the T&SCo's Licence, that the T&SCo has completed T&S Network commissioning as required in order to be able to commence commercial operation of the T&S Network, and the User will be participating in commissioning of the T&S Network prior to System Acceptance.

1.2 Notwithstanding any other provisions of this Construction Agreement, the provisions set out in Part B and Part C of this Schedule 6 shall apply.

1.3 The provisions set out in Part B and Part C of this Schedule 6 govern the interaction between:

(a) the construction and commissioning of the User Facility and the User Works as required to enable the construction and commissioning of the T&S Network and the T&SCo Works (including, where applicable, the supply of carbon dioxide for the commissioning of the T&S Network); and

(b) the construction and commissioning of the T&S Network in accordance with the T&SCo's Licence and the T&SCo Works.

## Part B T&S Network Commissioning Definitions

### 1. Definitions

1.1 In this Schedule 6, the following definitions apply:

**Commercial Operations Date** has the meaning given in the Licence;

**Revenue Support Contract** means a revenue support contract granted to a transport and storage network user pursuant to Part 2 of the Energy Act 2023 or a Contract for Difference granted to a transport and storage network user pursuant to Chapter 2 of Part 2 of the Energy Act 2013;

**Scheduled COD** has the meaning given in the Licence;

**Supported User** means a User who has been awarded a Revenue Support Contract;

**T&S Network Commissioning Programme** means the programme established by the T&SCo pursuant to its Licence, for the commissioning of the T&S Network;

**T&S Network Commissioning Programme Commencement Date** means the date specified in the T&S Network Commissioning Programme for the commencement of the T&SCo Commissioning Activities or any substituted date fixed under the terms of this Construction Agreement;

**T&S Network Longstop Date** means the Longstop Date, as such term is defined under the T&SCo's Licence;

**T&SCo Delay** means any delay in the construction or commissioning of the T&S Network and/or the T&SCo Works;

**User Delay** means any delay in the construction or commissioning of the User Facility and/or the User Works; and

**User Facility Longstop Date** means:

(a) in the case of a Supported User, the longstop date under the User's Revenue Support Contract (where applicable), or

(b) in the case of a User which is not a Supported User, [*to be agreed on a case by case basis*].

1.2 Defined terms used in this Schedule 6 and not listed in clause 1.1 of Part B of this Schedule 6 have the meaning given to them in clause 1 of this Construction Agreement.

## Part C Specific provisions relating to T&S Network Commissioning

### 1. Effect of existing provisions

1.1 Where this Schedule 6 applies, the following clauses of this Construction Agreement (and any definitions used only in such clauses) shall cease to have effect:

(a) clause 11;

(b) clause 12;

(c) clause 13;

(d) clause 14;

(e) clause 15;

(f) clause 17;

(g) clause 18; and

(h) clause 19.

### 2. Provision of User information

2.1 The User must liaise with the T&SCo throughout the Construction Programme and provide all information relating to the User Facility and the User Works as is reasonably necessary to assist the T&SCo in preparing the T&S Network Commissioning Programme, including any specific requirements relating to commissioning.

## 3. Provision of T&S Network Commissioning Programme

3.1 Not later than six (6) months prior to the T&S Network Commissioning Programme Commencement Date, the T&SCo must provide the User with a draft T&S Network Commissioning Programme for the T&SCo Commissioning Activities which shall incorporate the information provided by the User pursuant to clause 2.1 of Part C to this Schedule 6.

3.2 The User must, as quickly as practicable and in any event within two (2) months of receipt of the draft T&S Network Commissioning Programme, notify the T&SCo of any comments on the draft T&S Network Commissioning Programme, including any changes or variations to the draft T&S Network Commissioning Programme recommended by the User.

3.3 The T&SCo must give reasonable consideration to any comments provided by the User under clause 3.2 of Part C to this Schedule 6 and incorporate such comments where possible, provided that it shall be reasonable for the T&SCo not to incorporate such comments where such changes or variations may be reasonably likely to cause the T&SCo to be in breach of its Licence.

3.4 Within one (1) month of receipt of the comments provided by the User under clause 3.1 of Part C to this Schedule 6, the T&SCo must deliver to the User the final version of the T&S Network Commissioning Programme.

3.5 The T&S Network Commissioning Programme shall be implemented by the Parties and their sub-contractors in accordance with its terms.

## 4. Activities and responsibilities of parties

4.1 ***Drafting instruction****: the T&SCo and User are to agree and set out here provisions dealing with the activities and responsibilities of the T&SCo and the User under the T&S Network Commissioning Programme.*

## 5. Commissioning

5.1 The Works shall be deemed to have been Commissioned on the date that the T&SCo certifies in writing to that effect.

## 6. Notification of delay

6.1 If the User has reason to believe that there is or will be a User Delay for any reason (whether it is one entitling it to an adjustment to the User Facility Longstop Date or any other date under this Construction Agreement or not) it shall forthwith notify the T&SCo in writing of the circumstances giving rise to the delay and of the extent of the actual and/or anticipated delay.

6.2 If the T&SCo has reason to believe that there is or will be a T&SCo Delay for any reason (whether it is one entitling it to an adjustment to the T&SCo Network Longstop Date or any other date under this Construction Agreement or not) it shall forthwith notify the User in writing of the circumstances giving rise to the delay and of the extent of the actual and/or anticipated delay.

## 7. Impact of delays

7.1 ***Drafting instruction****: the T&SCo and User to agree the process for rescheduling the activities and responsibilities of the T&SCo and the User under the Construction Programme and/or the T&S Network Commissioning Programme, provided that any such process shall be without prejudice to any decision of the Regulator with respect to such delays.*

## 8. Liquidated damages – payable to the User

**Delayed commencement of T&S Network commissioning**

8.1 In the event that the actual date of commencement of the T&S Network Commissioning Programme is later than the T&S Network Commissioning Programme Commencement Date, the T&SCo (if and to the extent that it is responsible for delayed commencement of the T&S Network Commissioning Programme beyond the T&S Network Commissioning Programme Commencement Date), shall be liable to pay the User Liquidated Damages for each day that the actual date of commencement of the T&S Network Commissioning Programme is later than the T&S Network Commissioning Programme Commencement Date.

8.2 Such Liquidated Damages shall cease to be payable in respect of any period after the date of actual commencement of the T&S Network Commissioning Programme.

**Delayed completion of T&S Network commissioning**

8.3 In the event that the actual date on which the Commercial Operations Date is achieved is later than Scheduled COD, the T&SCo (if and to the extent that it is responsible for the Commercial Operations Date being delayed beyond Scheduled COD) shall be liable to pay the User Liquidated Damages for each day that the actual date on which the Commercial Operations Date is achieved is later than Scheduled COD.

8.4 Such Liquidated Damages shall cease to be payable in respect of any period after the Commercial Operations Date.

## 9. Liquidated damages – payable to the T&SCo

**Delayed commencement of T&S Network commissioning**

9.1 In the event that the actual date of commencement of the T&S Network Commissioning Programme is later than the T&S Network Commissioning Programme Commencement Date, the User (if and to the extent that it is responsible for delayed commencement of the T&S Network Commissioning Programme beyond the T&S Network Commissioning Programme Commencement Date) shall be liable to pay the T&SCo Liquidated Damages for each day that the actual date of commencement of the T&S Network Commissioning Programme is later than the T&S Network Commissioning Programme Commencement Date.

9.2 Such Liquidated Damages shall cease to be payable in respect of any period after the T&S Network Commissioning Programme Commencement Date.

**Delayed completion of T&S Network commissioning**

9.3 In the event that the actual date on which the Commercial Operations Date is achieved is later than Scheduled COD , the User (if and to the extent that it is responsible for the Commercial Operations Date being delayed beyond Scheduled COD ) shall be liable to pay the T&SCo Liquidated Damages for each day that the actual date on which the Commercial Operations Date is achieved is later than Scheduled COD.

9.4 Such Liquidated Damages shall cease to be payable in respect of any period after the Commercial Operations Date.

## 10. Costs of rescheduling

10.1 In the event of User Delay and/or T&SCo Delay, each Party shall be responsible for its own costs of rescheduling of activities and responsibilities under the T&S Network Commissioning Programme.

## 11. Longstop date

11.1 Where the T&S Network Longstop date has been extended, the T&SCo must promptly notify the User in writing of the same.

11.2 Where the User Facility Longstop Date has been extended, the User must promptly notify the T&SCo in writing of the same.

11.3 In the event that the T&SCo has failed to achieve the Commercial Operations Date by the T&S Network Longstop Date, such failure shall constitute a Construction Longstop Default and paragraph 13 of Section J (General) of the Code shall apply.

11.4 In the event that the User has failed to complete the User Facility and/or User Works by the User Facility Longstop Date, such failure shall constitute a Construction Longstop Default and paragraph 12 of Section J (General) of the Code shall apply.

***Drafting instruction****: Users and T&SCos to provide for the impact of extension of the T&S Network Longstop Date and /or the User Facility Longstop Date on the activities and responsibilities of the T&SCo and the User under the T&S Network Commissioning Plan.*

## 12. Becoming operational

12.1 Once:

(a) the T&SCo achieves the Commercial Operations Date and the T&SCo has certified that the Works have been Commissioned pursuant to clause 5 of Part C to this Schedule 6; and

(b) the User has certified to the T&SCo that the User Facility is complete,

the T&SCo must forthwith notify the User in writing that the connection at the Delivery Point has become operational.

# Schedule 7

# Works Relating to Re-Use Service

***Drafting instruction**: this schedule is only to be included where applicable. If the User is required to pay for any T&SCo Works to the extent they relate to the Re-use Service, then this should be set out here.*

# Schedule 8

# Conditions Precedent

***Drafting instruction**: any conditions precedent, as contemplated by Section C of the Code, are to be set out here.*

**T&SCo Conditions Precedent**

***Drafting instruction**: these are intended to be any conditions precedent for the benefit of the T&SCo, and to be fulfilled by the T&SCo, such as the approval of the Regulator under the Change in Scope mechanism under its Licence. The date by which they are to be satisfied should also be included here.*

**User Conditions Precedent**

***Drafting instruction**: these are intended to be any conditions precedent for the benefit of the User, and to be fulfilled by the User. The date by which they are to be satisfied should also be included here.*

# Signatures

# CCS Network Code
# Exhibit C
# Connection Agreement

[Name of T&SCo]

[Name of User]

20●

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**THIS AGREEMENT** is made on [●] 20[●]

**BETWEEN:**

(1) [**INSERT T&SCO**] (Company no. [●]) whose registered office is at [●], (the "**T&SCo**" which expression includes its legal successors in title and permitted assignees); and

(2) [**INSERT USER**] (Company no. [●]) whose registered office is at [●], (the "**User**" which expression includes its legal successors in title and permitted assignees),

each a "**Party**" and together, the "**Parties**".

**RECITALS:**

(A) Pursuant to its Licence, the T&SCo maintains the CCS Network Code setting out the terms of the arrangements for connection to and use of the T&S Network by Users.

(B) The User has applied for connection to and use of the T&S Network and pursuant to its Licence, the T&SCo is required to offer terms in accordance with the Code in this respect.

(C) The T&SCo and the User are parties to the Code Agreement (being an agreement by which the Code is made contractually binding between the parties to the Code).

(D) This Connection Agreement documents details relating to the User's connection to and use of the T&S Network and is entered into pursuant to the Code and shall be read as being governed by it.

**THE PARTIES AGREE AS FOLLOWS:**

## 1. Definitions and Interpretation

1.1 Unless the subject matter or context otherwise requires or is inconsistent with the subject matter or context:

(a) capitalised terms used in the Connection Agreement have the same meaning given to them in Section K (Glossary) of the Code and in the Construction Agreement and, where relevant, are more particularly described in the Schedules to this Connection Agreement; and

(b) the interpretation provisions set out in the Code shall apply to the interpretation of this Connection Agreement.

1.2 The following terms shall have the following meanings:

**Agreement Date** means the date of this Connection Agreement;

**Commencement Date** means the date when Commissioning has been completed in accordance with the Construction Agreement;

**Conditions Precedent** means the conditions precedent set out in Schedule 5;

**Construction Agreement** means the Construction Agreement entered into between the T&SCo and the User in relation to the Works required to connect the User Facility to the T&S Network at the Delivery Point;

**Key User Connection Details** means details set out in Schedule 1;

**Scheduled Commencement Date** means the date anticipated to be the Commencement Date for this Connection Agreement in accordance with the Construction Programme and/or Commissioning Programmes set out in the User's Construction Agreement, and which is specified in the Key User Connection Details;

**T&SCo** means the party identified in this Connection Agreement as such, which, in relation to each T&S Network or part of a T&S Network, is the entity that is the holder of a Licence authorising it to operate that T&S Network or part of a T&S Network; and

**User** means the party identified in this Connection Agreement as such, which is the entity other than T&SCo that is bound by the provisions of the Code and delivers carbon dioxide into the T&S Network at a Delivery Point.

## 2. Commencement and Term

2.1 Subject to clause 13, this Connection Agreement becomes effective on the date of its execution.

2.2 This Connection Agreement shall continue to be in force until it is terminated in accordance with the provisions of Section J (General) of the Code.

## 3. Scope

3.1 This Connection Agreement relates to the connection of the User Facility to the T&S Network at the Delivery Point and the User's rights to deliver carbon dioxide at the Delivery Point.

3.2 The Key User Connection Details define the parameters of the User's connection to and use of the T&S Network and in particular describe the following:

(a) the User's contact details, as required for the purposes of Section J (General) of the Code;

(b) the T&S Network to which the User is connected at the Delivery Point;

(c) the Delivery Point at which the User is entitled to deliver carbon dioxide; in accordance with and subject to the provisions of the Code;

(d) the User's Scheduled Commencement Date;

(e) the nature of the User's User Facility which is connected to the T&S Network at the Delivery Point;

(f) the User Type of the User, for the purposes of Section B (Governance) of the Code;

(g) the Delivery Point Size of the Delivery Point;

(h) whether the User is an Onshore User or an Offshore User;

(i) the Registered Capacity allocated to the User (expressed in $tCO_2$/hour, over a set number of years), which represents the Registered Capacity held by the User as at the date of this Connection Agreement but which may subsequently change in accordance with the provisions of the Code; and

(j) the Minimum Turndown Rate, the Minimum Ramp Rate and the Maximum Ramp Rate of the User Facility, which the T&SCo will have regard to pursuant to Section E of the Code.

## 4. Use of T&S Network

4.1 Subject to and in accordance with the terms of this Connection Agreement and the Code, from the Commencement Date the User has the right to use the T&S Network by delivering carbon dioxide from the User Facility at the Delivery Point.

4.2 Except as expressly provided otherwise in this Connection Agreement and the Code, each Party will perform its duties under this Connection Agreement and the Code in accordance with the standard of a Reasonable and Prudent Operator.

## 5. Entry Provisions

5.1 To the extent that any of the Entry Provisions specified in the Code are specific to an individual T&S Network, Schedule 2 identifies (by reference to the Code) those T&S Network-specific Entry Provisions that are applicable to the User's Delivery Point.

5.2 The Entry Provisions shall include any Local Requirements where, in accordance with the provisions of Section F (Network Design and Specification) of the Code, such Local Requirements are required to deal with any of the User's User Requirements.

5.3 The User recognises and acknowledges that:

(a) the Entry Provisions are designed to protect the T&S Network and ensure that the T&SCo can:

(i) safely transport and/or store carbon dioxide; and

(ii) measure the quality and quantity of carbon dioxide delivered by the User,

in compliance with the Code, all Regulatory Requirements and any contractual requirements; and

(b) the User is required to fully comply with the Entry Provisions at all times in accordance with the Code and any failure to do so may constitute a breach of the Code.

## 6. Installation of Measurement Equipment

6.1 In accordance with the requirements of the Code, Measurement Equipment has been installed at the User's Metering Point to:

(a) determine mass flow of carbon dioxide for fiscal purposes; and

(b) measure the critical components, quality and characteristics of carbon dioxide delivered by the User at the Delivery Point as against the Carbon Dioxide Specifications for integrity purposes.

6.2 The details and schematics of the Measurement Equipment and Metering Point that are referred to in paragraph 6.1 are set out in Schedule 3.

## 7. Provision of Security

7.1 The User must provide:

(a) the Registered Capacity Financial Security, in accordance with Section E (Network Use and Capacity) of the Code, for an amount calculated by the T&SCo in accordance with Section E (Network Use and Capacity) of the Code; and

(b) the Required Security, in accordance with Section H (Charges, Invoicing and Payment) of the Code, for an amount calculated by the T&SCo in accordance with Section H (Charges, Invoicing and Payment) of the Code.

7.2 The User must ensure that the Registered Capacity Financial Security and the Required Security are in place before the User is entitled to start delivering carbon dioxide at the Delivery Point, and in any case within fourteen (14) Days of the Commencement Date.

## 8. Registered Capacity

8.1 The Registered Capacity that has been allocated to the User pursuant to the Code and that the User holds as at the Commencement Date is set out in the Key User Connection Details.

8.2 If the User wishes to increase or decrease the amount of Registered Capacity held by the User, the User must apply to do so in accordance with the provisions of Section E (Network Use and Capacity) of the Code.

## 9. Use of System Charges

9.1 From the Commencement Date, the User must pay all Use of System Charges in accordance with the Code.

## 10. Re-use Service

10.1 This clause 10 applies where:

(a) the T&SCo has agreed to provide the Re-use Service to the User in accordance with Section F (Network Design and Specification) of the Code; and

(b) details of the terms for the provision of that Re-use Service are set out in Schedule 4.

10.2 Subject to and in accordance with the terms of this Connection Agreement and the Code, from the Commencement Date the User has the right to take delivery of carbon dioxide from the T&S Network at the User's Re-use Delivery Point.

10.3 From the Commencement Date, the User must pay the Re-use Service Charge for the Re-use Service provided by the T&SCo to the User.

## 11. Variations

11.1 Subject to clause 11.2, no variation to this Connection Agreement shall be effective unless made in writing and signed by or on behalf of both the T&SCo and the User.

11.2 The T&SCo and the User must effect any amendment required to be made to this Connection Agreement as a result of a Modification to the Code, including as a result of any

modifications to or directions issued by the Regulator in connection with the Licence or any Project-Specific Document referred to in the T&SCo's Licence.

11.3 The User authorises and instructs the T&SCo to make any amendment required under clause 11.2 on its behalf and undertakes not to withdraw, qualify or revoke such authority or instruction at any time.

## 12. General provisions

12.1 Paragraphs 15 to 22 of Section J (General) of the Code apply to this Connection Agreement as if they were set out in this Connection Agreement.

## 13. Conditions Precedent

13.1 The provisions of, and the rights and obligations of the parties pursuant to, this Connection Agreement (other than this clause 13) are conditional upon the Conditions Precedent being:

(a) fulfilled by the T&SCo, in the case of the T&SCo Conditions Precedent;

(b) fulfilled by the User, in the case of the User Conditions Precedent; or

(c) waived by the party for whose benefit the relevant Condition Precedent has been included (as specified in Schedule 5).

13.2 The T&SCo must use reasonable endeavours to fulfil or procure the fulfilment of the T&SCo Conditions Precedent as soon as reasonably practicable, and in any event no later than the date specified in Schedule 5.

13.3 The User must use reasonable endeavours to fulfil or procure the fulfilment of the User Conditions Precedent as soon as reasonably practicable, and in any event no later than the date specified in Schedule 5.

13.4 The parties shall keep each other informed about the status of the Conditions Precedent and each party shall notify the other party when a Condition Precedent has been fulfilled.

## 14. [Anti-bribery and corruption]

14.1 [The Parties acknowledge that the intent behind this Connection Agreement is to ensure consistency with Legal Requirements relating to:

(a) the prevention of corruption and bribery ("**ABC Laws**"); and

(b) anti-money laundering ("**Anti-money Laundering Laws**").

14.2 In performing its obligations and activities in accordance with this Connection Agreement and the Code, each Party must comply with all applicable ABC Laws and Anti-money Laundering Laws.

14.3 Each Party represents, warrants and undertakes to the other Party that it has not, directly or indirectly, engaged in any bribery or corruption or other act that may contravene any ABC Laws or Anti-Bribery Laws.]

***Drafting instruction****: this clause 14 (Anti-Bribery and Corruption) is optional for inclusion by the Parties. It is anticipated that the Parties may agree alternative provisions regulating the subject matter contained within this clause 14.*

## 15. [Human rights]

15.1 [In performing its obligations and activities in accordance with this Connection Agreement and the Code, each Party must:

(a) comply with all applicable Human Rights Laws; and

(b) take reasonable steps to ensure its contractors and consultants comply with all applicable Human Rights Laws in performing any obligations or activities in connection with the Connection Agreement and the Code,

where "**Human Rights Laws**" means all Legal Requirements regarding respecting human rights, the use of labour (including the terms and conditions of employment), prevention of smuggling and trafficking of human beings and modern slavery and immigration.]

