

Southern Gas Networks Plc
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Date: 29 June 2023

Dear Southern Gas Networks Plc,

SIF Project Direction ref:

SGN/Intelligent Gas Grid/SIFDataDigitalisation/Rd1 Beta

Southern Gas Networks Plc submitted Intelligent Gas Grid - Beta (the Project) to be considered for funding through the Beta Phase of the Strategic Innovation Fund (SIF). As explained in greater detail below, this Project previously received SIF Funding and completed a Discovery Phase and Alpha Phase for round 1 of the SIF. In our¹ SIF funding decision which is finalised and will be issued on 18 July 2023, we selected the Project² for conditional funding and as a result we are now issuing this SIF Project Direction to implement that decision.

Southern Gas Networks Plc must comply with the conditions contained in this SIF Project Direction as a condition of the Project receiving funding through the SIF. These conditions can be found in the Schedule to this document.

Progression through SIF Phases

The SIF consists of a multi-phase approach for Projects in order to mitigate the risk associated with innovations. The Discovery Phase focuses on feasibility, the Alpha Phase on experimental development, and the Beta Phase on deployment and demonstration.

The Project previously received SIF Funding for the Discovery Phase³ and Alpha Phase⁴ of round 1, and submitted an Application for the Project to be considered for SIF Funding

¹ The terms 'we', 'us', 'our' refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

² Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in Appendix 1 of the SIF Governance Document.

³ The Project Directions for round 1 of the Discovery Phase are available at:
<https://www.ofgem.gov.uk/publications/strategic-innovation-fund-discovery-projects-approved-funding>.

⁴ The Project Directions for round 1 of the Alpha Phase are available at:
<https://www.ofgem.gov.uk/publications/strategic-innovation-fund-round-1-alpha-projects-approved-funding>.

through the Beta Phase of round 1 of the SIF. As stated above, the Project has been selected to receive SIF Funding for the Beta Phase of round 1.

Role of UK Research & Innovation (UKRI)

As per Chapter 1 of the SIF Governance Document⁵ the role of UKRI is to deliver the SIF in line with the SIF Governance Document - administering the funding programme, monitoring the delivery of Projects, collating data from Projects on benefits, making recommendations to Ofgem on operational matters, supporting third-party innovators and, where possible, successful Projects to become 'business as usual' activities. To support the success of the Projects and the SIF programme, we expect that the Funding Party and Project Partners collaborate with Ofgem and UKRI.

SIF Project Direction

Paragraph 5.14 of the SIF Governance Document states that a SIF Project Direction will:

- Set out the Project-specific conditions, to which the Funding Party is committing in accepting SIF Funding.⁶
- Require the Funding Party to undertake the Project in accordance with the commitments made in the Application. Where appropriate, the SIF Project Direction may therefore include extracts from the Application or refer to specific sections of the SIF Application.⁷
- Where applicable, set out conditions (such as Project stage gates) linked to milestones and deliverables, which Projects must meet.⁸
- Set out the SIF Approved Amount for the Project, that will form part of the calculation contained in the SIF Funding Direction issued by the Authority under chapter 7 of the SIF Governance Document.⁹
- Set out the Project budget that the Funding Party must report against and how variations in the Project budget will be reported.¹⁰
- Where applicable, set out special information sharing requirements applicable to the Project.¹¹
- Set out the mechanism for the Funding Party receiving the SIF Approved Amount as set out in the SIF Funding Direction.¹²

⁵ <https://www.ofgem.gov.uk/publications/sif-governance-document>

⁶ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁷ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁸ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

⁹ 'SIF Funding Amount' detailed under Point 5 – 'Condition President' of this SIF Project Direction.

¹⁰ 'Annex 1 – Project Budget.

¹¹ 'Project specific conditions' detailed under Point 3 – 'Condition President' of this SIF Project Direction.

¹² 'SIF Funding Amount' detailed under Point 5 – 'Condition President' of this SIF Project Direction.

All SIF Project Direction requirements are detailed in the Schedule to this SIF Project Direction.

Decision

Provided the Funding Party complies with the SIF Governance Document and with the Schedule to this SIF Project Direction, the Project is deemed to be an Eligible SIF Project¹³.

This SIF Project Direction constitutes notice pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.

