



Programme Area: Energy Storage and Distribution

Project: Heat Infrastructure Development (HID)

Title: Request for Proposal

Context:

This project seeks to identify the innovative solutions needed to deliver major reductions in the capital cost of heat network infrastructure and accelerate its deployment. Examining the technical, process and system developments needed to deliver a step change reduction in the capital costs, along with cost estimates and time frames for undertaking these developments. District heat networks supply heat to homes and businesses through pipes carrying hot water. They have great potential to deliver CO2 emissions reductions and cost benefits through the use of low carbon heat, waste heat from power stations, industry and other sources, combined heat and power, and large-scale heat pump deployment.

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Title of Services for which Proposals are Requested

Heat Infrastructure Development Project

Programme within which this Project is Commissioned

Energy Storage and Distribution Programme

Project Reference

EN2013

Request Issue Date

11th December 2013

Deadline for Notification of Intention to Submit a Proposal

20th January 2014

Closing Date

4th February 2014

Contact for Enquiries

Leena Tailor (Programme Management Officer) or Nick Eraut (Project Manager). Tel +44 (0)1509 202020 or email esd@eti.co.uk

Address for Notifications and Submission of Proposals

The Energy Technologies Institute, Holywell Building, Holywell Park, Loughborough, LE11 3UZ

For the attention of: Leena Tailor (Programme Management Officer)

Email: esd@eti.co.uk

SUMMARY OF KEY PROJECT INFORMATION

The ETI's Heat Infrastructure Development Project aims to identify innovative solutions for capital and through-life cost reduction of district heat network infrastructure; and for each of these solutions to detail the likely impacts and the technical developments required (with estimated timescales, budgets and success criteria to undertake these developments).

A glossary of terms used in this RfP is provided at Appendix E.

Project Financing	Values	
Total Project Cost	To be proposed by Respondent within Proposal	
ETI Investment (which will ultimately be determined by the ETI, based on Proposals received)	To be proposed by Respondent within Proposal	
Minimum expected Participant Funding and/or Third Party Funding	Difference between Total Project Cost and ETI Investment	

Request for Proposals and Selection	Dates (Fixed unless otherwise stated)		
Issue of RfP	11 th December 2013		
Deadline for submitting to the ETI a request to attend Workshop for Respondents	7 th January 2014		
Workshop for Respondents	14 th (& potentially 15 th) January 2014		
Deadline for (i) notifying the ETI of an intention to submit a Proposal (Appendix B); and (ii) return of signed Non-Disclosure Agreement (Appendix C); (See Section 6.1.1)	20 th January 2014		
Closing date for submission of Proposals	4 th February 2014		
Preferred Respondent(s) notified	Anticipated Date: 8th April 2014		

Contract Finalisation and Project Delivery	Anticipated Dates
Project Contract execution target date	1 st June 2014
Project start	1 st July 2014
Project finish (based on anticipated 6 month duration)	January 2015

Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their Proposals. The ETI shall not be responsible for, and shall not pay, any costs or expenses which may be incurred by Respondents in connection with participation in the Project Commissioning Process, including but not limited to any costs or expenses incurred up to and including the execution of the Project Contract.

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1. ETI INTRODUCTION

1.1. Introduction to the Energy Technologies Institute

The Energy Technologies Institute (ETI) is a public-private partnership between global industries – BP, Caterpillar, EDF, E.ON, Rolls-Royce and Shell – and the UK Government.

Public sector representation is through the administration of the Department for Business, Innovation and Skills, with funding channelled through the Technology Strategy Board and the Engineering and Physical Sciences Research Council. The Department of Energy and Climate Change are observers on the Board.

The ETI's role is to bring together and invest in engineering projects that accelerate the development, demonstration and eventual commercial deployment of a focused portfolio of affordable energy technologies, which will increase energy efficiency, reduce greenhouse gas emissions and help meet energy and climate change goals.

We do this by leveraging the skills, capabilities and market access routes of our Members, working with other organisations worldwide to take the most challenging large-scale energy projects to full system demonstration, thereby bridging the gulf between laboratory proven technologies and full scale commercially tested systems. Our projects also develop knowledge, skills and supply-chains, and inform the development of regulation, standards and policy. Hence we aim to overcome major barriers, de-risk the future development and shorten the lead times to market for secure, affordable, low-carbon energy systems for power, heat and transport.

Our portfolio presently includes programmes in the following areas: Offshore Wind, Marine, Distributed Energy, Buildings, Energy Storage and Distribution, Smart Systems & Heat, Carbon Capture & Storage, Transport and Bioenergy.

The ETI is not a grant-giving body. The ETI is a commercial organisation and makes targeted commercial investments in technology projects, which can involve the ETI funding entire projects or working with Participants or third parties to co-fund project activity.

Further information can be found on our web-site at www.eti.co.uk.

1.2. ETI Approach to Health, Safety and Environment (HSE)

The health and safety of those who may be affected by ETI projects and the protection of the environment that may be impacted by ETI projects are of paramount importance to the ETI and its Members. The ETI therefore expects those who receive ETI funding to demonstrate a commitment to delivering excellence in health, safety and environmental management as well as demonstrating that all applicable legal requirements are met.

The ETI requires certain HSE-related information as part of a Proposal. See Section 4.6 of this RfP and Appendix A Section 4.5.

1.3. Terminology Used in This Request for Proposals Document

A glossary of terms used in this RfP is provided at Appendix E.

2. ENERGY STORAGE & DISTRIBUTION PROGRAMME INTRODUCTION

2.1. Background to the Energy Storage and Distribution Programme

The UK's energy networks will require substantial investment in new capacity, technology development and innovation to accommodate low carbon generation sources to ensure that they are fit for purpose to meet predicted future demand.

Therefore, networks must have the capacity to not only meet peak flow demand, but also build in extra capacity. There is every chance that there will be greater interdependence between networks in the future.

There is scope for significant innovation in the way that energy is delivered to end customers. In the future, there will be an important role for storage technologies to cater for more intermittent supplies. Heat networks may also emerge as a critical new infrastructure requirement and there will be implications for the role of gas in the future energy mix together with investment in gas storage.

2.2. Programme Objectives

The core themes to the ETI's Energy Storage & Distribution Programme are:

- to adapt and develop networks to enable the delivery of a cost effective and secure future low carbon energy system in the UK; and
- to develop and demonstrate new infrastructure approaches to support the energy transition out to 2050.

2.3. Context of the Heat Infrastructure Development Project

The Heat Infrastructure Development Project, which is the subject of this RfP, is one of a number of projects relating to heat and other energy networks within the Energy Storage & Distribution Programme.

In parallel with this, the ETI is also developing its Smart Systems and Heat (SSH) Programme which will create and demonstrate the capability to provide practical cost-effective solutions for energy efficient heat and comfort in homes and businesses throughout the UK.

3. THE PROJECT

3.1. Project Introduction

By the year 2050 the UK will need to be meeting stringent targets requiring an 80% reduction in CO₂ emissions compared with 1990 levels, whilst still providing the end-user services that consumers require. The total CO₂ emissions associated with just one of those services – heating the UK's buildings – is estimated to be 123 Mtonnes per annum (in 2011), which is roughly 20% of overall UK CO₂ emissions. Indeed, heat accounts for over 40% of the UK's total energy demand. Developing cost effective ways for providing sufficient low carbon heat to buildings is a major challenge.

The use of District Heat Networks (DHNs) is one option that offers significant promise. The potential value of heat networks to the UK and the role they might play has been highlighted in a number of studies and reports over recent years, notably DECC's recent heat strategy¹ and the previous Pöyry study². Deployment of DHNs can enable enormous CO₂ and cost benefits to be achieved (potentially including a significant contribution to long-term price reduction for heat energy consumers) from the use of low carbon heat, waste heat (from power stations, industry and other sources), CHP and large scale heat pump deployment within a DHN area. Indeed, the flexibility of heat networks to utilise a wide range of heat sources offers a long term solution as the wider energy supply chain transitions, and can even enable the introduction of other low carbon options elsewhere (e.g. heat pumps in rural areas). DHNs also have significant potential to increase energy security by enabling flexibility in fuel sources.

Heat networks are deployed in many regions of the world and are effective at delivering large quantities of heat, particularly to areas of high heat demand. This includes locations with relatively densely packed buildings, particularly where the buildings are larger or older properties with greater heating requirements and are difficult to retrofit with other energy saving measures, such as insulation³. High rise flats where, for safety reasons, a gas supply is not an option, are also favourable for DHN connection. Conventional wisdom suggests that suitable anchor heat loads⁴, say from hospitals, hotels, swimming pools or other public or commercial properties are a useful means for delivering greater utilisation (and thus improved financial viability) from DHNs. Given the nature of urban development it is typical for these amenities and types of homes to be in close proximity. Indeed 43% of building heat demand currently resides within only 4% of the geographical area of the UK. This 43% of demand amounts to 12.4 million homes and 2.9 million non-domestic connections.

Currently, only 1-2% of UK buildings are connected to DHNs. However, analysis by the ETI indicates that close to half of existing UK heat demand could be connected to heat networks economically. This would amount to a huge potential investment, of the order of £75bn⁵ for heat pipework alone between 2014 and 2050.

¹ DECC, March 2013, *The Future of Heating: Meeting the Challenge*.

² Pöyry, 2009, The Potential and Costs of District Heating.

³ Whilst the costs of providing DHNs for new developments at greenfield sites are generally lower, the space heating requirements are also lower due to the positive impact of building standards in lowering energy demand. DHNs may still be suitable, though, depending on the actual heat density of these and adjacent areas and the alternative heat supply options that might be available.

⁴ Certain buildings, such as hospitals, hotels, swimming pools and civic buildings, have a large demand for heat, which tends to be steadier over 24 hours. These are called anchor loads and connecting these up can provide the starting point for a district heating network.

⁵ ETI data.

Developing ways to reduce the capital and lifecycle costs of DHNs therefore has the potential to deliver very considerable savings, whilst continuing to allow the range of benefits that they offer to be fully exploited. Additionally, the high initial capital investment for network installation has been identified by Pöyry and DECC as a key barrier to the wider-scale deployment of DHNs, and DECC's heat strategy specifically identifies the need for DHN infrastructure cost reduction. Thus, addressing the techno-economic barriers – particularly lowering the capital cost of installing DHNs – will greatly increase the opportunity for their deployment and make them a more attractive investment.

Dependent on the location, size and type of a heat network, the hot water pipes and their installation can account for some 60% of the overall DHN cost, and the cost of installing heat network pipes in the UK is estimated⁶ to be up to £1000 per metre.

This high capital cost is attributable to a number of factors, including the following:

- The process of excavating, typically, main roads is expensive, causes disruption and has to be done whilst navigating other sub-surface infrastructure.
- Installing the pipes is labour intensive.
- Usually the pipes are then welded together whilst in the ground, which incurs significant costs from a time and labour perspective and presents numerous health and safety challenges.
- The capital cost of the pipes themselves is also substantial. (These need to carry large volumes of hot water whilst minimising heat loss and to do so reliably over long periods of time. Additionally, both flow and return pipes are required.)
- The overall length of pipe required to serve and connect to a given set of buildings, clearly also plays a major role in the overall upfront cost.

Identifying ways to reduce the cost of DHN pipes and their installation therefore represents both an important objective for the realisation of the potential benefits of DHNs and a significant opportunity for market deployment of solutions to be developed.

3.2. Project Objectives

3.2.1. Primary Objective

The primary objective of the Project is to identify and then assess innovative solutions that would deliver a step change reduction in the capital cost of district heat network (DHN) infrastructure deployment and contribute to overall lifecycle cost reduction. In particular, this will focus on the upfront costs associated with heat network pipes and their installation, for the purposes of connecting to existing buildings.

For each of these solutions the Project will detail the likely impacts and the technical developments required, with estimated timescales, budgets and success criteria to undertake these developments.

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⁶ 'The Future of Heating: A strategic framework for low carbon heat in the UK', DECC, 2012.

3.2.2. Purpose

The outputs from the Project will be used by the ETI:

- to understand the potential impact of technology and other developments relating to district heat network infrastructure;
- to determine whether there are suitable opportunities for further investment by the ETI in projects to develop any identified technologies;
- to inform further analysis of the value and applicability of heat networks throughout the UK (including the range of locations at which district heat networks could be economically deployed);
- to understand any new information regarding the relative difficulty of installing DHNs (compared to other network infrastructure) – including both technical issues and planning/consenting issues;
- to understand any synergies with other sub-surface infrastructure (particularly gas, hydrogen and electricity networks) and how these synergies might be exploited;
- to inform stakeholders of potential opportunities for cost reduction, (including DECC's Heat Networks Delivery Unit);
- to inform stakeholders regarding any specific requirements identified by the Project for policy and/or regulatory intervention in order to enable sufficiently wide-spread deployment of the cost reduction opportunities; (Importantly, it should be noted that general DHN policy and regulatory changes are not the primary focus of this Project and should not consume significant resources within the Project⁷, but any need for changes resulting directly from opportunities identified within the Project should be included; e.g. regulatory changes to enable novel planning practice; safety standards, etc); and
- through the above, to enable the ETI to influence the scale and timing of district heat network deployment in the UK, as may be appropriate to support achievement of the UK's climate change objectives.

