

NIA Project Registration and PEA Document

Date of Submission

Aug 2026

Project Reference Number

NIA_SPEN_0141

Project Registration

Project Title

WARMTH – Phase 2

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NIA_SPEN_0141

Project Licensee(s)

SP Energy Networks Distribution

Project Start

August 2026

Project Duration

1 year and 5 months

Nominated Project Contact(s)

SPEN Innovation Team

Project Budget

£403,350.00

Summary

The project seeks to improve outcomes for customers whose health is adversely affected by living in a cold home by creating a trusted, health-led route into SPEN's fuel poverty support. Through secure referrals, faster triage and tailored interventions, including meaningful energy credit, income maximisation, energy-efficiency measures and damp and mould support, WARMTH will help households maintain warmer, healthier homes, improve the customer experience and reduce avoidable pressure on health services.

For SPEN, the trial will test whether targeting medically at-risk households improves delivery efficiency and generates greater social value than conventional fuel poverty pathways. The project will also establish the operational, data and delivery evidence required to scale the model in Phase 3, across ED3 and potentially to other DNOs.

Nominated Contact Email Address(es)

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Problem Being Solved

Fuel poverty has significant consequences for customers' health and wellbeing, particularly where cardiovascular or respiratory conditions are worsened by living in a cold or damp home. SPEN is required to deliver effective fuel poverty support and demonstrate measurable social value through the Consumer Vulnerability Outcome Delivery Incentive (CV-ODI). However, existing fuel poverty pathways do not systematically use trusted health-sector referrals to identify medically at-risk households. This can result in support failing to reach the customers for whom it could generate the greatest health, wellbeing and social value benefits.

Phase 1 of WARMTH established that a Warm Home Prescription-inspired approach could be adapted for a DNO delivery model. Under this model, health partners identify eligible customers, referrals are managed through a central Hub, and customers are connected to appropriate fuel poverty interventions.

The proposed model has not yet been tested in a live DNO environment. Key uncertainties remain around onboarding health partners, managing referrals securely, determining the appropriate intervention, coordinating delivery partners, achieving customer participation and measuring outcomes. Without a controlled trial, SPEN cannot determine whether the model is operationally viable, scalable or capable of delivering the anticipated increase in SROI performance.

Method(s)

Phase 2 will use a controlled development and demonstration approach to design, build and test the preferred WARMTH hub delivery model.

The project will first refine the operating process, including referral routes, eligibility criteria, triage logic, partner responsibilities, data requirements and the range of support that may be provided. A secure, role-based referral and case-management platform will then be developed.

Selected health partners will be onboarded and trained to identify and refer customers whose health is adversely affected by living in a cold home. Referrals will be processed through the Hub and eligible customers will receive tailored support through SPEN's established delivery pathways. This will include a meaningful energy credit to allow participants to keep their homes warmer for longer as well as income-maximisation support, energy-efficiency advice or improvements, and damp and mould interventions where appropriate.

The complete process will initially undergo end-to-end testing before progressing to a live pilot involving real customer referrals. Evidence will be collected on referral volumes, processing time, successful interventions, customer participation, delivery efficiency, customer satisfaction and health and fuel poverty outcomes. Findings will be used to refine the process and produce recommendations for wider implementation.

Scope

Phase 2 will design, develop and trial the WARMTH model in selected areas of the SPD licence region. Pilot locations will be chosen based on evidence of fuel poverty and low household income, together with the availability of established relationships between health and energy-support partners.

The project scope includes:

- Refining the end-to-end WARMTH operating and customer journey.
- Defining eligibility, referral, triage and intervention processes.
- Developing the standalone digital referral and case-management Hub.
- Sourcing, onboarding and training health and delivery partners.
- Conducting user testing and a controlled live pilot with real customer referrals.
- Delivering tailored fuel poverty support to eligible participants.
- Measuring operational performance, customer experience, social outcomes, and SROI.
- Refining the model and producing recommendations and a handover plan for wider implementation.