Marzia Zafar

Deputy Director, Decentralisation & Digitalisation

For and on behalf of the Authority

¹³ The meaning 'Eligible SIF Project' is described in Chapter 2 of the SIF Governance Document.

Schedule to SIF Project Direction

1. PROJECT DETAILS

SIF Project Direction reference:

SGN/Intelligent_Gas_Grid/SIFDataDigitalisation/Rd1_Beta

Application number: 10063754

Project title: Intelligent Gas Grid – Beta

Innovation Challenge/Project Phase: Data and digitalisation / Beta Phase round 1

Project start date: 01 July 2023

Project end date: 30 June 2026

SIF Approved Amount for SIF Funding: £6,072,524

2. PREAMBLE

This SIF Project Direction is issued by the Gas and Electricity Markets Authority (the “Authority”) to Southern Gas Networks Plc (the “Funding Party”) pursuant to the SIF Governance Document issued pursuant to Special Condition 9.13 of the Gas Transporter Licence (the “Licence”). It sets out the conditions to be complied with in relation to Intelligent Gas Grid (the “Project”) as a condition of it being funded under the SIF Funding Mechanism.¹⁴

Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in the Licence or Appendix 1 of the SIF Governance Document.

References to specific sections of the Funding Party’s Application in this SIF Project Direction are, for ease of reference, made by referring to the section number in the Funding Party’s Application.

3. PROJECT SPECIFIC CONDITIONS

In accepting funding for the Project, the Funding Party is subject to the following Project-specific condition(s):

Condition 1

The Funding Party must not spend any SIF Funding until contracts are signed with the Project Partners named in Table 1 for the purpose of completing the Project.

¹⁴ The SIF Funding Return Mechanism is defined in the SIF Governance Document.

Table 1. Project Partners

UTONOMY LTD
DNV SERVICES UK LIMITED
CADENT GAS LIMITED
WALES & WEST UTILITIES LIMITED
NORTHERN GAS NETWORKS LIMITED
NATIONAL GAS TRANSMISSION PLC

Condition 2 – Financial contribution

The Funding Party must report on the financial contributions made to the Project as set out in its Application. Any financial contributions made over and above that stated in its Application should also be reported and included within the Project costs template.

Condition 3 – Meeting arrangements

The Funding Party must participate in all meetings related to the Project that they are invited to by Ofgem, UKRI and DESNZ during and after the Beta Phase.

Condition 4 – Stage gate scoping

The Funding Party must, with support from Innovate UK/UKRI and, where applicable Ofgem, scope the requirements and success criteria for each stage gate within a Project at the quarterly reporting meetings ahead of any stage gate. These will be used to determine what criteria a Project must meet in order to pass a stage gate, and whether any additional information, such as a report, must be produced as part of the stage gate.

Condition 5 – Dissemination of annual progress report(s)

Each of the annual progress reports that the Funding Party publishes in the Beta Phase must, at a minimum, be uploaded to the ENA's Smarter Networks Portal. We also strongly encourage wider dissemination of the annual progress report(s) and support from all Project Partners in ensuring it reaches a wide audience.

Condition 6 – Impact monitoring

As part of the end of Project Phase report, the Funding Party must produce a Project Impact Monitoring and Evaluation Plan. This plan must outline how the Project plans to monitor and evaluate the delivery of benefits outlined in the Beta Phase Application following the end of the Beta Phase. The plan must also include the methodology that will be utilised for quantifying and qualifying benefits realisation and how the Funding Party plans to report this to Ofgem 1, 3, 5 & 10 years post-Beta Phase completion.

Further details on how to approach the development of this plan may be provided by Ofgem or IUK.

Condition 7 – SIF Community Forums

The Funding Party and all Project Partners must make reasonable attempts to attend, participate and/or contribute at SIF Community Forum events occurring during the Project delivery. We anticipate there being approximately one event per year.

Condition 8 – Policy, regulatory and standards barriers

The Funding Party must provide verbal updates at each quarterly meeting on any regulatory, policy and standards barriers and any change requirements which may impact delivery of the Beta Phase activities. The Funding Party must also include as an attachment to each of its annual progress report an update on any regulatory, policy and standards barriers which may require derogations and articulation of any proposed regulatory, policy and standards changes which would be necessary in deployment. The Funding Party must also provide as an attachment to its end of Project Phase report a summary of the Project's findings on regulatory, policy and standards barriers, including any considerations for future work, and where applicable, where specific regulatory, policy and standards changes would be required for deployment.