***Drafting instruction****: this clause 15 (Human Rights) is optional for inclusion by the Parties. It is anticipated that the Parties may agree alternative provisions regulating the subject matter contained within this clause 15.*

# Schedule 1

# Key User Connection Details

| | |
|---|---|
| **User** | [*insert company details*] |
| **User contact details** | [*insert details, for purposes of notice provisions (paragraph 1.4 of Section J) under the Code*] |
| **T&S Network** | [*description to be inserted*] |
| **User Facility** | [*description to be inserted*] |
| **User Type** | [*User's User Type, by reference to the definition of User Type in the Code, to be inserted*] |
| **Scheduled Commencement Date** | [*to be inserted*] |
| **Delivery Point** | [*description to be inserted, as well as a schematic showing the location of the Delivery Point and the demarcation of the User Facility and the T&S Network*] |
| **Delivery Point Size** | [*to be inserted, expressed in $tCO_2$/hour*] |
| **Onshore/Offshore User by reference to the location of the Delivery Point** | [*Onshore User/Offshore User*] |
| **Registered Capacity as at the date of the Connection Agreement** | [*to be inserted – note that this will also be recorded in the T&S Network Portal*]<br><br>[*this is to be expressed in $tCO_2$/hour*] |
| **Period of Registered Capacity** | [*insert years*] from the Commencement Date<br><br>[*note that this will also be recorded in the T&S Network Portal*] |
| **Minimum Turndown Rate** | [*to be inserted*] |
| **Minimum Ramp Rate** | [*to be inserted*] |
| **Maximum Ramp Rate** | [*to be inserted*] |

# Schedule 2

# Entry Provisions

| | |
|---|---|
| **Carbon Dioxide Specifications** | [*insert here which part of Annexure B (Carbon Dioxide Specifications) applies to the T&S Network to which this Connection Agreement relates*] |
| **Measurement Requirements** | [*insert here which part of Annexure C (Measurement Requirements) applies to the T&S Network to which this Connection Agreement relates*] |
| **Local Requirements** | [*it is intended that any additional or alternative technical requirements for the User's Delivery Point that are necessary due to the nature of the User Facility or its particular operating processes or which otherwise reasonably warrant a deviation from the Carbon Dioxide Specifications or Measurement Requirements for the T&S Network are included here – e.g. any changes to temperature and pressure requirements or carbon dioxide monitoring requirements*] |

# Schedule 3

# Measurement Equipment

| | |
|---|---|
| **Details of the Measurement Equipment at the Metering Point** | [*details to be inserted and schematic showing location to be attached to this schedule*] |
| **Metering Point** | [*details to be inserted describing the location of the Metering Point, including a schematic/map showing its location*] |

# Schedule 4

# Re-use Service

| | |
|---|---|
| **Re-use Delivery Point** | [*description to be inserted, as well as a schematic showing the location of the Re-use Delivery Point*] |
| **Re-use Delivery Point Size** | [*to be inserted, expressed in $tCO_2$/hour*] |
| **Re-use Meter** | [*details of meter requirements to be inserted*] |
| **Access right to inspect equipment/infrastructure associated with Re-use Service** | [*details of User's access rights to be inserted, where there is equipment/infrastructure on a site owned or controlled by T&SCo*] |
| **Re-use Service Operational Procedures** | *[details to be inserted of the arrangements agreed between the parties, in accordance with Section F of the Code, for offtake of carbon dioxide by the User at the Re-use Delivery Point*] |

# Schedule 5

# Conditions Precedent

***Drafting instruction**: any conditions precedent, as contemplated by Section C of the Code, are to be set out here.*

**T&SCo Conditions Precedent**

***Drafting instruction**: these are intended to be any conditions precedent for the benefit of the T&SCo, and to be fulfilled by the T&SCo, such as the approval of the Regulator under the Change in Scope mechanism under its Licence. The date by which they are to be satisfied should also be included here.*

**User Conditions Precedent**

***Drafting instruction**: these are intended to be any conditions precedent for the benefit of the User, and to be fulfilled by the User The date by which they are to be satisfied should also be included here.*

# Signatures

# CCS Network Code
# Exhibit D
# CDS Accession Agreement

T&SCo

and

CDS

and

New T&SCo

Accession agreement to the Central Data Service Contract.

20[●]

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3. Counterparts 287

**THIS CDS ACCESSION AGREEMENT** is made on [●] 20[●]

*Note: the CDS Contract will be signed by the first T&SCo(s) to appoint the CDS. Any T&SCo that is required to become a Party to the CDS Contract after the CDS Contract is signed will become a Party to the CDS Contract by signing a CDS Accession Agreement.*

**BETWEEN:**

(1) a **T&SCo** that is already a party to the CDS Contract;

(2) the **CDS**; and

(3) [a **New T&SCo** (as this term is defined in the CDS Contract).][1]

**RECITALS:**

(A) The CDS Contract dated [●], attached to this CDS Accession Agreement as an exhibit, appoints the CDS.

(B) The [New T&SCo] is acceding to the CCS Network Code and in accordance with the provisions of the CCS Network Code, the [New T&SCo] wishes to become a Party to the CDS Contract.

**THE PARTIES AGREE AS FOLLOWS**

## 1. Interpretation

1.1 Capitalised terms used in this CDS Accession Agreement shall have the meaning given to them in the CDS Contract and the CCS Network Code.

1.2 *Note: reference here any boilerplate provisions set out in the CDS Contract.*

## 2. Admission as a Party

2.1 The T&SCo(s) and the CDS admit the [New T&SCo] as a Party under the CDS Contract.

2.2 The [New T&SCo] accepts its admission as a Party and undertakes to perform and to be bound by the CDS Contract as a Party from the date of this CDS Accession Agreement.

2.3 This CDS Accession Agreement and the CDS Contract shall be read and construed as one document and references (in or pursuant to the CDS Contract) to the CDS Contract should be read and construed as references to the CDS Contract and this CDS Accession Agreement.

[1] *Note: the details of the CDS Accession Agreement are subject to the terms of the CDS Contract itself, and are to be further developed once the CDS Contract is developed.*

3. **Counterparts**

This CDS Accession Agreement may be executed in any number of counterparts and all of those counterparts taken together will be deemed to constitute one and the same instrument.

**THIS CDS ACCESSION AGREEMENT** has been entered into on the date first above written.

## Signatures

# CCS Network Code

# Annexures

# Annexure A – Carbon Dioxide Specifications - General

The carbon dioxide specifications shall as a minimum:

(a) recognise that >95mol% $CO_2$ is the industry standard;

(b) recognise that the combined non-condensable content of <4mol% is the industry standard;

(c) set the $H_2O$ specification such that, and with sufficient margin, an aqueous phase is never present during any operational scenario, including transient operations;

(d) ensure that impacts of all impurities in the $CO_2$-stream at all operational conditions are considered, when determining the maximum value of the saturation pressure;

(e) consider the impact of lighter impurity components on refrigerated storage where the $CO_2$ stream itself is being used as the refrigerant;

(f) take into consideration the impact of lighter components on the potential for running ductile fracture of pipelines carrying a $CO_2$ stream in dense phase;

(g) ensure that the impact of the level of $H_2$ on hydrogen-enhanced crack propagation behaviour is considered, and that sufficient margin to crack growth exists;

(h) in the event of a release of $CO_2$-stream, ensure that the local hazard associated by any single impurity component, is always lower, and with sufficient margin, than the hazard associated with the $CO_2$ itself;

(i) note that in dense phase the concentration of an impurity in the released $CO_2$-stream can be different from that in the original fluid, which can result in a more corrosive mixture remaining in the pipeline;

(j) where an impurity may be liquid or solid on release to the environment, the hazard associated with this release shall be considered;

(k) where an impurity may accumulate anywhere in the CCS/CCU chain, the hazard associated with this accumulation shall be considered;

(l) consider the corrosion risk of induced aqueous phases in the specification for hygroscopic components that may be present as liquids in a gaseous $CO_2$ stream, such as glycols, amines, and methanol;

(m) consider this corrosion risk in the specification for polar light components that may impact the corrosivity of an aqueous phase induced by a hygroscopic impurity;

(n) assume that the products of possible chemical reactions, either between different impurities in a $CO_2$ stream or chemical reactions between impurities and the $CO_2$, are present in the $CO_2$ stream, and consider their impact(s);

(o) keep to a practical minimum the presence of liquids that may accumulate in a gaseous $CO_2$ stream;

(p) keep to a practical minimum the presence of solids in a $CO_2$ stream; and

(q) consider the impact of solid particles within the $CO_2$ stream on equipment such as compressors, and on the injection reservoir itself (if appropriate).

# Annexure B – Carbon Dioxide Specifications – T&S Networks

***Drafting instruction:*** *on accession of a T&SCo to the Code, a new Part will be incorporated into this Annexure B that sets out the Carbon Dioxide Specifications for that T&SCos T&S Network.*

# Annexure B Part 1 – Carbon Dioxide Specifications (Net Zero North Sea Storage)

## 1. Core specification

| Component | Limit | Units | Notes |
|---|---|---|---|
| $CO_2$ | ⩾96 | mol % | |
| N2 | ⩽4 | mol % | Note 1 – Cumulative inerts and non-condensible limit (including light hydrocarbons).<br>Note 2 – Additionally for Humber onshore pipeline system the saturation pressure of the mixture shall not exceed 80 barg. |
| H2 | ⩽0.75 | mol % | Note 1, 2 above apply |
| Ar | ⩽4 | mol % | Note 1, 2 above apply |
| CO | ⩽1000 | Ppm mol | Note 1, 2 above apply |
| CH4 | Cumulative light HCs ⩽4 | mol % | Note 1, 2 above apply |
| Methane | Cumulative light HCs ⩽4 | mol % | Methane same as CH4 – see above.<br>Note 1, 2 above apply |
| Ethane | Cumulative light HCs ⩽4 | mol % | |
| Propane & other aliphatic HCs | Cumulative light HCs ⩽4 | Mol % | Note 1, 2 above apply |
| Heavy Hca (C3+) | Heavy hydrocarbons should not shift the dew point below that of pure carbon dioxide e.g. n-C4: ⩽ 0.25mol%, n-C6: ⩽ 250ppm, n-C10: ⩽ 5ppm. | | |

| Component | Limit | Units | Notes |
|---|---|---|---|
| H2O | ⩽50 | ppm mol | |
| O2 | ⩽10 | ppm mol | |
| NOx (NO, $NO_2$) | ⩽5 | ppm mol | |
| Sox (SO, $SO_2$, $SO_3$) | ⩽10 | ppm mol | |
| H2S | ⩽5 | ppm mol | |
| $NH_3$ | ⩽10 | ppm mol | |
| Methanol | ⩽350 | ppm mol | Cumulative methanol and ethanol limit of less than 350 ppm. |
| Ethanol | ⩽50 | ppm mol | |
| Particulates | Particles shall be ⩽5 micron in size and with a maximum occurrence of ⩽1 mg/Nm3.v | | |
| Mercury (Hg) | ⩽0.0025 | ppm mol | |
| Cadmium | ⩽0.005 | ppm mol | |
| Thallium | ⩽0.012 | ppm mol | |
| Formaldehyde | ⩽20 | ppm mol | |
| Acetaldehyde | ⩽20 | ppm mol | |
| Amines | ⩽1 | ppm mol | |

| Component | Limit | Units | Notes |
|---|---|---|---|
| Glycols | ⩽1 | ppm<br>mol | |

## 2. ADDITIONAL REQUIREMENTS

In addition to the requirements set out in Paragraph 1, the following requirements must be met with respect to pressure and temperature:

***Note**: specific limits to be confirmed by Net Zero North Sea Storage*

# Annexure B Part 2 – Carbon Dioxide Specifications (Liverpool Bay T&S)

## 1. CORE SPECIFICATION

| Component | Limit | Units | Notes |
|---|---|---|---|
| $CO_2$ | ≥95.0 | mol % | |
| $N_2$ | 4.0 | mol % | Combined total ≤ 4.0 mol% |
| $H_2$ | 0.75 | mol % | |
| Ar | 4.0 | mol % | |
| CO | 0.1 | mol % | |
| Methane | 4.0 | mol % | |
| Ethane | 4.0 | mol % | |
| Propane & Other Aliphatic Hydrocarbons (Heavy hydrocarbons (C3+) shall not shift the dew point below that of pure $CO_2$) | 0.15 in total | mol % | |
| $H_2O$ | 50 | ppm mol | |
| $O_2$ | 10 | ppm mol | |
| NO, $NO_2$ | 5 in total | ppm mol | NO and $NO_2$ monitored individually but limit is the sum of two |
| $SO_2$ | 10 | ppm mol | |
| $H_2S$ | 5 | ppm mol | |
| COS & $CS_2$ | 5 in total | ppm mol | |
| $NH_3$ | 10 | ppm mol | |
| BTEX | 15 in total | ppm mol | |
| Toxic Metal [2] | | | |
| Magnesium oxide (as Mg) | 160 | mg/Nm³ | |
| Manganese and its inorganic compounds (as Mn) | 2 | mg/Nm³ | |

| Component | Limit | Units | Notes |
|---|---|---|---|
| Cr | 20 | mg/Nm³ | |
| Nickel and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni) nickel and water-insoluble nickel compounds (as Ni) | 4 | mg/Nm³ | |
| Cadmium and cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd) | 1 | mg/Nm³ | |
| Mercury and divalent inorganic compounds including mercuric oxide and mercuric chloride (measured as mercury) | 1 | mg/Nm³ | |
| Thallium, soluble compounds (as Tl) | 4 | mg/Nm³ | |
| Pb | 6 | mg/Nm³ | |
| Arsenic and arsenic compounds except arsine (as As) | 4 | mg/Nm³ | |
| Selenium and compounds, except hydrogen selenide (as Se) | 4 | mg/Nm³ | |
| VOC | | | |
| Formaldehyde | 48 | mg/Nm³ | Combined total ≤ 150 mg/Nm$^3$ |
| Ethanol | 150 | mg/Nm³ | |
| Acetaldehyde | 150 | mg/Nm³ | |
| Dimethyl sulphide | 48 | mg/Nm³ | |
| Methanol | 350 | ppm mol | |
| Naphthalene | 100 | ppb mol | |
| Acid Forming Compounds | | | |
| $Cl_2$ | 20 | mg/Nm³ | |
| HF | 35 | mg/Nm³ | |

| Component | Limit | Units | Notes |
|---|---|---|---|
| HCl | 80 | mg/Nm³ | |
| HCN | 40 | mg/Nm³ | |
| Amines | 100 in total | ppb mol | |
| Nitrosamines and Nitramines (Limited to NDMA, NMEA, NDEA, NDELA, NPIP, NMor) | 37 in total | µg/Nm³ | The limit is based on the n-amine NDEA (n-Nitrosodiethylamine). |
| Dioxins and Furans and Dioxin-like PCBs (PCDD/F + dioxin-like PCBs) | 1.4 | ng WHO-TEQ/Nm³ (in total) | Limit calculated with reference to 2,3,7,8-TCDD using WHO-TEF |
| Glycols[1] | Prohibited | | |
| Selexol (polyethylene glycol dimethyl ether) [1] | Prohibited | | |

Notes:

Definition of units:

| | |
|---|---|
| ppm mol | parts per million mol |
| ppb mol | parts per billion mol |
| mg/Nm³ | milligrams per Normal cubic meter |
| µg/Nm³ | micrograms per Normal cubic meter |
| ng/Nm³ | nanograms per Normal cubic meter |

Whereby Normal conditions are 0°C and 1 atmosphere.

[1] Where the $CO_2$ Quality Monitoring Procedure CIP refers to the limit of detection, these values are to be: Glycols - 30 ppb mol and Selexol - 30 ppb mol.

[2] definitions as per HSE “EH40/2005 Workplace exposure limits” apart from Lead which comes from the Control of Lead at Work Regulation 2002

## 2. ADDITIONAL REQUIREMENTS

### 2.1 Particles

Users shall install n+1 configuration of ≤ 1µm filters with a β ratio efficiency of ≥10,000. Filter bypass is prohibited.

### 2.2 Temperature Limits

The conditions reported below are to be fulfilled by all Users regardless their actual position in the T&S system.

The conditions are intended at the Battery Limit point between User and T&Sco that is downstream the Pressure Control Valve (PCV), as denoted in the individual Connection Agreement.

The minimum and maximum fluid temperature at the interface point varies with the pressure in the network, whereas the pressure at the interface point will depend on the actual condition at a particular moment in time (number of connected emitters, flow rate of the various emitters, reservoir pressure, free flow / compressors in operation).

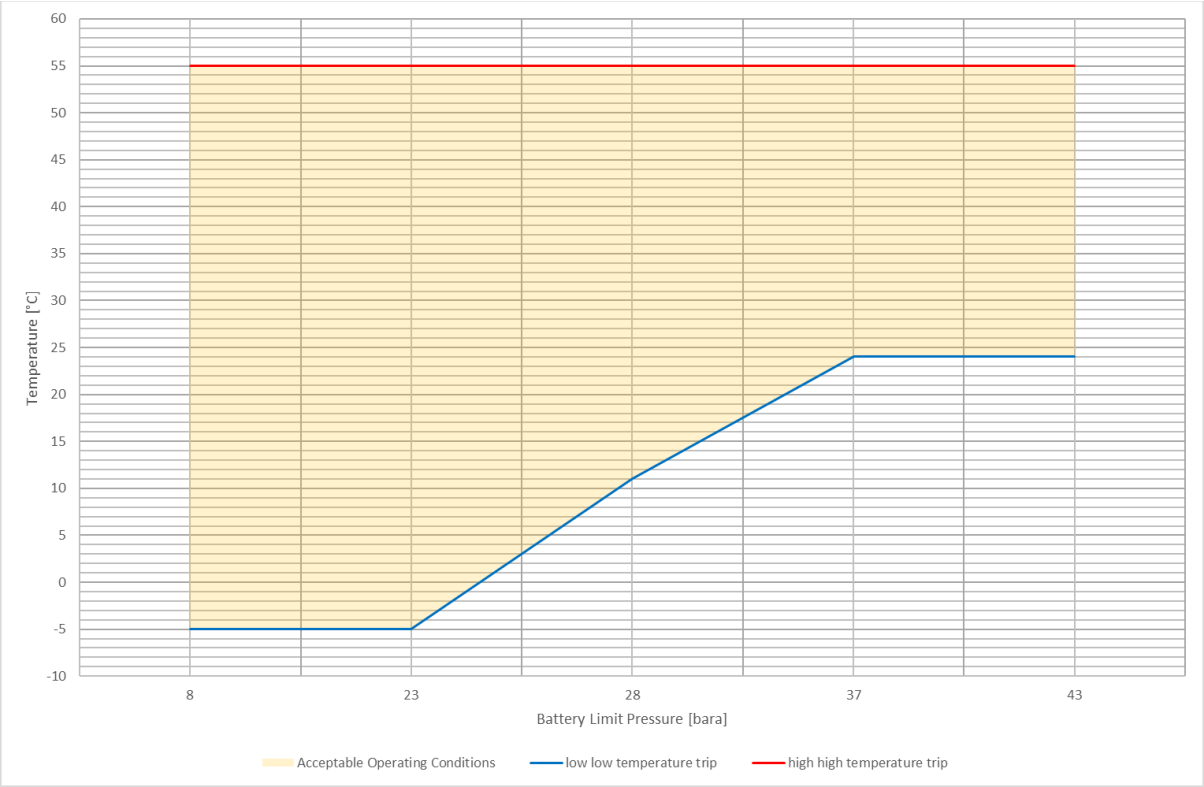



Figure 1-1: entry conditions at the Battery Limits

Note: Figure 1-1 refers to normal operating conditions and does not include commissioning and restart entry conditions at the Battery Limit.

# Annexure C – Measurement Requirements

***Drafting instruction***: *on accession of a T&SCo to the Code, a new Part will be incorporated into this Annexure C that sets out the Measurement Requirements for that T&SCos T&S Network. The $CO_2$ Quality Monitoring Procedure for each T&S Network (when developed in accordance with Section G) is to be incorporated into the relevant T&SCo's Part of this Annexure C following a Code Modification in accordance with Section G.*

***Note****: this Annexure must include details of how carbon dioxide pressure and temperature is to be monitored by T&SCo and Users, including commonly accepted standards to be applied and details of tolerance thresholds.*

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## 1 Definitions and interpretation

1.1 The following terms shall have the following meanings:

(a) CO2 Rich Stream means Carbon Dioxide and impurities; and

(b) Teesside CO2 Gas Gathering Pipelines means the T&S Network in respect of which the User's Delivery Point relates.

1.2 Unless the subject matter or context otherwise requires or is inconsistent therewith, terms and expressions defined in Section K (Glossary) of the Code and in the Connection Agreement and Construction Agreement have the same meanings, interpretations or construction in this Annexure C (Measurement Requirements – Net Zero North Sea Storage).

1.3 For the purposes of this Annexure C (Measurement Requirements – Net Zero North Sea Storage):

a) "shall" is to be understood as mandatory; and

b) "should" indicates best practice and is the preferred option. If an alternative method is used then a suitable and sufficient risk assessment and or cost benefit analysis must be completed to show that the alternative method delivers the same, or better, level of protection.

## 2 General

### 2.1 Purpose

The purpose of this Annexure C (Measurement Requirements – Net Zero North Sea Storage) is to specify the requirements that shall be addressed in the design and operation of gas phase $CO_2$ metering and analysis systems for Users delivering carbon dioxide into the Net Zero North Sea Storage Teesside $CO_2$ Gas Gathering Pipelines.

## 3 Regulations, Codes & Standards

3.1 Any metering and analysis shall be designed, manufactured, tested and delivered in accordance with the relevant sections of the latest editions (including addendums) of the following international and national codes and standards:

| Document Number | Title |
|---|---|
| (EU) 2018/2066 | Monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 601/2012 |
| ASME B31.3 | Process Piping |
| ASME B16.5 | Pipe Flanges and Flanged fittings NPS ½ through NPS 24 Metric/Inch Standard |
| BS ISO 5168 | Measurement of fluid flow – Procedures for the evaluation of uncertainties |
| ASME PTC 19.3 TW | Thermowells Performance Test Codes |

| Document Number | Title |
|---|---|
| BS EN ISO/IEC 17025 | General requirements for the competence of testing and calibration laboratories |
| BS EN 14181 | Stationary source emissions. Quality assurance of automated measuring systems |
| BS EN 15267-3 | Air quality – Certification of automated measuring systems – Part 3: Performance criteria and test procedures for automated measuring systems for monitoring emissions from stationary sources |
| BS EN 15259 | Air quality. Measurement of stationary source emissions. Requirements for measurement sections and sites and for the measurement objective, plan and report |
| IEC 60079 | Explosive Atmospheres (All Parts) |
| IEC 60751 | Industrial platinum resistance thermometers and platinum temperature sensors |
| IEC 61326-1 | Electrical equipment for measurement, control and laboratory use – EMC requirements |
| IEC 61285 | Industrial Process Control – Safety of analyser houses |
| IEC TR 61831 | On-line analyser systems – Guide to design and installation |
| ISO 19230 | Gas analysis – Sampling guidelines |
| BS EN ISO 6974 | Natural Gas – Determination of composition and associated uncertainty by gas chromatography |
| BS ISO 27919-1 | Carbon Dioxide Capture |
| BS ISO 10790 | Measurement of fluid flow in closed conduits – Guidance to the selection, installation and use of Coriolis flowmeters |
| BS ISO 15848 | Industrial valves – Measurement, test and qualification procedures for fugitive emissions |
| ISO 5208 | Industrial valves – Pressure testing of metallic valves |
| ISO 9000 | Quality Systems. Relevant Parts |
| MCERTS | Environment Agency Monitoring Certification Scheme for environmental permit holders |
| IEC 61508 | Functional safety of electrical / electronic / programmable electronic safety-related Systems |
| IEC 61511 | Functional safety – Safety instrumented systems for the process industry sector |

## 4 Responsible Persons

4.1 Each of the:

a) T&SCo; and

b) User

shall appoint a responsible person to observe and perform the obligations of the T&SCo or User (as applicable) set out in this Annexure C (Measurement Requirements – Net Zero North Sea Storage) as they relate to metering, analysis and measurement.

