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Making a positive difference
for energy consumers

Gwneud gwahaniaeth gwirioneddol
i ddefnyddwyr ynni

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20 April 2022

Dear James,

Decision on Material Change for Future Billing Methodology NIC Innovation Competition project

We¹ write further to your email dated 16 November 2021 seeking permission to extend the deadline for completing the Future Billing Methodology NIC project.

Background

The Network Innovation Competition ("NIC") funds a number of large-scale innovation projects and was set up to encourage network licensees to innovate in the design, development, and operation of their networks.

The purpose of the Future Billing Methodology project was to develop options for updating the gas billing methodologies to accommodate different gas qualities, such as biomethane or blended hydrogen. The NIC Governance Document sets out the regulation, governance and administration of the NIC.²

Cadent³ was awarded NIC funding for the Future Billing Methodology Project in November 2016.⁴ On 16 December 2016, we issued a Project Direction⁵ which outlined the terms to be followed in relation to the project as a condition of it being funded under the NIC.⁶ On 16 November 2021, Cadent submitted a change request to the 2016 Project Direction. The changes requested relate to the extension of project timescales due to delays caused by the Covid-19 pandemic.

This letter is our decision on the requested changes to the Project's 2016 Project Direction.

Material Change Request to the 2016 Project Direction

¹ The terms 'we', 'us', 'our' refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority. The terms 'you' and 'your' are used to refer to Cadent Gas Limited

² <https://www.ofgem.gov.uk/publications/version-30-network-innovation-competition-governance-documents>

³ NGGD was renamed Cadent in 2017. See link: <https://cadentgas.com/news-media/news/may-2017/launch-of-cadent>

⁴ <https://www.ofgem.gov.uk/publications/gas-network-innovation-competition-2016-funding-decision>

⁵ https://www.ofgem.gov.uk/sites/default/files/docs/2017/02/fbm_project_direction_-_final_-_signed.pdf

⁶ The Authority issued a Project Direction to Cadent pursuant to the NIC Governance Document issued pursuant to Part E of Special Condition 7.7 (Network Innovation Competition) of the Gas Transporter Licence setting out the terms to be followed in relation to the project as a condition of it being funded under the Network Innovation Competition.

On 16 November 2021 Cadent submitted a material change request to the Authority as required under paragraph 8.21 of the Gas NIC Governance Document to extend the project timelines.

The reasons provided by Cadent for the material change request are:

- Covid-19 caused a demobilisation in non-critical operations, delaying the installation of the site equipment
- This impacted its ability to complete the network modelling validation
- Following completion of installations in Summer 2020, Cadent extended the network modelling validation period to spring 2021 to gather a data set reflective of all seasons and demand conditions to provide meaningful results.
- The technical reports and knowledge dissemination through industry consultation has taken quite a bit of planning through 2021/22, with final report to conclude in March 2022.

A summary of requested timeline extensions is provided in the table below:

Successful Delivery Reward criterion (SDRC)	Original delivery date	Amended delivery date	Evidence
9.2. Novel tracking of unconventional gases by measurement	31 December 2019	31 December 2020	<p>The novel tracking of unconventional gases by measurement will involve the installation and collation of field trial measurements. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The installation of additional sensors on the gas network in governor stations and at street level • The efficacy of measuring oxygen content, pressure and flow to support the validation of network modelling for determining the distribution of biomethane in Low Pressure and Medium Pressure networks <p>This SDRC will be based on milestone 12 of the Full Submission.</p>
9.3. Report on novel validation of network modelling for embedded and network charging areas	31 December 2019	31 October 2021	<p>The novel validation of network modelling for embedded and network charging areas will use zonal analysis of pressure, flow and oxygen tracking measurements from the field trials. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • How to analyse oxygen, pressure and flow data from the field trials using network modelling techniques • Options and methods for assigning CV to charging areas for the <i>Pragmatic</i> and <i>Composite</i> scenarios <p>This SDRC will be based on milestone 13 in the Full Submission.</p>

