



Programme Area: Smart Systems and Heat

Project: Enabling Technologies

Title: Request for proposals

Abstract:

A request for proposals for a project to undertake a technology review and gap analysis.

Context:

This project identified gaps in the range of potential smart systems technologies to accelerate the development of component technologies which are required for any successful deployment and operation of a future smart energy system. This £500k project was announced in February 2013 and was delivered by a consortium of partners that includes Hitachi Europe, EDF Energy, Element Energy, David Vincent & Associates and Imperial Consultants.

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Request for Proposal (RfP)

Title of Services for which Proposals are Requested

Enabling Technologies: Technology Review and Gap Analysis

Request Issue Date

30 July 2012

Deadline for Notification of Intention to Submit a Proposal

31 August 2012

Closing Date

5 October 2012

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Contents

1. ETI INTRODUCTION	1
1.1. Introduction to the Energy Technologies Institute.....	1
2. PROJECT OVERVIEW	1
2.1. Background to the programme.....	1
2.1.1. WA1 - Enabling Technologies	3
2.1.2. WA2 – Integrated Energy System Design Tool.....	3
2.1.3. WA3 – Data Management and Overall System Architecture.....	4
2.1.4. WA4 – Value Management and Delivery	4
2.1.5. WA5 – Consumer Response and Behaviour	4
2.1.6. WA6 – Supply Chain Engagement	5
2.1.7. WA0 – System Integration and Demonstration Project Design	5
2.1.8. Phase 2.....	5
2.1.9. Outputs from Phase 1.....	5
2.1.10. Outputs from Phase 2.....	6
2.2. Enabling Technologies Project Brief	6
2.2.1. Aims and Objectives WA1 – Enabling Technologies	6
2.2.2. Project Approach.....	7
2.3. ETI approach to Health, Safety and Environment (HSE).....	9
3. SCOPE OF THE PROJECT	9
3.1. Required outcomes of WA1 – Enabling Technologies.....	10
4. TECHNICAL REQUIREMENTS	11
4.1. Specific technical requirements.....	11
5. PROJECT DELIVERY REQUIREMENTS	12
5.1. Project deliverables.....	12
5.2. Project organisation structure	13
5.3. Project funding and payment structure.....	13
5.4. Project assumptions and constraints.....	13
6. PROCUREMENT PROCESS	14
6.1. Briefing workshop	14
6.2. Intent to submit a proposal.....	14
6.2.1. NDA submission.....	14
6.3. Process outline	14

6.4.	Project shaping and contract negotiation	15
6.5.	Estimated procurement and project timeframes	16
6.6.	Acceptance, review and selection of proposals.....	17
6.7.	Statement of Compliance.....	18
7.	DISCLAIMERS	19
	APPENDIX A.....	21
Annex A1	Organisational Due Diligence Questionnaire.....	23
	APPENDIX B.....	24
	THE ETI'S APPROACH TO HSE IN PROJECTS.....	24
	APPENDIX C.....	26
	COMMERCIAL AND LEGAL REQUIREMENTS	26
	Intellectual Property.....	26
	Insurance	26
	ETI and State Aid	27
	Indemnities.....	28
	IP Warranties and Due Diligence.....	28
	R&D Tax relief.....	28
	APPENDIX D.....	29
	CONTENT AND FORMAT OF PROPOSALS.....	29
	APPENDIX E.....	36
	TERMS AND CONDITIONS OF THE TECHNOLOGY CONTRACT.....	36
	APPENDIX F.....	40
	NON DISCLOSURE AGREEMENT	40
	APPENDIX G.....	48
	GLOSSARY.....	48

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 is focused on accelerating the deployment of affordable, secure low-carbon energy systems for 2020 to 2050 by demonstrating technologies, developing knowledge, skills and supply-chains and informing the development of regulation, standards and policy.

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

2. PROJECT OVERVIEW

2.1. Background to the programme

Energy systems have developed to meet domestic and commercial consumer needs for energy services such as comfort, mobility, cleanliness, lighting, entertainment, manufacturing, sales etc. The requirements for space and water heating, along with mobility dominate the UK's current energy demand and associated contribution to greenhouse gas emissions.

The current UK energy system could be characterised as having:

- good reliability and availability;
- relatively good control over energy production profiles at the supply end;
- limited control over energy consumption profiles at the demand end;
- tolerance to large variations in demand through the day and year, with little supply / end-use utilisation at the overall energy system level;
- dependence on carbon intensive energy sources;
- housing stock with low thermal efficiency;
- mobility dominated by petrol/diesel fuelled internal combustion engines; and
- little opportunity for consumer-end participation.

Improving the management and optimisation of energy demand, generation and infrastructure is likely to be critical to delivering the UK's long-term energy targets in an affordable way. This is particularly relevant given the major changes that are expected to take place during the UK transition towards a low-carbon economy.

The potential implications of the transition include the decarbonisation of the electricity grid, increasing electrification of heat, greater diversity of energy sources, greater intermittency in electricity supply from renewable resources, and the diversification of transport fuel sources.

The challenge is to develop a system wide low-carbon solution that meets the requirements of future energy consumers in an affordable way, provides energy security and has an effective commercial foundation.

Smart Energy System

There is therefore a significant opportunity for the development of a 'smart energy system' which:

- is based upon consumer requirements for energy based services, and also meets UK climate change targets;
- incorporates power, heat, transport and the energy infrastructure;
- includes energy demand, supply, delivery and storage; and
- integrates energy control and management across the system.

However, the required functionality and shape of Smart Energy Systems relevant to the UK energy system is currently unclear and needs further investigation. Furthermore, the broad commercial viability of Smart Energy Systems in the UK context is yet to be demonstrated.

Based on prior work undertaken by the ETI it is expected that a UK smart energy system development would have four key themes:

- understanding real mass-market consumer behaviour, requirements and profiles in order to design and communicate effective service products;
- the provision of energy services and integrated products (i.e. the physical elements) to consumers in domestic and commercial buildings (primarily domestic & retrofit);
- key focus on space and water heating (comfort, cleanliness), but including other energy service needs in or connected to buildings (e.g. vehicle charging); and
- understanding the evolution of the whole energy system out to 2050, including buildings retrofits and energy distribution system choices.

Smart Systems and Heat Programme Structure

The ETI has commissioned a major two-phase Smart Systems and Heat programme in 2012, focussing specifically on the design, development and demonstration of a smart energy system aligned with the needs of UK consumers in the domestic and small commercial-scale sectors.

The Smart Systems and Heat programme will focus on the retro-fitting of pre-existing buildings, and will involve a significant low-carbon heat delivery activity. This work will inform technologists and policy makers on the social requirements, technology, commercial frameworks and policy design of a smart energy system.

The Smart Systems and Heat programme has been split into a number of self-contained work areas (WAs) covering key technology and consumer-end issues; the alignment and integration of these work areas will be critical to overall project success, and will be managed by a dedicated work area with oversight provided by the ETI.

The two distinct phases of the programme are:

- Phase 1: The first phase will develop the toolkit and capacity to deliver the prototype “product” to mass market consumers.
- Phase 2: The second phase will validate this with a significant system level demonstration.

Phase 1 of the programme contains six work areas WA1-WA6, under the guidance of a single work area WA0. WA1-WA3 will focus on technology, while WA4-WA6 will focus on the commercial aspects of the deliverables.

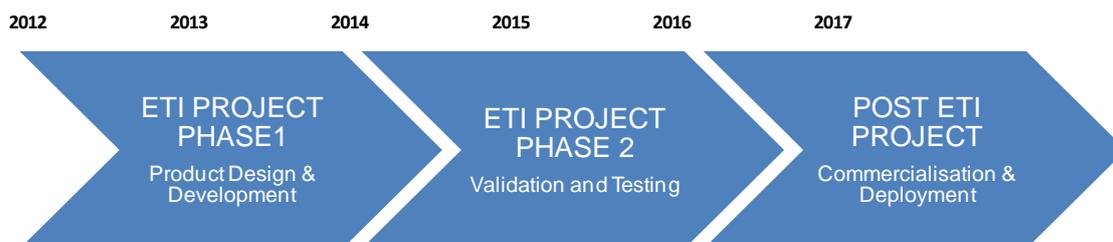


Figure 1: ETI SSH Programme Phasing

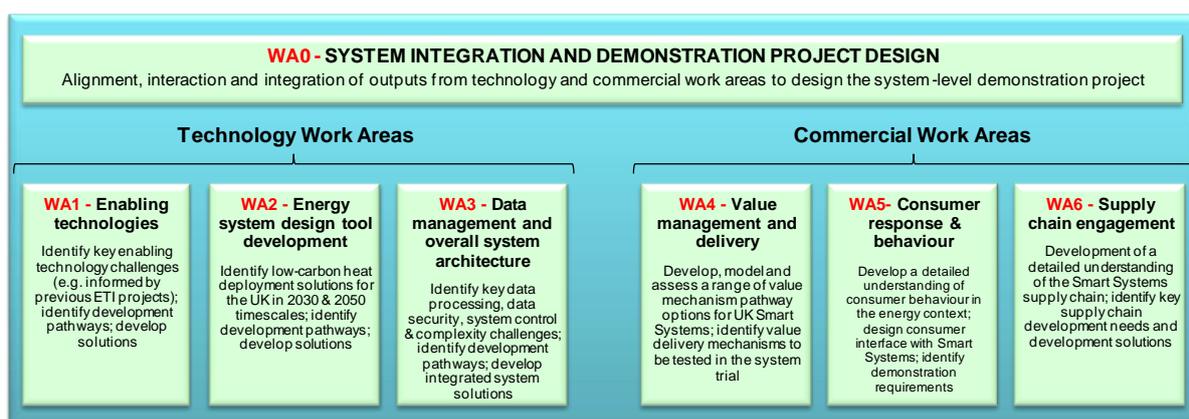


Figure 2: Phase 1 Work Areas

An overview of each of the Phase 1 work areas is as follows:

2.1.1. WA1 - Enabling Technologies

Many of the component technologies that might be deployed in a smart energy system already exist in a state suitable for deployment, whilst some key enabling technologies are believed to need further development before they are likely to be ready to be a sufficiently effective part of the broader “smart” system.