## 5 Summary

5.1 This Annexure C (Measurement Requirements – Net Zero North Sea Storage) sets out the details in respect of:

a) $CO_2$ Rich Stream flow measurement uncertainty of ±1.0%;

b) Coriolis flow metering;

c) Individual, dedicated meter flow computers;

d) Online analysers / detectors for quality monitoring purposes of selected components of carbon dioxide rich stream;

e) Periodic sampling facility for laboratory testing; and

f) Transmission of metering and analysis data, diagnostics and meter station status to the T&SCo's Remote Terminal Unit (RTU).

## 6 Deviations from these Measurement Requirements

6.1 Any deviations from the requirements detailed within this Annexure shall be formally submitted to T&SCo for consideration; full justification including technology readiness of alternative hardware shall be provided.

6.2 In considering any proposed deviations, T&SCo shall have regard to the possibility of the deviation resulting in an unfair advantage over other Users or increases risk to people, environment or business.

6.3 Any deviations from the Measurement Requirements shall only be permitted through a Modification to this Annexure C (Measurement Requirements – Net Zero North Sea Storage) or a User-specific derogation under Schedule 2 to the Connection Agreement.

## 7 Measurement Uncertainty

7.1 The following quantities shall be measured and reported to the T&SCo to an uncertainty of ±1.0% at a 95% confidence level over the continuous operating range of flow rates and process conditions:

a) All $CO_2$ Rich Stream mass flow rate measurements.

## 8 Units

8.1 The following units shall be used:

a) Mass Flow - metric tonnes per hour (t/h)

b) Pressure - bara

c) Temperature - deg C

d) Density - $kg/m^3$

## 9 Daily Reporting

9.1 Daily reports for the previous Day from User shall be made available by the User to the T&SCo by 10:00am the following day.

9.2 Reporting of data to the Central Data Service (CDS) shall be in accordance with the CCS Network Code.

## 10 Process Conditions

10.1 The fluid passing through the metering system shall be in single phase - gas.

10.2 The T&SCo Teesside Gas Gathering Pipelines are controlled by adjusting the downstream high pressure (HP) compressor(s) export flow to maintain a constant pressure at the inlet manifold upstream of the high pressure (HP) compressors. When pipeline entry isolation valves are open, the pressure at the User's metering point will therefore be floating and affected by the total flow of all Users exporting into the pipelines.

10.3 The flowing fluid temperature at the tie in point between the User and the pipeline shall meet the operating temperature requirements of the Carbon Dioxide Specifications. Flowing fluid temperature through the metering point shall therefore be constrained by a User in order to meet the Entry Provisions requirements downstream of the metering point.

10.4 The User shall ensure that no liquid drop out occurs within and downstream of the metering point to prevent carbon dioxide liquefaction leading to higher pipeline velocities or slug flow at the point of connection to the Teesside CO2 Gas Gathering Pipelines.

## 11 Metering System Configuration

### User Export Flow Metering

11.1 Flow measurement shall be continuous.

11.2 Metering system shall be supplied with N + 1 Coriolis meters, where N is the number of meters in service. Each meter shall have the capacity of no less than the maximum metering system throughput divided by N. Each meter shall be provided with appropriate isolation to allow removal for off-site calibration by a T&SCo approved facility.

11.3 It shall not be possible to divert flow to vent between flow metering point and the tie-in with the Teesside CO2 Gas Gathering Pipelines, any required venting shall occur upstream of the metering point. Any manually operated valves for maintenance vent or drain must be fully closed and of high integrity to minimise leak paths and fugitive emissions. Valves shall be sealed closed as per the User’s site practice.

11.4 Inline analysers / detectors (if applicable) and analyser / detector sample take off shall be located upstream of the metering point. Piping shall be configured such that the carbon dioxide stream can be diverted to vent between the analysers / detectors and the metering to allow for the carbon dioxide to be proved to be within specification prior to being allowed to be exported into the Teesside CO2 Gas Gathering Pipelines.

### User Re-use Flow Metering

11.5 Where the T&SCo has approved the User re-using carbon dioxide from the gas gathering network for a short term and intermittent basis to aid startup of low pressure (LP) compression facilities, the following requirements shall apply:

a) as a minimum, a single Coriolis meter stream shall be supplied with appropriate isolation to allow removal for off-site calibration. The provision of a spare meter stream is not a requirement but may be provided by the User to increase availability; a

correctly working flow meter shall be a requirement of the T&SCo opening and allowing use of the Re-use Service;

b) it shall not be possible to divert flow to vent between the tie-in with the Teesside CO2 Gas Gathering Pipelines and the flow metering. Any manually operated valves for maintenance vent or drain must be fully closed and of high integrity to minimise leak paths and fugitive emissions. Valves shall be sealed closed as per the User's site practice; and

c) the Re-use Meter shall be connected to a flow computer and report via the station computer provided for export flow.

## 12 Instrumentation

12.1 Pressure, temperature and composition shall be measured using high stability SMART instruments of proven performance and reliability with a preferred minimum technology readiness of two (2) years in similar service. The User shall seek the T&SCo's approval for any proposed instrumentation with less than two (2) years similar service. The User shall be required to demonstrate technology readiness level (TRL) as part of the approval process (Refer to Appendix A for TRL Level definitions). The sensitivity to environmental and process conditions shall be taken into account in the design of the installation arrangement.

## 13 Flow Meters

13.1 Coriolis flow metering in conformance with ISO 10790 is the required technique for flow metering.

## 14 Analysis

14.1 Online analysers / detectors shall be provided by the User based on a risk assessment of the potential challenges to the pipeline network and storage operation created by components in the User's raw emission stream. Analysers and/or detector selection shall be approved by the T&SCo. Approval by the T&SCo does not relieve the User of compliance with any analyser requirements imposed by the applicable Revenue Support Contract or similar agreement.

14.2 Where the selected technology allows, online analysers / detectors shall provide continuous output measurement of the component measured. Safety related alarm and trip points shall be agreed with the T&SCo to ensure compliance with Annexure D - $CO_2$ Quality Monitoring Procedure. Credit can only be taken for alarms in risk assessments such as LOPA if the User Operator has a minimum of 15 minutes, from the alarm being initiated, to take corrective action before the trip or breach of the alarm occurs. Any such trip or breach of the alarm shall not be treated as confirmation of suspected or actual Non-Compliant $CO_2$, identification of which shall only be determined in accordance with the $CO_2$ Quality Monitoring Procedure.

14.3 As a minimum the following online analysers / detectors shall be provided by Users for continuous monitoring of the following components:

(a) Carbon dioxide content/quality;

(b) Water;

(c) Oxygen;

(d) NOx; and

(e) SOx.

14.4 Where manual sampling identifies regular breaches of limits for components not online monitored, the T&SCo reserves the right to add those components to the list of components subject to the online analyser provision set out at paragraph 15(c) above, in accordance with the provisions of the $CO_2$ Quality Monitoring Procedure and subject to the revisions provisions set out in Section G (Common Interface Procedures) to the CCS Network Code.

14.5 Online analysers / detectors used for proving conformance with Annexure D $CO_2$ Quality Monitoring Procedure shall not be used for control of equipment upstream.

14.6 Periodic sampling for testing within a laboratory shall be undertaken for all other components that are present in the User raw gas stream.

**Analyser / Detector Selection**

14.7 Analysers and/or detectors selected shall be of high availability and high reliability to ensure that any deviation towards the limits stated in Annexure D $CO_2$ Quality Monitoring Procedure is detected such that appropriate action can be taken to ensure the Teesside pipeline entry requirements are not breached.

14.8 Analyser and/or detector performance shall meet or exceed that required to achieve the process objectives, including parameters such as analyser and/or detector response time and lower detection limit.

14.9 Analysers and/or detectors shall be housed suitably to ensure stable operation in the ambient conditions within which they are installed. It shall be noted that although many analysers have a wide ambient operating temperature range, they do not necessarily provide stable operation in the event of large temperature swings within this range, such as those caused by diurnal variations, and some degree of temperature control is therefore recommended.

14.10 Where multiple analysers and/or detectors, especially if including some complex types, are installed at the same location, then it is recommended that a comfortable maintenance environment is provided, e.g., analyser house, to ensure prompt maintenance and maximise analyser and/or detector availability; this shall ensure that adverse weather conditions do not prevent the maintainer working at the analyser and/or detector location when essential maintenance of the analyser and/or detector system is required.

14.11 Analysers and/or detectors selected shall have inbuilt diagnostics to allow the reporting of analyser health to supervisory systems. For all online analysers and/or detectors a fault signal shall be provided that shall be triggered when any fault that affects the reliability of the analysis signal occurs. It shall not be triggered by advanced warnings of maintenance/ calibration due, but shall be triggered by calibration overdue. This fault signal and diagnostic information shall be made available in the T&SCo pipeline control room via the remote terminal unit (RTU) interface.

14.12 A preventative maintenance plan shall be implemented for each analyser system including the identification of key spares and consumables.

**Sampling System**

14.13 Where the sensor type/design requires it, a sampling system shall be provided to extract and transport representative samples to the online analysers and/or detectors at process conditions suitable for use by the analysers and/or detectors.

14.14 The sample system shall be designed to minimise the transit time between the sampling point and the analysers and/or detectors. It shall be assured that the combined transit time and analyser and/or detector response (overall response) is rapid enough to guarantee the pipeline entry requirements and to ensure pipeline safety. Given that fast, turbulent flow is required in the sample transport line to maintain a representative sample, transit time shall not exceed ninety (90) seconds unless technical justification is provided and approved by the T&SCo. If a single line sample transport system does not meet the transit time requirement for the application, then a fast loop shall be provided.

14.15 For gas analysers and/or detectors the sample handling system shall be designed so that the sample is in its gaseous phase at the point of entry to the on-line analyser and/or detector, across the full range of compositions that may be encountered in service. If applicable, the sample system shall be designed to prevent ingress of liquid droplets into the transport system. If necessary, the sample shall be kept above the dew point or frost forming temperature, if this is higher than the minimum ambient temperature.

14.16 The sample systems for trace moisture analysers shall have tubing and components that have appropriate treatments applied for trace measurement, such as electropolishing and passification. A change in concentration at the sample take-off point shall be detected at the analyser and/or detector inlet faster than the permitted sample transit time. Minimal moisture hold-up within the sample system is permitted.

14.17 Sample system diagnostics shall be included with the analyser and/or detector diagnostics to verify that the complete analyser and/or detector system is working correctly. Sample system faults are a frequent cause of analyser system malfunction, with loss of sample flow being one of the most common reasons. Sample system fault diagnostics shall be included in the analyser alarm group.

14.18 Exhaust gas from the analysers and/or detectors and fast loop systems shall be vented to atmosphere at a safe location.

**Carbon Dioxide Analysis**

14.19 For carbon dioxide concentration the carbon dioxide composition analysis equipment required for the User's Revenue Support Contract or similar agreement shall be utilised.

14.20 Should Gas Chromatographs (GC) be utilised, these shall be optimised for high purity carbon dioxide as set out by BS ISO 27919-1.

14.21 For the carbon dioxide analysis, as a minimum, one (1) duty and one (1) standby analyser shall be installed. The duty analyser shall provide a composition reading at least every ten (10) minutes or more often if the time interval specified within Revenue Support Contract is shorter.

14.22 The analyser shall be able to detect and report carbon dioxide purity measurement values between 92 and 100mol% with a sensitivity better than 0.1%. Accuracy shall be better than ±0.3% of reading.

14.23 User shall develop calibration / validation strategy for the gas chromatographs (GC) to ensure accuracy is maintained.

**Water Content Detector**

14.24 The water content detector shall be highly reliable and achieve a minimum TRL of 8 at the start of commissioning. Where a Safety Instrumented Function (SIF) is required to meet the Target Mitigated Event Likelihood (TMEL) requirements stipulated in the Entry Specification, the water content detector shall be certified as per IEC 61508 / 61511 to allow their use as a trip initiator.

14.25 As a minimum one (1) duty and one (1) standby water content detector shall be provided.

14.26 It is expected that the analyser should utilise tunable diode laser (TDL) as the measuring principle.

14.27 The water content detector shall be able to detect and report moisture measurement between 10 and 100ppmv with a sensitivity better than 2ppmv in 96% carbon dioxide. Accuracy shall be better than ±3ppmv.

14.28 The User shall develop calibration / validation strategy for detector to ensure accuracy is maintained.

**Oxygen Detector**

14.29 The oxygen content detector shall be highly reliable and achieve a minimum TRL of 8 at the start of commissioning.

14.30 As a minimum one (1) duty and one (1) standby oxygen detector shall be provided.

14.31 If electrochemical technology is proposed for this application, electrochemical type sensors shall be carefully selected to ensure these are not poisoned or rapidly depleted by the high concentration of carbon dioxide.

14.32 Quenched UV luminescence may be a more suitable measuring technique.

14.33 The oxygen content detector shall be able to detect and report an oxygen measurement between 2 and 50ppmv with a sensitivity better than 1ppmv, Accuracy shall be better than ±2ppmv.

14.34 The User shall develop calibration / validation strategy for detector to ensure accuracy is maintained.

**Analysis of Nitrogen Oxides**

14.35 For NOx analysis, UV, fourier transform infra-red (FTIR) or nondispersive infra-red (NDIR) absorption analyser or Chemiluminescence analyser shall be utilised which shall be highly reliable and proven in use in carbon dioxide stream applications.

14.36 The User shall provide suitable redundancy in the form of an installed or a warehouse spare analyser.

14.37 Spectroscopy based photometers requires individual components to be analysed e.g. NO, NO2 etc. as opposed to a single conglomerate. The User's raw gas shall be used to determine the individual components required to be analysed.

14.38 The analyser shall be able to detect and report NOx measurement between 0.1 and 15ppmv with a sensitivity better than 0.1ppmv, Repeatability shall be better than ±0.25ppmv.

14.39 User shall develop calibration / validation strategy for detector to ensure accuracy is maintained.

**Analysis of Sulphur Oxides**

14.40 For SOx analysis, UV, fourier transform infra-red (FTIR) or nondispersive infra-red (NDIR) absorption analyser or UV-fluorescence analyser shall be utilised which shall be highly reliable and proven in use in carbon dioxide stream applications.

14.41 The Users shall provide suitable redundancy in the form of an installed or a warehouse spare analyser.

14.42 Spectroscopy based photometers requires individual components to be analysed e.g. SO2, SO3 etc. as opposed to a single conglomerate. The User's raw gas shall be used to determine the individual components required to be analysed.

14.43 The analyser shall be able to detect and report SOx measurement between 1 and 25ppmv with a sensitivity better than 0.5ppmv, Repeatability shall be better than ±1ppmv.

14.44 The User shall develop calibration / validation strategy for detector to ensure accuracy is maintained.

## 15 Periodic Sampling Requirements

15.1 Users shall have the necessary facilities for taking periodic samples of the User's export carbon dioxide stream for laboratory analysis.

15.2 Due to the toxic nature of the carbon dioxide stream, the periodic sampling system shall be designed to ensure that risk to the operator is as low as reasonably practicable. This may involve for example the use of actuated valves and a vent system that can be controlled from a panel located a safe distance from the periodic sampling unit.

15.3 The periodic sampling system shall allow for up to three (3) sample vessels to be filled simultaneously to allow for laboratory testing by the User's selected laboratory, the T&SCo's selected laboratory and with the third sample acting as a control for independent verification in the event of a dispute.

15.4 Samples shall be taken to confirm component levels remain within specification and to verify online analyser readings. The Users shall notify T&SCo if any test results indicate that components not specified in the Carbon Dioxide Specifications are present in the carbon dioxide stream. For details of sampling frequency refer to Annexure D $CO_2$ Quality Monitoring Procedure.

15.5 The sample probe shall be designed and installed to ensure a representative sample is obtained.

15.6 The probe and sampling equipment shall be suitably treated to ensure that trace components within the stream are not lost and the sample contained within the sample vessel is a true reflection of the export stream.

15.7 The T&SCo or delegate shall have the right to be present at the sampling arrangement during sample takeoff and to be able to remove sample vessels from the User premises for

analysis, or request a sample vessel is to be sent for analysis, at a laboratory of the T&SCo's choosing.

15.8 The User's selected laboratory shall be United Kingdom Accreditation Service (UKAS) accredited and in conformance with ISO/IEC 17025.

15.9 The results of the User's laboratory testing shall be made available electronically to the T&SCo within eight (8) hours of being received by the User.

15.10 The User must retain all historical analysis (online or laboratory), for auditing and submission on request by the T&SCo or the Regulator, for at least ten (10) years.

## 16 Density Measurement

16.1 Coriolis meter shall provide density readings for density reporting.

## 17 Flow Metering Package

17.1 The metering configuration shall be designed to meet Coriolis flow meter manufacturer's recommended installation configuration including any straight run requirements.

17.2 The Measurement Equipment shall not sit in a pipework low point where liquids may collect.

17.3 High quality double block and bleeds valves suitable for the service shall be used.

## 18 Equipment Certification

18.1 All instrumentation including analysers and/or detectors shall be certified for the operating range by a United Kingdom Accreditation Service (UKAS) accredited laboratory to be within agreed tolerances.

18.2 Flow Meters shall be calibrated using carbon dioxide, unless such facilities are not available. Where carbon dioxide cannot be used for calibration, any alternative medium proposed shall be subject to the T&SCo's approval.

## 19 Flow Computer System

19.1 Flow computation shall be performed on high-speed digital flow computers. It is recommended that one (1) flow computer is supplied per meter run to provide a high degree of availability.

19.2 Each flow computer shall hold high integrity registers for the following sets of totals:

a) Accumulative (non-re-settable) totals;

b) Flow (Rolling) over last twenty four (24) hours;

c) Current Day (since last daily reporting cut-off time) totals; and

d) Previous day (between previous two (2) daily cut-off times) totals.

19.3 This shall allow twenty four (24) hour carbon dioxide emission totals to be reported. In the event of station computer failure or communications failure, the previous Day totals may be manually read from each flow computer. The provision of a display and/or keypad for each flow computer is recommended to facilitate manual reading of totals.

19.4 A low flow cut-off arrangement is recommended to prevent spurious totalisation from small zero (0) errors in transducers when a stream is off-line. A maintenance mode must be provided to prevent transmitter testing or flow calculation tests corrupting the operational totals.

19.5 The use of keypad values for flow rate in operational mode is not permitted.

19.6 The transducer inputs shall be continuously monitored for failures, if one is detected a default value shall be used in the calculations, an alarm raised and an investigation initiated. Default values shall be representative of flowing conditions. For the Coriolis meters the default value shall be 0 kg/hr in order that such a failure is clear and unambiguous.

19.7 A redundant station computer is recommended in order to provide the following facilities:

a) sum totals from each flowing stream;

b) logging $CO_2$ Rich Stream mass flow in near real-time;

c) logging $CO_2$ Rich Stream mass flow every thirty (30) minutes;

d) calculating and logging mass of carbon dioxide flow (not including impurities) every thirty (30) minutes based on carbon dioxide concentration output from carbon dioxide composition analysis equipment and measured $CO_2$ Rich Stream flow;

e) produce daily export reports that accurately reflect the twenty four (24) hour stream totals for both CO2 Rich Stream and total carbon dioxide;

f) provide an interface with the User's process control system and data source for transmission of data to the T&SCo remote terminal unit (RTU) (Note this shall include all fault failure diagnostics); and

g) log all alarms, events and manually initiated commands.

19.8 For all alarms that may be generated, the User shall ensure an appropriate alarm response is identified, documented and easily available to plant operations personnel.

## 20 Factory Acceptance Testing

20.1 User shall invite the T&SCo to witness factory acceptance testing of the flow metering and analysis equipment, providing a minimum of ten (10) Business Days notice.

## 21 Documentation required by T&SCo

21.1 The following documentation is to be sent to the T&SCo for comment:

a) metering conceptual design summary;

b) design dossier featuring data sheets, schematics, piping and instrumentation diagrams (P&IDs), piping isometrics, process data, uncertainty calculations, technical specifications, project plan;

c) functional design specification (FDS) for metering system (including analysers / detectors) and flow computers;

d) risk identification (e.g. HAZOP) and risk assessment (e.g. LOPA) reports relating to breach of the Entry Provisions requirements;

e) carbon dioxide sample grab and transportation procedure for laboratory analysis;

f) Flow Meter calibration dates and procedure;

g) factory acceptance test dates and procedures;

h) flow meter calibration and factory acceptance test reports;

i) commissioning dates and procedures;

j) start-up date and procedure; and

k) metering station databook including operating and calibration test/ maintenance procedures, piping instrumentation diagrams (P&IDs), piping isometrics, process data, detailed description of metering system, summarised flow computer functional design specifications (FDS) and uncertainty calculations.

## 22 Metering Databooks

22.1 The metering databook shall contain full details of the Flow Meter system, analysers and/or detectors and data transmission equipment used and their operating ranges and measurement uncertainty. The operational and validation methods employed shall be included.

22.2 Example contents include:

a) system schematics with piping and instrumentation diagram (P&ID). Important piping isometrics;

b) detailed description of the system with list of equipment and operational data;

c) calibration test and maintenance procedures, tolerances and frequencies for the metering system. List of example calibration certificates;

d) operating procedures for the metering system;

e) details of sample probe, pressure let-down, sample line transit time, gas quality analysers / detectors;

f) list of calculations/ functions performed by the flow computer system and example computer constants where applicable;

g) list of test equipment with calibration frequencies, operating ranges and tolerances with example certification;

h) measurement uncertainty calculations;

i) list of permanent dispensations; and

j) maintenance log.