9.4. Report on Smart Metering Laboratory Trials	31 December 2019	31 March 2021	<p>The smart metering laboratory trials will be carried out at the DNV GL Technical Assurance Laboratories in Peterborough. Several CV measurement devices will be installed in the network field trial which would transfer CV to the smart meters. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The transfer of CV to smart meters via a mimic of Data Communications Company • Options and further developments required for the future transmission of CV from smart meters to the billing process <p>This SDRC will be based on milestone 11 of the Full Submission.</p>
9.5. Future Billing Methodology Recommendation	31 March 2020	31 March 2022	<p>The Project will report on Future Billing Methodologies and cost benefits of the three scenarios <i>Pragmatic, Composite and Ideal</i> concluding with a recommendation and high level implementation plan. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The Project findings through a collation of the outputs from Work Packs 1 to 4 • The Project recommendations and how these were derived including cost benefit analyses • High-level implementation plan of the recommendations <p>This SDRC will be based on milestone 15 of the Full Submission.</p>

Decision

We have decided to approve the NIC change request and extend the deadline for completing the Future Billing Methodology NIC project.

This is because we have considered your request to extend the Project deadline and we are of the view that it would be appropriate in the circumstances, including that it would be in the best interests of consumers, to extend the respective deadline for project deliverables.

From our assessment, we consider that the timeline extension requests set out above relate to circumstances that would have been difficult or impossible for Cadent to foresee at the outset of the Project. In our view, these changes extending the deadline to complete the Project do not significantly reduce or affect the value that network customers would derive from this Project.

In accordance with Paragraph 8.21 of the Governance Document and Section 13 of the 2016 Project Direction, we hereby amend the schedule to the 2016 Project Direction in the manner set out in Schedule 1 of this decision. . This letter constitutes notice pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.

You must provide a Close Down Report within three Calendar Months of the Project end date set out in the amended project direction Further guidance on the requirements and

contents of Close Down Reports is provided in Paragraphs 8.34 – 8.42 and in Appendix 2 to the Governance Document.

We have published the Amended Project Direction in the Schedule alongside this decision.

If you would like to discuss any of the issues raised in this letter, please contact Rebecca Pickett at Rebecca.Pickett@ofgem.gov.uk.

Yours sincerely,

Jourdan Edwards

Interim Deputy Director, Onshore Networks

For and behalf of the Authority

Schedule 1- Amended Project Direction

1. TITLE

Project Direction ref: Cadent/ Future Billing Methodology / ~~16-Decemebr-2016~~20 April 2022

2. PREAMBLE

This Amended Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority"⁷) to Cadent (the "Funding Licensee") pursuant to the Gas NIC Governance Document issued pursuant to Special Condition 7.7 (Network Innovation Competition) of the Gas Distribution Licence (the "Licence"). It sets out the terms to be followed by the Funding Licensee in relation to its Future Billing Methodology Project ("the Project") as a condition of the Project being funded under the NIC and the Funding Return Mechanisms⁸.

Unless otherwise specified, defined terms in this Amended Project Direction have the meaning given to them in Appendix 1 of the Gas NIC Governance Document.

References to specific sections of the Funding Licensee's Full Submission in this Amended Project Direction are, for ease of reference, made by referring to the section number in the Funding Licensee's Full Submission pro-forma.

3. CONDITION PRECEDENT

Condition 1: The Funding Licensee will not access any funds from the Project Bank Account until it has signed contracts with the Project Partner named in Table 1.

Table 1. Project Partner

DNV GL

Condition 2:

(i) Subject to paragraph (iii) below, the Funding Licensee must not spend NIC funding associated with Work Packs 2, 3 and 4, until it has received consent from us. We will make a decision in relation to whether to allow the Project to continue beyond Work Pack 1. If we do not provide written consent by the day which is six weeks after the completion of Successful Delivery Reward Criteria ("SDRC") 9.1a this will be deemed as the Authority having given permission to proceed with the Project. If during this period, we consider that there is insufficient evidence of stakeholder interest to continue with the Project, we may:

- extend our six week decision deadline; or
- extend the timeline for the Project by up to six calendar months.