The pilot will focus on customers whose health is adversely affected by living in a cold home. It will test whether trusted health-led referrals can connect these customers to timely, appropriate support and generate greater social value than existing fuel poverty delivery pathways.

The project does not include (i) full network-wide rollout, (ii) permanent integration with SPEN's core IT systems or, (iii) the processing of sensitive medical data. These matters will be considered as part of the recommendations for Phase 3 and potential implementation across ED3.

Objective(s)

The primary objective of WARMTH Phase 2 is to test and validate the proposed process and delivery model before SPEN commits to wider implementation and scale-up.

The project objectives are to:

- Design and validate the complete Hub delivery model, including referral, eligibility, triage, support delivery, follow-up and case-closure processes.
- Test the model in a controlled live environment with health partners, delivery partners and real customer referrals.
- Determine whether the referral process can identify medically at-risk customers and connect them to appropriate fuel poverty support securely, efficiently and within an acceptable timeframe.
- Test whether targeting fuel poverty support at customers whose health is affected by cold homes produces higher SROI than existing fuel poverty programme delivery.
- Evaluate customer participation, experience and outcomes, together with the usability and operational effectiveness of the process for health, delivery and SPEN teams.
- Identify operational, data, commercial and governance barriers that would need to be resolved before wider rollout.
- Produce an evidence-based recommendation and delivery plan for scaling WARMTH through Phase 3, the remainder of ED2 and future ED3 vulnerability programme delivery.

Consumer Vulnerability Impact Assessment

WARMTH is expected to have a positive distributional impact by targeting support at low-income customers whose health is adversely affected by living in a cold home. Benefits will therefore be concentrated among households with the greatest combined financial and health needs.

Technical impacts: Customers will not need to access or operate the digital Hub themselves; referrals will be managed by trusted health and delivery partners. This reduces digital-exclusion risks. Clear eligibility criteria, partner training and monitoring will help ensure consistent access. Only necessary personal data will be collected, with no sensitive medical information held within the platform.

Financial impacts: Customers will not be charged for participating. Eligible households may receive a meaningful energy credit, income-maximisation support, energy-efficiency assistance and other fuel poverty interventions, helping them heat their homes and reduce financial pressure. Support will vary according to assessed need, using transparent and consistent triage criteria.

Wellbeing impacts: Warmer homes are expected to reduce the worsening of cold-related health conditions, improve comfort and support mental wellbeing. Trusted referrals should also improve engagement among customers who may not approach SPEN directly.

The pilot will be limited to selected SPD areas, meaning benefits will not initially be available across the full network. The evaluation will examine geographic coverage, referral patterns and participation to identify any groups that could be underrepresented before wider rollout.

Success Criteria

The success of the WARMTH Phase 2 project will be evaluated against the following criteria:

1. Delivery of the WARMTH Hub and operating model:
Successful deployment of a functioning referral and case-management Hub supporting the complete customer journey, from health-partner referral through triage, intervention, follow-up and case closure.
2. Successful completion of the live pilot:
Evidence that referrals have been received from participating health partners, processed securely and efficiently, and connected to appropriate fuel poverty support through the agreed delivery model.
3. Effective targeting and positive customer outcomes:
Demonstrated ability to identify medically at-risk customers affected by cold homes and provide timely, tailored support, supported by positive customer feedback and recorded financial or wellbeing outcomes.
4. Alignment with SROI performance objectives:
Quantified assessment of the SROI generated per customer supported, including comparison with existing fuel poverty programme delivery to determine whether the anticipated uplift has been achieved.
5. Operational feasibility and readiness to scale:

Positive feedback from SPEN, health and delivery partners, together with evidence that the model is operationally practical and an agreed recommendation and handover plan for wider implementation.