3.2.3. Required Outcomes

The Required Outcomes from the Project are therefore that:

- the ETI is in a position to use the Project deliverables for the stated purpose(s) above; and
- in particular, the ETI is equipped with robustly derived and clearly presented analysis of innovative cost reduction opportunities for DHN infrastructure, which it can use to inform and influence the development and deployment of DHNs.

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⁷ It should also be noted that the ETI is not a government body and does not make policy, although it can when appropriate provide evidence to policy making bodies and other stakeholders.

3.3. Project Scope

3.3.1. Anticipated Project Stages

The Project is expected to be delivered in two stages, with a Stage Gate Review between them.

Stage 1: Identification, Initial Assessment and Down-Selection of Potential Solutions

Stage 1 of the Project is anticipated to comprise:

- Definition and analysis of present baseline (Capex and Opex) costs for DHN infrastructure, including analysis of present cost drivers with Pareto assessment, and including details of validation.
- Identification of potential innovative solutions that would deliver a step change reduction in the capital cost of DHN infrastructure deployment and contribute to overall lifecycle cost reduction.
- Initial (brief outline) assessment of each of the identified solutions, addressing the following aspects:
 - clear definition of the innovative solution;
 - statement of how the solution was identified;
 - o potential impact on capital and through-life cost of DHN pipework, (plus any other cost impact on the DHN as a whole);
 - o any potential impact on the operation, performance or other aspects of the DHN;
 - technical feasibility:
 - o required development;
 - o routes to deployment; and
 - o other relevant factors.
- Down-selection of promising solutions: Recommendations should be made to the ETI for the down-selection of those solutions which appear (from the initial assessment) to offer the greatest potential impact and which appear to have credible routes to development and deployment. This down-selection is intended to enable the unfettered, creative identification of a significant number of potential solutions in Stage 1, and the initial analysis to show which are and are not attractive, whilst avoiding the need for detailed analysis in Stage 2 of those which are evidently less attractive. However, since it may be beneficial ultimately to deploy a package of solutions, it is likely that a range of solutions should be down-selected for detailed analysis.

Stage 2: Detailed Assessment

Stage 2 of the Project is anticipated to comprise, for each of the technology and other solutions down-selected:

- Clear, detailed definition of the innovative solution.
- Statement of how the solution was identified.
- Detailed, evidence-based assessment of the impact of the solution (both qualitative and quantitative), including (without limitation):
 - potential impact on capital and through-life cost of DHN pipework, including installation, above-ground disruption and other relevant factors, (plus any other cost impact on the DHN as a whole);
 - o any potential impact on the operation, performance or other aspects of the DHN;
 - any constraints on deployment, such as particular types of DHN, location, environment, geology, application, housing type, etc; and any of these or other factors for which the solution is particularly well suited;

- technical feasibility;
- o any synergies with other sub-surface infrastructure (particularly gas, hydrogen and electricity networks) and recommendations as to how these synergies could be exploited;
- o information regarding the relative difficulty of installing DHNs (compared to other network infrastructure) arising from technical issues, planning/consenting issues or social acceptance issues⁸, and the impact of the proposed solution on these issues;
- o other relevant factors; and
- description of the assessment methodology applied and any relevant data (including sources) and tools used.
- Detailed, evidence-based assessment of the development requirements for the solution, including (without limitation):
 - technical developments required, evidenced by sound engineering analysis of the current state of technology and advancements required to enable deployment;
 - o other process developments required (e.g. specific planning practice);
 - o any new equipment required (e.g. specific innovations to back-hoe loaders, drilling equipment, etc);
 - any specific barriers or impediments to the development or deployment (whether technical, market, policy, regulatory or other); intellectual property rights should be included where known (or suspected), but patent searches are outwith the scope of this Project;
 - estimated timescales and costs (with supporting evidence) and success criteria to undertake these developments, and if necessary to demonstrate their use prior to widespread commercial deployment; and
 - any work already underway or planned which would contribute to delivery of the required developments.
- Assessment of the routes to deployment for the solution, and identification of any specific recommendations or other factors.
- Identification of any specific requirements for policy and/or regulatory intervention in order to enable sufficiently wide-spread deployment of the solution; (Importantly, it should be noted that general DHN policy and regulatory changes are <u>not</u> the primary focus of this Project and should not consume significant resources within the Project⁹, but any need for changes resulting directly from opportunities identified within the Project should be included; e.g. regulatory changes to enable novel planning practice; safety standards, etc).
- Conclusions and recommendations.

Note: An alternative delivery structure with a different approach to the Project Stages may be proposed if there is a sufficiently strong justification that such a structure would be more suited to a Respondent's proposed methodologies or that the value delivery from the Project would be significantly enhanced. Respondents are advised to discuss such structures with the ETI prior to submission of Proposals.

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⁸ Even with reduced cost solutions, there remains a risk relating to the ultimate deployment of DHNs that there are social barriers which must be overcome (in addition to the techno-economic barriers addressed by this Project) – e.g. lack of public acceptance of under-ground heat networks, objection to disruption during installation, etc.

⁹ It should also be noted that the ETI is not a government body and does not make policy, although it can when appropriate provide evidence to policy making bodies and other stakeholders.

3.3.2. Types of Innovative Solutions Anticipated

This Project is concerned with reducing the upfront capital cost associated with installing heat infrastructure. The focus for this is on the heat network pipes and their installation. Specifically, this is in relation to the supply of heat for existing buildings, as opposed to new build developments¹⁰.

The existing buildings of particular interest are those located in areas of reasonably high heat density. For example, urban and suburban areas but also compact villages and commercial or public premises with high heat demands in close proximity to homes. Rural areas where properties are predominantly isolated are not seen as suitable.

It is desirable that solutions will have broad applicability across the types of areas to which heat networks could reasonably be deployed (in particular those highlighted above), rather than being niche solutions applicable only to certain specific areas or types of buildings.

The types of solution that are envisaged as being valuable include the following:

- a) advanced installation approaches;
- b) installation approaches which reduce above ground disruption (especially to traffic);
- c) improved civil engineering and excavation techniques;
- d) sub-surface detection (and monitoring) measures;
- e) alternative materials for pipes and/or insulation;
- f) more cost effective routing and connection options; and
- g) other solutions.

Each of these is summarised below. In each case, the initial ideas listed should be used as a prompt for identification of specific innovations in these and related ideas. They should not be considered an exhaustive list.

a) Advanced Installation Approaches

Significant advances in the approach to installing heat network pipes that dramatically reduce the resource requirements and/or expedite the process of installation would deliver substantial cost benefits. Solutions might include:

- processes to remove redundant effort, wasted time or errors;
- greater automation of some or all of the aspects of the installation; and/or
- a reduction in the amount of in-trench welding that is required.

b) Installation Approaches Which Reduce Above-Ground Disruption

Considerably reducing or even eradicating the above ground disruption to traffic (in particular), as well as to pedestrians, homes and commercial premises, that occurs during the installation of heat network pipes would be very desirable. Options for achieving this might include:

- utilising tunnelling tools and methods to avoid or reduce the need to excavate in congested or critical areas; and/or
- developing advanced planning and sequencing approaches to limit the number of traffic lanes that would need to be closed or the duration for which they would need to be closed.

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¹⁰ This does not preclude identifying solutions that would also lower the cost for new build developments but the emphasis should be on lowering the cost of connecting existing buildings.

c) Improved Civil Engineering and Excavation Techniques

Bringing about dramatic improvements in civil engineering and excavation techniques could deliver sizeable cost benefits. Notably:

- faster methods of excavation could allow heat network pipes to be installed and up and running more quickly, whilst reducing the duration installation work to which the surrounding community is exposed; and/or
- more precise methods of excavation could be more efficient, with reduced errors ultimately leading to quicker and less expensive installations.

d) Sub-surface Detection (and Monitoring) Measures

Providing accurate information about what is below the surface enables more efficient installation of heat network pipes and helps to avoid accidents and further disruption. This might include:

- identification of existing buried services, their type and exact position, to plan the routing of heat network pipes more effectively and prevent clashes;
- assessment of near surface geology (natural and man-made) to plan more effectively what installation approach and tools to use; and/or
- monitoring of buried pipes to assess their performance and condition, and to identify any potential issues, in order to plan maintenance, etc.

e) Alternative Materials for Pipes and/or Insulation

Using alternative materials for the heat network pipes or the insulation that surrounds (or is part of) them could markedly reduce the costs of both the materials and their installation. For example:

- different materials which could enable more efficient installation, e.g. by adopting flexible rather than rigid pipes;
- using materials or designs which avoid the need for welding in trenches and which could thereby improve health and safety and lower costs; and/or
- there may also be opportunities to use materials that reduce heat and pumping losses and so increase system efficiency.

f) More Cost Effective Routing and Connection Options

The overall length of pipe used within a heat network clearly affects the overall cost. Minimising the length of pipe used to supply and connect all of the appropriate buildings is thus desirable. Methods for achieving this might include:

- developing methods for combining the connecting pipes for adjacent properties; and/or
- developing smarter approaches to routing to reduce the overall length of pipe and also reduce excavation requirements.

g) Other Solutions

The examples in the above list should not be considered exhaustive. Other areas for innovation may be identified, if appropriate, in Respondents' Proposals and/or during the Project.

Notes:

It may be that sufficient benefits can only be realised by employing combinations of solutions, and it is quite possible that a suite of solutions in fact produces the greatest cost saving.

In identifying solutions, it is necessary to ensure that the benefits of heat networks as a method of heat supply are preserved – for example: the effective delivery of large quantities of heat; the ability to transfer water at different temperatures, dependent on the application; long asset life; and the ability to utilise hot water from different heat sources, without undue impact on householders.

In the course of reducing the upfront capital cost, solutions should not detrimentally impact the overall lifecycle cost of the heat network.

4. PROJECT DELIVERY REQUIREMENTS

4.1. Project Deliverables

Key deliverables from this Project are anticipated to include:

- 1. report of all work undertaken during Stage 1 of the Project, including baseline cost analysis, identification and initial assessment of potential solutions, down-selection recommendations, etc, with methodologies, evidence, assessments, findings and conclusions, and accompanied by all supporting data:
- 2. interim report of all work undertaken during Stage 2 of the Project, including detailed assessment of the impact and development requirements of the down-selected solutions, routes to deployment, etc, with methodologies, evidence, assessments, findings and conclusions, and accompanied by all supporting data; and
- 3. final report of all work undertaken during Stage 2 of the Project, (incorporating any revisions following review of the interim report), including detailed assessment of the impact and development requirements of the down-selected solutions, routes to deployment, etc, with methodologies, evidence, assessments, findings and conclusions, and accompanied by all supporting data.

All deliverable reports must be provided electronically in both Microsoft Word and PDF formats. Additionally, electronic copies of all models and supporting data developed or used during the Project must also be provided, in both source code format and where applicable compiled format, with full rights to their use by the ETI and its Members.

4.2. Organisation and Contracting Structure

4.2.1. Organisations Required

To deliver this Project, it is anticipated that a range of organisations will be required to be engaged, either as part of the Project Team or through stakeholder consultation by the Project Team during the Project. Such organisations may, for example, include engineering consultancies, academics, technology/equipment developers, infrastructure installation contractors, pipe manufacturers or other infrastructure specialists.

It is essential that the organisations engaged contribute sufficient creative, novel approaches, and that these are complemented by a deep knowledge of current designs and practices and by the ability to assess the practical feasibility of ideas generated.

The ETI will only select Respondents who have the required skills, experience and capability (either themselves or within their Subcontractors) to complete all parts of the Project.

4.2.2. Contracting Structure

For this Project, the ETI intends that a single Respondent will enter into the Project Contract with the ETI and undertake the Project as <u>Prime Contractor</u>, with specified parts of the Project being performed (where appropriate) by Subcontractors. The Prime Contractor must demonstrably have the capability to manage and deliver the Project effectively and efficiently.

4.3. Critical Roles

The ETI places great emphasis on two critical roles in the delivery of the Project – the Project Manager and the Chief Technologist – who together will lead the Project on behalf of the Prime Contractor.

The Project Manager is responsible for leading and managing the Project Team, delivering the programme of work to time and cost, handling information flows and commercial issues, ensuring effective team-working and the continued engagement and support of key stakeholders. This includes regular liaison with the ETI's Project Manager to whom the Project Manager is accountable on behalf of the Project Team. In essence, the Project Manager's responsibility is to make sure that the ETI benefits from a result at the end of the programme of work that meets the agreed outcomes within time and cost. It is critical that the Project Manager is sufficiently empowered to lead the Project and accept accountability for delivery to the ETI on behalf of the Prime Contractor.

The Chief Technologist is responsible (on behalf of the Prime Contractor) for the technical quality and content of the work, ensuring the competence of key technical staff allocated to individual work packages, the effective review of key outputs (both for use within the Project and prior to any submission to the ETI) and the effectiveness of detailed technical planning to ensure that the emerging results of work are fed back into the forward plan. In essence this position has the responsibility to assure the technical quality of the Project and its outcomes.

Respondents are required in their Proposals to nominate individuals for each role. The ETI will assess the competence, experience and authority of these two people and their ability to work together as critical to Project success. The ETI's expectation is that certainly the Project Manager and (unless there is a compelling case to the contrary) also the Chief Technologist should each be an employee of the prospective Prime Contractor.