Condition 9 – Updated 60-second videos

The Funding Party must provide within the first three months of the Project beginning (i.e. by 1 October 2023) an updated 60-second video. If the Project is greater than two years (longer than 24 months) in length, an updated video must also be provided at the Project's mid-point meeting. All Projects must also provide an updated 60-second video as part of their end of Project phase report. Innovate UK can share its guidance for 60-second videos with the Funding Party, if necessary.

Condition 10 – Consumer engagement

The Funding Party must provide an update on consumer engagement plans where applicable at the quarterly monitoring meetings. This must include an update on any activities which involve engagement and interaction with energy consumers, and any impact the Project may have on existing or future energy consumers and their premises.

Condition 11 – Post-Beta Phase roadmap

The Funding Party must provide updates to the monitoring officer where applicable during the quarterly monitoring meetings a roadmap for activities post-Beta Phase. This

can build on the Project's Application question (question 11) and must focus on how and when the proposed solution will become business as usual within your network and across the other GB gas or electricity networks.

As part of this, the Funding Party must include consideration for:

- I. any steps the Project will take to ensure its innovation has suitable business as usual adoption;
- II. the Funding Party's strategy for adoption of the innovation or proposed solution, giving consideration to potential investment, ongoing costs and third-party involvement and;
- III. any early indication of interest from other networks in adopting the innovation.

The Funding Party must provide an update on all the above at every two quarterly monitoring meetings (i.e. every six months) and must include a final update of this roadmap as attachment to its end of Project Phase report.

Condition 12 – Commercialisation strategy

The Funding Party must provide updates to the monitoring officer where applicable during the quarterly monitoring meetings an update on its commercialisation strategy.

This can build on the Project's Application question (question 12) and must focus on what considerations have the Project consortium made for the commercialisation of the proposed solution or innovation, and how the Project provides support for non-network partners to move towards commercialisation. As part of this, the Funding Party may wish to include consideration for:

- I. who the primary customer segment is beyond the Funding Party; the customer value proposition;
- II. if identified, the outline of the route to market and potential new partnerships;
- III. any additional Project Partner capital requirements in order to commercialize the innovation and;
- IV. how this product, process or service could be scaled across the GB network and taken to new markets.

The Funding Party must also include a final update of its strategy as an attachment to its end of Project Phase report. Ofgem and/or Innovate UK may issue a template for the final update as part of the end of Project Phase report.

Condition 13 - Data Best Practice and Digital Strategy and Action Plan Guidance alignment

The Funding Party must provide at its second quarterly monitoring meeting a summary of how it intends to comply with Ofgem's Data Best Practice Guidance, and Digitalisation

Strategy and Action Plan Guidance. Additionally, a part of its year 1 annual progress report, the Funding Party must provide a written update to the monitoring officer on its incorporation and application of data best practices to date in the Project, including its presumed open data policies, and data triaging methodology.

Condition 14

The Funding Party must provide to its monitoring officer within three months of it formally beginning work on the Project an outline of its stakeholder engagement and dissemination of Project learnings beyond the Project's consortium, for example with the NICC UK Interoperability Standards, with gas operational forums (such as the gas operational forum hosted by National Grid, the Institute of Gas Engineers and Managers), and with telecommunication forums (such as the European Telecommunications Standards Institute (ETSI)).

Condition 15

The Funding Party must provide as part of its second quarterly monitoring meeting a summary of its spend control and governance approach for the Project to ensure it is providing value for money and is costed competitively. In addition, the Funding Party must provide updates to the monitoring officer where applicable during the quarterly monitoring meetings an update on whether the Project has identified any cost efficiencies which have been or can be incorporated.

Condition 16

As part of its third quarterly monitoring meeting, the Funding Party must provide an indication on how much of the Project's data and learnings using quantitative evidence can be shared and published publicly, in line with a suitable presumed open policy and data triaging methodology. The Funding Party must at each stage gate provide an update as to whether its initial indication is still applicable and must provide justification and reasoning for any data and learnings from the Project which the Funding Party considers to be unable to publish publicly.