The role of this work area is to identify gaps in the range of potential smart systems technologies known to ETI, and accelerate the development of those component technologies identified as likely to be important for the realisation of effective smart systems, including where investment by the ETI would have a significant and additive impact on the development of that technology.

2.1.2. WA2 – Integrated Energy System Design Tool

There are many potential options to consider when designing an energy delivery system for a particular location. Deciding which is the most appropriate requires assessment of a

multitude of factors, not least the different characteristics of the location in question and how the different energy demands are expected to change. Having a means to efficiently and effectively assess the different options and identify the most favourable will be of significant value.

This work area will look to develop a tool to undertake this assessment. In essence the tool will seek to answer the question, for a given zone, what smart energy system best meets the energy delivery requirements? Inevitably, this will depend on a range of factors, including the types and locations of and variations in energy demands, overall targets, the demographics within the area and the capabilities of the technology components that would make up the system. Much of this would be heavily informed by the outputs from other work areas (i.e. WA1, WA3, WA4, WA5 and WA6).

2.1.3. WA3 – Data Management and Overall System Architecture

It is inevitable that the future ‘smart’ energy system will have a significant dependence on ICT systems for its efficient design, operation and management. The ICT system will need to provide functionality along the energy delivery chain, from supply to the end customer including the associated premises and appliances. It will also need to fulfil the requirements of the commercial activities such as billing, and provide the data for the academic learning so important during and after completion of Phase 2.

The purpose of this activity is to specify the data system and architecture that fulfils the information and service requirements of the smart energy system, including data security and privacy aspects.

2.1.4. WA4 – Value Management and Delivery

This work area will address the key issue of how value can be delivered across the entire smart systems value chain (in the context of energy systems for domestic and small commercial consumers in the UK). The objective is to establish how smart systems might be configured and operated to deliver sufficient value to all likely market participants, thereby making commercial deployment more likely.

The outputs of WA4 will feed directly into the specification of the full system trial in Phase 2 of the programme. It is anticipated that a number of value delivery mechanisms and business models will be tested and validated in Phase 2, thereby delivering a much clearer understanding of which value chain business models are best suited to which smart systems applications. This will provide early insights into the consumer products, policy requirements, characteristics of potential emerging market entrants and commercial frameworks for ETIs Government and industrial members.

2.1.5. WA5 – Consumer Response and Behaviour

Domestic and commercial consumers have a basic need for a range of energy related services, and their per-capita space, water-heating and mobility requirements dominates UK energy consumption.

An energy system is designed to meet domestic and commercial consumer needs for energy services such as comfort, mobility, cleanliness, lighting, entertainment, manufacturing, sales logistics, etc

ETI's Smart Systems and Heat programme will develop and implement an ambitious energy demonstration project specifically designed around consumer needs in the context of the UK's low carbon targets.

'Consumer Response and Behaviour' (WA5) will be the first of the work areas to be undertaken. The insight developed will address today's mass market consumer needs and how energy services deliver these, and also assess the changing expectations, attitudes and behaviours that will be valuable in designing systems for 2030 / 2050. This includes the development of appropriate consumer segmentation and quantification, commercial and value judgements and also intelligence on human interaction with technology interfaces.

The ETI issued an RfP for the Consumer Response and Behaviour work area in March 2012, the downselection of a preferred bidder has been made and project shaping is currently underway.

2.1.6. WA6 – Supply Chain Engagement

The Supply Chain Engagement work area will analyse and define an appropriate supply chain model to ensure that the requirements of the supply chains, that would enable the deployment of smart energy systems, are understood.

2.1.7. WA0 – System Integration and Demonstration Project Design

The Smart Systems and Heat programme has a significant set of challenges which must be overcome to achieve its objectives, these include the requirement to commission, deliver and derive insight and learning from a range of multi-disciplinary research, development and design projects which build on prior work already completed by the ETI, all running in parallel with the requirement that these projects are mutually informing.

To ensure that knowledge and insight gained from prior work carried out by the ETI, and to facilitate a pragmatic and hands on approach to the delivery of the programme it is planned to create a dedicated "ETI SSH Project Team" at a separate physical location to the ETI. The SSH project office will be located within a reasonable distance of the current ETI offices in Loughborough. Project Respondents should anticipate and plan for an appropriate level of co-location of key members of their team to work collaboratively with the ETI staff and other project teams.

2.1.8. Phase 2

The precise scope of Phase 2 of the programme will be refined during the execution of Phase 1, it is Work Area 0 which takes responsibility for this. At this stage it is anticipated that phase 2 will build on the research and design activities in WA1 to WA6 to demonstrate the fundamental elements of an energy system comprising consumer, technology and economic framework aspects that meet UK sustainability, security and affordability needs. This will be carried out at sufficient scale such that the outputs can be assessed and evaluated at a statistically valid scale.

2.1.9. Outputs from Phase 1

The desired outputs from Phase 1 of the programme are:

- A catalogue of Technologies and their characteristics that might be used in, with or for a smart energy system, and certain of their characteristics of interest.
- Tools to aid the design of a smart energy system, which, in combination, account for the requirements of consumers, the performance and interactions of physical components of the smart energy system, the data and information needs and the objectives of the different stakeholders to ensure commercial sustainability.
- A Design Methodology for the detailed design of smart energy systems.
- An Implementation Structure and plan for the delivery of Phase 2.
- A detailed Energy System Design for implementation in Phase 2, derived from the Energy System Design Tool and Design Methodology.
- A portfolio of Value Delivery Mechanisms to be tested in Phase 2, taking into account consumer and commercial requirements.
- Insights into consumer lifestyles and behaviours and potential UK energy policy requirements, constraints and interventions.

2.1.10. Outputs from Phase 2

A verified Smart Energy System Design, demonstrated at a scale that is statistically representative of UK buildings, topography, demography, climate, infrastructure and transport system.

2.2. Enabling Technologies Project Brief

Many of the component technologies that might be deployed in a smart energy system already exist in a state suitable for deployment, whilst some key enabling technologies are believed to need further development before they are likely to be ready to be a sufficiently effective part of the broader “smart” system.

The role of this work area is to identify gaps in the range of potential smart systems technologies known to ETI, and accelerate the development of those component technologies identified as likely to be important for the realisation of effective smart systems, including where investment by the ETI would have a significant and additive impact on the development of that technology.

2.2.1. Aims and Objectives WA1 – Enabling Technologies

Aim

Enabling Technologies (WA1) will identify, analyse and develop component technologies that enable the implementation and operation of smart systems; in particular, those which enable the delivery of heat to properties, businesses and consumers efficiently and effectively and facilitate low carbon personal transportation.

The identification of the component technologies of interest will, in particular, be progressively supported by the findings from WA2 (Energy System Design Tools). The broader list of component technologies will be recorded and described within a Smart Systems Technology Catalogue which will be developed and managed within WA0 (System Integration and Demonstration Project Design). The catalogue will hold information

describing the technical, commercial and consumer related attributes of the various technologies of interest for work areas 1 to 3, including their degree of maturity or development potential.

Objectives

The work area has three principle objectives:-

- a) The identification of gaps in the ETI Smart Systems Technology Catalogue, and their closure (WA1.1)
- b) As required – the objectives and procurement approach for technologies identified within the programme that could contribute significantly to a smart energy system (WA1.2.1)
- c) As required - the provision of technology based information to the programme, supporting the development of the design tool and system design (WA1.2.2)

In addition it is possible during the programme that specific component technologies will be identified as being important for smart systems to become a reality and where the ETI is well placed to accelerate their development (WA1.3). This will be handled as a separate project by the ETI.

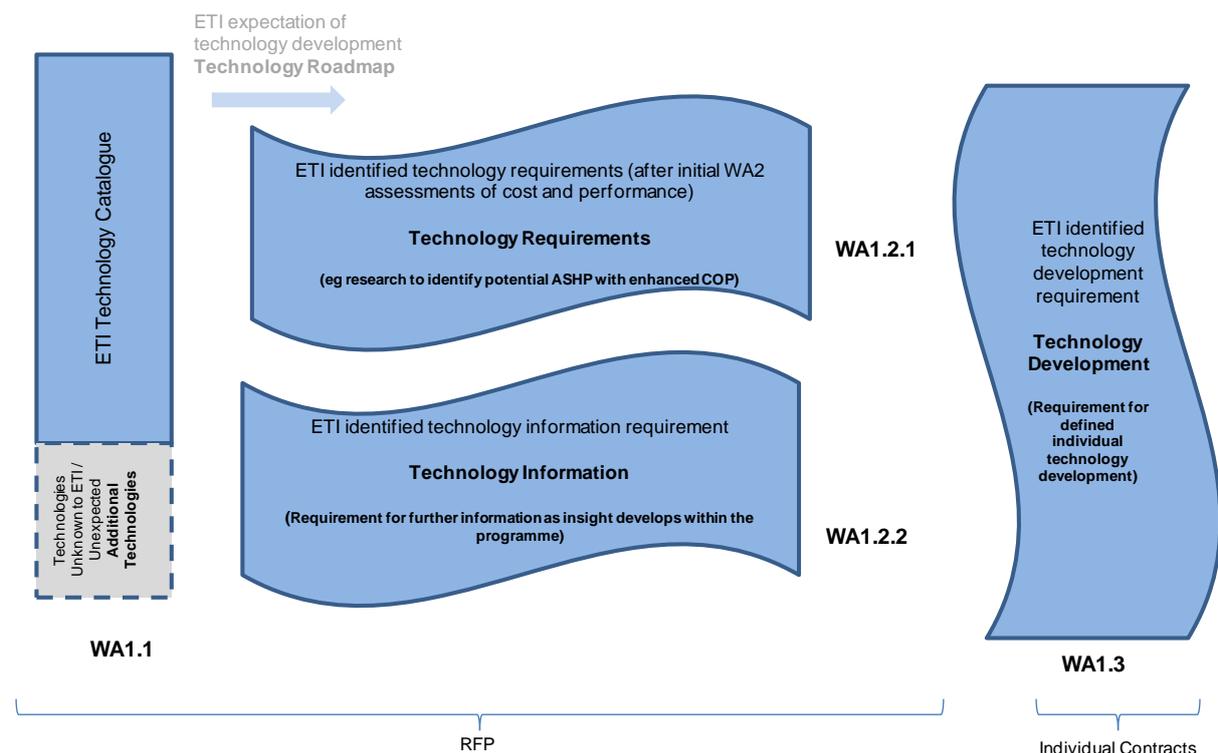


Figure 3 – Developing the Technologies for Smart Systems

2.2.2. Project Approach

The Smart Systems Technology Catalogue will be a key input into the Energy System Design Tool to be developed in WA2. There will be a high level of dependency and