In either case, we will do so, in writing, no later than the day which is six weeks after the completion of SDRC 9.1a.

(ii) At the end of SDRC 9.1a, the Funding Licensee shall prepare a report to us setting out the following from its industry engagement activities:

- a) Industry's current views on the desire for change to the current approach.
- b) Industry's current views on:

⁷ The terms 'the Authority', 'Ofgem', 'we', 'us' and 'our' are used interchangeably in this document.

⁸ The Funding Return Mechanism is defined in Special Condition 7.7 (Network Innovation Competition).

- i. What level of modelling validation is seen as required; and
- ii. What regulatory (or other) changes are required to support the continuation of the Project beyond Work Pack 1.
- c) Initial Cost Benefit Analysis of the three scenarios (noting that this will be finalised under Work Pack 4) to demonstrate that, following industry engagement, there remains a strong case to proceed with the Project.
- d) Based on a, b, and c, Cadent's assessment of the best way to proceed with this Project.

References to 'industry' includes, but is not limited to gas distribution networks (GDNs), National Grid group companies, shippers, suppliers, Xoserve and Ofgem.

(iii) The Funding Licensee may bring forward up to £250k of NIC funding from Work Packs 2 and 4 to help support its analysis under paragraph (ii) and to help prepare the project to move into delivering Work Pack 2.

(iv) If the Funding Licensee considers it necessary to delay the Project it must notify the Authority in writing to Ofgem by 1 August 2017. For the Funding Licensee to be able to delay the Project using the right to notify the Authority pursuant to this provision, the period of delay must be no longer than six calendar months. If the Funding Licensee notifies the Authority pursuant to this provision, the delivery date of all the SDRCs listed in table 2 below will move back by the number of calendar months indicated by the Funding Licensee in the written notification. No consent is required for this provision to take effect unless the Authority provides a written refusal within one calendar month.

4. COMPLIANCE

The Funding Licensee must comply with Special Condition 7.7 of the Licence and with the Gas NIC Governance Document (as may be modified from time to time in accordance with Special Condition 7.7 and as modified and/or augmented in respect of the Project by this Project Direction) and with this Project Direction.

Any part of the Approved Amounts that the Authority determines not to have been spent in accordance with this Project Direction (or in accordance with the Gas NIC Governance Document) is deemed to be Disallowed Expenditure.

Pursuant to Special Condition 7.7, Disallowed Expenditure is revenue received (whether by the Funding Licensee or by another Licensee) under the NIC and Funding Return Mechanisms that the Authority determines not to have been spent in accordance with the provisions of the Gas NIC Governance Document or with those of the relevant Project Direction.

Pursuant to Chapter 8 of the Gas NIC Governance Document, Disallowed Expenditure includes any funds that must be returned if the Project is halted without Ofgem's permission, any funds that have not been spent in accordance with the approved Project Budget contained within the Project Direction, and any unspent funds on the completion of the Project.

5. APPROVED AMOUNT FOR THE PROJECT

The Approved Amount is £4,798,628.95.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 to this Amended Project Direction.

The Funding Licensee will report on expenditure against each line under the category total in the Project Budget, and explain any projected variance against each line total in excess of 5% as part of its detailed report which will be provided, in accordance with Chapter 8 of the Gas NIC Governance Document. Ofgem will use the reported expenditure and explanation to assess whether the funding has been spent in accordance with the Gas NIC Governance Document and with this Project Direction.

For the avoidance of doubt this reporting requirement does not change or remove any obligations on the Funding Licensee with respect to reporting that are set out in the Gas NIC Governance Document.