Project Partners and External Funding

- Sirio Multilateral Strategies Ltd - Lead delivery partner responsible for design, development, and deployment of the WARMTH trial. Sirio also led the discovery phase for WARMTH (phase 1).
- Energy Systems Catapult – A third-party organisation that will be subcontracted by Sirio to support the evaluation and scaling up recommendations based on their expertise in delivering the Warm Home Prescription programme.
- SPEN vulnerability team – The team will provide input during initial scoping phase and support relationships with delivery partners.
- Delivery partners – Community-based organisations contracted by SPEN to deliver fuel poverty programmes, and the associated health partners they have existing relationships with.
- External funding – No external funding is being used to develop the WARMTH hub.

Potential for New Learning

WARMTH Phase 2 will generate new learning on how a DNO-led, health-based fuel poverty referral model can operate in practice. Expected learning includes:

- How health partners can identify and refer medically at-risk customers effectively.
- The optimal design of the Hub, referral, triage and intervention process.
- Which referral pathways and support packages deliver the best customer experience and outcomes.
- How personal data can be managed securely without collecting sensitive medical information.
- Whether targeting customers whose health is affected by cold homes generates greater SROI and NPV than existing fuel poverty delivery.
- The operational, commercial and governance requirements for scaling the model across SPEN and potentially other DNOs.

Learning will be shared through NIA progress and closedown reports published on the ENA Smarter Networks Portal. Anonymised findings, evaluation results, process maps and recommendations will also be shared through internal and partner workshops, industry engagement and discussions with other Network Licensees. No customer-identifiable information will be included in disseminated outputs.

Scale of Project

WARMTH Phase 2 will deliver a controlled live pilot in selected areas of the SPD licence region, involving health and fuel poverty delivery partners. The scale is sufficient to test the complete operating model with real customer referrals, including identification, triage, support delivery, follow-up and outcome measurement. It will also enable comparison of different referral pathways and provide evidence on customer experience, operational efficiency and SROI before wider implementation.

The requested NIA investment of £373,350 is proportionate to the expected benefits. Modelling indicates that, if deployed as a channel for delivering a DNO's fuel poverty programme, WARMTH could generate an additional £0.81 to £1.62 in net benefits for every pound spent compared with existing delivery practices. Had the model been deployed throughout ED2, this could have generated additional customer and societal benefits of between £6.3 million and £12.6 million.

A smaller project would provide fewer referrals, partners and customer outcomes, limiting SPEN's ability to test the end-to-end model, validate the anticipated SROI uplift and generate sufficiently robust learning to support network-wide rollout.

Technology Readiness at Start

TRL3 Proof of Concept

Technology Readiness at End

TRL5 Pilot Scale

Geographical Area

Within SPEN's SPD licence area in Scotland

Revenue Allowed for the RIIO Settlement

0

Indicative Total NIA Project Expenditure

Project Eligibility Assessment Part 1

Requirement 1

Facilitate the energy system transition and/or benefit consumers in vulnerable situations

Please answer **at least one** of the following:

How the Project has the potential to facilitate the energy system transition:

Fuel poverty and the risk of being left behind in the energy transition are closely linked. By addressing customers' immediate financial and heating needs through a trusted referral route, WARMTH can create opportunities to discuss sustainable, longer-term interventions, including energy-efficiency improvements and appropriate low-carbon solutions. The pilot will test this pathway and generate learning to help SPEN deliver a fair and inclusive energy transition

How the Project has potential to benefit consumer in vulnerable situations:

WARMTH will support low-income consumers whose health is adversely affected by cold and/or damp homes. Health partners will identify and refer eligible households for tailored support, including energy credit, income maximisation, energy-efficiency assistance and damp and mould interventions. This is expected to reduce financial pressure, improve warmth, health and wellbeing, and determine whether the model should be scaled to benefit more vulnerable customers.