4.4. Project Review Meetings

Throughout the Project the ETI expects to hold review meetings with the Project Manager and Chief Technologist, which may be at the ETI or the Prime Contractor's premises, as appropriate, typically monthly or at such other times as may be agreed between the ETI and the Prime Contractor. The ETI may involve external advisors and/or consultants, key industrial stakeholders, or representatives from its Members, as appropriate.

The timing and scope of review meetings will be confirmed in discussions once the Respondents' plans have been reviewed. Preliminary arrangements are as follows:

- a) Project Kick Off Meeting: This will be held within two weeks of the Project start date. The purpose of the meeting between the ETI and the Project Team is to review the scope of the Project, planned timescales, deliverables and Required Outcomes, and the Project Team's way of working and interfacing with the ETI, to ensure that all individuals who will be working on the Project (including those employed by Subcontractors) share with the ETI a common understanding of how the Project will be delivered in accordance with the Project Contract. It is anticipated that this review will be held at the Prime Contractor's premises and take no longer than one day.
- b) **Mobilisation Review Meeting**: This will be held within four weeks of the Project start date. The purpose of the meeting is to ensure that all residual actions from the kick-off meeting are completed and that the Prime Contractor and any Subcontractor(s) are fully mobilised, all intended work is actually under way and progressing to plan, and that all management processes are fully operational. It is anticipated that this review will be held at the Prime Contractor's premises and take no longer than one day.
- c) Project Reviews: Review Points will be agreed by the Prime Contractor and the ETI to be held at key points during the Project. It is anticipated that these reviews will be held at the ETI's premises (or if appropriate at the Prime Contractor's premises) and take no longer than one day each. Respondents should propose appropriate Review Points for the Project, dependent on their intended scope, methodology and plans.

d) Stage Gate Reviews:

- Stage Gate Review 1 will be held at the end of Stage 1 of the Project, and is a 'go / no-go' decision point for the ETI to determine, with support from the Project Team, whether the Project is on track to deliver the intended outcomes, whether the intended scope of Stage 1 has been satisfactorily completed, whether plans for Stage 2 are clear and appropriate, and therefore whether the Project should proceed to Stage 2, whether certain actions are required first, or in extremis whether the Project should be terminated.
- Similarly, Stage Gate Review 2 will be held at the end of Stage 2 to determine whether the intended scope of Stage 2 has been satisfactorily completed, whether the Project has delivered the intended outcomes, and therefore whether the Project can be concluded.

The Prime Contractor and relevant Subcontractors will be required to support all such meetings.

4.5. Reporting

The Project Manager is required to submit short Monthly Reports to the ETI, summarising progress using the ETI's simple reporting template.

Regular, short and informal catch-up telecons will be held between the Project Manager, the Chief Technologist if appropriate, and the ETI's Project Manager, at intervals appropriate to the progression of the Project (typically an hour each alternate week).

Specific additional reports may be required, as laid out in the draft Project Contract (see Section 5.3).

4.6. Project Health, Safety and Environmental (HSE) Management

The ETI's approach to the management of HSE in projects is based on three key elements:

- · Competency Assessment;
- · Performance Assurance; and
- Project Incident Protocol.

How the ETI applies this approach to a specific project depends upon the nature and content of the Project. For this Project specifically, this will depend upon whether any work to be undertaken during the Project is not entirely desk-based (e.g. site visits, field trials, experimental or laboratory work). The ETI's requirements for Respondents' Proposals are therefore set out in Appendix A, Section 4.5.

Respondents should note that:

- If the Project involves any activity which is not desk based then the ETI will carry out a full HSE competency assessment against the preferred Respondent(s) prior to contract award.
- If appropriate, specific HSE requirements will be included in the Project Contract including reporting against HSE performance on a periodic basis.
- The ETI will wish to discuss the management of any specific HSE issues with the preferred Respondent(s) prior to contract award.

4.7. Critical Success Factors

Critical Success Factors for this Project are as follows:

- i. The Project must generate a sufficient number of potential innovative solutions for the reduction of district heat network infrastructure cost. These must be sufficiently innovative to have significant impact.
- ii. It is anticipated that this will require inclusion in the Project Team of a broad range of specialists and/or engagement by the Project Team with industry specialists outwith the team. This must include access to expertise from countries in which DHN deployment is more widespread than the UK, to ensure that all appropriate practice and information is considered, whilst also ensuring that solutions are appropriate for UK deployment. It must also include access to the expertise and learning from other work which may be deemed relevant, such as DECC's Low Carbon Pioneer Cities projects and ongoing work on behalf of the International Energy Agency¹¹.
- iii. Down-selected solutions must be capable of delivering a substantial impact on infrastructure cost. A specific threshold has not been set, as it essential that the impacts of identified solutions are analysed honestly (rather than being adjusted to reach a pre-determined level).
- iv. Analysis of realisable cost reductions of identified solutions must be robust, credible and evidence-based including definition and analysis of present baseline costs and analysis of present cost drivers, and including net cost reductions at whole system level (accounting also for any increases caused by proposed solutions). Validation should be considered.
- v. Identified solutions must be credible and sufficiently attractive to the industry that they are likely to be deployed. (Some, of course, may require further development of technologies or techniques before they can be deployed). Implications for heat network interconnectivity and for adaptation of common technical standards across the industry must also be addressed.
- vi. Analysis of further development requirements (including technical steps required for development of technologies and techniques, timescales, budgets, risks, etc) must be realistic and supported by demonstrable expertise in such projects.
- vii. Down-selected solutions must preserve the benefits of heat networks as a method of heat supply for example: the effective delivery of large quantities of heat; the ability to transfer water at different temperatures, dependent on the application; long asset life; and the ability to utilise hot water from different heat sources, without undue impact on householders.
- viii. In the course of reducing the upfront capital cost, solutions should not detrimentally impact the overall lifecycle cost of the heat network.
- ix. Both the Project Manager and the Chief Technologist must have appropriate competence, experience and authority to carry out their respective roles, and must be able to work together effectively in order jointly to lead the Project.

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¹¹ e.g. IEA District Heating Annex 10, due to publish in spring 2014. (Note that Annex 11 is then planned to look specifically at cost reduction, with proposals due in January 2014, but not due to report until 2017).

5. COMMERCIAL AND LEGAL REQUIREMENTS

5.1. Project Funding

The ETI is an investor in technology, not a grant awarding body. In commissioning this specific Project, the ETI expects that it will be the predominant (or potentially sole) source of investment funding, and that Respondents may wish to include an element of financial profit in their proposed costs¹².

For this Project, the ETI's investment will be on a fixed price basis (see definition of ETI Investment at Appendix E – Glossary).

Proposals must clearly state the Respondents' proposed Total Project Cost, identifying the proposed ETI Investment and the source and amount(s) of any additional funding (from the Prime Contractor and/or third parties, including proposed Subcontractors) which may be required to bridge any gap. Any other commercial impacts associated with any proposed reliance on such Participant Funding and/or Third Party Funding must also be clearly stated in accordance with Section 6 (Project Finances) of Appendix A.

5.2. Value Return

The funding structure and purpose of the ETI means that it is a strategic investor in technology development. The ETI expects its projects to deliver value in return for its investment.

This Value Return is determined on a project by project basis considering factors such as the level of ETI Investment, the proportion of the Total Project Cost represented by the ETI Investment and the anticipated business value of the Project outcomes.

For this specific Project, in return for the ETI's investment, the ETI expects to own all Arising IP from this Project (and that appropriate licences of Background IP and third party IP will be granted/obtained if required by the ETI and third parties to use and exploit the Arising IP)¹³.

In addition, the Value Return may also include:

- benefits to the ETI and its Members arising from the experience and knowledge gained during the delivery of the Project; increasing investor confidence in future technology deployment; standardisation of approaches and methods; market confidence in long term cost reduction opportunities; development of the supply chain;
- sharing of the financial risk of the Project (for example, via Participant Funding and/or Third Party Funding);
- benefits to the wider industry / UK economy; and/or
- public dissemination of selected Project outputs (at the ETI's sole discretion).

Additional Value Return mechanisms may be applicable to any follow-on projects which the ETI may choose to commission, but these are outwith the scope of this Project.

In response to this RfP, Respondents are expected to set out in their Proposals full details of:

- the proposed Value Return that would be derived from their performance and delivery of the Project; and
- the value that they expect to derive from the Project for themselves.

(See Section 5 (Value Return) of Appendix A).

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¹² See also Section 5.7 regarding intellectual property rights for this Project in return for such profit.

¹³ See also Section 5.7.

5.3. Project Contract

The Project will be governed by a Project Contract. A draft Project Contract will be made available to Respondents following receipt by the ETI of a signed NDA in accordance with Section 6.1.1 and Appendix C.

The Project Contract will be negotiated following selection of the preferred Respondent(s) (see Sections 6.1.4 and 6.1.5), during the Project Detailing and Contract Finalisation Stage of the Project Commissioning Process (Section 6.2).

Any issues that any Respondent has with the terms of the Project Contract must be set out in the Statement of Compliance to be provided as part of the Proposal (see Section 8 (Statement of Compliance) and Annex A3).

Specific areas of the Project Contract have been highlighted by the ETI in Appendix D of this RfP. The ETI expects Respondents to provide an initial detailed view on these areas in their Statement of Compliance.

5.4. Subcontracts

As stated in Section 4.2, the ETI's intended organisation/contracting structure for this Project is that a single Respondent will enter into the Project Contract (as Prime Contractor) with the ETI, with specific parts of the Project being performed by agreed Subcontractors.

The ETI will require that there are Subcontracts in place between the Prime Contractor and its Subcontractors (including, as appropriate, companies within the same group as the Respondent), and that these Subcontracts are consistent in all material respects with the Project Contract. The appointment and use of Subcontractors by the Prime Contractor will be subject to prior ETI approval and the ETI reserves the right to approve the terms of Subcontracts.

5.5. Project Payment Structure

The ETI will invest in the Project as described in Section 5.1 above.

Payments will be made by the ETI following successful completion of agreed Milestones, i.e. points in the Project at which significant value has been delivered to the ETI (typically by submission of deliverables representing the completion of major Project Tasks / Work Packages / reports). Payment of ETI Investment monies in respect of a Milestone is subject to acceptance by the ETI of the Milestone deliverables against agreed acceptance criteria and to the Prime Contractor complying with the ETI's reporting requirements in relation to the Milestone.

Details of the Project payment terms, structure and related requirements will be set out in the draft Project Contract (see Section 5.3 of the RfP) and agreed during finalisation of the Project Contract (see Section 6.2, Project Detailing and Contract Finalisation).

The following Milestones are suggested by the ETI (with reference to the anticipated deliverables and Stage Gate Reviews set out in Sections 4.1 and 4.4 respectively):

- 1. **Milestone 1** upon acceptance of Deliverable 1 (the criteria for which will include a successful outcome from Stage Gate Review 1);
- 2. **Milestone 2** upon acceptance of Deliverable 2; Respondents should note that the ETI wishes to assist in the management of annual budgets by paying Milestone 2 before Christmas 2014 and Milestone 2 should ideally therefore be planned no later than the end of November if this is possible, to allow time for deliverable review and acceptance before Christmas:
- 3. **Milestone 3** upon acceptance of Deliverable 3 (the criteria for which will include a successful outcome from Stage Gate Review 2), at the end of the Project.

5.6. State Aid

A proportion of the ETI Investment for this Project will constitute state aid. The ETI has a specific state aid clearance from the European Commission. A copy is available on request. Respondents should note that:

- a) Respondents may be required to provide further information during the Project Commissioning Process to support any specific state aid requirements of the Project;
- b) Participant(s) are required to provide full transparency of costs where and to the extent necessary to ensure both the Participant(s) and the ETI comply with EU state aid law;
- c) Participant(s) are required to agree to certain obligations in the Project Contract related to the state aid requirements including the duration of the retention of records, and obligations to return ETI Investment monies in certain exceptional circumstances (including in the event the European Commission adopts a decision that there has been a grant of illegal state aid or misuse of state aid); and
- d) Respondents are required to confirm in their Proposals that there are no potential, threatened, pending or outstanding recovery orders by the European Commission in respect of any funding received by any proposed Participant (Appendix A, Annex A1, Section 1.1).

5.7. Intellectual Property

5.7.1. Introduction

The ETI has a set of standard IP principles that govern how intellectual property is dealt with in those of its projects to which the principles are applied. The ETI's standard IP Principles can be found on the ETI's website at http://www.eti.co.uk/about/how_we_operate/intellectual_property/.

The ETI recognises, however, that its standard approach to intellectual property matters may not be suitable for every ETI project. The ETI has sufficient flexibility in its approach to intellectual property matters to allow it to tailor the intellectual property arrangements on individual projects to meet the specific needs of that project where the circumstances justify a departure from the "standard" approach.

The ETI has determined that, for this specific Project, the arrangements are as set out in this Section 5.7 of the RfP. (See also Section 7 (Intellectual Property) of Appendix A) and Appendix D (Intellectual Property section).

5.7.2. Arising IP

Ownership and licensing of Arising IP are determined on a project by project basis. The ETI's expectations for this Project are set out below.

5.7.3. Arising IP – Ownership and Licensing

For this Project, the ETI expects to own all Arising IP.