interaction between WA1 as a whole and WA2. To this end the ETI will be taking a more hands on approach to the leadership, management and co-ordination of these projects than has historically been the case. This will be characterised by the ETI commissioning a larger number of small contracts to support the development of key elements of both WA1 and WA2.

There is a particular requirement for interaction between the work areas, and it is envisaged that WA1 will provide outputs to other work areas and receive inputs from them. For example, there is an expectation that WA2 will require information and verification from WA1 in regards to technology cost, performance and influences. In turn the decision as to which technologies will be developed in WA1.3 (not part of this RfP) will be informed, in particular, by work ongoing in WA2. There will also be significant interaction with WA0 given its role of overall system integration.

The Enabling Technologies work area is intended to be delivered through three inter-related pieces of work:

WA1.1 Technology Review and Gap Analysis

WA1.2.1 and WA1.2.2 Technology Requirements and Information:-

Potential call off contracts to support the development of the ETI Technology Catalogue and the Energy System Design Tool to be developed in WA2.

WA1.3 *Technology Development - Not the subject of this RFP*

For the purposes of clarity, Respondents to this Request for Proposals are requested to provide a fixed price proposal to deliver the scope of WA1.1 Technology Review and Gap Analysis. Deliverables from the Project (WA1.1) will be required to include proposals which the ETI may choose to proceed with to deliver the scope of WA1.2.1 and WA1.2.2 as described below. It is expected these will be based on a capped cost call off contract approach. The ETI reserves the right to undertake a separate procurement exercise for that.

WA1.1 Technology Review and Gap Analysis

Through prior work the ETI has developed a good understanding of a wide range of technologies and sub-systems which could be deployed in a smart energy system. This is referred to at the ETI Smart Systems Technology Catalogue. The ETI Smart Systems Technology Catalogue is populated with both quantitative and qualitative data relating to a range of different technology types. The aim of the WA1.1 project is to ensure that this list is comprehensive and no key technologies are omitted.

To enable this process and avoid duplication of work previously carried out by the ETI, on receipt of a signed NDA Respondents will be provided with copy of the Technology Catalogue listing all component technologies already identified by the ETI. The listing will include the characteristics required and examples of completed inputs. Respondents will be expected to review the technologies listed, identify any gaps in component technologies and sub-systems which have not been considered by the ETI and propose a methodology for the characterisation of technologies already identified by the ETI and those additional technologies identified by the Respondents.

In order to identify all current and future component technologies, it is accepted that best endeavours will apply. However, the ETI does expect the Prime Contractor or Organisation to consider emerging technologies under development by smaller technology development organisations within the portfolio of reviewed technologies.

WA1.2.1 - Technology Requirements

Proposals for a call off contract that would fulfil ETI's requirement to understand the development potential and activity required for specific technology types believed to be significant in the design of the smart energy system.

WA1.2.2 – Technology Information Requirements

Proposals for a call off contract that would fulfil ETI's requirement for further information on specifically identified technologies.

For reasons of continuity it is preferable, though not essential for one organisation to fulfil or lead the three elements outlined above.

WA1.3 – Technology Development

Dependent on the findings and insight gained during the programme from WA1.1, WA1.2.1 and WA1.2.2 it is anticipated that one or more pieces of specific technology development work will be commissioned by the ETI to ensure appropriate technologies are available to be demonstrated with confidence in phase 2 of the project.

2.3. ETI approach to Health, Safety and Environment (HSE)

The HSE of those who may be affected by ETI Projects is of paramount importance to the ETI. The ETI expects those who receive ETI funding to demonstrate a commitment to best practice in health, safety and environmental management as well as demonstrating that legal requirements are met.

See Appendix B of this RfP for further information.

3. SCOPE OF THE PROJECT

The work is bounded by the future needs of UK energy security, affordability and the achievement of national climate change targets.

The scope of this work encompasses all domestic energy use within the confines of the property, including energy delivered to vehicles. It includes all customer categories and all different levels of urban and rural environments.

The scope of work also includes commercial consumers of the type typically found within largely residential communities. This excludes industrial facilities, but includes all commercial building services along with any energy delivered to vehicles within the site. (e.g. hotels, public houses, embedded retail, schools, offices typically with an electrical demand less than 500kW).

3.1. Required outcomes of WA1 – Enabling Technologies

A major outcome of this work area is information which ensures that ETI has a comprehensive range of technologies and their attributes within its Smart Systems Technology Catalogue.

This information will be used along with detailed quantitative data developed in WA2, to populate the Energy System Design Tool and enable the development of the concept energy system design for the chosen location in Phase 2 of the programme. The information will also provide insight into the technology development roadmap required to meet 2050 emissions targets.

As detailed in section 2.2.2 Project Approach, this outcome will be achieved through three inter-related pieces of work, the activities associated with each being:

WA1.1 – Technology Gap Identification and Closure

- a) Review of the ETI Smart Systems technology catalogue listing to assess the technologies included as a guide the international review activity.
- b) International review of technologies that either individually or as part of a sub-system could materially contribute to the deployment of a smart energy system.

The technologies may relate to energy provision, distribution, demand, storage, or efficiency. They may also support the development of more efficient installation techniques or provide technology features that are particularly useful in satisfying the preferences of some consumer groups.

The degree of contribution will be largely be judged by the extent to which the technology would meet the consumer need for carbon saving or energy security, with a particular emphasis on heat.

- a) Extension of the list of technologies within the Technology Catalogue, identifying potential future and emerging technologies, thereby closing gaps in ETI's present assessment.
- b) Completion of the required technology characteristics of the extended list within the catalogue, to describe the role, attributes, potential for innovation etc. of each entry.
- c) Where relevant, understanding how particular component technologies that might be deployed together and also interact very closely with one another, should be integrated to perform most effectively.
- d) Understanding of development needs where component technologies identified whilst immature, have tangible and realisable potential to play a significant role in the long term future of smart systems.
- e) Developing the understanding of technologies associated with data collection, transport, storage and analysis and ICT architecture is part of Work Area 3.

WA1.2.1 – Smart Systems Technology Requirements

In response to learning during the development of the Smart Energy System Design Tool in WA2, understand the development potential and activity required for specific technology types believed to be significant in the design of the smart energy system.

WA1.2.2 – Smart Systems Technology Information Requirements

In response to the continuing system development needs, build the understanding of specific technology performance characteristics.

It is anticipated that additional technologies of concern will be identified and reviewed on an ongoing basis in this work area, as well as through the findings from WA2.

The specific requirements of the Enabling Technologies Technology Review and Gap Analysis are detailed in section 4.1.

4. TECHNICAL REQUIREMENTS

4.1. Specific technical requirements

The requirements of the WA1.1 Technology Review and Gap Analysis are:

- Identification of all current smart energy system related component technologies for development,
- Identification of all potential future and emerging technologies applicable for smart energy systems with estimated timescales for technology readiness,
- Support the development of the ETI Smart Systems Technology Catalogue to be used by other work areas for evaluation and systems testing,
- Definition of the success criteria for the development of component technologies, and,
- Definition of the roadmap for the development of technologies, in order to prepare them for a smart systems demonstration.

It is expected that the technology areas of particular interest for development in WA1 will include:

- Heat pumps better suited to efficient and effective heat delivery in UK climates and with greater applicability to the UK buildings stock and applications
- Novel approaches to cost effectively improve the capacity, utilisation and management of electricity and heat networks ; this may include local energy storage technology options
- Integrated packages of building retrofit measures that reduce the energy demand requirements placed on the energy network
- Tools to increase the accuracy of, provide greater and more relevant information from and expedite the process of surveying buildings in preparation for their retrofit
- Low carbon and low cost heat delivery and cooling solutions that are better able to deliver the required occupant comfort levels when and where needed in the building
- Ventilation systems (principally for retrofit) that help to maintain the required internal environment and are able to work in conjunction with the heating and cooling systems to control energy demand requirements

- Smart meters that can accurately and securely provide real-time data on key usage characteristics of different utilities in buildings to the wider “smart” system; these may also be configured to make scheduling decisions, etc

In order to identify all current and future component technologies, the ETI accepts best endeavours will apply. However, the ETI does expect the Prime Contractor or Organisation to consider emerging technologies under development by smaller technology development organisations within the portfolio of reviewed technologies.