7. PROJECT IMPLEMENTATION

The Funding Licensee must undertake the Project in accordance with the commitments it has made in the Full Submission approved by the Authority pursuant to the Gas NIC Governance Document and with the terms of this Amended Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with the description set out in Section 2 (Project Description);
- (ii) provide a Network Licensee Compulsory Contribution of £538,080.12;
- (iii) complete the Project on or before the Project completion date of 31 March 2022 ; (unless condition 2 set out in section 3 of this Project Direction is invoked – in which case the completion date will be no longer than six calendar months after this date); and
- (iv) disseminate the learning from the Project at least to the level described in Section 5 (Knowledge Dissemination).

8. REPORTING

Ofgem may issue guidance (as amended from time to time) about the structure and content of the Project Progress Report required by Chapter 8 of the Gas NIC Governance Document. The Funding Licensee must follow this guidance in preparing the reports.

As required by Chapter 8 of the Gas NIC Governance Document, the Funding Licensee must inform the Authority promptly in writing of any event or circumstance likely to affect its ability to deliver the Project as set out in its Full Submission.

9. COST OVERRUNS

The maximum amount of Contingency Funding that the Funding Licensee can request as additional funding for cost overruns on the Project is 5%⁹ of the Approved Amount.

10. INTELLECTUAL PROPERTY RIGHTS (“IPR”)

In Section 5 of its Full Submission (Knowledge Dissemination) the Funding Licensee has stated that the Project conforms to the default IPR arrangements set out in Chapter 9 of the Gas NIC Governance Document. The Funding Licensee must therefore undertake the Project in accordance with the default IPR arrangements.

⁹ This is the amount requested by the Funding Licensee in its Full Submission, or the default of 5%.

11. SUCCESSFUL DELIVERY REWARD CRITERIA

The Project will be assessed by the Authority for the purposes of the NIC Successful Delivery Reward against the SDRCs set out in Table 2 below (which comply with Chapter 5 of the Gas NIC Governance Document).

Table 2. Successful Delivery Reward Criteria (“SDRCs”)

Successful Delivery Reward criterion (SDRC)	Evidence
<p>9.1a. Industry Engagement – Phase 1</p> <p>11 August 2017</p>	<p>The Industry Engagement Phase 1 will take place in Work Pack 1a and this SDRC will provide Ofgem with evidence of the following:</p> <ul style="list-style-type: none"> • The Terms of Reference for the Industry Engagement • The numbers and types of participants in the Industry Engagement • A compilation of the output from workshops, questionnaires and meetings held during the Industry Engagement (Phase 1) • Initial cost benefit analysis • Requirement for the validation of the network modelling <p>This SDRC will be based on milestone 9a of the Full Submission.</p> <p>Submit Phase 1 report to Ofgem in line with condition 2 set out in section 3 of this Project Direction. Do not proceed on to the remaining SDRC until Ofgem consent is given in line with condition 2.</p>
<p>9.1b. Industry Engagement – Phase 2</p> <p>31 March 2018</p>	<p>The Industry Engagement Phase 2 will take place in Work Pack 1b and this SDRC will provide Ofgem with evidence of the following:</p> <ul style="list-style-type: none"> • Phase 2 industry engagement report to include an update on continuing industry liaison following Phase 1 <p>This SDRC will be based on milestone 9b of the Full Submission.</p>
<p>9.2. Novel tracking of unconventional gases by measurement</p> <p>31 December 20192020</p>	<p>The novel tracking of unconventional gases by measurement will involve the installation and collation of field trial measurements. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The installation of additional sensors on the gas network in governor stations and at street level • The efficacy of measuring oxygen content, pressure and flow to support the validation of network modelling for determining the distribution of biomethane in LP and MP networks