In the unlikely event that (i) a Respondent proposes that it shall own (any or all) Arising IP and (ii) the ETI agrees to this, the ETI will require (as a minimum) that the Respondent shall license the Arising IP it owns to the ETI exclusively, so that the ETI can in turn sub-licence it to anyone who has exploitation rights (including ETI Members) under the Project Contract. This mechanism is to ensure effective exploitation of the technologies developed.

The ETI does not anticipate granting rights to the Prime Contractor or other Project Team members (whether by licence or sub-licence) to use or exploit Arising IP / Project results. Respondents may therefore wish to include an element of financial profit in their proposed costs (see Section 5.1). Alternatively, Respondents should include in their Proposals details of any licences of Arising IP they

propose should be granted by the ETI together with a suitable Value Return proposal (note - "Arising IP and Profit" section, below).

5.7.4. Arising IP - Academic Organisations

Generally, if requested, the ETI will grant rights to a Participant (in this case a Prime Contractor) which is an academic institution, for the purposes of academic research and teaching. Publication of appropriate parts of the Project results, if appropriate, will generally be permitted subject to an approval process.

5.7.5. Arising IP and Profit

Respondents should note that profit will not be paid to a Participant in addition to the grant of a licence of Arising IP.

5.7.6. Background IP

Where a licence of Background IP is required to carry out the Project and/or for the subsequent exploitation of any Arising IP / Project results, the Participant (or Subcontractor, where appropriate) is expected to make an appropriate licence available on a non-exclusive and (for this Project) royalty-free basis. If Participants (or their proposed Subcontractors) fail to meet this expectation, the attractiveness to the ETI of the relevant Proposal may be adversely affected.

5.8. Due Diligence (General, State Aid, Insurance, IP and HSE)

The ETI requires Respondents to provide due diligence information at two points during the Project Commissioning Process: (i) as part of a Proposal and (ii) during the Project Detailing and Contract Finalisation Stage of the Project Commissioning Process (see Section 6.2).

Due diligence on IP will be required both in the Proposal (as requested in Section 7 of Appendix A of this RfP) and during the Project Detailing and Contract Finalisation Stage (see Annex A1, Section 2b).

Further details of the ETI's wider due diligence requirements are set out in Section 8 of Appendix A and Annex A1.

Please note that successful completion of all elements of the required due diligence is a pre-requisite for selection of a Proposal and Project Contract execution. Failure to meet the ETI's due diligence requirements at any stage may result in exclusion of a Proposal from the ETI's Project Commissioning Process.

6. PROJECT COMMISSIONING PROCESS AND ESTIMATED TIME SCALES

The ETI is using a two-stage approach to commission the Project:

Project Commissioning Stage 1 – RfP, Response to RfP and Selection of Preferred Respondent(s); and Project Commissioning Stage 2 – Project Detailing and Contract Finalisation.

6.1. Project Commissioning Stage 1: RfP, Response to RfP and Selection of Preferred Respondent(s)

6.1.1. Non-Disclosure Agreement and Notification of Intention to Submit a Proposal

Prior to submitting a Proposal in response to this RfP, Respondents are required to provide to the ETI (i) a formal notification of their intention to submit a Proposal, in the form set out at Appendix B, and (ii) a non-disclosure agreement (NDA) in the form provided at Appendix C, signed and returned to the ETI in accordance with the instructions at Appendix C. Respondents should take care to follow these instructions precisely, in order to avoid unnecessary delays.

Both documents must be received by the ETI no later than the deadline specified on the front page and at Section 6.3 of the RfP. (Electronic copies of each document are available on the ETI's website). Respondents are encouraged to return both the notification form and the NDA as soon as possible (rather than waiting until the deadline), as following return of the properly executed NDA the ETI will send out the full draft Project Contract (and Respondents are required to confirm acceptance of the detailed terms therein and/or provide specific comments on them in their Proposals).

Any subsequent changes to the proposed Project Team should be promptly notified to the ETI, clearly marking the changes on the notification form. To assist with planning, any organisations no longer intending to submit Proposals are politely requested to inform the ETI accordingly.

6.1.2. Workshop for Respondents, Questions and Clarifications

The ETI will be available to meet with Respondents before the Proposal deadline to answer questions and provide further clarifications.

The main opportunity for this will be by invitation to a Workshop for Respondents. This workshop may take the form of one-to-one meetings or an open question and answer event. This will depend upon the number of Respondents registering for the workshop. The dates for this workshop are listed on the second page of this RfP, as well as in Section 6.3.

To request an invitation to this workshop, Respondents should either indicate their desire to attend on the Notification of Intention to Submit a Proposal form, or should otherwise contact the ETI using the same contact details on the first page of this RfP, no later than the deadline listed on the second page of this RfP, as well as in Section 6.3. Further details regarding the workshop will then be provided to Respondents once the number of attendees is known.

To derive best value from this workshop, it is recommended that Respondents begin work on their Proposals prior to the workshop and are thus able to present informed questions at the workshop.

Following the workshop, Respondents may request a second, one-to-one meeting or telecon (though this is subject to limited availability), and should provide a list of topics for the meeting or telecon as early as possible.

Respondents may also contact the ETI at other times (using the contact details on the first page of this RfP) for quick questions, and the ETI will endeavour to address them where reasonably practicable.

Any advice or clarifications of ETI requirements requested by and/or provided to any Respondent may (at the ETI's discretion) be made available to all Respondents to ensure parity of information.

Respondents should therefore ensure (unless there is a fully executed NDA in place and unless it is agreed with the ETI in advance that specific information is provided pursuant to that NDA) that requests for advice and clarifications, and any related communications, do not contain confidential information.

6.1.3. Submission of Proposals

Respondents are required to submit Proposals to the ETI no later than the closing date specified on the front page and at Section 6.3 of the RfP. To ensure that all Proposals are treated equitably, extensions to this closing date will not normally be granted.

The required form and contents of Proposals are set out in Section 7 of the RfP and in Appendix A.

6.1.4. Selection Process

Following the closing date for Proposals, the ETI will convene a Selection Panel as part of its evaluation process to recommend which Respondent(s) should proceed to the Project Detailing and Contract Finalisation Stage. In addition to ETI staff, this panel may include experts selected by the ETI (typically including individuals drawn from ETI Member organisations and third parties) to provide the necessary expertise to consider the technical, commercial, legal and financial aspects of each Proposal.

It is intended that Proposals should provide all necessary information to enable the Selection Panel to select a preferred Respondent. However, the Selection Panel may request further clarifications from Respondents following the meeting. A period of three weeks has therefore been scheduled following the Selection Panel meeting for Respondents to resolve any clarification requests; for the ETI to ensure that all key principles in the Project Contract are agreed; and for any further due diligence to be conducted by the ETI as may be required. A second Selection Panel meeting is then scheduled.

Respondents may be requested to make a presentation to the Selection Panel to support information provided in their Proposal.

In the event that the ETI receives a large number of Proposals, the ETI may make an assessment to select a manageable shortlist of Respondents / Proposals for consideration by the Selection Panel.

In any event, the ETI may in its discretion decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision.

Recommendations of the Selection Panel are made to the ETI's Executive management team for consideration and ratification. All Respondents will be notified of the final ETI decision once it is confirmed. Prior to this notification, no information will normally be provided to Respondents concerning the Selection Panel recommendations, (except to the extent that further information may be requested by the ETI to clarify certain aspects of some or all of the Proposals, as outlined above).

6.1.5. Selection Criteria

The ETI expects that the capabilities and experience listed below will be critical to the successful delivery of the Project. Respondents are free to identify additional capabilities and experience which they consider to be critical or important to success or to provide reasoned arguments why capabilities identified by the ETI are not required.

The ETI's experience evaluating Proposals has shown that specific and objective evidence of capabilities and experience is more convincing than general statements about previous projects executed by the organisation.

Proposals will be reviewed and judged primarily against the criteria listed below and the supporting evidence supplied. Failure to meet minimum standards in any criterion may result in the ETI rejecting a Proposal.

- Completeness of information content, structure and quality of the Proposal (against the areas listed in Appendix A);
- Ability (overall) to deliver the Project Objectives (as detailed in section 3.2);
- Compliance with the scope and technical requirements set out in sections 3 and 4;
- Willingness to comply materially with the terms and conditions of the proposed Project Contract (see Section 5.3); willingness to support the contracting process (as laid out in Section 6.2) and the contracting timeline (as laid out in Section 6.3); and the extent to which there may be Background IP which would prevent the Project proceeding or the Arising IP being exploited;
- Project approach, structure and plan, (including methodologies for generating innovative potential solutions, assessing solutions, industry engagement and validation, etc; plus quality of planning, deliverables, Stage Gate Reviews, Milestones and proposed management of specific risks and issues); (see particularly Section 3.1 of Appendix A, and Sections 3 and 4 of this RfP);
- Value for money, including the proposed Value Return, the scope and quality of work proposed, as well as price and appropriateness of proposed Milestones; (see particularly Section 5 of this RfP);
- Generic knowledge, skills and experience, which must include those listed below:
 - Availability and stability of deployable resources to mobilise sufficiently rapidly and for sufficient durations:
 - Record and ability in quality, timely and on-budget delivery (of similar projects) to the full satisfaction of stakeholders;
 - Ability and experience in collaborative working;
 - Project management expertise and experience as a Prime Contractor; and
 - Suitability and capability of the Chief Technologist and Project Manager assigned to the Project (as per Section 4.3 of the RfP body); and
- Specific technical knowledge, skills and experience, which must include some or all of those listed below:
 - Heat network infrastructure design, technologies and costing,
 - Heat network infrastructure installation, operation, maintenance and removal practices;
 - Capex and through-life cost analysis;
 - Innovation, preferably both in obviously relevant technologies/applications and in other areas which may provide valuable sources of potential novel solutions;
 - Equipment / technology development and roll-out, preferably in relevant technologies / applications, (at least sufficient to carry out credible feasibility assessments, and to understand the development process and determine credible estimates);
 - Modelling and optimisation (e.g. pipe routing);
 - Materials science and application engineering;
 - o Geology;
 - Understanding of the market for heat network technologies, deep contacts with the organisations involved in all stages of a DHN lifecycle; and
 - o Knowledge of other sub-surface infrastructure and industry practices.

6.2. Project Commissioning Stage 2: Project Detailing and Contract Finalisation

Following selection, the ETI will invite the preferred Respondent(s) to enter into negotiations with the ETI to finalise the details of the Project and the terms of the Project Contract. See Section 6.3 for further details relating to anticipated dates.

The ETI may decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision.

The Project Detailing and Contract Finalisation Stage will include the following activities (as required and dependent on the level of detail provided in the Respondent's Proposal):

- a) final detailing of the detailed Value Return and IP terms;
- b) final detailing of the proposed technical programme, including definition of deliverables and acceptance criteria;
- final detailing and agreement of Stage Gate Reviews, where Project performance and the business case are critically reviewed and decisions taken on whether to proceed with the Project;
- d) final detailing of Milestones for payment purposes;
- e) finalisation and agreement of the Project Contract;
- f) further due diligence activities as required (see Annex A1 Section 2);
- g) agreement (and approval as required by the ETI) to terms of other key contractual arrangements (e.g. Subcontracts);
- h) gaining all necessary Respondent and ETI approvals to undertake the Project; and
- i) any further information or assessment that may be necessary to meet state aid requirements.

As part of the above process, Respondents may be required by the ETI to present a Final Detailed Offer to the ETI, addressing all technical, commercial, legal and financial issues.

A series of meetings will be required, as indicated in Section 6.3, to complete the Project Detailing and Contract Finalisation Stage and Respondents are required to commit to provide legal, technical, commercial and managerial resources as required to achieve the target contract execution date shown. The ETI reserves the right to re-open discussions with other parties and/or cancel the commissioning of the Project should it become apparent that this date may not be achieved.

6.3. Estimated Project Commissioning Timeframes

The following tables outline the anticipated schedule for the Project Commissioning Process. They also include anticipated dates when Project resources will be required to attend Project Detailing and Contract Finalisation Stage meetings with the ETI.

The timing and the sequence of events resulting from this RfP may vary and shall ultimately be determined by the ETI.

Request for Proposal and Selection	Dates (Fixed unless otherwise stated)	
Issue of RfP	11 th December 2013	
Deadline for submitting to the ETI a request to attend the Workshop for Respondents	7 th January 2014	
Workshop for Respondents	14 th (& potentially 15 th) January 2014	
Deadline for (i) notifying the ETI of an intention to submit a Proposal (Appendix B); and (ii) return of signed Non-Disclosure Agreement (Appendix C); (See Section 6.1.1)	20 th January 2014	
Closing date for submission of Proposals	4 th February 2014	
Selection Panel #1 (provisional)	5 th March 2014	
Clarifications, potential meetings, additional due diligence, etc, if required	10 th to 21 st March 2014	
Selection Panel #2 (provisional)	27 th March 2014	
Preferred Respondent(s) notified	Anticipated Date: 8th April 2014	

Project Detailing and Contract Finalisation	Anticipated Dates	
Project Detailing and Contract Finalisation meetings (to finalise technical aspects, commercial and legal aspects, plans, deliverables, milestones, HSE management arrangements, any remaining due diligence, etc)	11 th April – 8 th May	

Project Start and Finish	Anticipated Dates
Project Contract execution target date	1 st June 2014
Project start	1 st July 2014
Project finish (based on anticipated 6 month duration)	January 2015

7. CONTENTS AND FORMAT OF PROPOSAL

The Proposal shall be arranged according to the structure detailed in Appendix A and shall include all required supporting information and appendices detailed therein.