22.3 The metering databooks are to be issued to the T&SCo for review. It is recommended that the documentation is provided in electronic form and has a contents list in line with the above.

22.4 The metering databook is a key document that will be reviewed during the metering audit and should contain the latest versions of procedures and drawings. It shall also include a maintenance log to record maintenance undertaken and details of missed maintenance. It is expected that the document should be updated annually.

## 23 Metering and Analysis Audits

23.1 The T&SCo shall perform metering and analysis audits at the installation as soon as normal operation has been established, and thereafter at T&SCo discretion in accordance with Section F of the Code.

23.2 The audit requirements and method shall be covered in a metering and analysis audit terms of reference document. This will detail access required to User historical data, maintenance records, carbon dioxide component excursion events and other breaches relating to carbon dioxide capture and disposal.

23.3 Any findings shall be recorded, tracked and close out approved by the T&SCo.

## 24 Dispensations

24.1 The metering and analysis system shall be operated and maintained to an agreed standard and set of procedures. Situations may arise infrequently that result in difficulties in following these procedures, for example due to equipment failure or changes in process conditions. Often these changes are foreseen and may be planned well in advance, though occasionally faults may occur which cannot be resolved quickly.

24.2 In situations where agreed procedures can no longer be followed, a dispensation may be sought by the User, subject to such dispensation not contravening Section F of the Code. Dispensation applications to the Teesside pipeline system shall include a summary of steps being taken to minimise the impact on custody transfer metering.

## 25 Mis-measurements

25.1 The metering and analysis system shall operate automatically and normally create a daily export report for the T&SCo.

25.2 Occasionally daily report quantities may need to be adjusted in order to correct them for an event or fault that has affected the metered figures. This will be covered by an operating procedure developed for the T&S Network.

25.3 Metered quantities may only be corrected when supported by a valid mis-measurement report and subject to Section F of the Code. Flow measurement undertaken in other locations in the pipeline systems shall be used to validate corrected flows.

## 26 Proposed changes to method of Measurement / Analysis

26.1 The T&SCo shall be notified well in advance of any significant changes to the User's metering/ analysis and the data reporting system.

26.2 Changes may be due to change in emission rates or specification, difficulties in operating the installed system or upgrading due to obsolescence/ adoption of new techniques.

26.3 The T&SCo shall review the proposal with the aim of ensuring consistency throughout all the metering systems.

26.4 Implemented changes pursuant to a Modification of the Code shall be incorporated into the metering databook, sections such as procedures and uncertainty calculations may need to be updated.

## 27 Metering Meetings

27.1 Regular meetings shall be conducted by the T&SCo; metering specialists of the Users shall participate in the meeting.

27.2 Meetings shall be held at least annually, representatives of the Department for Energy Security and Net Zero (or any successor) may be invited to attend annual meetings for their information/ comment.

27.3 The purpose of the meetings is to review the Users metering and analysis systems. Any problems or proposed changes will be discussed that may impact upon all representatives.

27.4 Typical agenda items include:

a) safety issues and any safety alerts since the last meeting;

b) action log status;

c) any general carbon credit accounting issues;

d) any general metering/ analysis/ data reporting issues;

e) status of metering and analysis systems;

f) metering audit summary;

g) dispensation summary;

h) mis-Measurement summary; and

i) review of each metering and analysis system since last meeting and any proposed changes over the next twelve months.

27.5 An action log will be used to record agreed actions with a responsible party and target date. The action log will also be used to record any technical decisions made. Copies of presentation material from the meeting will be issued to attendees. It is expected that all organisations invited will be represented by the primary contact or deputy. It is anticipated that six (6) weeks' notice will be given for meetings.

**Appendix A – Technology Readiness Level Definition**

TRL definitions based on ISO 16290.

| Phase | TRL | Stage | Description |
|---|---|---|---|
| Operations | TRL 9 | Operations | The technology is being operationally used in an active facility |
| Deployment | TRL 8 | Active Commissioning | The technology is undergoing active commissioning |
| | TRL 7 | Inactive Commissioning | The technology is undergoing inactive commissioning. This can include works testing and factory trials but it will be on the final designed equipment, which will be tested using inactive simulants comparable to that expected during operations. Testing at or near full throughput will be expected |
| Development | TRL 6 | Large Scale | The technology is undergoing testing at or near full-scale size. The design will not have been finalised and the equipment will be in the process of modification. It may use a limited range of simulants and not achieve full throughput |
| | TRL 5 | Pilot Scale | The technology is undergoing testing at small to medium scale size in order to demonstrate specific aspects of the design |
| | TRL 4 | Bench Scale | The technology is starting to be developed in a laboratory or research facility. |
| Research | TRL 3 | Proof of Concept | Demonstration, in principle, that the invention has the potential to work |
| | TRL 2 | Invention & Research | A practical application is invented or the investigation of phenomena, acquisition of new knowledge, or correction and integration of previous knowledge |
| | TRL 1 | Basic Principles | The basic properties have been established |

# Annexure C Part 2 – Measurement Requirements (Liverpool Bay T&S)

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## 1. SCOPE OF THE DOCUMENT

This document sets out the Measurement Requirements for the Liverpool Bay T&S Network in accordance with Section F of the Network Code.

## 2. CARBON DIOXIDE STREAM MEASUREMENT REQUIREMENTS

Prior to any carbon dioxide being allowed to be delivered at a Delivery Point to flow in the T&S Network, the User must ensure that the following certificates are made available to the T&SCo and

that the Measurement Equipment complies with the Measurement Requirements and that such compliance has been validated by the Independent Verifier appointed by T&SCo:

1. Design and Certifications Manual, including:

    (a) Declaration of conformity by the constructor that the Measurement Equipment has been designed in compliance with local legislation and technical standards.

    (b) Type approval certifications of measuring devices for compliance to metrological controls from accredited agencies authorized by notified bodies.

2. Operating and Maintenance Manual, including:

    (a) Description of start-up modalities;

    (b) Description of utilisation modalities;

    (c) List and description of each equipment/system used;

    (d) Instructions and procedures for the periodic and corrective maintenance to take out and replacement of all components and accessories included in the spare parts list;

    (e) Instructions of estimative maintenance, with the schedule of inspection programs;

3. Factory Acceptance Test (FAT) certificate

4. Site Acceptance Test (SAT) certificate

5. Calibration Certificates

The Measurement Equipment shall be certified by the manufacturer or by a third party appointed by the User:

(a) prior to any carbon dioxide being allowed to be delivered at the Delivery Point to the T&S Network; and

(b) in case of major modifications of the Measurement Equipment.

The standards and requirements set out in this Annexure C (Measurement Requirements) are designed to be based on the capability of the best available technology for the monitoring of carbon dioxide captured for transport and storage, with sufficient performance assurance to satisfy a Reasonable and Prudent Operator of the Measurement Equipment (including by Users having regard to their User Requirements).

The T&SCo considers the below instruments capable of satisfying the standards and requirements set out in this Annexure C (Measurement Requirements), which Users may use as guidance when selecting their Measurement Equipment:

| Instrument | Manufacturer | Code |
|---|---|---|
| Instrument 1 – FTIR for multi-species analysis | California Analytical Instruments, Inc.<br>1312 West Grove Avenue<br>Orange, CA 92865<br>Phone: 714-974-5560<br>Fax: 714-921-2531<br>Website: www.gasanalyzers.com | There are three models of the CAI FTIR:<br>• 600 FTIR – 4.3 m path length<br>• 600 FTIR-SC – 8.2 cm path length<br>• 700 FTIR – 10.2 m path length |
| Instrument 2 – MicroGC/TCD for Argon, Nitrogen, Hydrogen and H2S analysis | Qmicro by Sensirion · Neptunusstraat 21 · 7521 WC · Enschede · The Netherlands · Phone: +31 88 6760 700<br>info@qmicro.com · www.qmicro.com | DynamiQ-S micro GC |
| Instrument 3 – Oxygen Analyser electrochemical | Advanced Micro Instruments<br>225 Paularino Ave<br>Costa Mesa, CA 92626<br>(714) 848-5533<br>www.AMIO2.com | Oxygen Analyzer Model 2001RS |
| Instrument 4 – GC-PID – Naphthalene | STEP Sensortechnik und Elektronik Pockau GmbH<br>Siedlungsstraße 5-7<br>09509 Pockau- Lengefeld<br>Germany | GC - VUV – Analyzer<br>Gas Chromatography Photoionization Detector<br>GC-PID |

If a User selects the instruments specified above and, during detailed design development, installation, commissioning and/or performance testing of such instruments forming part of the Measurement Equipment, the User can demonstrate to T&SCo's reasonable satisfaction that such Measurement Equipment is unable to satisfy the Measurement Requirements or there is insufficient performance assurance to satisfy a Reasonable and Prudent Operator of the Measurement Equipment (including by Users having regard to their User Requirements), the T&SCo shall put forward an amendment to this Annexure C (Measurement Requirements) as a Modification Proposal under paragraph 44 of Section B (Governance) of the Code to address this discrepancy by (as applicable and appropriate with respect to the discrepancy):

(a) amending the Measurement Requirements; and

(b) if proposed by the User, approving alternative Measurement Equipment.

The Modification Proposal put forward by the T&SCo to address this discrepancy shall take into account the following:

(a) the safe and efficient operation of the T&S Network and the User Facility and the User Requirements; and

(b) the need to balance the commercial interests of the T&SCo and Users with respect to the cost and risk of operation of the T&S Network and User Facility.

A User shall be entitled to dispute the T&SCo's determination not to proceed with putting forward a Modification Proposal and/or the scope of a Modification Proposal put forward in connection with this paragraph and may refer the matter to dispute resolution in accordance with the provisions of Section B (Governance), including to an Expert for determination in accordance with the provisions of paragraph 51 of Section B (Governance).

2.1 Metering Uncertainty- Flow Measurement

The overall Uncertainty of the Measurement Equipment shall:

(a) where the Flow Rate is equal to or greater than 10% of the Maximum Flow Rate (upper range), be equal to or less than +/- 1 % of the measured value at 95% confidence interval; and

(b) where the Flow Rate is between the Minimum Flow Rate and less than 10% of the Maximum Flow Rate (lower range), be equal to or less than +/- 2 % of the measured value at 95% confidence interval.

The specified measurement Uncertainty can only be achieved under conditions where the measurement occurs on a single – phase fluid. Therefore, the Metering Point should be positioned within the process plant of the User Facility where this condition is ensured, considering the anticipated phase behaviour of the carbon dioxide stream.

The User shall carry out a Measurement Uncertainty Assessment when the Measurement Equipment is commissioned, which consists of a report on the calculation of theoretical uncertainty. This Measurement Uncertainty Assessment shall demonstrate that specified Uncertainty requirements are fulfilled, offering assurance that products satisfy the Uncertainty requirements specified above. Such Measurement Uncertainty Assessment will be ascertained in accordance with internationally recognized and accepted standards, including, but not limited to the guide to the expression of Uncertainty in measurement ISO/IEC Guide 98 all parts.

The Measurement Uncertainty Assessment shall be reviewed annually and in cases of major changes to the Measurement Equipment.

## 2.2 Measurement Equipment

As defined in paragraph 5 of Section F of the Network Code, the Measurement Equipment shall comprise instruments designed to:

(a) measure the mass flow of carbon dioxide delivered by the User for fiscal purposes;

(b) evaluate the critical components, stream quality, and composition of the carbon dioxide delivered by the User; and

(c) measure the pressure and temperature of the carbon dioxide stream delivered by the User, therefore assessing whether the carbon dioxide is compliant with Annexure B (Carbon Dioxide Specifications) of the Network Code.

For mass flow determination, coriolis and ultrasonic Flow Meters are recommended. Other kind of Flow Meters still can be used if the working principle is based on a recognized international standard and is agreed with the T&SCo.

The pressure and temperature within the carbon dioxide stream shall be measured continuously upstream of the Delivery Point and downstream of any pressure let down valve. If necessary, this data will be used to adjust the meter reading and other technical purposes. For the temperature measurement, thermowell installation shall be used. Temperature and pressure continuous monitoring shall be the responsibility of the User.

## 2.3 Redundancy

In compliance with paragraphs 4.1 and 7.1 of Section F of the Network Code, to increase the availability and the reliability of the measurements, the duplication (sparing) and redundancy of Measurement Equipment is recommended.

The User can meet this recommendation in respect of the Measurement Equipment as follows:

(a) at least one (1) standby Flow Meter shall be installed at all times, an exception will be made only for the technical time required for the replacement operations to take place (switching from the principle Flow Meter to the standby Flow Meter).

(b) if the flow meter is one that is not a mass Flow Meter:

(i) where the User has installed a densitometer, at least one (1) standby densitometer shall be installed at all times, exception made for the technical time required for the replacement operations; or

(ii) where the User has installed alternative instrumentation reasonably acceptable, at least one (1) standby set of instruments shall be installed at all times, exception made for the technical time required for the replacement operations;

(c) at least one (1) standby carbon dioxide concentration analyser shall be installed at all times, exception made for the technical time required for the replacement operations.

## 2.4 Spare line

In accordance with paragraph 2.3 above, it is recommended that, for Measurement Equipment, at least one (1) standby spare line is available. The following figure illustrates an example of a possible configuration with a spare line, highlighted in red. The spare line must have the same capacity as the line taken out of service.

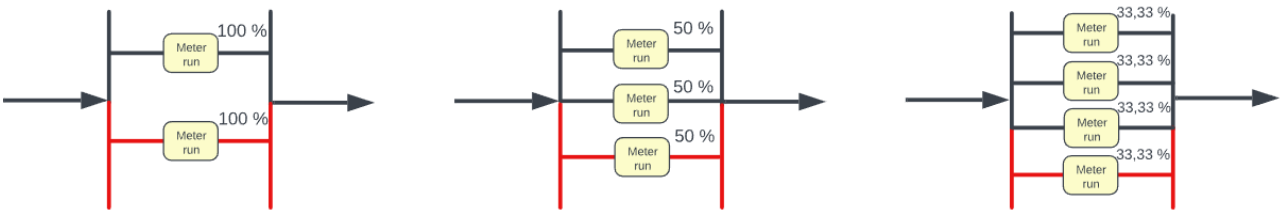



**Figure 2-1: Spare line example**

## 2.5 Metering configuration

### (a) Requirements

The User shall ensure that each meter has suitable isolation valves installed downstream and upstream in order to safely isolate and remove the meter if required.

The User shall also ensure that suitable straight lengths upstream and downstream of the meter shall be considered as well as the use of flow conditioner (if required) in compliance with the Applicable Standards in such a way that the impact of the installation on the meter shall be minimised.

Metering configuration applications must allow for temporary or continuous comparisons between duty and check (or master) measurements. Metering comparisons shall be conducted between instruments measuring the same process value, either within the same meter runs or across different meter lines.

### (b) Guidance

Although the configuration of the Measurement Equipment shall be defined by the User, this paragraph 2.5(a) suggests possible arrangements/configurations that can be selected by the User to enhance the availability and the maintainability.

Two (2) permanent configurations that are typically used for this purpose are "Z" configuration and "pay/check" configuration.

The Z-configuration requires the installation of two (2) or more meters placed on different lines interconnected, as per the figure below.



**Figure 2-2: Z configuration**

The pay/check configuration requires the installation of two (2) flow meters placed in series on the same line, where the principal meter is the “pay meter” and the other meter is the Check Meter.

If the Measurement Equipment is equipped with a single meter, the line shall be designed in such a way that a calibrated meter (the Master Meter) can be put temporarily in series with the Duty Meter for the functional Verifications activities.

Each User’s Flow Meter shall be located downstream of the composition analysis equipment.

If the flow meter is one that is not a mass Flow Meter, a densitometer or other equipment meeting the requirements of this Annexure C (Measurement Requirements) shall be installed. In this case, the mass Flow Rate shall be calculated by combining the volume flow rate measurement from the volumetric Flow Meter with the density measurement.

(c) Quality measurement

Control of quality of carbon dioxide stream performed at the Delivery Point is regulated by the $CO_2$ Quality Monitoring Procedure.

## 2.6 Metering Certification, Calibration, and Verification/Check

All the instrumentation used for determining the quantity and quality of carbon dioxide delivered must be subject to periodic calibrations and checks to ensure correct measurement over time within the MPE. Calibration and certifications of the Measurement Equipment are defined in paragraph 4.

## 2.7 Applicable Standards

| Measurement Equipment shall, as minimum, comply with following standards | |
|---|---|
| ISO/IEC Guide 98 | Evaluation of measurement data – Guide to the expression of uncertainty in measurement |

| | | |
|---|---|---|
| ISO 5168 | Measurement of fluid flow. Evaluation of uncertainties | |
| ISO 10012 | Measurement management system. Requirements for measurement processes and measuring equipment | |
| Flow Meter(s) shall comply with the following standards, as applicable | | |
| If the Flow Meter is coriolis meter | ISO 10790 | Measurement of fluid flow in closed conduits – Guidance to the selection, installation and use of Coriolis flowmeters (mass flow, density and volume flow measurements) |
| If the Flow Meter is an orifice meter | ISO 5167 - 1 | Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements |
| | ISO 5167 -2 | Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 2: Orifice plates |
| If the Flow Meter is an ultrasonic meter | ISO 17089 – 1 | Measurement of fluid flow in closed conduits — Ultrasonic meters for gas — Part 1: Meters for custody transfer and allocation measurement |
| | ISO 17089 – 2 | Measurement of fluid flow in closed conduits – Ultrasonic meters for gas — Part 2: Meters for industrial applications |
| If the Flow Meter is turbine meter | ISO 9951 | Measurement of gas flow in closed conduits – Turbine meters |
| | BS EN 12261 | Gas meters – Turbine gas meters |
| If the composition analysis equipment is an online gas chromatograph, the composition analysis equipment shall comply with the relevant sections of the following standards, as applicable | | |
| ISO 6141 | Gas analysis – Contents of certificates for calibration gas mixtures | |
| ISO 6142 | Gas analysis – Preparation of calibration gas mixtures – Gravimetric method | |
| ISO 6143 | Gas analysis – Comparison methods for determining and checking the composition of calibration gas mixtures | |
| ISO 6974 – 1 | Natural gas — Determination of composition and associated uncertainty by gas chromatography — Part 1: General guidelines and calculation of composition | |
| ISO 6974 – 2 | Natural gas — Determination of composition and associated uncertainty by gas chromatography — Part 2: Uncertainty calculations | |
| ISO 6974 – 3 | Natural gas — Determination of composition and associated uncertainty by gas chromatography — Part 3: Precision and bias | |

| | |
|---|---|
| ISO 6974 - 4 | Natural gas — Determination of composition with defined uncertainty by gas chromatography — Part 4: Determination of nitrogen, carbon dioxide and C1 to C5 and C6+ hydrocarbons for a laboratory and on-line measuring system using two columns |
| ISO 6974 – 5 | Natural gas — Determination of composition and associated uncertainty by gas chromatography — Part 5: Isothermal method for nitrogen, carbon dioxide, C1 to C5 hydrocarbons and C6+ hydrocarbons |
| ISO 6974 – 6 | Natural gas — Determination of composition with defined uncertainty by gas chromatography — Part 6: Determination of hydrogen, helium, oxygen, nitrogen, carbon dioxide and C1 to C8 hydrocarbons using three capillary columns |
| ISO 10723 | Natural gas — Performance evaluation for analytical systems |
| ISO/TR 10715 | Natural gas — Gas sampling |
| ISO/TR 24094 | Analysis of natural gas — Validation methods for gaseous reference materials |
| ISO/TR 14749 | Natural gas – Online gas chromatograph for upstream area |
| ISO 19230 | Gas analysis — Sampling guidelines |
| ISO 16664 | Gas analysis — Handling of calibration gases and gas mixtures — Guidelines |
| Monitoring requirements for dioxins and dioxin-like PCBs | |
| EN ISO 1948-1 | Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 1: Sampling of PCDDs/PCDFs |
| EN ISO 1948-2 | Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 2: Extraction and clean-up of PCDDs/PCDFs |
| EN ISO 1948-3 | Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 3: Identification and quantification of PCDDs/PCDFs |
| EN ISO 1948-4 | Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 4: Sampling and analysis of dioxin-like PCBs |
| Monitoring requirements toxic metals | |
| BS EN 14385 | Stationary source emissions - Determination of total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V |
| BS EN 13211 | Air quality. Stationary source emissions – Manual method of determination of total mercury |

**Table 5-1- List of Applicable Standards**

Although in many cases the above-mentioned standards refer to natural gas, and sampling from stationary sources (stack gases in large ducts at near atmospheric pressure) as comparable standards are not yet available specifically for carbon dioxide, such standards will nevertheless be applied, as reasonably applicable, in relation to carbon dioxide due to a lack of specific carbon dioxide

related standards until and to the extent a carbon dioxide specific standard becomes applicable. Users shall use all reasonable endeavours to apply the standards as is appropriate.

## 3. METERING DATA TRANSFER

The User shall secure and provide the T&SCo with continuous Measurement Data access. This will be achieved through communication equipment which enables Measurement Data to be obtained by the T&SCo according to the frequencies of the following table.

Telemetered equipment means equipment for the synchronous generation and transmission of data calculated by, or otherwise derived from, the operation of the metering skid including data which constitutes or permits the derivation of meter readings, together with a transmission data system and/or such other equipment as shall be required for the continuous transmission of a stream of such data to the T&SCo (the **"Telemetered Equipment"**). Measurement Equipment includes Telemetered Equipment for the purposes of the Network Code.

The data transmitted shall be the same values as displayed on User's Human Machine Interface (HMI). The frequencies listed in the tables below are a minimum.

Each User shall provide, within the User Facility, the capability for fully redundant, fault tolerant, bi-directional communications via fibre optic cable ("**FOC**").

Redundancy shall be achieved by the installation of two (2) FOCs along the route from the User's Facility site to the AGI (**"Above Ground Installation"**). Diverse routing is required where possible to avoid any potential common mode failures.

FOCs shall be in accordance with IEC60793 Optical Fibres & IEC60794 Optical Fibre Cables.

Communications between the T&SCo's Integrated Control & Safety System ("**ICSS**") & User control systems shall be in via MODBUS TCP/IP over ethernet in accordance with IEC 61158 Industrial Communications Networks & IEC61784 Industrial Networks. Cyber security within the T&SCo's ICSS shall be in accordance with IEC62443 Security Level 3.