5. PROJECT DELIVERY REQUIREMENTS

5.1. Project deliverables

The required deliverables from the Technology Review and Gap analysis are:-

WA1.1 Technology Review and Gap Analysis

The Respondent will be required to deliver:-

- The summary of findings from the international technology review as a report.
- The extension to the Smart Systems Technology Catalogue listing, with all appropriate technology characteristics completed.
- A report detailing the additional technology characteristics, describing their potential role in a future smart energy systems roadmap, and development needs where appropriate.

WA1.2.1 - Technology Requirements Proposal

The Respondent will be required to deliver a proposal detailing the development potential and activity required for specific technologies:-

- the technology characteristics;
- its potential role in a future energy system;
- any sub-system associations or dependencies;
- the potential for development as part of the future smart energy system, along with a plan for such development including as a minimum the timescales, cost and likely delivery organisation; and

The proposal should be structured as a call off contract up to a specified capped cost.

WA1.2.2 – Technology Information Requirements

The Respondent will be required to deliver a proposal responding to any particular questions on a chosen technology subject supporting the development of the smart system design, which might include:-

- the technology characteristics;
- its potential role in a future energy system;
- any sub-system associations or dependencies;
- the potential for development;

- capital and operating costs;
- energy consumption;
- results from existing research, trials etc.
- operational experience; and

The proposal should be structured as a call off contract up to a specified capped cost.

5.2. Project organisation structure

It is possible that more than one Participant will be required to provide all the necessary knowledge, skills, experience and inputs to complete the Project.

The Participants may choose either of the following structures:

- **Sub-contracts** – between themselves, with one of their number acting as ‘Prime Contractor.’ The Prime Contractor shall manage the Project, contract with the ETI and act as primary interface with the ETI. The ETI will require that there are collateral warranties between the Prime Contractor and other sub-contractors, on an equal basis to the warranties made in the Technology Contract. The ETI will need to approve key subcontractors (and the key subcontracts).
- **Consortium** – governed by its own Consortium Agreement and led by a ‘Lead Coordinator’ to manage the Project and act as primary interface with the ETI. The Consortium Agreement will require approval by the ETI. If a Consortium approach is adopted, the ETI requires that the Participants accept the obligations under the Technology Contract with the ETI on a joint and several basis.

The ETI has a strong preference for the contracting structure to be based on the Prime Contractor arrangement. However in both cases there must be a single organisation (Lead Coordinator or Prime Contractor) leading and acting as the primary interface with the ETI. This organisation shall appoint a Project Manager to lead and coordinate all activities of the Project Participants, and to liaise regularly with the ETI’s Programme Manager to whom he/she is accountable on behalf of the Participants. This organisation shall also act as the Respondent for the purposes of this Request for Proposals. The Consortium must also appoint a Chief Technologist (the responsibilities of these two key individuals are described in part 3b of Appendix D).

5.3. Project funding and payment structure

WA1.1 Technology Review and Gap Analysis will be procured as a fixed price piece of work.

WA1.2.1 - Technology Requirements and WA1.2.2 – Technology Information Requirements may be procured by the ETI on a call off contract basis up to a capped value proposed by the Respondent.

5.4. Project assumptions and constraints

The Respondents should be aware of the following assumptions and constraints:

- The anticipated duration of the Technology Review and Gap analysis is 5 – 6 months

- The project is one of a number of parallel projects within Phase 1 of the ETI Smart Systems and Heat programme, it is expected that the project team will interact and exchange relevant information with the other project teams engaged by the ETI.
- It is expected that an element of co-location with the ETI and other project teams will be required during key phases of the project, this should be budgeted for by the Respondents.
- Project outputs will be shared with the teams delivering the other work areas.

6. PROCUREMENT PROCESS

6.1. Briefing workshop

Respondents are encouraged to seek advice from the ETI to ensure full understanding of ETI requirements. A compulsory project briefing and workshop will be held 22nd August at Loughborough. This will include a briefing session on ETI requirements and the opportunity to network with other potential project participants. The discussions at the workshop will be on a non-confidential basis. Up to 2 attendees from any individual organisation will be permitted to attend. The ETI is willing to offer subsequent meetings to discuss matters on a confidential basis following receipt of a signed NDA.

Interested Participants are to notify the ETI with their request to attend the briefing workshop no later than 10th August 2012. Upon notification, a briefing workshop package (including agenda) will be distributed. See [Section 6.7](#) for the full procurement timeframe.

Any advice or clarifications of ETI requirements requested by and provided to any Respondent may be made available to all Respondents to ensure parity of information. Respondents should consider presenting requests for advice and clarifications in a way that the ETI can respond to all Respondents without comprising bidder's confidential information.

6.2. Intent to submit a proposal

Respondents should indicate their intention to submit a proposal by 31 August 2012, the submission of a clean, signed NDA (see Appendix F) shall be taken as formal notification of the intention to bid.

6.2.1. NDA submission

A draft Technology Contract and a copy of the Technology Catalogue shall be made available upon the successful execution and submission of a Non Disclosure Agreement. See Appendix F.

6.3. Process outline

Interested organisations are required to make a collective Submission through their nominated Respondent as described in Section 5.2. The Submission shall comprise five components:

- Detailed Proposal, arranged according to the structure set out in [Appendix D](#). The content must clearly demonstrate how the bidding organisation/Consortium will meet the requirements and criteria set out in this Request for Proposal. The Proposal must

be written in a succinct manner and must not include imprecise statements, generalities or repetition. The Proposal must be easily readable with appropriate font sizes (11pt or larger), margins, etc, and shall not exceed a maximum of 40 pages (excluding appendices).

- ii. Supporting information as specifically set out in [Appendix D](#).
- iii. Risk Register, as described in [Appendix D](#), part 10.
- iv. Due-diligence information (as set out in [Section 6.8](#)).
- v. Statement of Compliance and, if appropriate, supporting information, confirming compliance with or identifying exceptions to the specification or contractual requirements (as set out in [Section 6.8](#)). This must be signed by the Respondent: if a Consortium structure is proposed, every member organisation of the Consortium must provide a separate Statement of Compliance.

Additional information (such as organisational brochures, etc) may be provided to accompany the Submission, but such additional information will not be taken into account when reviewing Proposals.

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

6.4. Project shaping and contract negotiation

Following selection, the ETI will invite a preferred Respondent (or Respondents) to enter into a phase of project shaping, which includes due diligence and contract negotiations. An overall period of up to 2 months has been allowed for this phase.

The project shaping and contract negotiation phase will include the following activities (as required and dependent on the level of detail provided in the Respondent's proposal):

[Example activities]

- a) Negotiation and agreement of the detailed commercial offer.
- b) Detailing of the proposed technical programme, including definition of deliverables and acceptance criteria.
- c) Detailing and agreement of Project Stage Gates, where project performance and the business case are critically reviewed and decisions taken on whether to proceed with the Project.
- d) Detailing and due diligence relating to the breakdown of costs of the Project.
- e) Further intellectual property due diligence.
- f) Other due diligence activities as required.
- g) Negotiation and agreement of outstanding contractual issues.
- h) Agreement (and approval by the ETI) to terms of other key contractual arrangements (e.g. Sub-contracts).
- i) Gaining all necessary Respondent and ETI approvals to undertake the project.

- j) Any further information or assessment that may be necessary to meet state aid requirements.

As part of the above process, Respondents may have the opportunity to present a Final Detailed Offer to the ETI, addressing all technical, commercial, legal and financial issues. Subject to acceptance by the ETI, this Offer will form the basis of the Technology Contract.

6.5. Estimated procurement and project timeframes

The following tables outline the anticipated schedule for the procurement process. They also include anticipated dates when project resources will be required to attend shaping and contract negotiation meetings with the ETI.

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

Request for Proposal and Selection	Anticipated Dates
Issue of Request for Proposal	30 July 2012
Deadline for notifying the ETI with a request to attend briefing workshop.	10 August 2012
Project briefing workshop	22 August 2012
Deadline for notifying the ETI of an intent to submit a proposal (via return of signed Non-Disclosure Agreement)	31 August 2012
Closing date for submission of proposal	5 October 2012
Preferred Respondent(s) notified	26 October 2012

Project Shaping and Contract Negotiations	Anticipated Dates
Total duration for project shaping and contract negotiations	8 weeks
Technical meeting 1	6 November 2012
Technical meeting 2	20 November 2012
Technical meeting 3	4 December 2012
Legal/Finance meeting 1	6 November 2012
Legal/Finance meeting 2	20 November 2012
Legal/Finance meeting 3	4 December 2012

Project Start	Anticipated Dates
Contract signature target date	11 January 2013
Project start	21 January 2013

6.6. Acceptance, review and selection of proposals

6.6.1. Selection criteria

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.

- Compliance with terms and conditions, including any intellectual property issues (such as acceptance of ETI IP terms, or the existence of any IP issues which may affect the ability to carry out the project and exploit the results).
- Specific technical criteria:
 - Demonstrated knowledge and capability in the field of technology evaluation, roadmapping and development in an energy context.
 - Experience of futures work in energy systems, in particular Smart Energy Systems.
 - Demonstrated ability to deliver project outputs successfully in multi-disciplinary teams and across project boundaries within the energy system context.
- Generic criteria
 - 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 technology programmes) to the full satisfaction of the main stakeholders
 - Knowledge and previous experience of industry, environment, technologies, and of this type of study, etc
 - Ability and experience in collaborative working
 - For the lead organisation particularly, project management expertise
- Viability and strength of the project governance model
- Completeness of information content, structure and quality of the Proposal (against areas listed in appendix A).
- Robust project approach, organisation and plan to deliver the aim and objectives of the project. It is expected this will include as a minimum the proposed management of specific risks and issues and if relevant the strength of the Consortium or Subcontractor participants engaged in the Project. Note smaller consortia will be viewed more favourably at selection than large consortia, with the expectation that any organisation with less than 30% of the overall budget will be a sub-contractor to another participant.
- Gantt chart and suitable payment milestones (if appropriate).
- Record and ability in quality, timely and on-budget delivery.
- Value for money for the ETI and confidence in achieving outcomes versus price.