The content must clearly demonstrate how the proposed Prime Contractor will meet the requirements and criteria set out in Sections 3 to 6 of this RfP. The Proposal must be written in a succinct manner and must not include imprecise statements, generalities or repeated information. It must be easily readable with appropriate font sizes, margins, etc.

The Proposal should ideally be approximately 25 pages long, but it shall not exceed a maximum of 45 pages (excluding the appendices to the Proposal explicitly required by Appendix A to this RfP).

Additional information (such as organisational brochures, etc) may be provided to accompany the Proposal if this is expected to add value (although it is not necessarily required by the ETI), but such additional information will not usually be taken into account when reviewing Proposals.

The Proposal shall consist of three (3) hard copies, separately bound, and one (1) electronic copy. The latter shall be provided in both PDF and Microsoft Word formats.

8. STATEMENT OF COMPLIANCE

The ETI's full requirements for the Statement of Compliance are set out in Appendix A, Annex A3.

Respondents are required to provide a statement confirming that the Proposal is fully compliant with the Request for Proposals, or stating clearly any exceptions, deviations, alternative approaches or additions, with justification.

Additional comments and clarifications should also be listed where appropriate (for example to clarify interpretation of requirements), but these must be differentiated from any deviations / exceptions above.

In relation to the draft Project Contract (Section 5.3 above), Respondents are required to confirm in the Statement of Compliance the extent to which the provisions of the draft Project Contract will be accepted by the Respondents.

The extent of compliance with the RfP and the draft Project Contract is one of the key Selection Criteria against which a Proposal will be assessed (Section 6.1.5).

9. IMPORTANT NOTICES

- a) The ETI at its discretion may request clarification of a Proposal, and may reject any Proposal which is unclear.
- b) Neither the issue of any documentation in the Project Commissioning Process nor any of the information presented in it should be regarded as a commitment or representation on the part of the ETI or any other person to enter into a contractual arrangement. The issue of the RfP is not an agreement or offer to purchase goods or services, and the ETI is not bound to enter into any contract with any Respondent. By responding to this Request for Proposals, a Respondent does not commit itself to entering into a contract with the ETI.
- c) All decisions made by the ETI relating to the acceptance, review and selection or otherwise of Proposals are final.
- d) All documents, including Proposals, submitted to the ETI become the property of the ETI. They will be received and held in confidence by the ETI under the terms of the Non-Disclosure Agreement (Appendix C), subject to any contrary agreement. No part of a Proposal, or other documents provided by Respondents, shall be returned.

- e) The ETI reserves the right at any time to (i) withdraw the RfP and terminate the Project Commissioning Process; (ii) change the basis, timetable and/or requirements of, and/or the procedures for, the Project Commissioning Process, including the timetable or closing date for receipt by the ETI of Proposals, (iii) make modifications to, or alter any of the information within, the RfP, (iv) reject any or all of the Proposals received, and (v) not invite any Respondent(s) to proceed further.
- f) Neither the ETI nor any of its agents or advisers accepts any liability or responsibility for the accuracy, adequacy or completeness of any of the information provided or any opinions contained in this RfP or of any other information made available during the Project Commissioning Process. No representation or warranty, express or implied, is or will be given by the ETI or any of its agents or advisers with respect to such information provided or opinion given therein. Any liability is thereby expressly disclaimed.
- g) Respondents must assess the information and terms contained in this RfP independently, having taken professional advice if necessary. Each Respondent will be deemed to have examined all the documents enclosed with this Request for Proposals and by its own independent observations and enquiries will be held to have fully informed itself as to the nature and extent of the requirements of the RfP. Each Respondent must rely on its own enquiries and on the terms and conditions contained in any agreement, when and if finally executed, subject to such limitations and restrictions as may be specified therein.
- h) Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their responses to the RfP. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by the Respondent (or by any third party, including proposed Sub-contractors) in connection with its participation in the Project Commissioning Process, including but not limited to any costs or expenses incurred up to and including the execution of the Project Contract.
- i) The ETI may, at its discretion, shortlist Respondents for the next stage of the Project Commissioning Process (the Project Detailing and Contract Finalisation Stage). The ETI does not undertake to accept the lowest bid or to accept part or all of any Proposal and the acknowledgement of receipt of any Proposal (and/or any invitation to any Respondent(s) to proceed to the next stage) shall not constitute any actual or implied agreement between the ETI and the Respondent.
- j) The copyright in the documentation and any other materials supplied by the ETI and/or its advisers in this Project Commissioning Process, in whatever format, belongs to the ETI or its appointed advisers. Such documentation and materials may not, either in whole or in part, be copied, reproduced, distributed or otherwise made available to any other third party or used without the prior written consent of the ETI, except in relation to the preparation of the Proposal in the course of the Project Commissioning Process. All documentation supplied by the ETI in relation to this Project Commissioning Process must be returned on demand, without any copies being retained by the Respondent.
- k) In this RfP, any phrase introduced by the term "include", "including", "in particular", "for example", "such as" or similar expression shall be construed as illustrative and shall not limit the sense of the words preceding that term.
- This RfP, and any dispute or claim arising out of or in connection with it (including any dispute or claim relating to non-contractual obligations), shall be governed by and construed in all respects in accordance with the laws of England and Wales and the parties agree that the Courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this document (including any non-contractual disputes or claims).
- m) The submission of a Proposal will confirm acceptance of the foregoing provisions by the Respondent without qualification. Any attempt to qualify any of the foregoing provisions in this Section 9 (Important Notices), either expressly or impliedly, may result in a Respondent being disqualified.

APPENDIX A - PROPOSAL CONTENT AND FORMAT

In addition to the requirements in Section 7 of the RfP, the Proposal shall be arranged according to the structure defined below and shall explicitly include all the information listed.

The Proposal should ideally be approximately 25 pages long, but it shall not exceed a maximum of 45 pages (excluding the appendices to the Proposal explicitly required by this Appendix A to the RfP).

1. **EXECUTIVE SUMMARY** [1 – 2 pages]

A summary of the Proposal, describing briefly:

- the overall Project objectives (as specified in Section 3.2 of this RfP) plus any subsidiary objectives if appropriate;
- the organisation(s) undertaking the work and the Project organisation structure (including identification of the Prime Contractor and proposed Subcontractors);
- summary of the approach to the Project and the work to be undertaken;
- summary of the key Milestones and key deliverables;
- confirmation of compliance with the RfP and brief summary of any key exceptions/deviations;
- Total Project Cost, with proposed breakdown between the ETI Investment, Participant Funding and Third Party Funding where relevant;
- the proposed Value Return; and
- proposed Project duration.

2. PROJECT TEAM MEMBERS AND STRUCTURE [approximately 5 - 10 pages, plus appendices]

2.1. Project Team Members [approximately 2 - 5 pages]

This section should briefly describe (i) the Prime Contractor organisation and, where appropriate, each of the other organisations in the proposed Project Team (i.e. proposed Subcontractors), and (ii) in each case their relevant knowledge, skills, experience and previous track record.

This section should include a table summarising which of these knowledge, skills, experience and previous track record are being brought to the Project by each organisation (including both the 'generic' and 'specific' knowledge, skills and experience areas listed in Section 6.1.5 of the RfP (Selection Criteria)).

2.2. Key Individuals and Critical Roles [approximately 1 - 3 pages]

This section should identify all key roles and all associated key individuals (including deputies and alternates where appropriate). As well as key technical and other specialists, this should specifically include the Project Manager and Chief Technologist. See Section 4.3 of the RfP main body.

The proportion of each individual's time dedicated to the Project should be identified and their expertise briefly summarised; (CVs, of no more than 2 pages each, should be included in an appendix).

2.3. Project Team Contracting Structure [approximately 1 - 2 pages]

The ETI intends that a single Respondent will contract with the ETI as Prime Contractor, with agreed parts of the Project being subcontracted (where appropriate and as agreed with the ETI) by the Prime Contractor to one or more third party organisations. Each Respondent should include confirmation that

all other organisations identified as Project Team members will be subcontracted directly by the Respondent (as Prime Contractor).

An organisation diagram showing the organisations and their roles should be included. The positions of the key individuals identified as required by Section 2.2 of this Appendix A (including the proposed Project Manager and Chief Technologist – see Section 4.3 of the RfP body) should be indicated.

Respondents should identify in their Proposal any foreseen issues or difficulties in executing Subcontracts.

2.4. Collaborative Working [typically < 1 page]

Evidence of previous collaborative working (including Subcontract management, as appropriate) should be provided, both within and outside the proposed Project Team membership.

3. PROJECT APPROACH AND PROGRAMME OF WORK [approximately 5 - 13 pages]

3.1. Project Approach [approximately 2 - 5 pages]

Respondents should provide a summary of the overall approach to the Project.

This should include a summary work flow diagram which clearly identifies the key Work Packages, their interdependencies and how they contribute to the overall Project objectives. This work flow should identify Stage Gate Reviews and other key Review Points where overall progress on the Project will be critically reviewed. The ETI has suggested a structured approach in Section 3.3 (of the RfP main body). Respondents should confirm their adherence to this or state and justify any alternative structures proposed.

This should also specifically include (but not necessarily be limited to) descriptions of the strategies and approaches proposed to address the following aspects:

- a) validation of baseline cost data (including costs of disruption during installation) and analysis of cost drivers:
- b) identification of potential cost-reduction solutions;
- c) validation of practical feasibility and impact of solutions (including validation of potential system cost reduction against baseline system costs, and including confirmation of credibility and attractiveness of deployment to industry);
- d) estimation and validation of development requirements for each solution;
- e) basis upon which down-selection will be recommended;
- the extent to which expertise is proposed to be included within the Project Team and the extent to which expertise and stakeholders are proposed to be consulted outside the Project Team; and
- g) management of intellectual property particularly how and by whom ideas are proposed to be generated, assessed and validated with experts and stakeholders, and how throughout this process it is proposed that confidentiality, disclosure and ownership of Arising IP will be managed to ensure that the ETI is able to patent solutions if appropriate in future.

3.2. Programme of Work [approximately 3 - 8 pages]

The programme of work to be undertaken in the Project should be described. A detailed project schedule (Gantt chart) should be included in section 4.3 of the Proposal (see below).

Each Work Package should be broken down into Tasks and a Task-by-Task description of the proposed work provided, identifying for each Task:

- the Task leader and other Project Team members involved;
- the Task objectives;
- the scope and nature of the Task, and the technical approach to it (e.g. methodologies, tools, techniques);
- deliverables produced (labelled D1, D2 to Dn), complete with descriptions and proposed acceptance criteria; and
- · dependencies, constraints and assumptions.

4. **PROJECT MANAGEMENT** [approximately 4 - 7 pages, plus appendices]

4.1. Project Management Activities [< 1 page]

Respondents should describe how the Project will be managed (e.g. management, coordination and quality of subcontractors' inputs; regular meetings; reporting; Stage Gate Reviews; steering groups; etc).

4.2. Milestones and Constituent Deliverables [< 1 page]

Following the detailed specifications of each deliverable in Section 3.2, a summary table should be provided here detailing the proposed Milestones and their constituent deliverables, together with the proposed costs and delivery dates for each Milestone and constituent deliverable.

See also Section 6 of this Appendix A (Project Finances).

4.3. Project Schedule [typically 1 to 2 pages]

Respondents should provide a summary time schedule (Gantt chart) showing the main Work Packages, Project stages and main Tasks within each Work Package and stage. This should clearly identify:

- Task durations and dependencies (including any inputs required from the ETI or other parties and any other external dependencies);
- Project deliverables;
- Milestones (see Section 5.5 of the main RfP body, and Sections 4.2 and 6 of Appendix A);
- any other relevant (project management) milestones; and
- Project Stage Gate Reviews and other Review Points.

4.4. Risk Management [typically <1 page, plus Risk Register as an Appendix]

Respondents should describe their proposed risk management strategy (i.e. how risks to the successful delivery of the Project will be identified and managed throughout the Project). They should also separately provide a Risk Register as an appendix, identifying the key challenges, risks (including any assumptions or dependencies identified earlier), issues and opportunities which may affect the successful delivery of the Project outcomes and identifying planned activities to address / mitigate each item.

4.5. Health, Safety and Environment Management (HSE) [typically < 1 page unless work is not desk based – in which case typically 2 -3 pages]

Respondents should confirm that all work during the Project will be entirely desk-based, or clearly state the nature of any exceptions to this (e.g. site visits, field trials, experimental or laboratory work). In the event that any work is not entirely desk-based, then Respondents should provide evidence of the competence of the Prime Contractor and relevant Subcontractors to undertake this Project, and should summarise their approach to managing and coordinating HSE in the Project. Specifically:

- a) Respondents should advise whether any work to be undertaken during the Project is not desk based (e.g. site visits, field trials, experimental or laboratory work).
- b) If the Project involves any activity which is not desk based then the Respondents are required to provide evidence throughout the Project that HSE is being managed, and that planned and proactive assurance activities are undertaken throughout the project, and that such arrangements are adequate. The Respondents are required to set out in their Proposal how their management arrangements will enable such evidence to be provided.
- c) Respondents should identify any specific HSE issues related to specific facilities or sites to be used in the Project. To the extent that parts of the Project may take place outside of the UK, the Respondents should deal with the corresponding issues as they apply in the local laws of the relevant country.
- d) Respondents should demonstrate their experience of identifying and managing HSE issues in projects of equivalent complexity and scale, including incorporation of safety into design.
- e) Respondents should set out their approach to managing Subcontractors.