	This SDRC will be based on milestone 12 of the Full Submission.
<p>9.3. Report on novel validation of network modelling for embedded and network charging areas</p> <p>31 December 2019<u>October 2021</u></p>	<p>The novel validation of network modelling for embedded and network charging areas will use zonal analysis of pressure, flow and oxygen tracking measurements from the field trials. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • How to analyse oxygen, pressure and flow data from the field trials using network modelling techniques • Options and methods for assigning CV to charging areas for the <i>Pragmatic</i> and <i>Composite</i> scenarios <p>This SDRC will be based on milestone 13 in the Full Submission.</p>
<p>9.4. Report on Smart Metering Laboratory Trials</p> <p>31 December 2019<u>March 2021</u></p>	<p>The smart metering laboratory trials will be carried out at the DNV GL Technical Assurance Laboratories in Peterborough. Several CV measurement devices will be installed in the network field trial which would transfer CV to the smart meters. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The transfer of CV to smart meters via a mimic of DCC • Options and further developments required for the future transmission of CV from smart meters to the billing process <p>This SDRC will be based on milestone 11 of the Full Submission.</p>
<p>9.5. Future Billing Methodology Recommendation</p> <p>31 March 2020<u>2022</u></p>	<p>The Project will report on Future Billing Methodologies and cost benefits of the three scenarios <i>Pragmatic</i>, <i>Composite</i> and <i>Ideal</i> concluding with a recommendation and high level implementation plan. This SDRC will provide Ofgem with evidence of:</p> <ul style="list-style-type: none"> • The Project findings through a collation of the outputs from Work Packs 1 to 4 • The Project recommendations and how these were derived including cost benefit analyses • High-level implementation plan of the recommendations <p>This SDRC will be based on milestone 15 of the Full Submission.</p>

The maximum amount of the Gas NIC Successful Delivery Reward (which cannot exceed the Network Licensee Compulsory Contribution) that the Project is eligible for is £ 538,080.12.

12. USE OF LOGOS

The Funding Licensee and Project Partners, External Funders and Project Supporters¹⁰ may use the NIC logo for purposes associated with the Project but not use the Ofgem or Ofgem E-Serve logos in any circumstances.

¹⁰ As listed in Box 1.6 in Section 1 of the Full Submission.

13. AMENDMENT OR REVOCATION

As set out in Chapter 8 of the Gas NIC Governance Document and this Project Direction, this Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Licensee considers that there has been a material change in circumstance that requires a change to the Project Direction, and the Authority agrees; or
- (ii) if Ofgem agrees to provide Contingency Funding, which requires the re-issue of the Project Direction; or
- (iii) if the Funding Licensee applies for Contingency Funding to cover a decrease in Direct Benefits and the Authority decides it would be in the best interest of customers to make changes to the Project Direction before the Contingency Funding would be awarded; or
- (iv) to reflect amendments made to the Licence.

14. HALTING OF PROJECTS

This Project Direction is subject to the provisions contained in Chapter 8 of the Gas NIC Governance Document relating to the halting of projects. By extension, this Project Direction is subject to any decision by the Authority to halt the Project to which this Project Direction relates and to any subsequent relevant Funding Direction issued by the Authority pursuant to Special Condition 7.7 of the Licence.

In the event of the Authority deciding to halt the Project to which this Project Direction relates, the Authority may issue a statement to the Funding Licensee clarifying the effect of that halting decision as regards the status and legal force of the conditions contained in this Project Direction.

NOW THEREFORE:

In accordance with the powers contained in the Gas NIC Governance Document issued pursuant to Special Condition 7.7 of the Licence the Authority hereby issues this Project Direction to the Funding Licensee in relation to the Project.

This Project Direction constitutes notice of reasons for the Authority's decision pursuant to section 38A of the Gas Act 1986.

ANNEX 1: PROJECT BUDGET

Cost Category	Cost (£)
Partner Labour	2,402,075.83
Equipment	161,808.72
Contractors	2,518,639.11
IT	62,801.29
IPR Costs	-
Travel & Expenses	28,500.00
Payments to users	-
Contingency	-
Decommissioning	206,976.30
Other	-
Total	5,380,801.25