The ETI at its discretion may request further clarification of a Proposal, and may reject any Proposal which is unclear.

6.6.2. Selection process

All proposals will be evaluated by the ETI against the Selection Criteria.

As part of its evaluation process, in addition to ETI staff, the ETI may convene a Selection Panel, comprising experts selected by the ETI to provide the necessary expertise to consider the technical, commercial, legal and financial aspects of each bid. This may include experts drawn from ETI Members and third parties.

As part of Project Detailing and Contract Negotiation, Respondents may be required to provide a Final Detailed Offer. In such a case, the ETI may convene a second Selection Panel and the Final Detailed Offer(s) will be reviewed against the Selection Criteria.

6.6.3. Due diligence and information requirements

All Consortium Members (except ETI Members, universities / higher education institutions and UK/EU government laboratories / agencies) which provide more than 20% of the resources for the Project or which provide an input which is critical to the Project's success, shall provide due diligence Information to the ETI according to the table in Appendix A.

Please note that successful completion of all elements of the due diligence is a pre-requisite to any contract award: Failure to meet due diligence requirements at any stage may result in the exclusion of that Respondent or the Proposal from the ETI's selection process.

6.7. Statement of Compliance

The Respondents shall provide a statement that the Proposal is fully compliant with the Request for Proposals, or shall state clearly any exceptions, deviations, alternative approaches or additions, with justification. Note that in the absence of any specifically-stated deviation in this section of the Proposal, in the case of any subsequent dispute, the ETI's Request for Proposals will take precedence over the Proposal. 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 Technology Contract, the Statement of Compliance should set out as a minimum;

- a) The acceptance by each Respondent of the terms and conditions of the Technology Contract.
- b) Any exceptions to the terms and conditions of the Technology Contract issued by the ETI.

The exceptions set out will both be considered as part of the selection process to determine whether there is material compliance of the terms and conditions and as the basis of negotiations with the successful Respondent in the initial negotiation and after selection to enter into contract negotiations.

6.7.1. Insurance

The Respondent should confirm that liability and indemnity insurance cover is held and should confirm levels of cover and expiry for each. See Appendix C for further detail.

7. DISCLAIMERS

- 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 Request for Proposals 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 Request for Proposals is not an agreement to purchase goods or services, and the ETI is not bound to enter into any contract with the Respondent. By responding to this Request for Proposals, the 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, subject to the terms of the Non Disclosure Agreement ([Appendix F](#)). No part of a Proposal, or documents provided by Respondents, shall be returned.
- e) The ETI reserves the right to (i) change the basis of, or the procedures for, the Request for Proposals process, including the timetable or Closing Date, (ii) make modifications to, or alter any of the information within, the Request for Proposals at any time until the execution of the Technology Contract, (iii) reject any or all of the Proposal received, and (iv) not invite any Respondent to proceed further. In cases (i) and (ii) the ETI shall provide a minimum of five working days written notice.
- 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 Request for Proposals or of any other information made available during the Request for Proposals 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 Request for Proposals independently, having taken professional advice if necessary. The 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 Request for Proposals. The 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 Request for Proposals. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by the Respondent in connection with its participation in the Request for Proposals

process, including but not limited to any costs or expenses incurred up to the execution of the Technology Contract.

- i) The ETI may, at its discretion, shortlist Respondents for the next phase. 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 shall not constitute any actual or implied agreement between the ETI and the Respondent.
- j) 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 Disclaimer Notice, either expressly or impliedly, may result in a Respondent being disqualified.
- k) The copyright in the documentation and any other materials supplied by the ETI and/or its advisers in this Request for Proposals 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 Request for Proposals process. All documentation supplied by the ETI in relation to this Request for Proposals process must be returned on demand, without any copies being retained by the Respondent.
- l) This Request for Proposals, 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).

APPENDIX A

<Relating to [Section 6.8](#) due diligence and information requirements>

The ETI requires due diligence information during two phases:

- (1) submission of the Proposal; and
- (2) contract detailing and negotiation.

Certain information is required with the Proposal as part of the first phase of the procurement process. Further information will be required if any Proposal is selected to proceed to the contract detailing and negotiation.

Please note that successful completion of all elements of the due diligence is a pre-requisite to any contract award: failure to meet due diligence requirements at any stage may result in the exclusion of that Respondent or the Proposal from the ETI's selection process.

1. Submission of the Proposal

1.1 State Aid

All Consortium Members 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 Consortium Member.

1.2 General Due Diligence

All Consortium Members (except ETI Members, universities / higher education institutions and UK/EU government laboratories / agencies) which provide more than 20% of the resources for the Project or which 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 A1.

1.3 Insurance

The Respondent should confirm that insurance cover for the following risks is held, and should confirm levels of cover and expiry for each. The ETI will require evidence of these during the project shaping phase.

- Property damage (both any Property occupied by the Participants and any third party properties).
- Business interruption.
- Employer's liability.
- Public liability.
- Product liability (or justify its exclusion if not appropriate).
- Professional Indemnity.

- The Respondent should identify if it self-insures for any of these risks.
- The Respondent should identify if it is intending to take out any project-specific insurance for the Project and the scope and intended beneficiaries of such insurance.

In relation to the Professional Indemnity Insurance, Respondents should note that the ETI has the following requirements.

Each Project Participant is required to have in place at the start of a 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 Project 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 Project Participant or a copy of a letter of confirmation from the Project Participant's insurance company or broker summarising the policy.

1.4 Intellectual Property

If selected, the ETI will require Participants to complete a Background and Third Party IP due diligence questionnaire and provide documentary evidence of ownership or licence rights.

2. Contract Detailing & Negotiation Requirements

These are only required if a Proposal is selected to proceed to the project shaping and contract negotiations phase, and will include:

- A full health and safety competency assessment will be carried out by the ETI, to assess each organisation's health & safety management systems and specific technical competence to manage the risks in this Project. The ETI will not carry out such an assessment for any project participants who are carrying out desk based work only that does not include any design work. Any parts of the Project which fall under the CDM Regulations, will be assessed in line with the CDM Approved Code of Practice, Appendix 4.
- 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.
- Copies of insurance policies.

- Any other information that the ETI reasonably requires in order to fund the proposed Project including any information necessary to meet state aid requirements.

Annex A1 Organisational Due Diligence Questionnaire

Details of organisation
Full name:
Registered Office:
Type of Business (sole trader, limited company, partnership etc):
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 or litigation
Please provide (and attach if necessary) details of any claims or litigation against the organisation, outstanding and/or anticipated.

APPENDIX B

THE ETI'S APPROACH TO HSE IN PROJECTS

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

- Competency Assessment.
- Performance Assurance.
- Project Incident Protocol.

How the ETI applies this approach to a specific Project depends upon the nature and content of the Project.

Respondents should ensure their Proposal makes the nature of the Project clear, demonstrates their competency to undertake the Project, and describes how they intend to organise themselves and manage health, safety and environmental issues in the Project. Specifically:

- a) Respondents should advise if any work to be undertaken during the Project is not desk based (e.g. site visits, field trials, experimental or laboratory work).
- b) 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 take place outside of the UK, the Respondents should deal with the analogous issues as they apply in the local laws of the relevant country.
- c) Details of the Respondent's proposals to appoint a Construction Design and Management Regulations (CDM) Coordinator and/or a Principal Contractor should be included in the Proposal.
- d) The ETI expects that the Lead Coordinator or Prime Contractor will elect to act as Client and details should be included in the Proposal to confirm which Participant will elect to be the Client.
- e) Respondents should demonstrate their experience of identifying and managing HSE issues in projects of equivalent complexity and scale, including:
 - i. Coordination of HSE across multiple contractors, if applicable.
 - ii. Incorporating safety into design, if applicable.
- f) Respondents are required to provide evidence throughout the Project that HSE is being managed 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.
- g) Respondents should set out their approach to managing contractors. This should include key roles and responsibilities of different Participants in the Project.

The Respondent should note that:

- Specific HSE requirements will be included in the Technology Contract including reporting against HSE performance on a periodic basis.

- The ETI will carry out a full HSE competency assessment against the Respondents (the Prime Contractor and the members of any Consortium) prior to contract award unless their proposed scope work under the Project is entirely desk based.
- The ETI will wish to explore the management of environmental issues with the Respondent prior to contract award.

APPENDIX C

COMMERCIAL AND LEGAL REQUIREMENTS

Intellectual Property

This project will be critical to drive direction and input into the other projects that will be closely linked. In order to feed the outputs of this Project into the other linked ETI projects, the ETI requires that the Arising IP in this Project are owned by the ETI. The ETI will provide licences, for example for academic teaching and research, to Project Participants on request.

The Respondent should note that it is a standard requirement:

- that Project Participants are provided with a royalty free licence to Background IP required for the purposes of undertaking the project;
- that relevant Project Participants, ETI, ETI Members and ETI Programme Associates have licensed access to any Background IP or Third Party IP that ETI, its Members and Programme Associates will require solely in order to use the Arising IP in the later ETI projects;
- Where Respondents propose that Participants will have a licence to commercially exploit Arising IP a royalty would be expected as part of the commercial offer to the ETI, its Members and its Programme Associates.

In the event that a Respondent does make any Proposals to offer an alternative to these standard requirements, the Respondent must set out details of the exception together with:

- (i) reasons for the proposed exception; and
- (ii) how this will achieve ETI's wider programme objectives.