The Respondents should also set out any key HSE risks or issues in the Risk Register in section 4.4 above.

4.6. Critical Success Factors [typically < 1 page]

Respondents should confirm agreement with the Critical Success Factors listed in section 4.7 of the main body of this RfP and should identify any additional factors which either characterise a successful outcome or which are required to facilitate a successful outcome for the Project. If Respondents do not consider that it is already clear elsewhere in their Proposals, they may provide additional commentary here in respect of the means by which one or more of the Critical Success Factors are addressed.

5. VALUE RETURN [typically < 1 page]

As stated in Section 5.2 of the RfP, ownership of Arising IP by the ETI is expected to form the main Value Return from this Project. Respondents should set out in this Section of the Proposal full details of the Value Return proposed, including any additional proposed Value Return elements.

Respondents should also set out the value that they expect to derive for themselves.

6. **PROJECT FINANCES** [approximately 1 - 2 pages]

Respondents should provide:

- a figure for the proposed Total Project Cost;
- a figure for the proposed (fixed price) ETI Investment;
- figures for any proposed Participant Funding and/or Third Party Funding (as appropriate);
- a breakdown of Total Project Cost between Milestones.

If there are any assumptions or limitations to this cost, these should be clearly stated.

Respondents should also provide a breakdown of the proposed Total Project Cost as specified in the table below.

TOTAL PROJECT COST BREAKDOWN BY CATEGORY	Prime Contractor	Subcon- tractor 1	Subcon- tractor 2	Subcon- tractor 3	Total
Number of Person- days					
Base Labour					
Materials					
Subcontractors (major) (see note ii below)		n/a	n/a	n/a	
Subcontractors (minor)					
Travel & Subsistence					
Overheads					
Profit					
Other					
TOTAL PROJECT COST					
ETI Investment					
ETI Investment (% of Total Project Costs)					
Own Funds (Participant Funding)					
Third Party Funding (Private Funding)					
Third Party Funding (Public Funding)					

Notes on Category Breakdown table:

- i. Base Labour should include direct add-ons (e.g. NI, pension etc).
- ii. The total cost of all Subcontractors should be included in the Prime Contractor's total cost figures, and a breakdown of each major Subcontractor's costs should be included in subsequent columns in the table. (In this context a major Subcontractor is one whose contribution is budgeted at more than 20% of the total Project cost or which is critical to the success of the Project).
- iii. The selected Respondent(s) will be required to provide justification of overhead calculations during the Project Detailing and Contract Finalisation Stage. The ETI can provide a spreadsheet to calculate overheads on request.
- iv. Respondents should note that under state aid rules, profit cannot be paid to a Participant if they wish to receive a licence for Arising IP.
- v. Academic Respondents should determine their costs using the JeS system. Note that ETI funds academic Participants at 100% Full Economic Cost.
- vi. Please note that during the Project Detailing and Contract Finalisation Stage (prior to Project Contract execution) the ETI will require a more detailed cost breakdown. Whilst not compulsory; it is strongly recommended that the relevant Respondents use the ETI's standard budget form for fixed price contracts.

For all sources of funding or resource to be provided in addition to the ETI Investment, the Respondents should provide full details of such funding, including:

- · evidence of the availability of those funds for the Project;
- details of the sources of any Third Party funding, (including identifying where any such funding is Public Funding), and the terms and status of such funding; and
- any other commercial impacts associated with any proposed reliance on such Participant Funding and/or Third Party Funding.

7. INTELLECTUAL PROPERTY [approximately 1 - 3 pages]

Respondents should read Section 5.7 (Intellectual Property) of the RfP before completing this section.

Arising IP

Respondents should provide a brief overview of the nature of any anticipated Arising IP from the Project, including the areas of technology in which the IP will arise and the forms of the anticipated intellectual property rights arising. This should expressly include reference to development of any existing technology, any innovations, any results and any know-how.

In this Project, the ETI expects that all Arising IP will belong to the ETI. It is not anticipated that licences of Arising IP will be granted to the Prime Contractor (or any Subcontractor).

In the event that the Respondent proposes that it shall own any Arising IP, then the Proposal should identify the relevant items of Arising IP and the reasons why the Respondent should be the owner, including (but not limited to) details of:

- the intellectual property experience and capabilities of the Respondent which would justify granting it the rights and obligations of ownership, protection and maintenance of such Arising IP;
- any other reasons why the Respondent should be the owner of the Arising IP; and
- any alternative Value Return offered for the ETI waiving its ownership rights (as a minimum, the ETI would expect appropriate licences in favour of the ETI and its Members).

Respondents are reminded that, in the unlikely event that Arising IP is to be owned by a Participant, the ETI will require the Participant to licence that Arising IP exclusively to the ETI; the ETI will then sublicence the Arising IP to anyone who is to have exploitation rights under the Project Contract (for example, the ETI and its Members).

In the event that the Respondent proposes that it shall be granted any licences of Arising IP, the Respondent should provide details of the proposed use and licences of Arising IP. This proposal should expressly include (but not be limited to):

- reference to development in any existing technology, any innovations, any results and any know-how;
- the sublicensing rights that will be needed in order to commercialise the technology; and
- any alternative Value Return (e.g. royalty payment or other return) offered for such licence rights.

Respondents are reminded that profit will not be paid to a Participant in addition to the grant of a licence of Arising IP.

Academic Institutions

Generally, the ETI will grant rights to Participants who are academic institutions for the purposes of academic research and teaching if requested. Publication of appropriate parts of the Project results will generally be permitted subject to an approval process. Academic Respondents should include details of their proposed requirements in relation to academic research, teaching and publication in their Proposal.

Background IP

Respondents should describe any Background IP (e.g. patents, proprietary data, computer algorithms, know how or other IP) only to the extent that there is Background IP:

- which is or may be needed (whether by the ETI, or to be licensed from the Prime Contractor to a Subcontractor, or to be licensed by a Subcontractor to the Prime Contractor or to another Subcontractor, or otherwise) to carry out the Project or which may be used during the Project;
- which may be needed by the ETI, a Member or other third party to exploit the Arising IP.

The description of any such Background IP should detail:

- the nature of the IP (including the legal nature of the IP right);
- the rights to that IP that are or may be required and by whom;
- ownership and control, whether this is by the relevant Respondent, any of the other Project Team members or by any other third parties; and
- whether there is any reason that such Background IP will not be made available as and to the extent needed to carry out the Project and/or exploit the Arising IP.

IP Contractual Provisions

The Respondent should confirm its acceptance of the provisions in the Project Contract for dealing with IP. Where the Respondent proposes an exception to or deviation from these provisions, the Respondent should set out details of the exceptions/deviations together with (a) reasons for the proposed exceptions/deviations and (b) any alternative Value Return (e.g. royalty return or other value) offered to the ETI and its Members in return (e.g.) for waiving or varying IP rights. **Respondents are strongly advised to consult the ETI before proposing exceptions/deviations to the ETI's contractual requirements for IP** (see also Appendix D, "Intellectual Property" section and Annex A3 "Statement of Compliance").

8. DUE DILIGENCE REQUIREMENTS [typically 2 - 3 pages, plus appendices]

The ETI's due diligence requirements in relation to the submission of a Proposal are set out at Annex A1, Section 1 (Submission of Proposal).

9. PLAN FOR PROJECT DETAILING AND PROJECT CONTRACT FINALISATION [approximately 1 page]

Respondents should, in this section, identify key issues to resolve during the Project Detailing and Contract Finalisation Stage, before Project Contract execution, for example:

- detailing of the technical proposal: what further actions are needed;
- Project Contract key provisions to resolve (based on draft Project Contract; see Section 5.3 of RfP main body);
- timing sequences for the setting up of the Project organisational structure (e.g. Subcontracts), including any dependencies or other factors which could impact or delay the Project;
- internal approvals confirm what internal approvals will be required for the proposed Prime Contractor and key Subcontractors in order to enter into contract;
- securing finance identify what further actions are required to ensure that all funding arrangements are in place.

The Plan for Contract should be structured and link clearly back to the previous sections set out in this RfP.

Respondents should explicitly confirm that all key technical, commercial and legal resources, across the Project Team members, required to meet the Project Contract execution target date (see Section 6.3 of the RfP), will be available to achieve a signed contract by that date. A table should be included providing names and contact details (phone and email addresses) of key contacts for Project Detailing and Contract Finalisation. This should include, for the Respondent (proposed Prime Contractor) and each proposed key Subcontractor, the main project management and technical contacts. Additionally, the Respondent should include names and contact details of its relevant legal, commercial and finance representatives.

Any key risks or issues which may impact on meeting the Project Contract execution target date should be identified.

10. STATEMENT OF COMPLIANCE [typically 1 - 2 pages, or as required]

Respondents are required to provide a Statement of Compliance in accordance with Annex A3 (see also Section 8 of the main body of the RfP).

11. APPENDICES TO PROPOSAL

The following appendices are expressly required to be included in the Proposal. They are excluded from the maximum page count limit.

- CVs of key individuals (supporting Section 2.2 of the Proposal see Section 2.2 of Appendix A)
- Risk Register (supporting Section 4.4 of the Proposal see Section 4.4 of Appendix A)
- Any due diligence information required as appendices, as set out in Section 8 of this Appendix A, Section 1 of Annex A1, and Annex A2.

ANNEX A1 - DUE DILIGENCE INFORMATION REQUIREMENTS

The ETI requires due diligence information at two points during the Project Commissioning Process:

- i. submission of the Proposal. Certain information is required with the Proposal as part of the first stage of the Project Commissioning Process; and
- ii. Project Detailing and Contract Finalisation. Further information will be required if any Proposal is selected to proceed to the Project Detailing and Contract Finalisation Stage.

Please note that successful completion of all elements of the ETI's required due diligence is a prerequisite to any contract award: failure to meet any due diligence requirements may result in the exclusion of the Respondent(s) and/or the Proposal from the Project Commissioning Process.

1. SUBMISSION OF THE PROPOSAL

1.1 State Aid

All Respondents shall confirm that there are no potential, threatened, pending or outstanding recovery orders by the European Commission in respect of any funding received by any Respondent (all proposed Participants).

1.2 General Due Diligence

All Respondents (except ETI Members, universities / higher education institutions and UK/EU government laboratories / agencies), together with each proposed Subcontractor which may provide more than 20% of the resources for the Project or which may provide an input which is critical to the Project's success, shall provide due diligence Information to the ETI according to the table in Annex A2.

1.3 Insurance

Each Respondent should confirm that insurance cover for the following risks is held by the Respondent and should confirm levels of cover and expiry for each. The ETI will require evidence of these during the Project Detailing and Contract Finalisation Stage (see Section 2(d) of this Annex A1).

- Property damage (both any property occupied by the Respondent and any third party properties);
- · business interruption;
- · employer's liability;
- public liability;
- product liability (or justify its exclusion if not appropriate); and
- professional indemnity.

Additionally, each Respondent should identify:

- if it self-insures or intends to self-insure for any of these risks;
- if it is intending to take out any Project-specific insurance for the Project and the scope and intended beneficiaries of such insurance; and
- how (to the extent not already identified) it intends to insure against risks in the Project.

In relation to professional indemnity insurance, Respondents should note that the ETI has the following requirements.

Each Participant is required to have in place at the start of the Project a professional indemnity insurance policy (with at least a 6 month unexpired term).

• Each policy should have a limit of indemnity of not less than £1,000,000 each and every loss.

- Each policy should provide an indemnity at least as extensive as the ETI's policy (the ETI will
 make this assessment). For example, the cover needs to include cover for negligent acts or
 omissions, and dishonest or fraudulent acts or omissions by the insured).
- Each Participant will need to agree to maintain a professional indemnity insurance policy in force for 6 years from the date of completion of the Project.
- The ETI will require sight of the insurance policy provided by the Participant or a copy of a letter of confirmation from the Participant's insurance company or broker summarising the policy.

1.4 Intellectual Property

IP due diligence requirements are set out at Section 7 of this Appendix A (Intellectual Property) and should be included in the corresponding section of the Proposal.

1.5 Health, Safety and the Environment

In the event that any work is not entirely desk-based, a full competency assessment will be carried out on each proposed Project Participant at the Project Detailing and Contract Finalisation Stage (see Section 2a) of this Annex A1, below).

Please see Section 4.5 of Appendix A for the ETI's HSE requirements in relation to the Proposal.

2. Project Detailing and Contract Finalisation Stage – further Due Diligence Requirements

These are only required if a Proposal is selected to proceed to the Project Detailing and Contract Finalisation Stage, and will include:

- a) a full health and safety competency assessment, which will be required by the ETI, except to the extent that a Respondent's proposed scope of work under the Project is entirely deskbased, to assess each Participant organisation's health & safety management systems and specific technical competence to manage the risks in this Project. The ETI competency assessment process requires Respondents to complete a detailed questionnaire, the contents of which follow closely the competency assessment guidance set out in the Health and Safety Executive's Approved Code of Practice – managing health and safety in construction – Construction (Design and Management) Regulations 2007;
- b) further intellectual property due diligence. This will include a detailed Background IP questionnaire which will be issued by the ETI for completion to identify Background IP and third party IP relevant to the Project and (where appropriate) the Programme. Participants and Subcontractors (if any) may be asked to provide evidence of ownership or rights to use the relevant intellectual property for the Project / Programme and/or for exploitation of the results of the Project / Programme;
- c) financial due diligence on the breakdown of costs for the Project to enable the ETI to assess value for money and ensure that it meets state aid requirements;
- d) copies of insurance policies; and
- e) any other information that the ETI reasonably requires in order to invest in the proposed Project including any information necessary to meet State aid requirements.