Condition 17

As part of its second quarterly monitoring meeting, the Funding Party must provide rationale for why Faculty is a subcontractor rather than a Project Partner, and any impact this might have on the Project beyond the Beta Phase activities.

Condition 18

As part of its third quarterly monitoring meeting, the Funding Party must present scope and further details on the Project's activities and endeavours to ensure cyber security implementation from the outset of the Project, within the existing Project costs. As part of this, the Funding Party must outline how any of its endeavours and activities in the Project meet national standards for Critical National Infrastructure and must demonstrate engagement with the National Protective Security Authority for assessment of suitability. Innovate UK can facilitate engagements with relevant public bodies supporting security of critical national infrastructure if necessary.

Condition 19

The Funding Party must establish a working group with the team behind the other SIF Beta Phase Project Digital Platform for Leakage Analytics to identify areas of potential overlap or duplication, periodic updates, and opportunities for collaborative working. Innovate UK can facilitate an introduction if necessary.

Condition 20

The Funding Party must make reasonable endeavours to engage with the round 2 Discovery Phase Project CommsConnect to identify potential overlap or duplication and opportunities for shared learnings. Innovate UK can facilitate an introduction if necessary. Contingent on success of Project in to Alpha?

4. COMPLIANCE

The Funding Party must comply with Special Condition 9.13 of the Gas Transporter Licence (the "Licence"), the SIF Governance Document and with this SIF Project Direction.

5. SIF APPROVED AMOUNT

The SIF Approved amount of £6,072,524 (as detailed under Section 1: Project details of this Project Direction) will be recovered by National Gas Transmission from GB customers and transferred to the Funding Party. The Funding Party is responsible for notifying National Gas Transmission of the bank account details to which transfers must be made, in addition to completing Annex 2 of this SIF Project Direction. If a Funding Party is required to return funding to National Gas Transmission, the reverse applies. The Funding Party must provide bank account details to National Gas Transmission within two weeks of accepting this SIF Project Direction.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 of this SIF Project Direction.

The Funding Party must report on expenditure against each line under the category total in the Project Budget and explain any projected variance against each line as part of its detailed report which will be provided, in accordance with Chapter 7 of the SIF Governance Document. The Funding Party must report variations in the Project budget as outlined in Chapter 6 of the SIF Governance Document.

7. PROJECT IMPLEMENTATION

The Funding Party must undertake the Project in accordance with the commitments it has made in the Application and with the conditions of this SIF Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with its Application,
- (ii) complete the Project on or before the Project completion date as detailed under section 1 of the schedule of this SIF Project Direction, and
- (iii) disseminate the learning from the Project at least to the level described in chapter 3 of the SIF Governance Document. Dissemination of learning must be carried out whether the Project was concluded successfully or otherwise.

8. REPORTING

Ofgem and UKRI may issue guidance (and amend it from time to time) about the structure and content of the Project reporting required by Chapter 6 of the SIF Governance Document. The Funding Party must follow this guidance in preparing the reports.

The Funding Party must submit an end of Project Phase report to UKRI monitoring officers for the Beta Phase. Within this report, the Funding Party must submit information related to questions on Project delivery as detailed in chapter 6, table 6 of the SIF Governance Document.

9. MONITORING

The Funding Party must comply with any reasonable request for information by its monitoring officer at UKRI and related deadlines. Ofgem, with the support of UKRI, will together monitor Project delivery, impacts and benefits. Throughout the term of the Project, progress is monitored by UKRI through a monitoring officer. The monitoring

officer is the first point of contact for official notifications, queries and correspondence with UKRI and the Authority, unless otherwise required by this SIF Project Direction.

As detailed in Chapter 6 of the SIF Governance Document, meetings with the monitoring officer will take place at regular intervals, as advised by Ofgem or the monitoring officer during the delivery of the Project, and at the end of each Project Phase.

10. EVALUATION

The Funding Party has acknowledged when it submitted its Application for this Project, that reporting information and data gathered during the Project's timescales (as detailed in Section 1 of this SIF Project Direction) will be used to evaluate Project performance. In addition, the Funding Party may be required to provide requested information outside of the Project timescales and, in particular, for the period from the Project end date to the end of the SIF Programme. Further data and reporting information may be requested (frequency and method based on requirement) outside of standard monitoring and reporting requirements as deemed necessary. Further data and information requirements must be complied with by the Funding Party and Project Partners.