Requirement 2 / 2b

Has the potential to deliver net benefits to consumers

Project must have the potential to deliver a Solution that delivers a net benefit to consumers of the Gas Transporter and/or Electricity Transmission or Electricity Distribution licensee, as the context requires. This could include delivering a Solution at a lower cost than the most efficient Method currently in use on the GB Gas Transportation System, the Gas Transporter's and/or Electricity Transmission or Electricity Distribution licensee's network, or wider benefits, such as social or environmental.

Please provide an estimate of the saving if the Problem is solved

n/a

Please provide a calculation and/or description of the expected benefits of the solution

If deployed as a channel to deliver a DNO's Fuel Poverty programme, it is estimated that the WARMTH model would result in an ADDITIONAL £0.81 to £1.62 in NET benefits for every pound spent, compared to the base case (i.e. the adoption of ongoing practices to deliver fuel poverty programmes). If employed over the ED2 period, this model would have resulted in ADDITIONAL customer and societal benefits ranging from £6.3m to £12.6m. Forecasts for the ED3 period can be determined once DNOs' final allowances are set post final determinations.

The principal recipients will be medically at-risk customers, who will benefit from warmer homes, reduced financial pressure and improved health and wellbeing. Wider benefits include avoided costs for health services such as GP visits, hospital readmissions and medication costs for health conditions exacerbated by living in a cold home. SPEN and its customers will benefit from more effective targeting of vulnerability support, increased social value per customer supported and more efficient use of programme funding.

Please provide an estimate of how replicable the Method is across GB

The WARMTH method is potentially replicable across all electricity distribution licence areas. Fuel poverty, cold-related ill health and the need to support consumers in vulnerable situations are common challenges across all DNO regions. The core model - a trusted health-led referral pathway, central Hub, structured triage and coordinated delivery through vulnerability partners - could therefore be adopted by other Network Licensees.

A core part of Phase 2 is to identify opportunities for scaling the model and use evidence from the live trial to develop recommendations for wider rollout across SPEN and replication elsewhere in GB. These recommendations will consider the operating model, platform requirements, resources, governance and local adaptations required. Although implementation will need to reflect local health structures and partner relationships, the trial will provide a tested and reusable foundation for wider deployment.

Please provide an outline of the costs of rolling out the Method across GB.

The cost of rolling out WARMTH across GB is expected to be lower per Network Licensee than the initial £373,350 project cost. This phase includes the one-off costs of designing, developing and testing the model, establishing the referral and governance processes, and generating learning that other DNOs can reuse.

Future costs will primarily relate to local configuration of the Hub, technology licensing and hosting, onboarding and training health and delivery partners, programme management and ongoing support. Additional costs may arise where a Network Licensee chooses to integrate the Hub with its existing systems rather than use a standalone platform. Exact rollout and ongoing operational costs will depend on each Licensee's preferred delivery model (e.e preferred IT infrastructure) and will be assessed through the trial, with costed recommendations produced for scaling across SPEN and replication elsewhere in GB.

Requirement 3 / 1

Involve Research, Development or Demonstration

Projects must have the potential to have a Direct Impact on a Network Licensee's network or the operations of the System Operator and involve the Research, Development, or Demonstration of at least one of the following (please tick which applies):

- ☐ A specific piece of new (i.e. unproven in GB, or where a method has been trialled outside GB the Network Licensee must justify repeating it as part of a project) equipment (including control and communications system software).
- ☐ A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software)
- ☐ A specific novel operational practice directly related to the operation of the Network Licensees system
- ☐ A specific novel commercial arrangement

Involve Research, Development or Demonstration - Please select all that apply

- ☐ A specific piece of new equipment (including monitoring, control and communications systems and software)
- ☐ A specific piece of new technology (including analysis and modelling systems or software), in relation to which the Method is unproven
- ☒ A new methodology (including the identification of specific new procedures or techniques used to identify, select, process, and analyse information)
- ☐ A specific novel arrangement or application of existing gas transportation, electricity transmission or electricity distribution equipment, technology or methodology
- ☐ A specific novel operational practice directly related to the operation of the GB Gas Transportation System, electricity transmission or electricity distribution
- ☐ A specific novel commercial arrangement