ANNEX A2 - GENERAL DUE DILIGENCE REQUIREMENTS

A standalone copy of this form is available to download from the ETI website.

Details of Organisation
Full name:
Registered Office:
Type of Business:
☐ Sole Trader ☐ Limited Company ☐ Partnership
☐ Other – please describe:
Names of Directors/Partners/Owner:
VAT Number:
Details of Directors, Partners or Associates
Have any directors, partners or associates of the organisation been involved in any organisation which has been liquidated or gone into receivership?
☐ Yes ☐ No
Have any directors, partners or associates of the organisation been convicted of a criminal offence relevant to the business or profession?
☐ Yes ☐ No
Please give (and attach if necessary) full details if you have answered 'Yes' to either of the two previous questions.
Audited Financial Accounts
Please supply Audited Financial Accounts for the last 3 years for the organisation, or relevant part thereof.
Claims of Litigation
Please provide (and attach if necessary) details of any claims or litigation against the organisation in the last 3 years (including any which are outstanding) and/or any anticipated claims.

ANNEX A3 - STATEMENT OF COMPLIANCE

Each Respondent shall provide a Statement of Compliance which confirms:

- that the Respondent has full authority to submit a Proposal on the basis of this Request for Proposals;
- that the Proposal has been appropriately reviewed by the Respondent's technical, commercial, financial and legal representatives; and
- the level of internal approval obtained by key Subcontractors in order to make the Proposal (letters of support from each key Subcontractor should be included).

Each Respondent shall provide a statement that the Proposal is fully compliant with all aspects of the RfP including the terms and conditions of the draft Project Contract (Section 5.3), or shall state clearly any exceptions, deviations, alternative approaches or additions to the requirements of the Request for Proposals and/or draft Project Contract (as appropriate), with justification. Additional comments and clarifications should also be listed where appropriate (for example to clarify interpretation of requirements), but these must be differentiated from any deviations / exceptions (etc) above.

With respect to the terms and conditions of the draft Project Contract, each Respondent must either:

- expressly confirm that the Proposal is made on the basis of the terms and conditions of the draft Project Contract; or
- expressly confirm that the Proposal is made on the basis of the terms and conditions of the draft Project Contract subject to clarifications and exceptions. In these circumstances, the Respondent must include in their Proposal:
 - a copy of the draft Project Contract, marked up with the Respondent's proposed clarifications and exceptions; and
 - > a separate commentary against the clarifications and exceptions setting out the reason for those clarifications and exceptions.

Respondents should note that, in addition to the foregoing, the ETI expects that each of the Respondents will provide in their Statements of Compliance an initial detailed view on those areas of the Project Contract set out in Appendix D of this RfP.

Any exception in relation to those matters set out in Appendix D of this RfP is considered a material issue and must be clearly and specifically identified in the Statement of Compliance.

Please note that the ETI may reject a Proposal if a material issue (including a non-compliance with the terms and conditions of the draft Project Contract) is identified by a Respondent at any time during the Project Commissioning Process.

APPENDIX B - NOTIFICATION OF INTENTION TO SUBMIT A PROPOSAL

The following form is to be completed and received at the address (postal or email) on the front cover no later than the date defined on the front cover and in Section 6.3 of this RfP. A standalone copy of this form is available to download from the ETI website.

Notification of Intention to Submit a Proposal
Respondent Name: [Legal Name]
Address: [Registered Office Address]
Contact:
Email/telephone:
The above named Respondent hereby notifies the ETI of its intention to submit a Proposal in response to the ETI's Request for Proposals under the ETI's Energy Storage and Distribution Programme for the proposed project entitled "Heat Infrastructure Development Project (EN2013)", issued on 11 th December 2013.
The Respondent submits this notification on its own behalf and on behalf of the following proposed Subcontractors (together being the proposed Project Team):
Please list below the legal names of the organisations / entities proposed to deliver the Project.
1. [Enter Name]
2. [Enter Name]
3. [Enter Name]
4. [Enter Name]
5. [Enter Name]
6. [Enter Name]
7. [Enter Name]
8. [Enter Name]
9. [Enter Name]
10. [Enter Name]
Workshop for Respondents
The above named Respondent [does / does not] (delete as applicable) wish to attend the Workshop for Respondents [and requests an invitation].
Signed:
For and on behalf of the Respondent.
Name:

APPENDIX C - NON DISCLOSURE AGREEMENT

The Non-Disclosure Agreement (NDA) protects the confidential information of the Respondents and the ETI during the period of the Project Commissioning Process. For the successful Respondent, the confidentiality provisions in the Project Contract (when executed) will supersede this NDA.

Notes

In order to ensure parity between Respondents, the ETI will not enter into negotiations on the terms of this NDA.

NDA Execution Process / Instructions

A separate electronic version of the NDA is available on the ETI Website http://www.eti.co.uk/request_for_proposals for completion and signature by Respondents in accordance with the following instructions:

Each Respondent (as proposed Prime Contractor) should:

- complete Schedule 1 of a single electronic NDA with its company (legal) details and a postal address for return by the ETI of a fully executed NDA.
- print and sign TWO paper copies of the NDA. The NDA must NOT be dated on the front page.
- scan a copy of a signed and undated NDA and email it to the ETI at the address on the front of the RfP.
- post both original signed and undated copies to the ETI.

On receipt, the ETI will countersign and date the two original copies of the NDA. The ETI will retain one of these copies and post the other to the Respondent at the address provided by the Respondent at Schedule 1 of the completed NDA.

File Ref No: ESD/EN2013/RFP/NDA



CONFIDENTIALITY AGREEMENT

THIS AGREEMENT is made on of 201[]

BETWEEN:

- (1) **ENERGY TECHNOLOGIES INSTITUTE LLP,** a limited liability partnership (company no. OC333553) whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire, LE11 3UZ (the "**ETI**"); and
- (2) The party named in Schedule 1 of this Agreement (the "Respondent"),

(collectively the "Parties" and individually a "Party")

BACKGROUND:

The Parties intend to exchange certain Information on or after the Effective Date for or in relation to the Purpose. The Parties agree to receive such Information, and to treat it as confidential information, on the following terms and conditions.

IT IS AGREED:

In consideration of the above and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the Parties agree as follows:

- In this Agreement, unless the context requires otherwise, the following words shall have the following meanings:
 - "Disclosing Party" means any Party that discloses Information pursuant to this Agreement;
 - "Effective Date" means the date of execution of this Agreement:
 - **"ETI Affiliates"** means the Secretary of State for Business, Innovation and Skills (and any successor governmental department or agency from time to time) and any other entity which is entitled to appoint the directors or otherwise having the ability to direct management policies of the ETI (together with any affiliates of those entities) and any Programme Associates, and in each case together with their respective officers, employees, agents and consultants;
 - "Information" means any and all confidential information or data exchanged, submitted or otherwise disclosed in respect of or further to the Purpose or prepared for or in relation to the Purpose, including but not limited to written proposal documentation, due diligence materials, contractual documentation, reports, and the fact that the Parties have entered into this Agreement and are discussing and considering a business relationship;
 - "Project" means the proposed project under the ETI's Energy Storage and Distribution Programme entitled "Heat Infrastructure Development Project";
 - "Project Commissioning Process" means the ETI's commissioning process for the Project as defined in the RfP and as set out at Section 6 of the RfP or as later may be notified or published by the ETI;
 - "Project Contract" means a Project Contract as such term is defined in the RfP;
 - "Programme Associate" means any entity which is designated as such by the ETI from time to time:

"Proposal" means a Proposal as such term is defined in the RfP;

"Purpose" means:

- a the preparation and/or submission of any Proposals and related documents in response to the RFP:
- b the Project Commissioning Process;
- any activities related to the assessment of any Proposals for the Project; and
- d any related exchanges of Information, clarifications, clearances, discussions, due diligence, meetings, and/or negotiations in respect of the RFP, the Project Commissioning Process and/or the Project;

"Receiving Party" means any Party that receives Information pursuant to this Agreement; and

"RFP" means the request for proposals relating to the Project, issued by the ETI on 11th December 2013.

- The Receiving Party shall with regard to any Information disclosed pursuant to this Agreement by or on behalf of a Disclosing Party on or after the Effective Date:
 - a hold the Information in confidence and, except as is otherwise stated herein or agreed in writing by the Disclosing Party, shall not disclose or make available the Information by publication or otherwise to any third party (including for the avoidance of doubt, disclosure in any patent application or to any patent office) and shall use any Information disclosed to it pursuant to this Agreement only for carrying out the Purpose;
 - b make copies of the Information (or any further information derived from the Information) in whatever form or medium only to the extent that the copies are reasonably necessary for the Purpose and clearly mark all such copies as confidential;
 - c take all necessary and proper security precautions (and at least as great as those it takes to safeguard its own information) to safeguard every part of the Information to prevent it from being disclosed or otherwise made available to any third party except as permitted by this Agreement; and
 - at the request and direction of the Disclosing Party, and without delay, return or destroy any Information provided to it pursuant to this Agreement and any copies of such Information, except that one copy may be kept by the Receiving Party for archival purposes and for the purpose of defending itself against any claims arising in connection with this Agreement.
- The obligations set out in clause 2 shall not apply to Information that:
 - a the Receiving Party can prove (using written or electronic records), was lawfully known to the Receiving Party or in its possession prior to its communication by or at the direction of the Disclosing Party and was not communicated to the Receiving Party subject to any restrictions on disclosure or use; or
 - b is or becomes a part of the public domain through no wrongful act of the Receiving Party or any person on its behalf, provided that this clause 3(b) shall only apply from the date that the relevant Information so enters the public domain; or
 - the Receiving Party receives from a third party without similar obligations of confidence in circumstances where the third party did not obtain that Information as a result of a breach of an obligation of confidence; or
 - d subject to clause 4, is required to be disclosed or made available by the Receiving Party pursuant to any applicable law, governmental regulation, or decision of any court or tribunal

of competent jurisdiction or any government body, agency or regulatory body.

- If a Receiving Party believes it is required by law to disclose any Information under clause 3(d) above, the Receiving Party shall (in each case and to the extent not prohibited in law):
 - a provide the Disclosing Party with prompt written notice of such requirement or obligation (together with a copy of any relevant access request, court order or other evidence giving rise to such belief) in advance of the required disclosure, to enable the Disclosing Party to seek appropriate protective relief and/or to take other steps to resist or narrow the scope of any required disclosure;
 - b where it is not permitted in law to notify the requirement for disclosure in advance of the required disclosure, notify the Disclosing Party as soon as reasonably practicable after the disclosure confirming the nature of and extent of the disclosure; and
 - c co-operate with the Disclosing Party with respect to such matters,

and in any event disclose only such Information as it has ascertained, after taking legal advice, it is legally compelled to disclose.