In these circumstances, the ETI requests that in addition, the Respondents set out the alternative value offered to the ETI Members and ETI Programme Associates in return for waiving these rights. In any such case, the ETI strongly recommends that proposed Respondents discuss any alternatives with the ETI ahead of submission of a Proposal to ensure that any material concerns the ETI may have which would impact on the success of a Proposal are considered.

Insurance

The Respondent should confirm that insurance cover for the following risks is held, and should confirm levels of cover and expiry for each. The ETI will require evidence of these during the project shaping phase.

- Property damage (both any Property occupied by the Participants and any third party properties).
- Business interruption.
- Employer's liability.

- Public liability.
- Product liability (or justify its exclusion if not appropriate).
- Professional Indemnity.
- The Respondent should identify if it self-insures for any of these risks.
- The Respondent should identify if it is intending to take out any project-specific insurance for the Project and the scope and intended beneficiaries of such insurance.

In relation to the Professional Indemnity Insurance, Respondents should note that the ETI has the following requirements.

Each Project Participant is required to have in place at the start of a 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 Project 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 Project Participant or a copy of a letter of confirmation from the Project Participant's insurance company or broker summarising the policy.

ETI and State Aid

Funding from the ETI 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. In relation to their Proposals, Respondents should note:

- Further information may be required to support the specific state aid requirements of any Proposal during the procurement process.
- Successful Respondents will be required to provide full transparency of costs throughout the Project to ensure both the Participant(s) and the ETI comply with EU state aid law.
- Participants will need to agree to certain contractual obligations related to the state aid requirements including the duration of the retention of records, and obligations to return ETI funding in certain exceptional circumstances.

All Consortium Members 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 Consortium Member.

Indemnities

The ETI will fund this Project but has no control over any risks and associated liabilities that may arise from the Project. Therefore the Project Contract contains a number of indemnities for the ETI including for third party claims and for IP infringement. The ETI will consider caps on the third party claims indemnity that are proportionate to the risk and this is expected to be different to the contract value. The ETI will not accept a cap on the IP infringement indemnity.

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. The wording of any warranties may be amended to reflect due diligence performed as further set out in Appendix C of this Request for 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 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 funding that is spent on R&D.

APPENDIX D

CONTENT AND FORMAT OF PROPOSALS

Proposals should be a maximum of 40 pages. Appendices are in addition to this but may not be reviewed by the Selection Panel.

[Example sub-headings]

1. Executive Summary

A summary of the Proposal, describing briefly

- the organisation(s) undertaking the work;
- summary of the technical approach and **key** deliverables;
- confirmation that the proposal will be able to deliver the Required Outcomes as described in section 1.4 of the Request for Proposals and / or brief summary of **key** exceptions / deletions;
- duration of the Project;
- total cost of the Project.

2. Project Objectives

The overall Project objectives will be as specified in the Request for Proposals. The Respondent may provide subsidiary objectives if they think this is appropriate. The Respondent should also describe any Critical Success Factors which either characterise a successful Project outcome or which are required to facilitate a successful Project outcome.

3. Background to Proposed Participants

a) Project Participants

The Respondent should provide a brief description of each of the proposed Participant organisations, including any major Subcontractors, **[maximum 1 page per Participant/Key Subcontractor]**, including:

- key skills, knowledge, experience and previous track record in the area (technical, commercial and project management,etc);
- key staff members involved (including a designated Project Manager), with the amount of each individual's time which will be dedicated to the Project, and detailing their experience – with CVs included in an Appendix (maximum 2 pages per individual);
- alternate resources available to be deployed in the event that the above key members become unavailable;

b) relevant quality, health, safety and environment management systems
Key Individuals and Roles [maximum 1 page per key individual plus summary CVs as an appendix]

The ETI places great emphasis on two critical roles in major projects – Project Manager and Chief Technologist.

The Project Manager is responsible for managing and progressing the project team and programme to time and cost, handling information flows and commercial issues, ensuring effective team-working and the continued engagement and support of key stakeholders. In essence this 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.

The Chief Technologist is responsible 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 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 responsibility is to assure the technical quality of the project and its outcomes.

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 expects these two roles to be filled by the same people throughout the life of the project.

Respondents should identify specific individuals for these key positions, including deputies, and other key roles as appropriate. Respondents should state the amount of each individual's time which will be dedicated to the Project, and detail their experience – with CVs included in an Appendix (maximum 2 pages per individual).

c) Collaborative Working

If the Project is to be undertaken by a group of organisations (whether as a Consortium or where there are Subcontractors), a table [*typically ½ page*] should also be provided to identify which Participant(s) is/are proposed to satisfy each of the specific criteria (skills, experience, etc) listed in the 'Criteria for Review and Selection of Proposals' section of the Request for Proposals.

Also if the Project is to be undertaken by a group of organisations (whether as a Consortium or where there are Subcontractors), evidence of previous collaborative working (or subcontract management as appropriate) should be provided, both within and outside the Participant group.

4. Project Organisation

The Respondents should indicate their intended Project organisational structure (refer to Section 5.2 of the Request for Proposals) and set out, in detail, the governance and control structures and processes that will be put in place.

The Respondent should indicate in the structure each Participant (including the ETI) and the position of the key individuals identified in Section 5.2 (including the Project Manager and Chief Technologist).

The Respondent should identify in their Proposal any foreseen issues or difficulties in executing any part of the contractual structure (including funding agreements, subcontractors and/or the Consortium Agreement).

5. Programme of Work

The Respondent should provide a summary of the overall approach to delivery of the Project, and a Task-by-Task breakdown of the proposed work, identifying for each Task:

- the Task leader;
- other Participants involved;
- key dependencies;
- the technical approach (including use of any specific methodologies, techniques or tools);
- Task objectives;
- deliverables, including for each deliverable a specification (e.g. quality, appearance, scope, function and purpose as appropriate) and proposed Acceptance Criteria. Subject to agreement with the ETI these acceptance criteria will be the basis for payment to Participants for each Project milestone and deliverable.

The Respondent should be specific about the activities within the Task.

Any issues or assumptions in defining the programme or schedule (e.g. inputs required from the ETI or other projects) should be explicitly stated.

A specific project management Task (or Tasks) should be identified describing all the activities in this area (e.g. regular meetings, reporting, Stage Gates etc). ***Note that throughout Project delivery the ETI will require reports of monthly progress with supporting financial data, reports to substantiate completion of each milestone, etc.***

If appropriate, a work flow diagram should be provided to illustrate the relationships between Tasks.

Any relevant activities related to but not included within this Project, and the relationships with these activities, should also be described.

6. Deliverables and Payment Milestones

Following the detailed specifications of each deliverable in the previous section, a summary table should be provided here listing all the Project Payment Milestones (i.e. key points in the Project where one or more Deliverables will have been provided and payment is requested from the ETI), and their constituent deliverables, with due dates for each deliverable and Payment Milestone.

The ETI prefers that Participants aim to have no more than approximately four Payment Milestones a year but if more frequent Payment Milestones are proposed, the Respondents should provide reasons why.

7. Project Schedule

The Respondent should provide a time schedule for the Project (e.g. in the form of a 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;
- payment Milestones and other relevant milestones; and
- project Stage Gates, if appropriate (i.e. major review point(s) in the Project).

The confidence level in the plan shall be based on a montecarlo analysis or other equivalent robust project risk analysis tool, it is expected that any plan presented will have a P(70) level of confidence as a minimum.

8. Project Curtailment and Exit

The Respondents should propose Stage Gates at which it is appropriate to assess progress against the project objectives. In certain circumstances following such Stage Gates, the ETI reserves the right to look to vary the scope of the project, subject to the agreement of the Respondents or end part or all of the Project if the project is no longer able to achieve its objectives.

The Respondents should note that project participants will only be able to withdraw from the ETI project with the consent of the ETI and any remaining project participants in a consortium.

9. Risk Management

The Respondent should describe the 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, 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.

Whilst not being prescriptive about the style and format of the Risk Register, it is expected that it will:

- a) Show clear evidence of triage into: those risks which are so serious in terms of frequency and impact that they need to be kept under review by the Project leadership (and regularly shared with the ETI); those risks that are sufficiently serious

that they need to be managed within the project team; and those risks which have been recognised but which are not judged as material.

- b) Identify the causes of the risk and the likelihood of them occurring during the project.
- c) Identify the consequences of the risk and the scale of impact on project delivery and key stakeholders.
- d) Identify the degree of knowledge or uncertainty about the risk.
- e) Identify who is the risk (or issue) manager.
- f) Show what actions are in place to reduce the likelihood of the risk materialising (controls).
- g) Show what precautions or provisions will be implemented to reduce the impact of the risk, should it occur (mitigation).
- h) Identify any actions in place to investigate or increase knowledge of poorly understood risks.
- i) Identify any systems or actions that will be implemented to detect that a specific risk is developing, has started to occur or its likelihood or impact has increased (monitoring).

It is expected that no more than ten risks would be managed by the top team, rather more at the next level and many more that have been recognised with no further action planned. The ETI will only consider to the top two categories, but proposers may provide the complete register.

A summary of key risks should be included in the proposal, with a complete risk register as described above provided as a separate document.

10. Health, Safety & Environment (HSE)

The anticipated work required for this study is a desktop study using available information. It is not anticipated that any site visits, field trials, experimental or laboratory work will be required. Respondents should advise if any work which is not desk based is included in their Proposal.

11. Intellectual Property

Arising IP

Any Project commissioned by the ETI will be subject to the appropriate ETI Terms and Conditions, (a summary of which is included in Appendix E).

The Respondent should provide a brief overview of the nature of any anticipated Arising IP from the Project.