11. DATA SHARING

As set out in Chapter 3 of the SIF Governance Document, the Funding Party must follow Data Best Practice Guidance with regards to all data gathered or created in the course of a Project. We expect the Funding Party to document any reasons, such as commercial sensitivities, for desensitising data. As defined by, and in accordance with, Data Best Practice Guidance, Funding Parties must have a data triage process. Where multiple Project Partners are collaborating on a Project, the consortium must adopt a consistent Open Triage Process for the data related to the Project. Ofgem may require that Project information and data is also shared with other specified parties, such as parties working on complementary innovation funding programmes (subject to redaction of sensitive data).

12. CYBER SECURITY

It is the responsibility of the Funding Party and all Project Partners to implement and maintain appropriate security measures to protect personal data in accordance with The GDPR (General Data Protection Regulation)¹⁵ and DPA (Data Protection Act) 2018¹⁶.

¹⁵ https://ec.europa.eu/info/law/law-topic/data-protection/data-protection-eu_en

¹⁶ <https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted>

Protection of computer systems from unauthorised access or being otherwise damaged or made inaccessible must be in place alongside effective working practices. These must be maintained in line with the Funding Party's IT Management Strategies and policies.

13. PROJECT MILESTONES

The Funding Party must submit its end of Project Phase report to its monitoring officer that verifies the Project milestones have been achieved or explains why they have not.

Project milestones are outlined below in Table 3, based upon details contained within Question 7 and Appendix Question 9 in the Funding Party's.

Table 3. Project milestone¹⁷

Reference	Project milestone	Deadline	Overall objectives and key tasks	Summary of Milestones and Success Criteria	SIF Funding Request (100%)
Milestone 1	WP1: Intelligent Control MVP solution development and field trials	30 June 2026	<p>Overall work package objectives: Development and field-trial validation of a production-grade, minimum viable commercial product, that autonomously optimises network pressures to reduce methane leakage in low pressure networks.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Production of Umonitor (Prototype) equipment & internal test 2. Internal test of Automatic Network Response software functionality 	<p>M1: Umonitor (Prototype) & Automatic Network Response field trials: Umonitor (Prototype) & Automatic Network Response accepted as appropriate low-point protection system to facilitate lower set-point pressures during initial Upredict trial phases. (£156,490.00)</p> <p>M2: Upredict (Prototype) field trials: Upredict proven to predict low-point response to new set-point pressures to sufficient accuracy. (£712,474.00)</p>	<p>£1,385,901.00 (23%)</p>

¹⁷ As outlined in in the Application or Project Plan appendix.