Where improved speed, robustness, or security can be demonstrated by the User (through an appropriate technical note), alternative communications protocols can be proposed by the User for agreement with the T&SCo. The T&SCo reserves the right to accept or reject the proposal based on the actual compatibility with the T&SCo system.

There will be no integration of any control systems and the T&SCo shall not have the ability to change any parameters or open/close any valve etc, on the User Facility. Similarly, the User Facility shall not have the ability to change any parameters or open/close any valves on the T&S Network.

As a minimum, each User shall provide the following signals to the T&SCo ICSS:

| Parameter | Unit of measurement | Transmission of Data Frequency |
|---|---|---|
| Current instantaneous mass flow of the whole stream | tonnes/hr | 1/second |
| Total mass flow of the whole stream over previous 24 hours | tonnes | 1/day |
| Pressure | bara | 1/second |
| Temperature | deg C | 1/second |
| Density | kg/m3 | 1/second |
| Metering fault alarm | | 1/second |
| Carbon dioxide composition and outputs from all analysers performing continuous/cyclic measurements of the carbon dioxide | | In line with the frequency of the analyser output |
| Impurities analysis performed by laboratory analysis | | each time results of laboratory analysis are received by the User, in line with other provisions in the $CO_2$ Quality Monitoring Procedure |
| Moisture analyser | H2O ppm | In line with the frequency of the analyser output |
| Analyser fault alarms | | 1/second |
| Open/Close status of any system entry valves within capture plants battery limits | | 1/second |
| Shutdown status | | 1/second |

**Table 5-2**

As a minimum, the T&SCo shall provide the following signals to the User control systems:

| Parameter | Unit of measurement | Transmission Frequency |
|---|---|---|
| Open/close status of the system entry valve | | 1/sec |
| Shutdown status of the respective AGI and whole T&S Network | | 1/sec |
| An advisory permissive to allow flow into the T&S Network | | 1/sec |
| Pressure at the respective AGI | barg | 1/sec |
| Temperature at the respective AGI | °C | 1/sec |
| Pressure in the T&S Network main transport pipeline | barg | 1/sec |
| Temperature in the T&S Network main transport pipeline | °C | 1/sec |
| Moisture analyser | $H_2O$ ppm | In line with the frequency of the analyser output |

**Table 5-3**

The User is responsible for installing, commissioning, removing, making operational and maintaining Telemetered Equipment, including its connection or reconnection to, or incorporating it in the metering skid. The User shall repair or replace Telemetered Equipment where such repair or replacement is necessary as a result of the failure (including by reason of damage, normal wear or tear or defective design or manufacture) thereof. The User shall take reasonable steps to secure that the Telemetered Equipment is not damaged or otherwise mistreated.

When the User intends to undertake works on the Telemetered Equipment or whenever there are conditions which will or is likely to impact on the ability of the T&SCo to obtain accurate and timely valid readings then the:

(a) User will use best endeavours to notify the T&SCo prior to the commencement of such works by informing T&SCo of the date(s) when disconnection and reconnection of the Telemetered Equipment will occur;

(b) User shall present to T&SCo a comprehensive plan to guarantee that the composition of the carbon dioxide stream is monitored during the works on Telemetered Equipment in accordance with its obligations under the Measurement Requirements and Section F of the Network Code; and

(c) T&SCo reserves the right to accept, comment or reject the plan acting as a Reasonable and Prudent Operator.

## 4. Operations

Pursuant to paragraph 9.2 of Section F of the Network Code, whenever a specific operation occurs on the Measurement Equipment (such as commissioning of new Measurement Equipment, Verification, Calibration) the User shall notify the T&SCo with reasonable notice.

### 4.1 Commissioning

The Measurement Equipment shall be commissioned to demonstrate it is fully operational according to the design specifications set out in the Connection Agreement.

The analysers shall be provided with the proper Calibration certification done by the original equipment manufacturer ("**OEM**") adding the test Calibration result performed during the site acceptance test ("**SAT**").

The composition analysis equipment shall be tested by a competent and independent third-party laboratory accredited where available for the relevant activities and be demonstrated to be fully operational and to operate within the manufacturer's specifications prior to installation according to Applicable Standards.

### 4.2 Maintenance

The User shall maintain all the Measurement Equipment and all the systems to transmit data in accordance with the manufacturer's recommendations and restore any faulty equipment to as close to its original functionality as possible.

A computerized maintenance management system ("**CMMS**") shall be used, in order to record all planned and unplanned activity performed.

The CMMS shall be populated with all the equipment, job order instructions, maintenance and Calibration schedules and related frequencies.

If any component of the Measurement Equipment is removed, replaced, or otherwise changed, then the component and/or sub-system impacted shall be commissioned and a SAT shall be performed, recertified for compliance against the Applicable Standards, except in cases where the change involves a direct replacement of any instrument with an identical one (like for like).

4.3 Verifications

The User shall perform tests in order to verify that the Measurement Equipment is operating in accordance with the Applicable Standards (see paragraph 2.7).

Verifications can be carried out while carbon dioxide is delivered to the T&SCo.

Tests shall include, but shall not be limited to:

(a) A functional test consisting in the comparison of the Duty Meter with a Check Meter. A Check Meter can be installed in the metering line of a Z configuration metering architecture, as well as in series with the Duty Meter in the same line. If the system is not equipped with a Check Meter, the Duty Meter shall be put in series temporarily with a calibrated meter (the Master Meter) for the Verification.

(b) Functional checks for pressure and temperature transmitters.

The results of the control operations must be transcribed in specific reports on which the date and signature of the executor and the representatives of the Parties must be reported.

Periodic checks are performed on the instrumentation during their normal operation. The frequencies and MPE are reported in Table 4-1.

Upper range and lower range are referred to paragraph 2.1 (Metering Uncertainty- Flow Measurement).

If the check reveals an error on the indication of the parameter greater than MPE, the cause must be promptly ascertained and if the malfunctioning persists the duty line must be excluded and the stand-by system must be opened. Then the instrument shall be calibrated. If the error persists, the affected instrument shall be replaced.

If the Measurement Equipment shows stability with the error calculated during functional checks routine, it shall be possible to gradually reduce the frequency of check, according to the Table 4-4-1 and in any case agreed with the T&SCo.

The composition analysis equipment shall be verified by a competent technician in order to confirm whether it operates within the manufacturer's specifications. Where possible and if gas chromatograph is present, an auto-validation routine shall be set up assessing the instrument performance. During this check, it shall be verified that the analyser’s controller matches the analysis results with the certified composition of a reference gas. During auto-validation routine, gas chromatograph will hold its last measurement.

| Equipment. | Type of Verification | MPE | Frequency |
|---|---|---|---|
| Flow meter | In series Verification against Master / Check Meter for not less than 1 hour | ± 1% on upper range,<br>± 2% on lower range | Pay/check: real time with result printout every six months.<br>Z-configuration: Initially every six months, with possibility to increase the period to once per year.<br>Single meter configuration: Initially every six months, with possibility to increase the period to once per year. |
| Pressure transmitter | In series Verification against Master / Check Meter | ± 0.5% of full scale | At the same time and with same reporting mode as the Flow Meter Verification |
| Temperature transmitter | In series Verification against Master / Check Meter | ± 1 °C | At the same time and with same reporting mode as the Flow Meter Verification |
| Analysis equipment (other than the Gas Chromatograph) | As per manufacturer indication | | |
| Gas Chromatograph | Auto-validation | As per manufacturer indication | As per manufacturer indication |
| Gas Chromatograph | Inspection by technician | As per manufacturer indication | As per manufacturer indication |

**Table 5-4- Verification MPEs and frequency of operations.**

## 4.4 Calibration

The Calibration operations must be carried out in accordance with the methods defined by the manufacturer and on a line not in operation using the appropriate sample instruments.

The results of the Calibrations must be reported in the appropriate certificates. The periodic Calibrations must also be performed on the instrumentation which is momentarily out of operations, i.e. spare lines, check lines or spare instrumentation in warehouse. The User can decide not to perform the Calibration on instrumentation in warehouse provided that the instrumentation is suitably calibrated before being installed. In cases where it is not possible to bring the instrumental error at least within the MPE, it is necessary to exclude the measurement line and replace the instrument with one of equal characteristics and performance.

Table 5-5 shows the MPEs and the Calibration frequencies, without prejudice to different legislative requirements.

Upper range and lower range are referred to paragraph 2.1 (Metering Uncertainty- Flow Measurement).

Calibration must be performed every time a difference greater than the MPE is found during operational checks and all other reasonable alternative solutions have been attempted.

| Equipment | Type of Calibration | MPE | Frequency |
|---|---|---|---|
| Duty/pay Flow meter | Test laboratory Calibration | ± 1% on upper range, 2% on lower range | Based on Verification results and not less than 1/every 8 years |
| Master/check Flow meter | Test laboratory Calibration | ± 1% on upper range, 2% on lower range | Based on Verification results and not less than 1/every 4 years |
| Pressure transmitter | In situ Calibration | 0.15% of full scale | 1/year |
| Temperature transmitter | In situ Calibration | 0.5°C | 1/year |
| Analysis equipment (other than the GC) | As per manufacturer indication | | As per manufacturer's indication, unless otherwise agreed with theT&SCo having regard to the stability of the performance of the Composition Analysis Equipment as demonstrated by subsequent Calibrations and/or advanced diagnostic methods |
| Gas chromatograph | In situ Calibration | Feed the gas chromatograph with the test mixture for at least five analyses. | As per manufacturer's indication, unless otherwise agreed with T&SCo having regard to the stability of the performance of the Composition Analysis Equipment as demonstrated by subsequent |

| | | |
|---|---|---|
| | Verify that the raw summation of the components of the last three analyses is included in the range 98%÷102%. | Calibrations and/or advanced diagnostic methods |

**Table 5-5- Calibration MPEs and frequency of operations.**

### Calibration of Flow Meter

If the Flow Meter is removed from the line and sent to a test laboratory for Calibration, such Flow Meter shall be replaced for the duration of the Calibration by a standby Flow Meter which complies with this Annexure C (Measurement Requirements).

The User shall ensure that:

(a) if the Flow Meter(s) are calibrated with a different fluid to the operational fluid, the transferability of the Calibration shall be assessed for the employed metering technology and the additional Uncertainty from the Calibration with an alternative fluid shall be accounted for in the Measurement Uncertainty Assessment;

(b) if the Flow Meter(s) are calibrated at different line pressure and temperatures to the operational line pressure and temperatures, the impact of such difference on the performance of the Flow Meter shall be assessed for the employed metering technology and, if feasible, corrected for. Any additional Uncertainty from the Calibration of the Flow Meter at line pressure and temperatures different from the operational line pressure and temperatures shall be accounted for in the Measurement Uncertainty Assessment; and

(c) the Uncertainty of the reference standard used for the Calibration of the composition analysis equipment shall be accounted for in the Measurement Uncertainty Assessment.

### Calibration of pressure and temperature transmitters

Calibration of transmitters will be performed in different points of the scale both in ascending and descending order.

As a minimum, the Calibration shall be performed as follows:

- Pressure transmitter:

  On at least three points of the scale (0%, 50%, 100%) comparing the value read on the sample instrument with the one read on the display of the instrument under Calibration.

- Temperature transmitters

  On at least three (3) points of the scale (0%, 50%, 100%) comparing the value read on the sample instrument with the one read on the display of the instrument under Calibration.

However, the number of points could be increased in case of manufacturer's recommendation.

The results of the operations performed shall be recorded in the Calibration report.

**Calibration of analysers**

The User shall ensure that:

(a) the analyser is used at all times within its calibrated measurement range; and

(b) where Calibration mixture bottles are used, the composition of such bottles shall be within their shelf life and certified by a traceable accredited laboratory for the relevant activities.

The User shall ensure that analysers are Calibrated according to the manufacturer’s recommendations in terms of procedures and frequencies. Calibration gas bottles, if present, must be readily available, with valid expiration dates, to sequentially supply the necessary gases and initiate the Calibration procedure.

Unattended automatic Calibration can be done if foreseen by the manufacturer ensuring the validity of Calibration bottle and proper functionality of the sample conditioning system.

**Reference tools**

The instrumentation necessary to carry out Calibration operations must be in accordance with Applicable Standards and have the following characteristics:

| Reference tool | Maximum Uncertainty | Certificate expiring date |
|---|---|---|
| Pressure calibrator | 0.1% of reading | 1 year |
| thermometer | 0.2°C | 1 year |

**Table 5-6- Reference tools Uncertainty and Calibration**

**Sampling for periodic analysis**

Sampling operation – either automatic or manual, either performed locally at the User's Facility or at an external laboratory – shall be performed using certified and Calibrated equipment and in line with Applicable Standards.

In general, they shall take into consideration the following:

- potential change in composition between the sampling point and the analyser(s);
- potential fluid condensation in the sampling system(s); and
- potential contamination from previous sampling operations.

### 4.5 Witnessing

In accordance with paragraph 10 of Section F of the Network Code, the User shall, upon reasonable notice and in accordance with any site safety or other access regulations, grant the T&SCo and its agents, subcontractors, and representatives access to inspect any portion of the Measurement Equipment and to obtain samples of the User's carbon dioxide.

The User shall notify T&SCo of and grant the access during operations, all in accordance with Section F of the Network Code, including but not limited to, Calibration, functional check, main maintenance activities, re–certification of metering stream or system against specified procedures.

### 4.6 Auditing/verification of Measurement Equipment

Pursuant to paragraph 6.1 of Section F of the Network Code, the Measurement Equipment shall be validated by an Independent Verifier appointed by T&SCo:

(a) prior to any carbon dioxide being allowed to be delivered at a Delivery Point to flow in the T&S Network; and

(b) at least once per calendar year thereafter.

The audit shall seek to ensure compliance with this Annexure C (Measurement Requirements) and relevant design specifications and metering international standards.

The User shall grant the Independent Verifier access to examine all Measurement Equipment, subject to the access provisions of paragraph 10 of Section F of the Network Code, and ensure that relevant personnel are available at the request of the Independent Verifier to gather information.

The audit includes, but is not limited to:

(a) a review of comments and associated actions from the previous audit;

(b) a review of record keeping, including log books;

(c) a review of Calibration and maintenance procedures;

(d) a review of Measurement Equipment;

(e) a review of carbon dioxide analysis equipment including sampling systems; and

(f) a review of flow computer calculations.

The T&SCo requesting for the audit by the Independent Verifier shall provide two (2) weeks' advance notification of the upcoming audit to the User, stating the audit requirements and time- schedule involved.

Pursuant to paragraph 6.6 of Section F of the Network Code, the User and relevant parties shall be provided with a copy of the Validation Report and any recommendations following which the provisions in paragraph 6 of Section F of the Network Code shall apply. The User must then respond in writing stating the proposed action to resolve each recommendation and the proposed completion date, subject to and in accordance with paragraph 6 of Section F of the Network Code.

## 5. Procedure in case of OFF-SPEC

Procedures in case of suspected or actual Non-Compliant $CO_2$ are detailed in Section F of the Network Code and the CO2 Quality Monitoring Procedure.

In case of total failure in the data transmission (both on quantity and quality determination) to the T&SCo from the Measurement Equipment, the User shall commence the Isolation Procedure to cease the delivery of the carbon dioxide (and the data transmission system shall be set with a maximum of unavailability lag of 30 seconds from the detection of fault in the Measurement Equipment) until the data transmission is available again, subject to such failure being identified as Measurement Equipment Error in respect of which paragraph 12 of Section F of the Network Code applies.

## 6. CO2 Quality Monitoring Procedure

### 1. Purpose

a. The $CO_2$ Quality Monitoring Procedure forms part of the Measurement Requirements and therefore the Entry Provisions.

### 2. Carbon Dioxide Monitoring Plan

a. Table 2-1: Measurement Requirements for the carbon dioxide stream (Table 2-1) establishes the plan for monitoring of components in a User's carbon dioxide stream for the T&S Network following a risk-based assessment of the impact of each identified component on the T&S Network. For each identified component, the minimum acceptable monitoring requirements to be adopted by Users are listed, subject to any derogations set out in a User's Connection Agreement which shall prevail to the extent of any inconsistency with this $CO_2$ Quality Monitoring Procedure.

Testing frequencies in Table 2-1 are defined as:

- **Online Continuous:** meaning a direct measure performed on a side stream extracted from the process line through appropriate tubing/piping and properly processed. Reading is provided as a continuous trend. Feedback time will depend on the actual arrangement of the system but processing time of the instrument must comply with Table 2-1.
- **Online Cyclical:** meaning a direct measure performed on a control volume taken from a side stream extracted from the process line through appropriate tubing/piping and properly processed. Feedback time will depend on the actual arrangement of the system but processing time of the instrument must comply with Table 2-1.
- **Offline Monitoring**: meaning an extractive test (involving taking a physical sample) performed by an instrument or an approved method in an off-site or on-site laboratory.

b. Table 2-1 also defines the principles of what constitutes non-compliance with the Entry Provisions in respect of each component, which are in addition to the need for the identification of an exceedance of the specified threshold limit for a component which is set out in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), such principles including result averaging periods and maximum allowable durations of exceedance.
c. The threshold limits for components set out in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), together with the exceedance thresholds for each component specified in Table 2-1 below (subject to any derogations in a User's Connection Agreement) determine whether a User is flowing Non-Compliant $CO_2$.
d. The components have been allocated into one of the following categories, based on the predominant risk that the component presents to the T&S Network.
    1. Corrosion
    2. (Modification to) Phase envelope
    3. Liquid dropout
    4. Toxicity
    5. Prohibited
e. If a threshold specified in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S) is below the Limit of Detection (LoD) for best available technology (BAT) Measurement Equipment, a result reported at the LoD will be deemed as compliant with Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S) and Annexure C (Measurement Requirements – Liverpool Bay T&S). A measurement result reported as being below the LoD will be deemed as indicating no presence of the relevant component. For the grouped component of amines and nitrosamines, if the individual measurement results for each amine are all below the LoD, then the aggregate result will be deemed to be below LoD, and therefore indicate an absence of amines.

Table 2-1: Measurement Requirements for the carbon dioxide stream

| **Component** | **Threshold** | **Non-Compliance**<br><br>**(exceedance threshold)** [7] | **Minimum Monitoring Requirement: Online – Continuous, Online- Cyclical, or Offline Monitoring**[8] | **Component category** |
|---|---|---|---|---|
| $CO_2$ | As per Annexure B | Two consecutive readings (in the range of 1 minute each) below the limit | Online Cyclical | Main component |
| $N_2$[1] | | Either single reading, in the order of 2 minutes, or two consecutive readings every 1 minute above the limit | Online Cyclical | 2 |
| $H_2$ | | Either single reading, in the order of 2 minutes or two consecutive readings every 1 minute above the limit | Online Cyclical | 1 |
| Ar[1] | | Either single reading, in the order of 2 minutes or two consecutive readings every 1 minute above the limit | Online Cyclical | 2 |
| CO | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| Methane[1] | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 2 |
| Ethane[1] | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 2 |
| Propane & Other Aliphatic Hydrocarbons | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 2 |

| Component | Threshold | Non-Compliance (exceedance threshold) [7] | Minimum Monitoring Requirement: Online – Continuous, Online- Cyclical, or Offline Monitoring[8] | Component category |
|---|---|---|---|---|
| $H_2O$ | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| $O_2$ | | 2 minute average reading above the limit | Online Continuous | 1 |
| NO, $NO_2$ | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| $SO_2$ | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| $H_2S$ | | Either single reading, in the order of 2 minutes or two consecutive readings every 1 minute above the limit | Online Cyclical | 1 |
| COS & $CS_2$ | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| $NH_3$ | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 1 |
| BTEX | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 3 |
| Toxic Metals | | | | |
| Magnesium oxide (as Mg) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Manganese and its inorganic compounds (as Mn) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Cr | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |

| Component | Threshold | Non-Compliance (exceedance threshold) [7] | Minimum Monitoring Requirement: Online – Continuous, Online- Cyclical, or Offline Monitoring[8] | Component category |
|---|---|---|---|---|
| Nickel and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni) nickel and water-insoluble nickel compounds (as Ni) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Cadmium and cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Mercury and divalent inorganic compounds including mercuric oxide and mercuric chloride (measured as mercury) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Thallium, soluble compounds (as Tl) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Pb | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Arsenic and arsenic compounds except arsine (as As) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Selenium and compounds, except hydrogen selenide (as Se) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Volatile Organic Compounds (VOC) | | | | |
| Formaldehyde | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 3 |
| Ethanol | | Two consecutive readings (in the range | Online Cyclical | 3 |

| Component | Threshold | Non-Compliance (exceedance threshold) [7] | Minimum Monitoring Requirement: Online – Continuous, Online- Cyclical, or Offline Monitoring[8] | Component category |
|---|---|---|---|---|
| | | of 1 minute each) above the limit | | |
| Acetaldehyde | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 3 |
| Dimethyl Sulphide | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 3 |
| Methanol | | Two consecutive readings (in the range of 1 minute each) above the limit | Online Cyclical | 3 |
| Naphthalene | | Two consecutive readings every 3/5 minute above the limit shall result in isolation from the network | Online Cyclical | 3 |
| Acid Forming Compounds | | | | |
| $Cl_2$ | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| HF | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| HCl | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| HCN | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Amines[4] | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 3 |
| Nitrosamines and Nitramines<br><br>(Limited to NDMA, NMEA, NDEA, NDELA, NPIP, NMor) | | Measurement Exceedance Event[2] | Offline Monitoring (Monthly) | 4 |
| Dioxins and Furans, and Dioxin-like PCBs | | Measurement Exceedance Event[2, 6] | Offline Monitoring (Monthly) | 4 |

| Component | Threshold | Non-Compliance (exceedance threshold) [7] | Minimum Monitoring Requirement: Online – Continuous, Online- Cyclical, or Offline Monitoring[8] | Component category |
|---|---|---|---|---|
| (PCDD/F + dioxin-like PCBs) | | | | |
| Glycols[3,5] (TEG, MEG, DEG, propylene glycol) | | Single reading - see table 2-2 below | Offline Monitoring (at Commissioning & Post Plant Modification) | 5 |
| Selexol[3] (polyethylene glycol dimethyl ether) | | Single reading - see table 2-2 below | Offline Monitoring (at Commissioning & Post Plant Modification) | 5 |

Table notes:

[1] If the User wishes to rely on the $CO_2$ concentration being shown to be >=96% to demonstrate that the 4% limit on this component is not being exceeded, then it may seek a derogation not to be obliged to report the concentration of this component. Such derogations will be determined by T&SCo acting as a Reasonable and Prudent Operator, and will be set out in Schedule 2 (Entry Provisions) of the User's Connection Agreement if agreed.