In this Project, it is anticipated that it may be appropriate for the Arising IP will belong to the ETI. Any licensing of Arising IP from the ETI to the Participants may be discussed if appropriate. If Participants wish to discuss any licence to use the Arising IP, Participants should note that under State Aid rules profit cannot be paid for the Project in addition to the grant of a licence of Arising IP.

Background IP

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

- Which is needed (whether by the ETI, or to be licensed from one Participant to another Participant or a Subcontractor, or to be licensed by a Subcontractor to a Participant or to another Subcontractor, or otherwise) to carry out the Project or which may be used during the Project; or
- Which may be needed by the ETI 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),
- Rights to that IP, and
- Ownership and control, whether this is by any of the Project Participants or by any third parties.

12. Academic Institutions/Publishing

Generally, the ETI will grant rights to Participants, and/or key academic sub-contractors (if appropriate) 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. Participants should include details of their desired requirements in relation to academic research, teaching and publication in their Proposal.

13. Project Finances

Project Costs

The Respondent should provide

- a figure for the fixed price contract value, and
- a breakdown between Tasks and (for consortia or other Participant groups) between participants **against each Task**

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

- The Respondent should also provide a breakdown of the total project costs (only), as specified in the Table below.

	Participant 1 (Lead Coordinator or Prime Contractor)	Participant 2	Participant 3	Participant 4	Total
Number of Person-days					
Base Labour					
Materials					
Subcontractors (minor)					
Travel & Subsistence					
Overheads					
Profit					
Other					
TOTAL ELIGIBLE COSTS					
ETI Funding					
ETI Funding (%)					
Own Funds					
Third Party Funding (Private)					
Third Party Funding (Public)					

Notes on Category Breakdown table:

1. Base Labour should include direct add-ons (e.g. NI, pension etc).
2. If a Prime Contractor/Subcontractor project structure is proposed, major Subcontractors should be considered as Participants and fill in a column in the table.
3. Participants will be required to provide justification of overhead calculations during the project shaping and contract negotiations phase. ETI can provide a spreadsheet to calculate overheads on request.
4. Participants should note that under state aid rules profit cannot be paid to Participants if they wish to receive a licence for Arising IP.
5. Academic Consortium Members should determine their costs using the JeS system. Note that ETI funds Academic Consortium Members at 100% Full Economic Cost.

APPENDIX E

TERMS AND CONDITIONS OF THE TECHNOLOGY CONTRACT

Introduction

The following represents a summary of the key contractual terms which the ETI would expect to be included in the Project Contract.

Structure

1. The Project is subject to state aid rules. Certain requirements relating to information on costs, IP and return of funding are a requirement of State Aid requirements. The ETI cannot fund a Project with a Participant who is unable to agree to terms relating to state aid requirements.
2. If the Project is carried out by a multi-party consortium, the project participants shall be represented in dealings with the ETI by an organisation who will act as Lead Co-ordinator who will appoint an individual as a project manager. The Lead Coordinator shall, in the majority of instances, be the intermediary for any communication between the ETI and the project participants. This role includes providing notices of meetings and other activities to the ETI, reviewing and commenting on project reports (as required under the project) and administering payment of invoices for all Participants.

Project Management

3. The Participants will be required to appoint a project manager for the day-to-day management of the Project normally from the Lead Co-ordinator. The ETI will appoint a programme manager to act on behalf of the ETI with regards to the Project.
4. In the case of a consortium, the Participants shall form a steering committee to make decisions on day-to-day matters (excluding decisions affecting the overall scope structure and timing of the project). The frequency of meetings of the steering committee will be agreed. The ETI, its Members and Programme Associates shall be entitled to attend any meetings of the steering committee.
5. The Participants must fulfil various reporting obligations which will include monthly reports including on costs. Each report must address a specified list of topics required by the ETI.

Note: Project Participants should include costs to fulfil the reporting obligations in their Proposal.

6. The ETI will require the right to carry out a stage gate review on completion of a "stage" in order to assess (a) overall performance in the Project; (b) whether the project continues to deliver against ETI outcomes; and (c) also in order to carry out a validation exercise against the business case. The ETI may carry out stage gate reviews more frequently if the project is in jeopardy. The need for stage gate reviews and the definition of a stage will depend upon the exact nature of the Project.

Note: Please refer to Sections 8 of Appendix D.

Finance

7. In the event of any funding from the Participants, the Participant[s] will be obliged to fund their share of the project costs in accordance with agreed funding milestones. Before signing of the Project Contract, the Participant[s] will be required to provide appropriate evidence of their funding capability.
8. The ETI will pay fixed sums.
9. Acceptance of milestones will be determined by the ETI against acceptance criteria agreed with the Participant[s]. Any increase in costs in carrying out the project over and above the agreed contractual amounts will only be payable by the ETI when such charges are agreed in accordance with the contractual variation control procedure.

Note: Please see Sections 6 and 13 of Appendix A. The Project Participants should propose the Payment Milestones, deliverables and acceptance criteria. The acceptance criteria should be objective.

10. Costs are payable in Sterling and the ETI will pay valid invoices within 30 days of receipt of an invoice and all supporting financial documentation following acceptance of a milestone.
11. The ETI reserves the right to require the return of funding in certain exceptional circumstances (such as in the event of corruption or fraud, overpayment, costs incurred in respect of unapproved project changes and failure to comply with State Aid obligations).

Note: Please see Appendix C of this RFP in relation to State Aid.

Representatives, Warranties and Covenants

12. The Project Contract will contain representations and warranties in favour of the ETI as to the accuracy of information provided by the Participant[s] to the ETI prior to entry of the Contract.
13. The Project Contract will contain on-going covenants from the Participant[s], including to meet certain ETI requirements, deliverables due dates, and environmental and health and safety requirements.
14. In certain rare circumstances, major subcontractors may need to enter into deeds of collateral warranty and representation in favour of any parties nominated by the ETI.
15. The Project Contract will require the Participants to provide accurate information about the level of ETI Funding and Subcontractors.

Note: Please see Appendix C.

Key Personnel

16. The Contract will identify a limited number of key personnel involved in the project, and Participants will be required to gain approval from the ETI for proposed replacement staff.

Confidentiality

17. Restrictions on disclosure of any other party's confidential information will apply. Any publication of results (if appropriate) will be subject to the confidentiality provisions in the Contract.

Audits and Records

18. ETI will require the right to audit the project and Participants during the Project and, in certain circumstances, up to 7 years from the end of the Project on financial or technical grounds
19. The Participants will be required to maintain the majority of project records for a minimum of 10 years from the project end date to comply with state aid rules.
20. The Participant[s] will be required to keep relevant project records for more than 20 years where the records relate to registered intellectual property rights.

Sub-contracting and assignment

21. Sub-contracting or assignment (other than by the ETI) is not permitted without consent. However, details of known sub-contractors (and therefore the requisite consent) can be given in the Project Contract at signing.
22. The terms of any material sub-contract will be subject to the prior approval of the ETI. The ETI may impose conditions prior to consenting to any subcontract.

Variation

23. Any variations to the project must be made via the variation control procedure.

Liability

24. The liability provisions relating to Participants[s] will be tailored on a case-by case basis. It is expected to be capped at the amount payable by the ETI to the Participants under the Project (except in relation to the agreed indemnities, return of funding or other liabilities which cannot be limited or certain excluded by law). For these claims, no cap will apply. Recovery of indirect, consequential etc. damages will usually be excluded.
25. The ETI will require an indemnity in respect of (a) third party infringement claims (b) certain claims brought by any third parties against the ETI as a result of the acts or omissions of the Participant[s] under the Project and in relation it, the terms of which will be negotiated on a case by case basis.

Note: Please see Appendix C of this RFP.

26. In the case of a consortium, liability is expected to be on a joint and several basis.

Insurance

27. Participant[s] will be obliged to carry appropriate insurance which will be tailored on a project by project basis.

Withdrawal

28. Withdrawal from the Project is only possible with the ETI and in the case of a consortium, the unanimous consent of all other contracting parties. Withdrawing participant[s] cannot recover outstanding costs, unless otherwise agreed.

Termination and Suspension

29. The ETI reserves the right to terminate the agreement in certain circumstances (such as breach by a participant, withdrawal of a participant, insolvency, change of control of a Participant without ETI consent etc).
30. The ETI also reserves the right to terminate the agreement unilaterally upon giving a (to be agreed) period of notice to the Participants. Upon unilateral termination, the ETI will pay the eligible costs (pre-approved by the ETI) incurred by the project participant[s] up to the date of termination.
31. The ETI will reserve the right to suspend the project in certain defined circumstances.

Governing Law

32. The Project Contract will be governed by English law and the parties will submit to the exclusive jurisdiction of the English Courts.

APPENDIX F

NON DISCLOSURE AGREEMENT

The Non Disclosure Agreement protects the confidential information of the Respondents and the ETI during the bidding process through to the conclusion of contract negotiations. For the successful Respondents, the confidentiality provisions in the Project Contract will supersede this NDA.

In order to ensure parity across different groups of bidders, the ETI will not enter into negotiations on the terms of this NDA during the bidding process.

A separate version of this NDA is available on the ETI website.

Instructions for completing the Non Disclosure Agreement

Respondents bidding through a Prime Contractor

1. The Prime Contractor should arrange to complete a single electronic NDA with its company details in Schedule 1.
2. The Prime Contractor should print and sign TWO copies of the NDA. The NDA **must not be dated**.
3. A copy of the signed NDA is to be sent to the ETI by post and scanned by email to the address on the front of the RFP.
4. The Respondent should indicate if it wishes to receive an original hard copy by post signed by the ETI.
5. On receipt of an NDA fully signed by the Respondent, the ETI will execute and date all copies of the NDA. The ETI will then send a scanned copy of the now fully executed NDA by email to the proposed Prime Contractor Respondent. The ETI will retain the original hard copies. The ETI will also send original hard copies signed by it, if requested.
6. The proposed Prime Contractor should then arrange for non disclosure agreements to be entered between it and proposed Subcontractors in order to comply with the NDA.