			<p>3. Installation & field trials of Umonitor (Prototype) in two networks (~15 sites)</p> <p>4. Field trials of Automatic Network Response</p> <p>5. Development of Upredict (Prototype) software functionality & internal test</p> <p>6. Field trials of Upredict (Prototype)</p> <p>7. Development and production of Umonitor (Production) equipment & internal test</p> <p>8. Installation & field trials of Umonitor (Production) in four networks (~30 sites)</p> <p>9. Development of Intelligent Control MVP software functionality & internal test</p> <p>10. Field trials of Intelligent Control MVP</p> <p>11. Approval of Intelligent Control MVP</p>	<p>M3: Umonitor (Production) field trials: Successful completion of in-field test requirements. (£162,527.00)</p> <p>M4: Umonitor (Production) product approval: SGN product approval of UtonomyOne Umonitor (Production) for commercial use. (£1,000.00)</p> <p>M5: Intelligent Control MVP field trials: Successful completion of in-field test requirements.</p> <p>M6: Intelligent Control MVP product approval: SGN product approval of UtonomyOne Intelligent Control MVP for commercial use (initial 4 networks). (£1,000.00)</p>	
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Milestone 2	WP2: Intelligent Control solution expansion and evolution	30 June 2026	<p>Overall work package objectives: Development and field-trial validation of a production-grade, product extension, that autonomously optimises network pressures to reduce methane leakage in larger and more complex low pressure networks.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Development of enhanced Umonitor-IoT (Production) low-point monitoring and alarm device & internal test 2. Installation & field trials of Umonitor-IoT (Production) in two networks (~40 sites) 3. Development of Intelligent Control product extension software functionality & internal test 	<p>M1: Umonitor-IoT (Production) development and internal testing: Development and internal testing completed. (£283,908.00)</p> <p>M2: Umonitor-IoT (Production) installation & field trials: Successful completion of in-field test requirements. (£45,703.00)</p> <p>M3: Installation of UtonomyOne Connected & Umonitor-IoT units to new field trial networks: All units installed and site acceptance tests completed. (£345,520.00)</p> <p>M4: Intelligent Control product extension field trials: Successful completion of in-</p>	<p>£1,545,711.00 (25%)</p>
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			<p>4. Installation of UtonomyOne Connected units in two networks (~40 sites)</p> <p>5. Field trials of Intelligent Control product extension</p> <p>6. Approval of Intelligent Control product extension</p>	<p>field test requirements. (£869,580.00)</p> <p>M5: Intelligent Control product extension product approval: SGN product approval of UtonomyOne Intelligent Control product extension for commercial use. (£1,000.00)</p>	
Milestone 3	WP3: Anomaly detection - data collection & model development	30 June 2026	<p>Overall work package objectives:</p> <p>Confirm whether gas escapes, faults and excursions can be identified through anomalies in network pressure behaviour.</p> <p>Develop a model that flags network pressure anomalies that lead to these issues.</p> <p>Key tasks:</p> <p>1. Data access and setup.</p>	<p>M1: Data collection & user research: Collected datasets contain sufficient evidence of anomalies over large geographic area and timescales, as defined by user research outputs. (£258,177.00)</p> <p>M2: Model development: Model proven to detect anomalies against internal test dataset. (£258,177.00)</p>	<p>£516,354.00 (8%)</p>

			<p>2. User research.</p> <p>3. Model design</p> <p>4. Data collection for LDZ region, min. 5 years.</p> <p>5. Model development.</p> <p>6. Post stage-gate plan.</p> <p>7. Data sharing with DPLA project.</p>		
Milestone 4	WP4: Anomaly detection - solution development and field trials	30 June 2026	<p>Overall work package objectives: Development and field-trial validation of a production-grade, minimum viable commercial product, that effectively flags network pressure anomalies and indicates the type of issue (e.g. escape, fault or excursion) they are most likely related to.</p> <p>Key tasks: 1. Model finalisation.</p>	<p>M1: Development and internal testing: Development and internal testing completed. (£394,724.00)</p> <p>M2: Field trials: Solution demonstrates ability to detect anomalies and associate causes from live field trials. (£157,623.00)</p> <p>M3: Product approval: SGN product approval of anomaly</p>	<p>£553,347.00 (9%)</p>

			<p>2. Build data and model retraining pipelines.</p> <p>3. Model storage and output preparation.</p> <p>4. Front-end development.</p> <p>5. User testing and iterations.</p> <p>6. Deployment to pre-production field trials</p> <p>7. Field trial iterations.</p> <p>8. Solution approval.</p>	detection MVP solution for commercial use. (£1,000.00)	
Milestone 5	WP5: Anomaly detection - solution expansion and evolution	30 June 2026	<p>Overall work package objectives:</p> <p>Development and field-trial validation of a production-grade, product extension, that effectively flags network pressure anomalies and indicates the type of issue (escape, fault or excursion) they are most likely related to, given additional solution constraints and/or input/network complexity.</p>	<p>M1: Development and internal testing: Development and internal testing completed. (£136,992.00)</p> <p>M2: Field trials: Solution demonstrates ability to detect anomalies and associate causes from live field trials. (£188,128.00)</p>	<p>£326,120.00</p> <p>(5%)</p>