[2] Measurement Exceedance Event: the process described in paragraph '§3 Offline Monitored Component Sampling Philosophy' shall apply.

[3] Where the $CO_2$ Quality Monitoring Procedure refers to the limit of detection, these values are to be: Glycols - 30 ppb mol and Selexol - 30 ppb mol, unless otherwise agreed by T&SCo and User in accordance with the derogation procedure and based on technical evidence to be provided by the User.

[4] Users are to propose and agree with the T&SCo which amines they shall monitor, based on their specific capture process/technology. Users will report total amines.

[5] Users shall complete monitoring tests at commissioning and after any major modifications to a User's carbon capture process / major turnaround where the following components were used and, therefore, may have entered the system, for Mono Ethylene Glycol (MEG), Diethylene Glycol (DEG), Triethylene Glycol (TEG) and propylene glycol. Users shall identify and declare to the T&SCo if there are any additional glycols compounds introduced to the User Facility at any time. The Users shall test for the identified and declared glycol compounds.

[6] The limit in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S) (1.4 ng WHO-TEQ/$Nm^3$) was calculated with reference to 2,3,7,8-TCDD using WHO-TEF. Demonstration of compliance with the proposed limit should account for the relative toxicity of the individual Polychlorinated dibenzodioxins and polychlorinated dibenzofurans (PCDD/PCDF) congeners based on WHO-TEF. The congeners to be monitored are listed below.

- 2,3,7,8-TCDF,
- 1,2,3,7,8-PCDF,
- 2,3,4,7,8-PCDF,
- 1,2,3,4,7,8-HxCDF,
- 1,2,3,6,7,8-HxCDF,
- 1,2,3,7,8,9-HxCDF,
- 2,3,4,6,7,8-HxCDF,
- 1,2,3,4,6,7,8-HpCDF,
- 1,2,3,4,7,8,9-HpCDF,
- OCDF,
- 2,3,7,8-TCDD,
- 1,2,3,7,8-PeCDD,
- 1,2,3,4,7,8-HxCDD,
- 1,2,3,6,7,8-HxCDD,
- 1,2,3,7,8,9-HxCDD,
- 1,2,3,4,6,7,8-HpCDD,
- OCDD
- PCB 126

[7] Response times indicated in Table 2-1 refer to expected performance of the instrument. Total response time is affected by the travel time of the carbon dioxide from the process piping to the analyser. The User shall be responsible for the design of the system and the definition of the layout in order that travel time is as low as reasonably practicable.

[8] For all offline monitoring, the User shall agree with the T&SCo, with each party acting as a Reasonable and Prudent Operator, the test that shall be used and the limit of detection to be applied that, on a best available technology basis, delivers a reliable and repeatable analysis.

Table 2-2: Action resulting from Non-Compliance (exceedance of threshold)

| Category | Action based on exceedance threshold being met |
|---|---|
| 1, 2 and 3 | User immediately to commence isolation procedure as set out in the Isolation Procedure derived from Annexure H (Isolation Procedure Terms of Reference). |
| 4 | Measurement Exceedance Event does not require the User to immediately commence the Isolation Procedure and cease flow from the T&S Network. Please refer to paragraph 3 ‘Offline Monitored Component Sampling Philosophy’ for further details. |
| 5 | User immediately to commence isolation procedure as set out in the Isolation Procedure derived from Annexure H (Isolation Procedure Terms of Reference) |

## 2. Data Reporting

a. For data reporting and communication of the measurement results please refer to paragraph 3 of Annexure C (Measurement Requirements – Liverpool Bay T&S).

## 3. Offline Monitored Component Sampling Philosophy

a. Sampling techniques are to be defined by Users. A non-exhaustive list of applicable standards is reported in paragraph 2.7 of Annexure C (Measurement Requirements – Liverpool Bay T&S).

b. For Offline Monitoring category 4 components, the User shall adopt the following sampling philosophy:

- At the beginning of each calendar year, the T&SCo and User will agree on the calendar of the monthly sampling campaign including the result due dates.
- On every agreed planned day for sampling, the User shall take a sample (Sample #1) and a second sample (Sample #2) seven (7) calendar days later (Day 7).
- The Users shall send Sample #1 for laboratory analysis to confirm the concentration for the nominated components. If the results from the laboratory analysis indicate the concentration of a component is below the threshold limit set out in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), the User shall be allowed to continue flowing into the T&S Network.
- If the results from the laboratory analysis indicate the concentration for a component is above the threshold limit set out in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), the User shall enter the enhanced Offline Monitoring campaign whereby they shall immediately send Sample #2 for laboratory analysis. The User shall then be required to sample weekly (from the date of Sample #2) and to send the samples for laboratory analysis.
- If the results from the laboratory analysis for Sample #1 are not received within five (5) Business Days of the result due date, the User shall submit Sample #2 for laboratory analysis. If results for Sample #1 are still not received within five (5) Business Days of the due date for Sample #2, the User shall proceed with taking Sample #3 and submit this for laboratory analysis.
- The enhanced Offline Monitoring campaign (which involves weekly sampling) shall continue until the User is able to demonstrate, through laboratory analysis, four (4) consecutive weekly on-specification samples, after which the User shall return to the monthly sampling campaign.
- The User shall be allowed to continue flowing into the T&S Network during the enhanced Offline Monitoring campaign unless three (3) consecutive results (including the sample initially identified as Non-Compliant $CO_2$) from the laboratory analysis indicate the concentration for a component is above the threshold limit set out in Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S). In this circumstance, the User shall immediately commence the Isolation Procedure to cease flow into the T&S Network. The isolation process at all times shall comply with the provisions of the Isolation Procedure derived from Annexure H (Isolation Procedure Terms of Reference).

c. For Offline Monitoring category 3 components, the same procedure as in paragraph 3(b) above applies with the only difference that after two (2) consecutive results (including the sample initially identified as Non-Compliant $CO_2$) of the laboratory analysis indicating that the concentration for a component is above the threshold limit set out in Annexure B (Carbon

Dioxide Specifications – Liverpool Bay T&S), the User shall immediately commence the procedure set out in Annexure H (Isolation Procedure) to cease flow into the T&S Network.

## 4. Relevant Standards or Accreditations

a. For a non-exhaustive list of applicable standards please refer to paragraph 2.7 of Annexure C (Measurement Requirements – Liverpool Bay T&S).

## 5. Early Warning Systems That Users Should Have

a. For Online Continuous and Online Cyclically monitored components, the User, where practicable, shall install pre-exceedance alarms in line with good design practice. The alarm set points shall be determined by each User based on their specific process design and the results of their transient analysis and should allow for, where practicable, sufficient time for the User to take corrective action to avoid exceeding the component threshold limits.

## 6. Response to Non-Compliant $CO_2$ (exceedance threshold being met)

a. Where a User's Measurement Equipment has identified that the User's carbon dioxide has met the exceedance threshold resulting in Non-Compliant $CO_2$ being identified for a category 1, 2 or 3 component with Online Continuous or Online Cyclical monitoring the User must immediately commence the Isolation Procedure to cease flow into the T&S Network. The isolation process shall comply with the provisions of the Isolation Procedure derived from Annexure H (Isolation Procedure Terms of Reference) at all times.
b. Where the carbon dioxide has met the exceedance threshold resulting in Non-Compliant $CO_2$ being identified for a category 4 component or category 3 component with Offline Monitoring, the User shall be allowed to continue flowing into the T&S Network in accordance with the paragraph 3 'Offline Monitored Component Sampling Philosophy' above.
c. Following confirmation of flow of Non-Compliant $CO_2$, the T&SCo's response will vary according to the risk category of the component in breach. Paragraph 6(d) sets out the criteria that will be applied by T&SCo in determining its response. Detailed procedures consistent with the Network Code (the "Code") will be developed by T&SCo before first introduction of carbon dioxide into the T&S Network which shall be shared with Users and developed to form part of the Isolation Procedure derived from Annexure H (Isolation Procedure Terms of Reference) in accordance with Section G (Common Interface Procedures).
d. After a User has isolated themselves or was isolated from the T&S Network, for reasons of supplying Non-Compliant $CO_2$ a number of aspects shall be assessed by the T&SCo, including but not limited to:
    - Integrity of the T&S Network;
    - risk of corrosion;
    - requirement of in-line inspection;
    - CO2 condensation;
    - free water / aqueous phase formation;
    - acid formation; and
    - hazard to operators and public.

e. Following a User being isolated due to delivery of Non-Compliant $CO_2$, the T&SCo will take steps it assesses to be necessary, as a Reasonable and Prudent Operator, to confirm the T&S Network is ready to accept further delivery of carbon dioxide. The steps necessary will vary, subject to the severity of the exceedance, overall network conditions and the outcomes of the verifications in paragraph 6(d). The T&SCo must use reasonable endeavours to minimise the duration of any isolation. T&SCo shall develop Common Interface Procedures in accordance with Annexure G (Start-up and Shut-down Procedure) and Annexure H (Isolation Procedure), developed in accordance with Section G of the Code, which shall outline the process for resuming flow. Paragraph 8 'Process for User reconnection following isolation' below sets out the expectation on a User, to demonstrate readiness to recommence delivery of compliant carbon dioxide.

f. T&SCo must take steps to allow Users to re-commence delivery of carbon dioxide into the T&S Network in accordance with its Licence and the Code to minimise any unavailability of the T&S Network. In this context it is to be noted that T&SCo has various obligations under the Code and under its Licence, which incentivise and require it to maintain T&S Network availability, and be accountable for its actions in this regard, including (but not limited to) the following obligations:
    - the obligations under the Licence for T&SCo to use reasonable endeavours to achieve the Availability Target and to achieve the Availability Floor in each Operational Charging Year;
    - the obligations under the Licence (in relation to events that give rise to Availability Relief Factors) for T&SCo to:
        (i) avoid, overcome or otherwise mitigate the impact of such events, acting in accordance with Good Industry Practice; and
        (ii) provide evidence to the Regulator of such events and the actions taken by the T&SCo; and
    - the obligations under the Code to act as a Reasonable and Prudent Operator (in certain circumstances), keep records of Capacity Constraints in accordance with paragraph 36.1 of Section E (Network Use and Capacity) and avoid directing Users to cease delivery unless necessary or unnecessarily delaying their restart of delivery after isolation.

## 7. Communication and response timeframes when a User becomes aware of Non-Compliant $CO_2$

a. If an on-line analyser detects Non-Compliant $CO_2$, the User shall immediately notify T&SCo and publish the details on the T&S Network Portal.

b. If Non-Compliant $CO_2$ is detected via Offline Monitoring, the User shall promptly (within 1 hour of receiving such results) notify T&SCo and publish the details on its account on the T&S Network Portal.

## 8. Process for User reconnection following isolation

a. Where a User has become isolated from the T&S Network due to exceedance of the component threshold limits for components the subject of Online Continuous or Online Cyclical monitoring, it shall perform steps that it assesses, as a Reasonable and Prudent

Operator, to be necessary to ensure it can recommence delivery of carbon dioxide that is compliant with the Entry Provisions, taking into consideration the nature and severity of the non-compliance, and in accordance with Annexure G (Start-up and Shut-down Procedure). The User must provide written communication that they have done, at minimum, the following:

(i) have undertaken sufficient checks and remediation of assets on its side of the Delivery Point, that resumption of carbon dioxide delivery would be safe.

(ii) all reasonable endeavours have been applied to remove Non-Compliant $CO_2$ up to the Delivery Point, including but not limited to venting, purging, recycling, re-treat, unless otherwise agreed with T&SCo.

(iii) normal operating conditions (for the User) have been restored such that delivered carbon dioxide is expected to comply with the Entry Provisions.

(iv) on resumption of flow, the carbon dioxide stream would not trigger the safeguards in the AGI (e.g. free aqueous phase removed) and will fulfil the conditions reported in paragraph 1 of Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S). Note: If safeguards are triggered, and the User again becomes isolated from the T&S Network, T&SCo will notify the User as to what safeguard has been triggered and any subsequent expected steps.

b. Where the User has both met the above expectations, and received confirmation from the T&SCo, acting as a Reasonable and Prudent Operator, that the T&S Network is available to receive carbon dioxide, a User will be able to recommence delivery of carbon dioxide provided it has demonstrated ten (10) minutes of continuous on-specification carbon dioxide evidenced through the operation of the Online Continuous and Online Cyclical monitoring of components.

c. Irrespective of whether the User previously requested to be allowed to continue to flow Non-Compliant $CO_2$ (in line with the Isolation Procedure and in line with paragraph 4.3 of Section F of the Code), a User may request from T&SCo temporary relief against the obligation to isolate where it suspects a temporary non-compliance may occur in future (i.e. when it resumes flow), by providing advanced notice to the T&SCo. If granted by the T&SCo, at its own discretion, any such temporary relief may be relied upon by the User when determining that it can meet expectations on readiness to resume flow, set out above.

d. Where a User has become isolated from the T&S Network due to exceedance of the component threshold limits for components the subject of Offline Monitoring, it shall perform steps that it assesses, as a Reasonable and Prudent Operator, are necessary to ensure it can recommence delivery of carbon dioxide that is compliant with the Entry Provisions, taking into consideration the nature and severity of the non-compliance, and in accordance with general requirements of Annexure G (Start-up and Shut-down Procedure). The User must confirm to T&SCo that they, at minimum:

(i) have identified the issue leading to the exceedance of the offline monitored component thresholds and taken the necessary steps to address this issue, acting as a Reasonable and Prudent Operator.

(ii) have restored normal operating conditions and be able to meet the Carbon Dioxide Specification for online monitored components, demonstrated through ten (10) minutes of continuous on- specification operation of the Online components (Continuous/Cyclical).

(iii) upon commencement of flow, the User shall return to the monthly sampling campaign set out in paragraph 3.

(iv) if the first monthly result of the Offline Monitoring demonstrates that the User's carbon dioxide remains Non-Compliant $CO_2$, the User will re-isolate and carry out the steps in

paragraph 8(d) until the User is able to flow carbon dioxide that is compliant with the Entry Provisions.

e. Detailed procedures for both components monitored using Online Continuous and Online Cyclical monitoring and components subject to Offline Monitoring shall be developed by the User and shared with the T&SCo for coordination before first introduction of carbon dioxide to the Delivery Point.
f. Where a User has become isolated from the T&S Network, the User shall complete appropriate investigation of the event leading to the exceedance of the component threshold limits and submit a report to the T&SCo for information, along with associated evidence that any identified remedial actions have been completed. Reconnection and resumption of flow into the T&S Network is not conditional on submission of the report to the T&SCo, however the User shall complete such course of action in a timely manner (which shall be no longer than ten (10) Business Days after the reconnection and resumption of flow, or such longer period as may be reasonably agreed between the T&SCo and the User).
g. In case of reconnection after isolation for any reason that is not due to Non-Compliant $CO_2$ (e.g. maintenance, loss of communication, unavailability of T&S Network), the User shall be able to resume flowing into the T&S Network, in accordance with the general steps set out in Annexure G (Start-up and Shut-down Procedure), and in respect of carbon dioxide quality, when the User, acting as a Reasonable and Prudent Operator, demonstrate that:
    (i) normal operating conditions continue to exist and the User is able to meet the Carbon Dioxide Specification again, demonstrated through ten (10) minutes of continuous delivery of components the subject of Online Continuous and Online Cyclical monitoring that comply with the Entry Provisions.
    (ii) the carbon dioxide stream will not trigger the safeguards in the AGI (e.g. free aqueous phase removed) and will fulfil the conditions reported in paragraph 1 of Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S).
h. Upon resumption of flowing carbon dioxide onto the T&S Network, the sampling of components subject to Offline Monitoring will resume according to the planned schedule.
i. Conditional on the User having met the requirements of paragraphs 8(a) to 8(g) for reconnection, T&SCo shall use reasonable endeavours to allow recommencement of delivery to the T&S Network within 15 minutes of receipt of confirmation that the requirements of paragraphs 8(b), 8(d)(ii) or 8(g)(i), as applicable, have been met.

## 9. Derogations

a. In line with paragraph 3.8 of Section F of the Code, Schedule 2 of the Connection Agreement may document User-Specific Carbon Dioxide Specification requirements, Measurement Requirements, or carbon dioxide monitoring requirements, as Local Requirements. Such Local Requirements are referred to as derogations within this $CO_2$ Quality Monitoring Procedure.
b. When proposing a derogation, the User shall be expected to have fully considered whether other commercial technical solutions can meet the requirements of the Annexure B (Carbon Dioxide Specifications – Liverpool T&S), Annexure C (Measurement Requirements – Liverpool Bay T&S) and the $CO_2$ Quality Monitoring Procedure prior to proposing the derogation.

### 9.1 Derogation against the need to monitor for a given component

a. As required by the Terms of Reference for the $CO_2$ Quality Monitoring Procedure, details of how a User may seek a derogation from the need to monitor for a component are set out below:

- The User shall submit a technical report to the T&SCo, detailing the evidence and documentation held by the User that support the derogation request, together with proposed wording of the derogation.
- A technical report may detail a request for a derogation that would apply to multiple components on the same basis. However, where the technical basis of a derogation request differs between impurities (or groups of impurities) separate technical reports should be submitted.
- The T&SCo shall review the technical report(s) submitted by the User in a timely manner. If necessary, the T&SCo may request additional information or justification for a User's request for a derogation.
- Either the T&SCo or the User may request a technical meeting between the parties to facilitate the T&SCo's understanding of the request and its determination of the request.
- If the evidence and/or justification for a derogation presented by a User is considered satisfactory by the T&SCo (acting as a Reasonable and Prudent Operator), the T&SCo shall confirm the derogation and include it in the User's Connection Agreement under Schedule 2 (Entry Provisions).
- If the content of a User's technical report relating to a derogation is considered unsatisfactory to the T&SCo (acting as a Reasonable and Prudent Operator), and/or the T&SCo has provided comment and the User has not addressed the comments to the satisfaction of the T&SCo (acting as a Reasonable and Prudent Operator), the derogation will be rejected by the T&SCo and the User shall implement the Measurement Requirements in accordance with the $CO_2$ Quality Monitoring Procedure without any derogation.
- The T&SCo may make a derogation against the need to monitor for a given component conditional on chemical validation testing at the User commissioning stage, and/or subject to periodic re-validation following the User reaching commercial operations date. The process for this is set out below.

9.2 Wider derogations

a. Users shall seek to design their facilities and processes to comply with the requirements of Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S) and the $CO_2$ Quality Monitoring Procedure without the need to derogate from the obligation to monitor for a specified component.
b. The $CO_2$ Quality Monitoring Procedure has been developed in line with the requirements of Section G of the Code. The response times defined in Table 2-1 above define what is considered by the T&SCo to represent the capability of best available technology at the time of its accession to the Code, with the wider Measurement Requirements (which incorporates the implemented $CO_2$ Quality Monitoring Procedure) benchmarked to this. Additionally, Annexure C (Measurement Requirements – Liverpool Bay T&S) includes a mechanism to maintain alignment between the Measurement Requirements and the capability of the identified technology set out in Annexure C (Measurement Requirements – Liverpool Bay T&S).
c. Notwithstanding the above, if, at the time of submission of Measurement Equipment for the T&SCo's approval, the User demonstrates to the satisfaction of the T&SCo (acting reasonably) that no technology exists that allows it to comply, with the requirements stated in Table 2-1 and reasonably balances the commercial interests of T&SCo and the User including the consideration of operation and maintenance of equipment, a derogation shall be granted in respect of:

(i) the response time on which the exceedance threshold in the table is based; and/or
(ii) on the achievable LoD being higher than the relevant component threshold.

d. Derogations agreed with T&SCo that align the response time with the best available technology may require a corresponding downwards adjustment to the Non-Compliant $CO_2$ (exceedance thresholds) in Table 2-1. All derogations are to be agreed as per the process in paragraph 9 and these will be set out in Schedule 2 of the Connection Agreement.

9.3 Chemical validation and revalidation testing

a. Where a derogation includes a requirement for chemical validation testing at the time of commissioning of the User's Delivery Point, the following will apply:
- The wording of the derogation shall specify the sampling and testing requirements, together with the validation criteria (e.g. an acceptable component threshold). At the agreed time, sampling and analysis shall be performed as defined. The User shall then prepare, assure and submit a validation report to the T&SCo, for its consideration.
- Where the validation report confirms that the validation requirements are met, subject to the T&SCo being in agreement, it shall provide written confirmation to the User that the findings of the report are accepted and the condition(s) are discharged.
- Where the validation report confirms that the validation requirements have not been met, if in the opinion of the User, the cause of the failure is known and can be reasonably remedied, the User may request the opportunity to implement remedial action, by a specified deadline, and provide further validation evidence. If, in the reasonable opinion of the T&SCo, remedy of the issue can be reasonably expected to succeed, it shall allow the User to attempt to remedy the issue and submit an updated report. If in the opinion of the T&SCo, acting as a Reasonable and Prudent Operator, the cause of the issue is not sufficiently understood, or the proposed remedial steps are unlikely to succeed such that it can be confident in the results thereafter, it can confirm in writing to the User that the validation conditions have not been discharged and that as a result, the User shall instead conform to the requirements of Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), Annexure C (Measurement Requirements – Liverpool Bay T&S) and the CO2 Quality Monitoring Procedure, without such derogation.

b. Where the derogation includes a requirement for chemical revalidation testing, subsequent to User's commercial operation date, the following shall apply:
- During operations, periodic sampling (at a frequency to be defined as part of the monitoring exemption derogation request process), shall be carried out in order to confirm that the component in the carbon dioxide stream is below the limit of detection or below the limit stated in the derogation if that is greater than the limit of detection, and that frequency shall be based on:
  (i) the criticality of the component to the T&S Network; and
  (ii) on the evidence provided.