Respondents bidding as a Consortium (please discuss with ETI first)

1. The Lead Coordinator should arrange to complete a single electronic NDA with the company details of each Respondent that proposes to be a Project Participant in Schedule 1. **It is critical that each organisation signs an NDA with an identical Schedule 1 with all the details of each organisation bidding in that consortium printed on that Schedule.**
2. The Lead Coordinator should circulate electronically the NDA with the fully completed Schedule 1 to all Project Participants to EACH print and sign TWO copies. The NDA **must not be dated**.

3. One copy signed by each proposed Project Participant for a Respondent is to be sent to the ETI by post and scanned by email to the address on the front of the RFP.
4. Each Respondent should indicate if they wish to receive an original hard copy by post signed by the ETI.
5. On receipt of a complete set of NDAs fully signed by the Respondents, the ETI will execute and date all copies of the NDA. The ETI will then send a scanned copy of the now fully executed NDA by email to the proposed Lead Coordinator as appropriate (the Lead Coordinator should send these on to each Project Participant). The ETI will retain the original hard copies. The ETI will also send original hard copies signed by it, if requested.

A separate version of this NDA is available on request to: smart@eti.co.uk.

Hard copies of the completed NDA must be sent by post, with **original signatures**, to the ETI.

File Ref No: **SMART SYSTEMS/ENABLING TECHNOLOGIES/RFP/NDA**
MULTI-PARTY CONFIDENTIALITY
AGREEMENT

THIS AGREEMENT is made on _____ of _____ 2012

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 parties named in Schedule 1 of this Agreement** (the “**Respondents**”),
(collectively the “**Parties**” and individually a “**Party**”)

BACKGROUND:

The Parties intend to exchange certain Information on or after the Effective Date for the Purpose. The Parties agree to receive such Information, which shall be treated as confidential information, for the Purpose 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:

- 1 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 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 submitted in respect of or further to the Purpose or prepared 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;

“**Procurement**” means the procurement by the ETI of the Project including any stages set out in the RFP or as later may be notified or published by the ETI;

“**Project**” means the proposed project Enabling Technologies: Technology Review and Gap Analysis;

“**Programme Associate**” means any means an entity which is designated as such by the ETI from time to time;

“**Purpose**” means:

- a the preparation of documents and the making of any proposal in response to the RFP;

- b any activities related to the assessment of a Respondent's proposal or proposals for the Project including, but not limited to, any technology, commercial offer, financial information, management systems and intellectual property; and
- c any related exchanges of Information, clarifications, discussions, meetings, or negotiations in respect of the RFP, the Procurement and the Project;

“Receiving Party” means any Party that receives Information pursuant to this Agreement;

“Respondent Affiliate” means any undertaking that is:

- a a holding company of such Respondent;
- b the ultimate holding company of the group to which such Respondent belongs; or
- c a subsidiary of any holding company or subsidiary of the group to which such Respondent belongs,

and for the purposes of this definition, the terms above are as defined in section 1159 of the Companies Act 2006;

“RFP” means the request for proposals relating to the Project, issued by the ETI on 30th July 2012.

- 2 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
 - d 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.
- 3 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
 - c 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.
- 4 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) 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 advice, it is legally compelled to disclose.
- 5 The ETI shall be entitled to disclose or make available any Information it receives from the Respondents to such of the ETI Affiliates, and either the ETI's or the ETI Affiliates' employees, officers, secondees, agents, consultants, sub-contractors, proposed sub-contractors, professional advisers and proposed professional advisers where such disclosure is necessary for the Purpose, provided that in the case of disclosure of Information to ETI Affiliates, that this is limited to disclosure as is reasonably necessary for the purpose of ETI's governance of the Procurement and the Project.
- 6 The ETI shall be entitled to disclose or make available any Information it receives from the Respondents to the Department of Business, Innovation and Skills (or other relevant Government department) and to the European Commission and their advisers as is necessary to seek advice in relation to the application of state aid, to notify or as part of any detailed assessment of state aid in the Project.
- 7 The ETI shall ensure that all such persons to whom any Information under clause 5 of this Agreement is disclosed are bound by obligations of confidentiality and the ETI shall be responsible for breaches of the obligations by such persons.
- 8 The ETI shall be entitled to disclose or make available any Information it receives from a Respondent to the other Respondent where it is necessary for the Purpose.
- 9 Each Respondent shall be entitled to disclose or make available any Information it receives from the ETI or the other Respondent 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 written 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.

- 10 Each Respondent shall be entitled to disclose or make available any Information it receives from the ETI to the other Respondent where it is necessary for the Purpose.
- 11 The 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, sub-contractors 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.
- 12 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.
- 13 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.
- 14 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. 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 upon statements made prior to the date of this Agreement.
- 15 Neither Party 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.
- 16 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 or superseded by a subsequent written agreement.
- 17 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 Contracts (Rights of Third Parties) Act 1999.
- 18 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.

- 19 If any provision of this Agreement is or become 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.
- 20 Nothing in this Agreement is intended to or shall operate to create a partnership or joint venture of any kind between the Parties, or to authorise either Party to act as agent for the other, and neither Party shall have authority to act in the name or on behalf of or otherwise to bind the other in any way.
- 21 Except as provided otherwise, no person may assign any of its rights under this Agreement or any document referred to in it.
- 22 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.
- 23 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

By: _____

Name: _____

Title: _____

Date: _____

SCHEDULE 1

Respondent	Signature
Company Name: Company Registration No: Address of Company:	By: Name: Title:
Company Name: Company Registration No: Address of Company:	By: Name: Title:
Company Name: Company Registration No: Address of Company:	By: Name: Title:
Company Name: Company Registration No: Address of Company:	By: Name: Title:
Company Name: Company Registration No: Address of Company:	By: Name: Title:
Company Name: Company Registration No: Address of Company:	By: Name: Title:

The ETI will return a copy of the executed Non Disclosure Agreement to the Prime Contractor/Lead Coordinator of a consortium (whichever appropriate). 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:
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APPENDIX G

GLOSSARY

Term	Definition
Arising IP	Any intellectual property which is created by or for any Participant during the Project or for the purposes of the Project.
Background IP	Any intellectual property which existed prior to any Participant's commencement of the Project and which was created by or for the Participant.
CDM	Construction (Design and Management) Regulations 2007.
Client	As defined by CDM.
Company Registration Number	Company number as registered at Companies House. Universities should enter their Royal Charter (RC) number in place of the Company Registration Number requested in Schedule 1 of Appendix F.
Consortium	The group of organisations described in Section 5.2 which may decide together to submit a Proposal to carry out the Project and be governed by a Consortium Agreement between themselves. This will not include the ETI itself or any Subcontractors.
Consortium Member	An organisation which forms part of the Consortium.
Consortium Agreement	The agreement to be entered into between the organisations together forming a Consortium, as described in Section 5.2, which governs the execution of the Project within the Consortium.
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 Executive	The Executive Committee of the ETI.
Lead Coordinator	The organisation which is a Consortium Member, and which manages and coordinates the activities of all the Consortium members, and which acts as the primary interface between the Consortium and the ETI, as described in Section 5.2.
Net Residual Value	The value assigned to facilities constructed during the Project on completion of the Project. Such value should take into account the costs of the facility, use during the Project, expected future use and income streams and future costs commitments, e.g. decommissioning.
Own Funds	Funding sourced by the Respondent's own resources and not dependent in any way on third party lending to either the Respondent

	or member of the Respondent's group.
Participant	Either the Prime Contractor or a Consortium Member.
Payment Milestone	A contract milestone with defined constituent deliverables, associated deliverable acceptance criteria, and milestone value (all to be detailed in the Respondent's Proposal and agreed in the Technology Contract which should be completed in order to reach the said milestone, and at which, subject to acceptance by the ETI that the milestone has in fact been reached, payment may be claimed from the ETI.
Prime Contractor	A sole organisation which contracts with the ETI to manage the project. It may have Subcontractors.
Programme Manager	The individual appointed by the ETI to manage the overall ETI programme to which this Project is affiliated, and to whom the Project Manager is accountable.
Project	The project for which the purpose, scope of work and other details are described in this Request for Proposals, WA1.1, Enabling Technologies: Technology Review and Gap Analysis.
Project Manager	The individual who is appointed by the Lead Coordinator or Prime Contractor, or is otherwise agreed by the Project Participants, to carry out its responsibilities.
Project Organisation	The entity or group of entities / organisations, and the contracting and management structure which they adopt, as described in Section 5.2, which together will carry out the Project if commissioned by the ETI and includes any Consortium Members or Prime Contractor and any Subcontractors.
Proposal	The proposal for the Project submitted to the ETI, in response to this Request for Proposals.
Public Funding	Any funding provided by a public authority or agency.
Respondent	The organisations submitting a Proposal to the ETI.
Review Point	A Project review involving Project Participants and ETI representatives at which the overall progress in Project or a specific Work Package will be critically reviewed and following which a formal decision will be made on the future Project programme.
Stage Gate	A major Project Review Point involving Project Participants 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 to continue with the Project, based on whether agreed Stage Gate Criteria have been met.
Subcontract	A contractual arrangement between a Participant (described in Section 5.2) and another organisation to which work for the Project has been subcontracted.

Subcontractor	An organisation which has a Subcontract.
Submission	The components set out in Appendix D, including the Respondent's Proposal submitted by the Respondent in response to this Request for Proposals.
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.
Technology Contract	The contract, as described in Appendix E, to be entered into between the ETI and the Participants (whether between the Consortium Members or a Prime Contractor).
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.