			<p>Key tasks:</p> <ol style="list-style-type: none"> 1. Review of user feedback from existing deployments. 2. Definition of additional solution requirements and constraints. 3. Enhanced model and/or solution design. 4. Additional dataset definition and collection. 5. Enhanced model and/or solution development and internal test. 6. Deployment of enhanced solution to field trials. 7. Enhanced solution approval. 	<p>M3: Product approval: SGN product approval of anomaly detection extended solution for commercial use. (£1,000.00)</p>	
Milestone 6	<p>WP6: Biomethane injection: data collection and</p>	30 June 2026	<p>Overall work package objectives: Exploratory data analysis and modelling to confirm solution design proposed at Alpha.</p>	<p>M1: Data collection & user research: Collected datasets contain sufficient detail of network response to current biomethane injection rates, as</p>	<p>£581,768.00 (10%)</p>

	model development		<p>Development of a model that defines the optimal pressure levels in medium pressure networks to create additional capacity for biomethane injection.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. User research. 2. Data collection. 3. Exploratory data analysis and initial modelling. 4. Solution design refinement. 5. Model development. 6. Post stage-gate plan. 	<p>defined by user research outputs. (£277,256.00)</p> <p>M2: Model development: Model proven to accurately predict medium pressure network low-point response to varying supply pressures using internal test dataset. (£304,512.00)</p>	
Milestone 7	WP7: Biomethane injection: solution development and field trials	30 June 2026	<p>Overall work package objectives:</p> <p>Development and field-trial validation of a production-grade, minimum viable commercial product, that autonomously optimises network pressures to increase</p>	<p>M1: Development and internal testing: Development and internal testing completed. (£164,059.00)</p> <p>M2: Installation of UtonomyOne MP Connected</p>	<p>£377,022.00</p> <p>(6%)</p>

			<p>capacity for biomethane injection in medium pressure networks.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Development of MVP software functionality & internal test 2. Installation of UtonomyOne MP Connected units & UtonomyOne LP Connected units at sites that manage in the injection from three biomethane plants (~2 MP supply sites and ~2 MP low-point sites). 3. Field trials of MVP solution. 4. Approval of MVP solution. 	<p>and Umonitor (Production) units to field trial networks: All units installed and site acceptance tests completed. (£45,225.00)</p> <p>M3: Field trials: Solution demonstrates ability to increase capacity for biomethane injection from live field trials. (£166,738.00)</p> <p>M4: Product approval: SGN product approval of biomethane injection solution for commercial use. (£1,000.00)</p>	
Milestone 8	WP8: Project management, steering & knowledge dissemination	30 June 2026	<p>Overall work package objectives: Utonomy technical engineering management, overall project and risk management, stakeholder engagement (including with the supporting network partners); knowledge dissemination with</p>	<p>M1: Project management activities: All management activities completed. (£716,749.00)</p>	<p>£716,749.00 (12%)</p>

		<p>other relevant SIF projects, and all UKRI reporting commitments.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Utonomy technical engineering management 2. Project management 3. Steering committees & intra-project communication 4. Two-way knowledge dissemination with other SIF projects, especially DPLA (Cadent)and Gas System of the Future (SGN) 5. UKRI reporting 6. Annual progress reports 7. SIF community forums 8. Post Beta phase roadmap 9. Project summary videos (x3) 		
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			10. Customer engagement plan and activities 11. Close down report		
Milestone 9	WP9: Implementation	30 June 2026	<p>Overall work package objectives: Preparation for the implementation and national roll-out of the innovations.</p> <p>Key tasks:</p> <ol style="list-style-type: none"> 1. Impacts and benefits management. 2. Review of regulatory barriers 3. Commercialisation activities 	M1: Completion of implementation tasks: All tasks completed. (£69,552.00)	£69,552.00 (1%)

14. USE OF LOGO

The Funding Party and the Project Partners, External Funders and Project Supporters or subcontractors¹⁸ must not use the Innovate UK/UKRI and/or Ofgem logo for purposes associated with the Project in any circumstances.

As an alternative for use of both Ofgem and UKRI logos, all external Project communications must include the following standard form of wording:

- (i) "this project is funded by network users and consumers under the Strategic Innovation Fund, an Ofgem programme managed in partnership with UKRI."

For additional guidance, refer to the communications and media guidelines for competition winners, detailed as part of your delivery pack. These guidelines are designed to help with some suggestions and encourage you to take a proactive approach to communicating about your Project.

15. SHARING OF LESSONS LEARNED

The Funding Party is required to ensure that the sharing of lessons learned and the facilitation of knowledge transfer is conducted as effectively as possible, to ensure that all parties, and therefore all consumers including future consumers, can benefit from Projects.