- In the event that any periodic sampling indicates the presence of a component at a level that exceeds the specified validation criteria, the monitoring exemption derogation will be voided and the User shall conform to requirements of Annexure B (Carbon Dioxide Specifications – Liverpool Bay T&S), Annexure C (Measurement Requirements – Liverpool Bay T&S) and the $CO_2$ Quality Monitoring Procedure, without such derogation.

9.4 Other considerations

a. Derogations are agreed on the basis of the User Facilities and Measurement Equipment defined in a User's Connection Agreement, and will remain valid (subject to any validation requirements) until there are changes that materially affect the conclusions of the derogation technical report. In the event of a change that impacts on the findings of the derogation technical report, the derogation will be invalid. In that case, the User may request that the derogation is retained and the T&SCo shall permit such derogation to continue to apply, provided that the User has submitted evidence to the satisfaction of the T&SCo acting reasonably that such derogation remains valid and appropriate.
b. Where a User and T&SCo cannot agree on derogations for inclusion within the Connection Agreement, Parties are able to access the Connection Application dispute process set out in paragraph 15 of Section C of the Code.
c. For any type of derogation other than monitoring exemption, T&SCo reserves the right to periodically request User evidence that confirm that the basis for the derogation is still valid.

## 10. Periodic review of the $CO_2$ Quality Monitoring Procedure

a. The T&SCo, with Users support, will perform periodic reviews of this $CO_2$ Quality Monitoring Procedure, to ensure it remains effective and risk based.
b. The timing of the first review shall be the same as the Section E Review process in Paragraph 48 of Section E (Network Use and Capacity) and will be based on operational experience, publication of international standards pertaining to carbon dioxide transportation and on the knowledge and data gathered by the T&SCo about impact of events on the T&S Network and its ability to accommodate such events.
c. The timing for subsequent reviews will be based on the outcomes of the first Section E Review and any agreed changes will be implemented via a Modification pursuant to the Modification Procedure in Section B of the Code.

## 7. Definitions, Acronyms and Abbreviations

| Term | Meaning |
|---|---|
| **AGI** | Refer to paragraph 3. |
| **Applicable Standard** | Refer to paragraph 2.7. |
| **Calibration** | An operation performed under specified conditions, which in a first step establishes a relationship between the values of a quantity, with the respective measurement uncertainties, provided by measurement samples, and the corresponding indications, including the associated measurement uncertainties, and in a second step uses this information to establish a relationship that allows a measurement result to be obtained from an indication. |
| **Check Meter** | Meter installed as secondary meter in pay/check configuration or as back-up meter in Z configuration |
| **CMMS** | Refer to paragraph 4.1. |
| **Duty Meter** | Meter in operations that is used for carbon dioxide accounting |
| **FOC** | Refer to paragraph 3. |
| **ICSS** | Refer to paragraph 3. |
| **Master Meter** | Meter used as reference during Calibration activities |
| **Maximum Flow Rate** | The highest flow rate at which the Measurement Equipment is required to meet the applicable MPEs. |
| **Measurement Uncertainty Assessment** | Refer to paragraph 2.1 |
| **Minimum Flow Rate** | The lowest flow rate at which the Measurement Equipment is required to meet the applicable maximum permissible errors. |
| **MPE** | Maximum Permissible Error. |
| **OEM** | Refer to paragraph 4.1. |
| **SAT** | Refer to paragraph 4.1. |
| **Telemetered Equipment** | Refer to paragraph 3. |
| **Uncertainty** | A non-negative parameter characterizing the dispersion of the quantity values being attributed to a measurand, based on the information used. |
| **Verification** | Objective evidence that a given Measurement Equipment is operating within MPE by comparing its measurement with another instrument which is measuring the same quantity. |

All other capitalised terms are as defined in the Section K of the Network Code.

# Annexure D – $CO_2$ Quality Monitoring Procedure Terms of Reference

1. **Purpose**

The Common Interface Procedure for the $CO_2$ Quality Monitoring Procedure will form part of the Measurement Requirements and therefore the Entry Provisions and will:

**Establishing T&S Network Monitoring Plan**

(a) establish risk-based plans for monitoring of components in the carbon dioxide stream for each T&S Network, including:

(i) for each component, identification of acceptable sampling techniques and testing frequencies to be adopted by Users on that T&S Network; and

(ii) requirements for on-site testing and off-site laboratory testing, minimum accreditations, any prohibited analytical techniques, industry standard testing turnaround times and when and how monitoring test results are to be sent to T&SCo;

**Defining a non-compliance with the Entry Provisions**

(b) define what constitutes a non-compliance of the Entry Provisions in respect of each component, including:

(i) confirming the acceptability of data treatment (including having regard to the expected variability of a User's carbon dioxide stream components), result averaging periods, maximum allowable durations of exceedance, frequency of exceedances (i.e. based on historic data on number of exceedances and level of exceedance above limit) and/or any other measurements reasonably agreed for the determination of whether a component does not comply with the Entry Provisions;

(ii) the role of any systems for giving an early warning that carbon dioxide may not be in compliance with the Entry Provisions; and

(iii) categorise components by reference to the risk that non-compliance with the Entry Provisions may have on the T&S Network;

(iv) the following details:

*Note: this table is to be populated in the Common Interface Procedure.*

| **Component** | **Limit (incl. Units)** | **Exceedance threshold** | **Type/frequency of monitoring (e.g. online continuous, offline monthly)** |
|---|---|---|---|
| [***Drafting instruction**: this column is intended to be populated with the components listed in the T&SCo's Annexure B (Measurement Requirements – T&S Network)*] | [***Drafting instruction**: this column is intended to be populated with the limits and units of measurement for the respective components listed in the T&SCo's Annexure B (Measurement Requirements – T&S Network)*] | [***Drafting instruction**: this column is intended to be populated with details of the exceedance limit and number of occasions such limit is to be exceeded / averaging in respect of each component before carbon dioxide is considered non-compliant with the Entry Provisions*] | [***Drafting instruction**: this column is intended describe how a component will be monitored and the frequency of such monitoring*] |
| [x] | [x] | [x] | [x] |

**Monitoring response following a non-compliance or suspected non-compliance**

(c) set out the monitoring response following a suspected or confirmed non-compliance with the Entry Provisions by the T&SCo or a User, including:

(i) approaches and thresholds on the provision of early warning notices by T&SCo and Users;

(ii) subject to paragraph 1(c)(iii), communication and response timeframes which reflect the principle that if a User becomes aware of a non-compliance with the Entry Provisions (as defined at paragraph 1(b)), it must immediately take steps to cease delivery of carbon dioxide in accordance with paragraph 1(b) and the Isolation Procedure;

(iii) circumstances where a User is permitted to continue or resume flowing carbon dioxide that is not in compliance with the Entry Provisions (as defined at paragraph 1(b);

(iv) the nature and duration of any additional sampling and testing that may be requested by the T&SCo or a User;

(v) how compliance of carbon dioxide with the Entry Provisions can be demonstrated and confirmed following a suspected or confirmed non-compliance with the Entry Provisions; and

(vi) the role of the $CO_2$ Quality Monitoring Procedure in complying with the Isolation Procedure, including the role in determining whether full isolation is required, timeframes and the process for reconnection to the T&S Network;

**Communication following a suspected or confirmed non-compliance**

(d) detail the communication requirements between T&SCo and Users in the event of a suspected or confirmed non-compliance with the Entry Provisions;

**Derogation**

(e) detail how a User may seek a derogation from the need to monitor for a component by demonstrating that such component would not reasonably be expected to be present in the carbon dioxide stream delivered by that User or would be present but at a level that is below an agreed threshold, acknowledging that any such agreed derogation must be specified in Schedule 2 (Entry Provisions) to the Connection Agreement in order to apply to User;

**Periodic review of the $CO_2$ Quality Monitoring Procedure**

(f) define a process for periodically reviewing and if appropriate, requiring update of the $CO_2$ Quality Monitoring Procedure, to ensure it remains effective, risk based and value for money. This shall include a requirement that the T&SCo provide evidence of and justification for any requirements to alter the monitoring approach set out in the $CO_2$ Quality Monitoring Procedure (provided that any changes shall only be effected through a Code modification pursuant to Section B (Governance);

**Compliance with Entry Provisions**

(g) define a process for testing and demonstrating compliance with the Entry Provisions, as part of the User's Commissioning Programme (including any additional sampling and testing above the agreed $CO_2$ Quality Monitoring Procedure and when/how test results are sent to T&SCo); and

**Change in operating process / components**

(h) detail the communication requirements in the event of a change in the carbon dioxide composition (including identification of components not specified in the Carbon Dioxide Specifications) and/or in the operating process (or otherwise) of a User that may change the components (including levels) to be delivered to the T&S Network and define a process for T&SCo and Users to engage in a review and update to the $CO_2$ Quality Monitoring Procedures required for a User (which shall be effected through a variation to Schedule 2 (Entry Provisions) to the Connection Agreement).

## 2. Additional Requirements

Monitoring requirements set out in the $CO_2$ Quality Monitoring Procedure will:

(a) in the absence of a commonly accepted standard, not exceed the capabilities of best-in-class sampling, monitoring and analysis technologies (including sampling frequency, accuracy/uncertainty and limit of detection) existing at the date of finalisation of the $CO_2$ Quality Monitoring Procedure; and

(b) balance the commercial interests between T&SCo and the User with respect to the cost and risk of operation of the T&S Network and User Facility and as a result not place disproportionate cost on a User relative to the operational issues that could arise for the T&S Network from the presence or level of any given component in the carbon dioxide; and

(c) set out a sampling methodology that provides for samples of carbon dioxide to be as representative as possible of a User's carbon dioxide stream.

## 3. User specific requirements

The $CO_2$ Quality Monitoring Procedure will:

(a) describe actions to be taken and obligations to be met where a User can evidence that an allowable threshold as defined in Annexure B (Carbon Dioxide Specifications – T&S Networks) cannot reasonably be achieved to satisfy paragraph 2(a); and

(b) acknowledge that to the extent that a User's Connection Agreement contains any derogations from the obligations set out in the $CO_2$ Quality Monitoring Procedure that are reasonably necessary having regard to the User's operational processes and anticipated carbon dioxide flow with respect to any component, including sampling and testing requirements for any component, the terms of the Connection Agreement shall prevail.

# Annexure E – Technical Parameters – T&S Networks

***Drafting instruction***: *on accession of a T&SCo to the Code, a new Part will be incorporated into this Annexure E that sets out the Technical Parameters for that T&SCos T&S Network.*

# Annexure E Part 1 – Technical Parameters – (Net Zero North Sea Storage)

| | |
|---|---|
| Minimum Instantaneous Flow Rate | 11.41t$CO_2$/30 minutes (0.20 MTPAi) (6.34 kg/s) |
| Over Variation Limit | 15% |
| Under Variation Limit | 15% |

# Annexure E Part 2 – Technical Parameters (Liverpool Bay T&S)

| | |
|---|---|
| Minimum Instantaneous Flow Rate | 22.83tCO2/hour<br><br>*To note: this figure is based upon the minimum instantaneous flow rate in the APDP where it is quoted as 6.34 kg/s and 0.20 MTPAi.* |
| Over Variation Limit | 15% |
| Under Variation Limit | 15% |

# Annexure F – Emergency Procedure Terms of Reference

## 1. Purpose

1.1 The purpose of a Common Interface Procedure for emergencies is to:

(a) provide a means of defining a Network Emergency; and

(b) execute a co-ordinated response; and

(c) establish a hierarchy or communication across the Transportation & Storage Network; and

(d) ensure that T&SCo and User specific Emergency Response Plans (ERPs) effectively include consistent and complimentary response to Network emergencies; and

(e) ensure a constant state of readiness to respond to Network emergencies and to clearly define the requirements to carry out emergency response exercises and drills.

## 2. Definition of a network emergency

[TBD]

## 3. Co-Ordinated response to a network emergency

[TBD]

## 4. Communication hierarchy during a network emergency

[TBD]

## 5. Emergency response plans – T&SCo and User

[TBC]

## 6. Ensuring a constant state of readiness

[TBC]

# Annexure G – Start-up and Shut-down Procedure Terms of Reference

## 1. Purpose

The Common Interface Procedure for Start-up, Shutdown and Recovery post Interruption Procedure will:

(a) establish an agreed method for communication between the T&SCo and User(s) in the event of; a process interruption, start-up, shutdown and recovery following an interruption;

(b) detail the communication protocols and methods between the T&SCo and User(s); and

(c) detail the hierarchal arrangements (where necessary) for shut off and reintroduction of User(s) from and back into the T&S Network.

# Annexure H – Isolation Procedure Terms of Reference

## 1. Purpose

The Common Interface Procedure for isolations will:

(a) detail the requirements for the safe isolation of T&SCo and User(s) across defined boundaries; Process/Piping, Electrical, Instrumentation/Control and Mechanical, including:

(i) agreed industry isolation standard (e.g. HSG 253);

(ii) the requirements for cross-party tagging (Lockout/Tagout - LOTO);

(iii) the requirement for cross-party proof of isolation integrity. i.e., proving zero energy; and

(iv) reinstatement of plant and equipment;

(b) detail the communication requirements in the event of a planned event that causes loss in data communication systems (hardwired and wireless), loss of control signals, loss of metering/measurement data;

**Isolations relating to Non-Compliant CO2**

(c) detail the responsibilities of T&SCo and User(s) relating to isolation in the event that carbon dioxide has been confirmed as Non-Compliant $CO_2$ in accordance with the Entry Provisions, including setting out the role of the $CO_2$ Quality Monitoring Procedure in complying with this isolation procedure;

(d) require the T&SCo to have regard to:

(i) the findings of monitoring responses (as defined in the $CO_2$ Quality Monitoring Procedure); and

(ii) the timeframes in which the findings are expected to be delivered,

to inform risk based decisions on the timeframes for completion of any isolation and the duration of any temporary consent by the T&SCo for the User to continue to flow carbon dioxide, notwithstanding any suspected or actual Non-Compliant $CO_2$ being confirmed, pending further monitoring information becoming made available by the User;

(e) require the T&SCo to have regard to:

(i) historical data of a User's carbon dioxide flow; and

(ii) the expected variability of a User's carbon dioxide flow,

in determining whether to require full or partial cessation of flow of carbon dioxide through a Delivery Point;

(f) detail the communication requirements and process relating to carbon dioxide flow where the User has notified the T&SCo that it has reason to believe that there will be a temporary deviation of a component of carbon dioxide that might result in Non-Compliant $CO_2$, having regard to the consequences of a full or partial cessation of flow of carbon dioxide when compared to the potential impact on the T&S Network and value for money resulting from such carbon dioxide being delivered to the T&S Network, including details of:

(i) any requirements for increased monitoring under the $CO_2$ Quality Monitoring Procedure; and

(ii) any other conditions relating to carbon dioxide flow following the issue of such notice,

until compliance with the Entry Provisions is demonstrated in accordance with the $CO_2$ Quality Monitoring Procedure;

(g) detail the communication requirements and process relating to resumption of carbon dioxide flow:

(i) following confirmation that carbon dioxide is no longer Non-Compliant $CO_2$ in accordance with the Entry Provisions; and

(ii) where a User has requested to resume flow of carbon dioxide to the Delivery Point where the User can demonstrate to the T&SCo's reasonable satisfaction that, having regard to historical data in the absence of confirmation that carbon dioxide is no longer Non-Compliant $CO_2$, the User's carbon dioxide complies with the Entry Provisions; and

(h) not require Users to take delivery of carbon dioxide from the T&S Network or vent or purge carbon dioxide that has passed through the Delivery Point and entered the T&S Network;

**Downstream Venting Events**

(i) set out;

(i) a method that is compliant with ETS Legislation and Guidance for obtaining the Vented Quantity; and

(ii) any data reporting requirements associated with this method.

**Isolations relating to results of a Validation Report, failure to grant T&SCo access or Measurement Equipment Error, destruction or damage**

(j) detail the responsibilities of T&SCo and User(s) relating to isolation in the event that:

(i) the results of a Validation Report indicate that adjustment or replacement of Measurement Equipment is required under paragraph 6 of Section F (Network Design and Specification);

(ii) the T&SCo is prevented from exercising its access rights under paragraph 10 of Section F (Network Design and Specification); or

(iii) any component of the Measurement Equipment is destroyed or damaged or the User identifies a Measurement Equipment Error under paragraph 12 of Section F (Network Design and Specification),

including communication requirements and process relating to resumption of carbon dioxide flow where adjustment or replacement of Measurement Equipment has been demonstrated, T&SCo's access has been granted, the relevant destruction, damage or Measurement Equipment Error has been rectified or the Measurement Adjustment has been completed (as applicable) in accordance with Section F (Network Design and Specification) or at such earlier time as agreed by the T&SCo.

# Annexure I – Minimum Documentation Requirements

***Note**: it is expected that this Annexure will be populated with templates, naming protocols, transfer intervals and methods of acquisition for what are considered to be key datasets across the network, eg flow rates, nominations, compositional analysis etc.*

# Annexure J – Information Publication Requirements

***Note**: it is expected that this Annexure will contain minimum requirements for granularity and frequency of data release in relation to information to be published by T&SCos.*

# Annexure K – Retained Data

***Note**: it is expected that this Annexure will list the categories of data and information, which is required to be retained for at least ten (10) years.*

# Annexure L – CDS Terms of Reference

**Background**

Transport and Storage Companies are required to jointly procure a CDS which will be responsible for providing the Processed Flow Meter Data Statement which sets out the data to be used as inputs to the calculation of the Onshore Flow Charge, the Offshore Flow Charge and the Re-Use Service Charge by both T&SCo (for purposes of invoicing under the CCS Network Code) and the LCCC (for payments under the User revenue support contracts). The CCS Network Code sets out the minimum scope of the CDS Contract within Section I (Data) of the CCS Network Code and through this CDS Terms of Reference.

| No | Subject | Terms |
|---|---|---|
| 1. | **Parties** | 1.1 The parties to the CDS Contract shall be:<br>(a) the T&SCos; and<br>(b) the CDS. |
| 2. | **Scope** | 2.1 The scope of the CDS Contract shall as a minimum comprise:<br>(a) the scope of paragraph 9.2 of Section I (Data) of the CCS Network Code; and<br>(b) responsibility for aggregating the actual mass of carbon dioxide delivered by each User into their respective T&S Networks. |
| 3. | **Roles & Responsibilities** | 3.1 The CDS will act independently of any User(s) or T&SCo(s) and shall comply with the scope as laid out in paragraph 2.1. |
| 4. | **General standards of performance** | 4.1 The T&SCos should ensure alignment, among themselves, when reviewing the operational performance of the CDS, and ensure that the CDS, at all times, meets the minimum requirements of the duties under the CDS Contract.<br>4.2 The CDS shall notify each T&SCo when the CDS is capable of collecting data, following:<br>(a) the successful integration of the CDS; and<br>(b) the CDS confirming that it is operationally ready to performance its responsibilities under the CDS Contract. |

| No | Subject | Terms |
|---|---|---|
| | | 4.3 Each party shall, in connection with its performance under the CDS Contract, comply with applicable laws.<br><br>4.4 The CDS shall:<br><br>(a) provide the services in accordance with the terms of the CDS Contract (including in such way as to meet the agreed performance standards and good industry practice;<br><br>(b) ensure that the CDS complies with its specification;<br><br>(c) obtain and maintain, for the duration of the CDS Contract, all necessary licences, permissions, authorisations, exemptions, permits, necessary consents and approvals;<br><br>(d) become familiar with the terms of the CCS Network Code, and the Data Transfer Procedures and the role (express or implied) under such documents of the "CDS";<br><br>(e) review information made available to the CDS by the parties in order to become fully acquainted with the CCUS project including any variations to the CCS Network Code made from time to time (and any other relevant documentation or information referred to in or connected with the CCS Network Code); and<br><br>(f) follow the API Minimum Measures in accordance with paragraph 14 when using API/s. |
| 5. | **Data Processing** | 5.1 Without prejudice to the Data Transfer Procedures, the T&SCos shall establish, document, implement and maintain written procedures for CDS activities within the CDS Contract, relating to the data processing and management of data from the boundary flow meter.<br><br>5.2 The CDS Contract shall set out parameters for the data to be processed and the CDS shall:<br><br>(a) accept data which is within the parameters defined in the CDS Contract; |

| No | Subject | Terms |
|---|---|---|
| | | (b) reject data which is outside of the parameters defined in the CDS Contract (and not include such data within any Processed Flow Meter Data Statement); and<br><br>(c) immediately notify the T&SCo of any such rejection and the nature of the divergence or non-compliance with such parameters once identified.<br><br>5.3 The CDS must comply with the Data Transfer Procedures to the extent necessary to be in a position to carry out its obligations under the CDS Contract.<br><br>5.4 The CDS Contract shall contemplate the following process:<br><br>(a) the CDS shall receive the data from each User's boundary flow meter via API so as to enable the CDS to have received all relevant data within one (1) Business Day following the relevant Billing Period;<br><br>(b) the CDS will aggregate the data in accordance with the Data Transfer Procedures of the CCS Network Code and the CDS Contract; and<br><br>(c) at the end of a Billing Period, the CDS will use the aggregated data to produce a Processed Flow Meter Data Statement for the purposes of paragraph 21.2 of Section H (Charges, Invoicing and Payment) which shall be sent to the LCCC and the T&SCos within two (2) Business Days following the end of the relevant Billing Period.<br><br>5.5 Where a User is being provided with a Re-use Service, the CDS shall receive the data from each such User's Re-use Meter via API. The data must be received within one (1) Business Day following the end of each relevant Billing Period.<br><br>5.6 The CDS will process any Flow Meter Adjustment as determined under paragraph 13.3 of Section F (Network Design and Specification) and any Vented Quantity |

| No | Subject | Terms | |
|---|---|---|---|
| | | | notified to it under paragraph 10.15 of Section F (Network Design and Specification). |
| 6. | **Access to Data** | 6.1 | The CDS must enable automated collection of metered data directly from the User's SCADA, or similar including DAHS, operations systems via push and/or pull API. |
| | | 6.2 | The CDS must be capable of data collection from the User's Measurement Equipment, data collection must be device and system agnostic. |
| | | 6.3 | The CDS shall provide periodic maintenance in accordance with the maintenance terms set out in the CDS Contract, such terms shall align with good industry practice and shall not impact BAU activities where possible. |
| | | 6.4 | The CDS Contract shall allow for reasonable downtime of the CDS in the event of an emergency and during the CDS's planned maintenance window, which shall be specified in the CDS Contract. The CDS shall provide to the T&SCos as much prior written notice as possible (having regard to the relevant circumstances) of any unplanned downtime. |
| | | 6.5 | The CDS shall provide support services in accordance with the maintenance terms set out in the CDS Contract, such terms to align with good industry practice. |
| | | 6.6 | The CDS is to produce the Processed Flow Meter Data Statement at the end of each Billing Period in accordance with Section H (Charges, Invoicing and Payment). This statement shall be accessible via an agreed communication method to the below bodies:<br>(a) the T&SCos;<br>(b) the Users; and<br>(c) the LCCC. |
| 7. | **CDS Data Disputes** | 7.1 | Following a CDS Data Dispute and Expert Determination, the CDS will reprocess any data that is found to be subject to rectification. |

| No | Subject | Terms |
|---|---|---|
| | | 7.2 The CDS will follow instruction from the T&SCo to reprocess the Flow Meter Data Statement in accordance with paragraph 27 of Section H (Charges, Invoicing and Payment). |
| 8. | **Liability** | 8.1 The CDS appointment shall contain market standard liability limitation provisions. |
| 9. | **Collateral Warranties** | 9.1 The CDS shall be required to enter into collateral warranties with Users and with the LCCC which provide as a minimum:<br>(a) warranties and undertakings regarding extending duties of care to such third parties;<br>(b) insurances;<br>(c) restrictions on scope variations without such third party's consent; and<br>(d) provision of access to data and reports.<br>9.2 In addition to the requirements above, the collateral warranty between the CDS and Users shall include:<br>(a) permitted assignment and accession by further Users to the collateral warranty;<br>(b) standing authority from Users to the CDS granting access to the Flow Meter and the Re-use Meter (if applicable);<br>(c) standing authority from the Users to the CDS for the CDS to collect and process that User's mass flow of carbon dioxide (measured in $tCO_2$) as laid out in Section F (Network Design and Specification) and Section I (Data);<br>(d) a requirement for the CDS to collect the User's data in accordance with the Data Transfer Procedures; and<br>(e) permitted assignment and accession by further Users to the collateral warranty.<br>9.3 In addition to the requirements above, the collateral warranty between the CDS and the LCCC shall include: |