Specific Requirements 4 / 2a

Please explain how the learning that will be generated could be used by the relevant Network Licensees

The project will generate practical learning on how Electricity Distribution Licensees can establish and operate a health-led route into fuel poverty support. This will include evidence on engaging health partners, defining eligibility criteria, managing referrals and personal data securely, triaging customers, coordinating delivery partners and selecting appropriate support packages. The trial will also show which pathways are most effective, the resources and governance required for delivery, and whether targeting medically at-risk households improves customer outcomes and SROI. Other Network Licensees will be able to adapt the resulting operating model, process maps, platform requirements and evaluation framework to their own licence areas, partnerships and vulnerability programmes.

n/a

Is the default IPR position being applied?

- ☒ Yes

Project Eligibility Assessment Part 2

Not lead to unnecessary duplication

A Project must not lead to unnecessary duplication of any other Project, including but not limited to IFI, LCNF, NIA, NIC or SIF projects already registered, being carried out or completed. Networks must explicitly mention similar projects that they have considered and how these differ.

Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

Project WARMTH is innovative because it is a first-of-its-kind trial for a DNO, adapting the Warm Home Prescription concept developed by Energy Systems Catapult into a DNO-led fuel poverty model. Rather than relying solely on conventional referral pathways, it brings together health services and energy-support partners to identify customers whose health is affected by cold homes and connect them to timely, tailored support. A secure central Hub will manage referrals, triage and outcomes across the customer journey. This approach has not previously been trialled by a DNO. Phase 2 will generate the evidence and recommendations needed to scale the model across SPEN and potentially other GB DNOs.

If applicable, justify why you are undertaking a Project similar to those being carried out by any other Network Licensees.

N/A

Additional Governance And Document Upload

Please identify why the project is innovative and has not been tried before

No unnecessary duplication will occur because WARMTH tests a distinct, first-of-its-kind application of the Warm Home Prescription concept within a DNO-led delivery model. It builds on, rather than repeats, Energy Systems Catapult's previous Warm Home Prescription trials and the findings from WARMTH Phase 1. Phase 1 was limited to discovery and feasibility; Phase 2 will develop the secure Hub, establish the operating and referral processes, and test the complete model with health partners, delivery partners and real customer referrals. No other known project has demonstrated this end-to-end approach within a DNO environment. Existing learning will be incorporated through Energy Systems Catapult's involvement, ensuring that previous work is reused and extended.

Relevant Foreground IPR

N/A

Data Access Details

The SP Energy Networks Data Sharing Policy can be found [here](#).

Please identify why the Network Licensees will not fund the project as a part of it's business and usual activities

WARMTH Phase 2 is not being funded through Business-as-Usual activities because the health-led referral model, digital Hub, and delivery process have not yet been tested in a live DNO environment. The project aims to address uncertainties around partner engagement, customer participation, referral management, and the delivery of improved social value. A controlled trial is therefore required to demonstrate operational feasibility, effectiveness, and scalability before SP Energy Networks can consider wider implementation through BAU funding

Please identify why the project can only be undertaken with the support of the NIA, including reference to the specific risks (e.g. commercial, technical, operational or regulatory) associated with the project

The project can only be undertaken with NIA support because it involves developing and testing an unproven health-led fuel poverty referral model in a live DNO environment. The project carries operational, technical, commercial, and governance risks, including onboarding health partners, managing customer referrals securely, developing the referral and case-management Hub, achieving sufficient customer participation, and demonstrating improved social value and customer outcomes. NIA funding is required to trial and evaluate the model, manage these risks, and generate evidence before any wider Business-as-Usual implementation can be justified.

This project has been approved by a senior member of staff

☒ Yes