As contained within Chapter 3 of the SIF Governance Document, we require the Funding Party to work collaboratively to maintain the ENA Smarter Networks Portal so that all reporting and dissemination of learnings on Projects (as required by chapter 6 of the SIF Governance Document) is available via the ENA Smarter Networks Portal.

16. COLLABORATION

The Funding Party must collaborate with third-party innovators as Project Partners, as well as work closely with other parties in the energy supply chain, as set out in Chapter 3 of the SIF Governance Document.

The Funding Party must collaborate with other parties and with UKRI to organise an annual conference in a format appropriate to enabling the building of consortiums and disseminating learning widely. The conference may be a single event for gas and electricity, or more than one event, as appropriate.

¹⁸ As detailed in the Application.

17. AMENDMENT OR REVOCATION

As set out in Chapter 7 of the SIF Governance Document, this SIF Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Party considers that there has been a material change in circumstance that requires a change to the SIF Project Direction, and the Authority agrees; or
- (ii) to reflect amendments made to the Licence.

18. HALTING OF PROJECTS

This SIF Project Direction is subject to the provisions contained in Chapter 7 of the SIF Governance Document relating to the halting of Projects. By extension, this SIF Project Direction is subject to any decision by the Authority to halt the Project to which this SIF Project Direction relates and to any subsequent relevant SIF Funding Direction issued by the Authority pursuant to Special Condition 9.13 of the Gas Transporter Licence (the "Licence").

Further to the requirements in Chapter 7 of the SIF Governance Document, in the event the Authority decides to halt the Project, to which this SIF Project Direction relates, the Authority may issue a statement to the Funding Party clarifying the effect of that halting decision as regards to the status and legal force of the conditions contained in this SIF Project Direction.

NOW THEREFORE:

In accordance with the SIF Governance Document issued pursuant to Special Condition 9.13 of the Gas Transporter Licence (the "Licence") of the Licence the Authority hereby issues this SIF Project Direction to the Funding Party in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.

Failure to comply with the conditions of this SIF Project Direction means that Ofgem may treat all or part of the SIF Approved Amount received by the Funding Party as SIF Disallowed Expenditure.

ANNEX 1: PROJECT BUDGET

SIF Project Direction costs		
Cost Category	Total Project costs (£)	Total SIF Funding requested (£)
Labour	£3,990,076	£3,758,479
Materials	£664,845	£664,845
Subcontracting	£1,630,000	£1,630,000
Travel and subsistence	£15,200	£15,200
Other costs	£4,000	£4,000
Total	£6,304,121	£6,072,524

Project Partner	Total project costs (£)	Project contribution (£)	Total SIF Funding requested (£)	In-kind contribution (£)	Project contribution (%)
SOUTHERN GAS NETWORKS PLC	£668,019	£0	£668,019	£15,063	
UTONOMY LTD	£4,434,538	£0	£4,434,538	£423,324	
DNV SERVICES UK LIMITED	£1,129,597	£231,597	£898,000	£0	
CADENT GAS LIMITED	£13,788	£0	£13,788	£0	
WALES & WEST UTILITIES LIMITED	£21,744	£0	£21,744	£0	
NORTHERN GAS NETWORKS LIMITED	£19,620	£0	£19,620	£0	
NATIONAL GAS TRANSMISSION PLC	£16,815	£0	£16,815	£0	
TOTAL	£6,304,121	£231,597	£6,072,524	£438,387	11%

ANNEX 2 TO SCHEDULE: TEMPLATE OF BANK ACCOUNT DETAILS TO BE PROVIDED TO EITHER NGGT (BOX.GSOSETTLEMENTS@NATIONALGRID.COM) OR NG ESO (revenue.invoice@nationalgrideso.com)

Company name:

Primary Contact Details (only one contact permitted)

First Name:

Last Name:

Email address:

Mobile phone number:

Work phone number:

Address details

Address name:

Street address:

City:

State / region:

Post code:

PO box: (if applicable)

PO box post code: (if applicable)

Banking details

These should be evidenced in non-editable format. The evidence provided must show company name and bank details and it should be dated within the last 6 months.

Any of the below documents will suffice:

- Bank statement (scanned document)
- Void cheque
- Paying in slip
- Screenshot of online banking (showing a logged in account with bank account and sort code, with browser visible)