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| | | (a) a requirement for the CDS to provide a copy of the notice under paragraph 4.2 at the same time it provides such notice to the T&SCos;<br><br>(b) a right for the LCCC to request evidence of the CDS' operational performance from the CDS no later than five (5) Business Days after any such request has been made; and<br><br>(c) a requirement for a copy of the relevant Processed Flow Meter Data Statement to be sent to the LCCC and the T&SCos within two (2) Business Days following the end of the relevant Billing Period.<br><br>9.4 The form of any such collateral warranties shall be annexed to the CDS Contract. |
| 10. | **Insurance** | 10.1 The CDS shall be required to take out and maintain professional indemnity and public liability insurance to agreed limits.<br><br>10.2 The CDS shall be required to maintain such insurances with reputable insurers who are acceptable to the T&SCo (such acceptance not to be unreasonably withheld or delayed) for a period of not less than twelve (12) years from the date of completion of the CDS's duties under the CDS Contract, provided that each such insurance is available at reasonable commercial rates.<br><br>10.3 The CDS will be required to provide evidence of such insurance. |
| 11. | **Business Continuity and Disaster Recovery** | 11.1 The CDS shall implement and maintain business continuity/disaster recovery plan(s) in relation to the services, in accordance with good industry practice. |
| 12. | **Information Security** | 12.1 The CDS shall have in place and maintain technical and organisational security measures which comply with good industry practice (which shall include at a minimum ISO 27001 and NIST cybersecurity framework). |

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| 13. | **API Minimum Measures** | 13.1 The CDS shall follow the following measures, as a minimum, when using API/s:<br>(a) Strong Authentication and Authorisation: Use OAuth 2.0, J to ensure only authorised access.<br>(b) Input Validation and Sanitisation: Validate and sanitise all inputs to prevent injection attacks.<br>(c) Encryption: Use HTTPS for secure communication and encrypt sensitive data at rest.<br>(d) Rate Limiting and Throttling: Implement controls to prevent Denial of Service attacks.<br>(e) Error Handling: Provide handling and error messages and log errors.<br>(f) Monitoring and Logging: Continuously monitor API activity and maintain logs for audit and forensic purposes.<br>(g) Regular Security Audits: Conduct regular security assessments and penetration testing to identify and fix vulnerabilities. |
| 14. | **Variations** | 14.1 The T&SCo shall be entitled to request a variation to the CDS Contract where any modifications are made to these Terms of Reference in accordance with Section B of the CCS Network Code. |
| 15. | **Definitions** | "**API**" means application programming interface.<br>"**SCADA**" means Supervisory Control and Data Acquisition.<br>"**DAHS**" means Data Acquisition and Handling System. |

# Annexure M – Independent Verifier Terms of Reference

The T&SCos shall ensure that the Independent Verifier appointment entered into with an Independent Verifier in connection with the User's procurement, installation, operation and maintenance of the Measurement Equipment in accordance with Section F of the CCS Network Code shall include the minimum terms and conditions set out in this Annexure M.

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| 1. | **Parties** | 1.1 The parties to the Independent Verifier Appointment shall be:<br>(a) the T&SCo; and<br>(b) the Independent Verifier. |
| 2. | **Recitals** | 2.1 The Independent Verifier Appointment shall include recitals to capture the following principles:<br>(a) the T&SCo has entered into a Code Agreement for the purpose of giving effect to and binding itself to the CCS Network Code.<br>(b) in accordance with its obligations under the CCS Network Code, the T&SCo wishes to procure the services of an Independent Verifier which the T&SCo will also make available to Users.<br>(c) the T&SCo now wishes to appoint the Independent Verifier to perform certain verification activities and certain services in connection with the T&S Network to the T&SCo on the terms of this Independent Verifier Appointment. |
| 3. | **Definitions** | 3.1 Terms in the Independent Verifier Appointment which are capitalised but not otherwise defined shall have the meaning given to such terms in the CCS Network Code. |
| 4. | **Appointment and Conflicts of Interest** | 4.1 The T&SCo appoints the Independent Verifier under the Independent Verifier Appointment to perform the Services.<br>4.2 The Independent Verifier confirms its acceptance of the appointment and agrees to carry out and |

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| | | complete the Services and all other obligations and tasks which are ascribed to the Independent Verifier under CCS Network Code.<br><br>4.3 The Independent Verifier shall be required to declare that it has no existing conflicts of interest and immediately notify the T&SCo of any situation that would compromise the Independent Verifier's ability to perform a wholly independent verification or any other aspect of the Services. |
| 5. | **Key Scope and Responsibilities** | 5.1 The Services that the Independent Verifier will be required to perform under the Independent Verifier Appointment shall be set out in Schedule 1.<br><br>5.2 As a minimum, Schedule 1 is required to provide for the following:<br><br>(a) initial validation of installed Measurement Equipment in accordance with Measurement Requirements in paragraph 6.1(a) of Section F of the CCS Network Code;<br><br>(b) annual validation of Measurement Equipment in accordance with paragraph 6.1(b) of Section F of the CCS Network Code;<br><br>(c) preparation of a validation report of each validation carried out in accordance with paragraph (a) and (b);<br><br>(d) participation in any dispute resolution regarding the content of a validation report;<br><br>(e) inspection of Measurement Equipment following Measurement Equipment Errors; and<br><br>(f) determination of Measurement Adjustments following Measurement Equipment Errors. |
| 6. | **Accreditations/Licenses** | 6.1 The Independent Verifier shall be required to hold and maintain, as a minimum, the following accreditations:<br><br>(a) be a competent auditor; and |

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| | | (b) possess an appropriate level of knowledge of metering and technical systems of the same type as the Measurement Equipment. |
| 7. | **Standard of Performance** | 7.1 In performing its obligations under the Independent Verifier Appointment, the Independent Verifier shall exercise the level of reasonable skill, care and diligence to be expected from a competent and properly qualified professional Independent Verifier experienced in providing services of a similar scope, type, scale and complexity to the Services in relation to a project of a similar scope, type, scale and complexity as the Project and in accordance with all Applicable Requirements and any other criteria, standards or codes relevant to the performance of the Services.<br><br>7.2 The Independent Verifier acknowledges that the T&SCo and Users have relied on, and shall continue to rely upon, the professional skill and judgement of the Independent Verifier in the performance of the Services.<br><br>7.3 The Independent Verifier shall:<br><br>(a) carry out the Services (including without limitation the exercise of any discretion in the performance of the Services) independently, fairly and impartially to and as between the T&SCo, Users and the LCCC and while the Independent Verifier may take account of any representations made by the T&SCos, Users and/or the LCCC, the Independent Verifier shall not be bound to comply with any representations made by any of them in connection with any matter on which the Independent Verifier is required to exercise its professional judgement.<br><br>(b) comply with all reasonable instructions given to it by the T&SCos and Users, except and to the extent that the Independent Verifier reasonably considers that any such instructions vary or might vary the Services or |

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| | | its authority or responsibilities under the Independent Verifier Appointment or prejudice or might prejudice the exercise by the Independent Verifier of its professional judgement in accordance with paragraph 6.1 or 6.1(a).<br><br>7.4 All instructions to the Independent Verifier shall be given in writing by the T&SCo, and such person shall provide a copy of the same to the other, immediately following issue.<br><br>7.5 The T&SCo agrees to co-operate with, and provide reasonable assistance to, the Independent Verifier to familiarise the Independent Verifier with all necessary aspects of the Measurement Equipment and relevant facilities to enable the Independent Verifier to carry out its obligations under the Independent Verifier Appointment.<br><br>7.6 The Independent Verifier shall familiarise itself with and shall be deemed to have full knowledge of the provisions of the CCS Network Code and shall be deemed to be aware of and to have taken full account of all the obligations, both expressed and implied, on the part of the T&SCos which are set out in the CCS Network Code.<br><br>7.7 The Independent Verifier shall perform the Services in such manner and at such times that no act, omission or default of the Independent Verifier shall constitute or cause any breach by the T&SCos or Users of any requirements and/or obligations in the CCS Network Code.<br><br>7.8 The Independent Verifier shall promptly and efficiently perform the Services as soon as reasonably practicable consistent with the requirements specified in paragraph 6.1 and [6.1(a).<br><br>7.9 The Independent Verifier shall in providing the Services comply with all Applicable Requirements and, without limiting the generality of the foregoing, shall comply with all lawful and reasonable directions, instructions or requests relating to or in |

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| | | | pursuance of the same given or made by and/or on behalf of the T&SCos or Users whilst the Independent Verifier is present on the T&SCo land or User land. |
| 8. | **Fee and Invoicing** | 8.1 | The T&SCo must pay to the Independent Verifier the agreed fee, at the agreed intervals, subject to a valid application payment application being made. |
| | | 8.2 | Each invoice submitted by the Independent Verifier to the T&SCo should clearly indicate the nature of the activities performed in accordance with the Services set out in Schedule 1. |
| 9. | **User Data and Data Protection** | 9.1 | The T&SCo shall own and continue to own all data and information (including T&S Network Data and Measurement Data) generated by or on behalf of the T&SCo or Measurement Equipment owned by the Users. |
| | | 9.2 | Each User must own and continue to own all data and information (including its relevant User-Specific Data) generated by or on behalf of the User or Measurement Equipment owned by the User. |
| | | 9.3 | The Independent Verifier shall not access, process, use or share any data provided by or on behalf of the T&SCo or a User other than as permitted under the Independent Verifier Appointment. |
| | | 9.4 | The Independent Verifier may not restrict or withhold access to data or otherwise refuse to return to the T&SCo or a User (or its nominee) any data belonging to the T&SCo or a User. |
| | | 9.5 | To the extent that any personal information is processed in connection with the Services, the Independent Verifier Appointment shall include adequate provisions detailing each party's roles and responsibilities in connection with any such processing. Each Party shall comply with applicable data protection laws in relation to the processing of personal information in connection with the Independent Verifier Appointment. |

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| | | 9.6 | The Independent Verifier shall implement and maintain reasonable archiving policies and procedures in relation to data of the T&SCo and Users held by it. The Independent Verifier's policies and procedures shall align with good industry practice. |
| 10. | **Disclosure and Confidentiality** | 10.1 | Subject to paragraph 10.3, the Independent Verifier shall be required keep confidential all matters relating to the Independent Verifier Appointment and use all reasonable endeavours to prevent its employees and agents from making any disclosure to any person of any matter relating to the Independent Verifier Appointment. |
| | | 10.2 | Upon termination of the Independent Verifier Appointment for whatever reason, the Independent Verifier shall be required to deliver up to the T&SCo and Users (as appropriate) all working papers, computer disks and tapes or other material aid copies provided to or prepared by the Independent Verifier in connection with the Independent Verifier Appointment. |
| | | 10.3 | The Independent Verifier Appointment shall contain market standard carve outs in relation to confidentiality obligations and permitted disclosures. |
| 11. | **Information Security** | 11.1 | The Independent Verifier shall have in place and maintain technical and organisational security measures which comply with good industry practice (which shall include at a minimum ISO 27001 and the NIST cybersecurity framework). |
| 12. | **Obligations on the T&SCo** | 12.1 | On reasonable prior notice, and in accordance with its obligations under Section F of the CCS Network Code, the T&SCo must provide (and procure that each User provides) the Independent Verifier with all access to the relevant site and any other areas and relevant information and other written material in the possession of the T&SCo as the Independent Verifier requires to carry out the Services. |

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| | | 12.2 The T&SCo must appoint one (1) or more appropriate persons to liaise with the Independent Verifier.<br><br>12.3 The T&SCo shall be responsible for ensuring that the Independent Verifier is kept informed of any variations to the CCS Network Code, including any updates to the Data Transfer Procedures or Common Interface Procedures.<br><br>12.4 The T&SCo must ensure that the Independent Verifier is provided with all documents and other evidence the Independent Verifier requires in order to perform the Services. |
| 13. | **Limitation of Authority** | 13.1 The Independent Verifier shall not consent or agree to any waiver or release of any obligation of the T&SCo under the CCS Network Code.<br><br>13.2 The Independent Verifier shall not express an opinion on and shall not interfere with or give any advice, opinion or representation in relation to any matters which are beyond its role and responsibilities under the Independent Verifier Appointment. |
| 14. | **Termination** | 14.1 The Independent Verifier Appointment shall contain immediate termination rights in relation to material breaches which remain unremedied, gross misconduct or delay in providing the services and insolvency. |
| 15. | **Assignment** | 15.1 Neither party shall assign, novate, sub-contract or otherwise transfer its benefits or obligations under the Independent Verifier Appointment or any part thereof without the prior written consent of the other party. |
| 16. | **Insurance** | 16.1 The Independent Verifier shall be required to take out and maintain professional indemnity and public liability insurance to agreed limits<br><br>16.2 The Independent Verifier shall be required to maintain such insurances with reputable insurers who are acceptable to the T&SCo (such acceptance not to be unreasonably withheld or delayed) for a |

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| | | period of not less than twelve (12) years from the date of the completion of the Independent Verifier's duties under the Independent Verifier Appointment, provided that each such insurance is available at reasonable commercial rates.<br><br>16.3 The Independent Verifier will be required to provide evidence of such insurances. |
| 17. | **Collateral Warranties** | 17.1 The Independent Verifier shall be required to enter into Collateral Warranties with the LCCC and Users providing as a minimum:<br><br>(a) warranties and undertakings regarding extending duties of care to such third parties;<br><br>(b) insurances;<br><br>(c) restrictions on scope variations without such third party's consent;<br><br>(d) permitted assignment and accession by further Users to the collateral warranty;<br><br>(e) provision of access to data and reports;<br><br>(f) provision of relevant contractual notices.<br><br>17.2 The form of any such collateral warranty shall be annexed to the Independent Verifier Appointment. |
| 18. | **Limitation of Liability** | 18.1 The Independent Verifier Appointment shall contain market standard liability limitation provisions. |
| 19. | **Other** | 19.1 The Independent Verifier Appointment shall contain boilerplate provisions addressing governing law, severability, entire agreement, dispute resolution etc. |
| 20. | **Schedule 1 (Services)** | As a minimum, Schedule 1 shall address the following: |
| | | **Familiarisation of the CCS Network Code**<br><br>20.1 The Independent Verifier shall : |

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| | | (a) become familiar with the terms of the Project CCS Network Code, Data Transfer Procedures and the Common Interface Procedures and the role (express or implied) under the such documents of the "Independent Verifier"; and<br><br>(b) review information made available to the Independent Verifier by the Parties in order to become fully acquainted with the CCS project including any variations to the CCS Network Code made from time to time (and any other relevant documentation or information referred to in or connected with the CCS Network Code),<br><br>to the extent necessary to be in a position to carry out its obligations pursuant to this Deed.<br><br>**Verification Activities**<br><br>20.2 The Independent Verifier shall carry out verification activities including, but not limited, to:<br><br>(a) tests or checks of the technical specification of the Measurement Equipment provided by a User to ensure conformity with the Measurement Requirements;<br><br>(b) tests or checks of the measurement uncertainty of the Measurement Equipment;<br><br>(c) checks to ensure compliance with the standards required by the Measurement Requirements;<br><br>(d) tests or checks of all points including, but not limited, to the:<br><br>(i) labelling of equipment;<br><br>(ii) general standard of installation, being the good working practice standard; |

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| | | (iii) compliance of installation with any relevant manufacturers' requirements and/or guidelines;<br><br>(iv) compliance with calibration requirements; and<br><br>(v) compliance with maintenance requirements.<br><br>**Site Visits**<br><br>20.3 The Independent Verifier shall as required visit the site of the relevant Measurement Equipment and any other areas required to ensure it is able to discharge the functions which the Independent Verifier Appointment contemplates will be discharged by the Independent Verifier.<br><br>20.4 The Independent Verifier shall give the T&SCo and Users reasonable advance notice of the dates upon which it intends to visit the sites concerned.<br><br>20.5 The Independent Verifier shall comply with all relevant site safety procedures and processes as required by the T&SCo or User in charge of the relevant site.<br><br>**Liaison with T&SCos and Users**<br><br>20.6 The Independent Verifier shall liaise with the T&SCo and Users in anticipation of carrying out such activities as are necessary, including the procurement of any third party services, for it to perform the Services.<br><br>**Participation in Dispute Resolution**<br><br>20.7 The Independent Verifier shall provide an opinion on Measurement Equipment Errors and any required Measurement Adjustments, where such matters are referred to it in accordance with Section F of the CCS Network Code.<br><br>20.8 As and when required by the T&SCo or a User, the Independent Verifier shall participate in the Dispute |

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| | | Resolution Procedure of the CCS Network Code to the extent that issues under the CCS Network Code which have been referred to the Dispute Resolution Procedure relate to the Services. |

# Annexure N – T&S Network Portal Minimum Specification

## 1. Publicly available information

1.1 The T&S Network Portal must have publicly available pages, to publish all the information that the T&SCo is required, in accordance with the Code, to make available for all Users, prospective Users and the public at large, including but not limited to:

(a) the T&SCo's Connection Application template, together with a succinct guide to the information that must be provided with the Connection Application, pursuant to paragraph 14.1 of Section C (Connection);

(b) the Registered Capacity of every User, pursuant to paragraph 3.7(b) of Section E (Network Use and Capacity);

(c) the required information relating to the Network Capacity specified in paragraph 6.1 of Section E (Network Use and Capacity);

(d) information about the quantity of residual Network Capacity that is available in the current and next six (6) Delivery Periods, pursuant to paragraph 21.5 of Section E (Network Use and Capacity);

(e) details of each Maximum Annual Cumulative Flow that applies to each individual Storage Site, pursuant to paragraph 23.3 of Section E (Network Use and Capacity);

(f) details of how it has determined that the Maximum Annual Cumulative Flow will be exceeded, pursuant to paragraph 23.6(a) of Section E (Network Use and Capacity);

(g) an updated Maintenance Programme for the Planning Period ahead, pursuant to paragraph 30.1 of Section E (Network Use and Capacity);

(h) a draft of the Maintenance Programme pursuant to paragraph 31.1(a) of Section E (Network Use and Capacity);

(i) details of the matters referred to in paragraph 36.3 of Section E (Network Use and Capacity):

(j) information about all Capacity Constraints pursuant to paragraph 37.1(a) of Section E (Network Use and Capacity);

(k) information about Minimum Flow Deficits pursuant to paragraph 22 of Section E (Network Use and Capacity);

(l) a summary of its findings based of the data and records reviewed pursuant to paragraph 48.5(a) of Section E (Network Use and Capacity);

(m) the T&S Network Data specified in paragraph 6.19 of Section I (Data); and

(n) the Use of System Charging Statement for the current Charging Year and previous Charging Years.

## 2. User accounts in the T&S Network Portal

2.1 The T&S Network Portal must also allow for each User to have its own account, accessible using a log-in, to allow the User to send to the T&SCo and receive from the T&SCo various operational communications, as set out in the Code, including but not limited to:

(a) Forecasts, Nominations and Renominations made by the User;

(b) responses from the T&SCo to Nominations and Renominations;

(c) communications relating to Capacity Constraints, Minimum Flow Deficits and Emergencies;

(d) the issuance of Invoice Documents and Processed Flow Meter Data.

2.2 The T&S Network Portal must have the following minimum features to allow each User to send to the T&SCo and receive from the T&SCo various operational communications in an effective and efficient manner:

(a) security features to protect the integrity of the communications; and

(b) automation features to facilitate and allow:

(i) all communications to be issued and received in a user-friendly and time efficient manner;

(ii) communications from the T&SCo to be brought to the timely attention of Users; and

(iii) any operational communications from each User, such as Nominations and Renominations (and any other communications being made pursuant to Section E), to be accurate and to reduce the potential for human error – for example, for input fields to automatically recognise details such as a User's Delivery Point and the User's Available Registered Capacity, and for Daily Nominations to be automatically rejected if they do not comply with the relevant parameters for compliance.