- The ETI shall be entitled to disclose or make available any Information it receives from the Respondent to:
 - such of the ETI Affiliates, and either the ETI's or the ETI Affiliates' employees, officers, secondees, agents, consultants, subcontractors, proposed subcontractors, professional advisers and proposed professional advisers where such disclosure is necessary for the Purpose, provided that all such aforementioned persons to whom any Information is disclosed by the ETI are bound by obligations of confidentiality and the ETI shall be responsible for breaches of the obligations by such persons. Each ETI Affiliate may enforce this clause in accordance with the Contracts (Rights of Third Parties) Act 1999; and
 - b the Department of Business, Innovation and Skills (or other relevant government department), the European Commission and such other bodies and/or individuals (including without limitation professional advisers) as may reasonably be required for the notification of, to seek advice in relation to, as part of an assessment of, or otherwise in relation to, State aid.
- The Respondent shall be entitled to disclose or make available any Information it receives from the ETI to such of its employees, officers, consultants, subcontractors, proposed subcontractors and professional advisers where such disclosure is necessary for the Purpose provided that all such persons to whom any Information is disclosed are bound by obligations that are no less restrictive than those in this Agreement. The Respondent disclosing Information shall be responsible for breaches of the obligations by such persons.
- Each Party as Receiving Party expressly agrees and accepts that except in the case of fraud, no representation or warranty, express or implied, is made by the Disclosing Party as to the accuracy, completeness, reasonableness or otherwise in respect of the use of the Information, and that neither the Disclosing Party or any of its affiliates nor any of its or their respective employees, officers, secondees, agents, consultants, subcontractors and professional advisers (as applicable) shall have any liability to the Receiving Party as a result of the Receiving Party's possession or use of the Information.
- The Parties agree that money damages would not be a sufficient remedy for any breach of this Agreement and that the Disclosing Party shall be entitled to specific performance and injunctive or other equitable relief as a remedy for any such breach. Such remedy shall not be deemed to be the exclusive remedy for breach of this Agreement, but shall be in addition to all other remedies available at law or equity.
- 9 No rights or obligations other than those expressly set out in this Agreement are to be implied and nothing contained in this Agreement:

- a constitutes an offer by or on behalf of the Disclosing Party; or
- b confers upon the Receiving Party a licence or other transfer of rights in respect of any Party's interest in any Information or in any present or future patent or patent application; or
- c affects the present or prospective rights of the Disclosing Party under the patent laws of any country or precludes the filing or prosecution of any patent applications by the Disclosing Party.
- This Agreement represents the entire agreement between the Parties in relation to the subject matter contained herein and supersedes all other agreements and representations, whether oral or written, between the Parties relating to such subject matter. This Agreement may only be modified if such modification is in writing and signed by a duly authorised representative of each Party. Each Party also agrees that it shall have no remedies or claims under this Agreement for any innocent or negligent misrepresentation based on statements made prior to the Effective Date.
- The Parties agree that the ETI may disclose that the Respondent is involved in discussions with the ETI and the subject matter of the discussions provided that the ETI will provide a copy of any press release or other announcement to the Respondent and seek the approval of the Respondent prior to its publication or release. Other than as set out in this clause, neither of the Parties will make any public announcements, statements or otherwise publicise the subject matter of this Agreement (or its existence) without the prior written consent of the other Party and neither Party will use the business names or trade marks of the other Party in any way without that Party's prior written consent.
- This Agreement shall come into force on the Effective Date and shall continue in full force and effect, notwithstanding the completion of the Purpose, for a period of seven years from the Effective Date unless extended, superseded or otherwise varied by a subsequent written agreement between the Parties.
- It is not intended that a third party (other than an ETI Affiliate) should have the right to enforce a provision of this Agreement pursuant to the Contracts (Rights of Third Parties) Act 1999.
- The rights of the Disclosing Party under this Agreement are in addition to and not exclusive of rights under the general law and may be waived only in writing and specifically. Delay in exercising or non-exercise of any right under this Agreement is not a waiver of that or any other right, partial exercise of any right under this Agreement shall not preclude any further or other exercise of that right or any other right under this Agreement and waiver of a breach of any term of this Agreement shall not operate as a waiver of breach of any other term or any subsequent breach of that term.
- 15 If any provision of this Agreement is or becomes illegal, invalid or unenforceable in any jurisdiction, that shall not affect:
 - a the legality, validity or enforceability in that jurisdiction of any other provision of this Agreement; or
 - b the legality, validity or enforceability in any other jurisdiction of that or any other provision of this Agreement.
- Nothing in this Agreement is intended to or shall operate to create a partnership or joint venture of any kind between the Parties (or any of them), or to authorise any Party to act as agent for another, and no Party shall have authority to act in the name or on behalf of or otherwise to bind any other in any way.
- 17 Except as provided otherwise, no person may assign any of its rights under this Agreement or any document referred to in it.

- This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute an original of this Agreement, but all the counterparts shall together constitute the same agreement. No counterpart shall be effective until each Party has executed at least one counterpart.
- This Agreement shall be construed in accordance with and governed by English law and the Parties hereby submit to the non-exclusive jurisdiction of the English Courts.

The Parties have caused this Agreement to be executed by their duly authorised representatives.

ENERGY TECHNOLOGIES INSTITUTE LLP

Ву:		
Name:		
Title:		
Date:		

SCHEDULE 1

Respondent	Signature
Company Name:	Ву:
Company No:	Name:
Address of Company:	Title:

The ETI will return a copy of the executed Non-Disclosure Agreement to the Respondent. Please provide the relevant name and address for this correspondence below.

Contact for return of executed Non-Disclosure Agreement	Send to [name]: At postal address:

APPENDIX D - TERMS AND CONDITIONS OF PROJECT CONTRACT

There is a general requirement that Respondents provide in their Statements of Compliance information on any proposed clarifications and exceptions to the terms and conditions of the draft Project Contract (see Annex A3). Each Respondent should mark-up and comment upon any areas of the draft Project Contract that the Respondent considers to be problematic.

In addition to this general requirement, there are aspects of the Project Contract that are of particular importance to the ETI and that the ETI wishes to highlight in this Appendix D. The ETI expects that each Respondent will provide an initial detailed view on these aspects in their Proposal, as part of the Statements of Compliance.

The particular aspects of the Project Contract that the ETI would like to highlight for Respondents' initial consideration are as follows.

Intellectual Property

The ETI will own all Arising IP and results from the Project.

The Project Contract contains provisions (including warranties; see further below) to ensure that Background IP and third party IP will not be infringed by the creation, use or exploitation of the Arising IP or Project results. In the event that any licences of Background IP or third party IP are required, the Prime Contractor is expected to grant (or to procure the grant, where appropriate, of) appropriate licences.

Respondents should note that this applies to all Background IP and third party IP, including copyright in any and all diagrams, images and/or photographs used in Project outputs (for example, reports).

Respondents should also note that, in the unlikely event that Arising IP is to be owned by a Participant, the ETI will require the Participant to licence that Arising IP exclusively to the ETI; the ETI will then sublicence the Arising IP to anyone who is to have exploitation rights under the Project Contract.

If a Respondent has any issues with the above or any other mechanisms for dealing with IP in the Project Contract, the ETI expects the Respondent to make alternative suggestions regarding how the Arising IP and Background IP will be dealt with in the Project Contract.

In the event a Respondent wishes to propose alternative IP provisions, the ETI strongly recommends that the Respondent has an early discussion with the ETI.

IP Warranties and Due Diligence

The Project Contract contains a number of warranties and undertakings related to IP. The ETI will conduct an appropriate level of due diligence before the start of the Project which relates to IP and the IP warranties and/or undertakings. The wording of any warranties and/or undertakings may be amended to reflect IP due diligence performed.

Indemnities

The ETI will invest funds in this Project but has no control over any risks and associated liabilities that may arise from the Project. Therefore the Project Contract contains indemnities in favour of the ETI, including for third party claims and for IP infringement. Respondents should review and comment on the indemnity position in their Proposal.

R&D Tax relief

The ETI's Industry Members (as partners in a limited liability partnership) and Programme Associates can claim R&D tax relief in return for investment funding provided to the ETI that is spent on research and development on ETI projects. Therefore the ETI requires that Project Participants provide details of the amount of the ETI Investment that is spent on R&D.

State Aid Requirements

The Project Contract has requirements that relate to State aid (through the provision of public monies to the ETI and therefore to the Project). Please see Section 5.6 of the body of the RfP (State Aid). This includes requirements to return ETI funds in certain exceptional circumstances and record keeping requirements. Please note, the ETI cannot award a contract to any organisation unwilling to accept these requirements.

APPENDIX E - GLOSSARY

Term	Definition
Arising IP	Any intellectual property which is created during the Project and/or for the purposes of the Project by or for any Participant and/or any Subcontractor.
Background IP	Any intellectual property which exists prior to commencement of the Project and which is owned or controlled by, or licensed to, the Participant and/or any Subcontractor.
CDM	Construction (Design and Management) Regulations 2007.
Chief Technologist	The individual as described in Section 4.3.
Combined Heat and Power (CHP)	The simultaneous generation of heat and electrical power from a power plant (often resulting in high efficiency plants).
Critical Success Factors	The critical success factors for the Project set out at Section 4.7.
District Heat Network (DHN)	A system which supplies heat to homes and businesses through pipes carrying hot water.
ETI	The Energy Technologies Institute LLP, a limited liability partnership (Company no. OC333553) whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire LE11 3UZ.
ETI Investment	The amount to be made available by the ETI, on a fixed-price basis, for the Project (to be determined by the ETI).
ETI's Project Manager	The individual appointed by the ETI to manage the ETI's interaction with the Project Team (via the Project Manager of the Prime Contractor), and to whom the Project Manager is accountable on behalf of the Prime Contractor.
Final Detailed Offer	A final and detailed offer to be made once all contractual issues have been negotiated and the Value Return has been agreed. Typically, if required, this will occur at the end of the Project Detailing and Contract Finalisation Stage.
Her Majesty's Government / UK Government	Her Majesty's Government, including but not limited to all of its departments and executive agencies and the devolved administrations of Scotland, Wales and Northern Ireland.
HSE	Health, Safety and Environment.
IP	Intellectual property / intellectual property rights.
Members	The ETI's industry members (as identified on the ETI's website from time to time - http://www.eti.co.uk), including affiliates of such members, and Her Majesty's Government (including but not limited to those public sector members identified on the ETI's website from time to time).

Term	Definition
Milestone	A Project milestone with defined constituent deliverables, associated deliverable acceptance criteria and milestone value (all to be proposed in the Respondent's Proposal and subsequently negotiated/agreed in the Project Contract) which should be completed in order to reach the said milestone, and upon successful completion of which, subject to acceptance by the ETI that the milestone has in fact been reached, payment may be claimed from the ETI.
Non-Disclosure Agreement / NDA	A non-disclosure agreement in the form provided at Appendix C.
Participant	The Respondent selected by the ETI to be the Prime Contractor. For the avoidance of doubt, references to "Participant" do not include any Subcontractors.
Participant Funding	Funding provided by the Participant from its own resources and not dependent in any way on Third Party Funding.
Prime Contractor	A sole organisation which contracts with the ETI to perform the Project, together with (subject to ETI approval) Subcontractors. (See section 4.2 of this RfP).
Programme	The ETI's Energy Storage and Distribution Programme that includes the Project.
Programme Manager	The individual appointed by the ETI to manage the Programme and to whom the Project Manager is accountable on behalf of the Prime Contractor. The ETI may also appoint the ETI's Project Manager to manage the ETI's interaction with the Project Team.
Project	The ETI project entitled the Heat Infrastructure Development Project, reference EN2013, for which the purpose, scope of work and other details are described in this Request for Proposals.
Project Commissioning Process	The ETI's process for commissioning the Project, including the issue of the RfP and the Stages described at Section 6.
Project Contract	The contract, as described in Section 5.3, to be entered into between the ETI and the Prime Contractor.
Project Manager	The individual as described in Section 4.3. (See also the ETI's Project Manager, to whom the Project Manager is accountable on behalf of the Prime Contractor).
Project Detailing and Contract Finalisation Stage	The second Stage of the Project Commissioning Process, as described at Section 6.2.
Project Team	The Prime Contractor and its Subcontractors.

Term	Definition
Proposal	The proposal for the Project submitted to the ETI, in response to this Request for Proposals, in accordance with Section 6.1.3, Section 7 and Appendix A. (For the avoidance of doubt, this includes all information in the main body of the proposal and in any appendices to the proposal).
Private Funding	Third Party Funding other than Public Funding.
Public Funding	Any Third Party Funding provided by a public authority or agency.
Required Outcomes	The required outcomes of the Project as set out at Section 3.2.3.
Respondent	An organisation submitting a Proposal to the ETI (i.e. a proposed Prime Contractor). For the avoidance of doubt, references to "Respondent" do not include any Subcontractors.
Review Point	A point at which a Project review will be held, involving the Prime Contractor, key Subcontractors as appropriate, and ETI representatives, at which progress in the Project or a specific Stage or Work Package (and other Project health criteria) will be critically reviewed and following which a formal decision will made on the future Project programme.
RfP / Request for Proposals	This Request for Proposals.
Risk Register	See Section 4.4 of Appendix A (Risk Management).
Stage	A stage of the Project as described at Section 3.3.1, or a stage of the Project Commissioning Process as described at Section 6.
Stage Gate Review	A major Project review involving the Participant, other Project Team representatives where appropriate, and ETI representatives at which the overall performance and business case for the Project will be critically reviewed and following which a formal decision will be made whether or not to continue with the Project, based on whether agreed Stage Gate Review criteria have been met.
Selection Panel	The selection panel described at Section 6.1.4.
Statement of Compliance	The statement of compliance required by the ETI, as described at Section 8 and at Appendix A, Annex A3.
Subcontract	A contractual arrangement between a Participant and another organisation to which work for the Project has been subcontracted.
Subcontractor	An organisation which has a Subcontract.
Task	A significant activity or group of activities (within a Work Package) which results in completion of a deliverable or a significant part of one, or which represents a significant step in the process towards one.
Third Party Funding	Funding provided to or for the purposes of the Project directly or indirectly by an organisation, person or entity other than the ETI or a Participant (including but not limited to any third party lending to any Participant). For the avoidance of doubt, a Subcontractor is a third party.

Term	Definition
Total Project Cost	The amount proposed by a Respondent as the total cost of the Project (proposed ETI Investment + Participant Funding + Third Party Funding, as appropriate).
Value Return	The value to be delivered by the Project (including to the ETI, the Members and the UK economy) in return for the ETI's investment in the Project. The Value Return is to be proposed by Respondents in accordance with Section 5.2 of the RfP main body and Section 5 of Appendix A.
Work Package (WP)	A major section of the Project scope of work, which may be identified in this Request for Proposals or in the Respondent's Proposal, in order to break up the scope of work into separate manageable parts. A Work Package will usually consist of a number of Tasks.
Workshop for Respondents	A workshop to be held by the ETI, prior to the deadline for submission of Proposals, to enable Respondents (and where appropriate key Subcontractors) to understand better the ETI's requirements by asking questions and discussing aspects of their intended Proposals. Further details of this workshop are set out in Section 6.1.2 of the RfP.