



BE23183 - Prior Information Notice

Heat Network Zoning Programme – Framework Agreement

The Department for Energy Security and Net Zero (DESNZ) wishes to establish a Framework Agreement of consultants to support the Heat Network Zoning Programme.

Background

The Energy White Paper, Heat & Buildings Strategy, and Net Zero Strategy have committed to introducing heat network zoning in England by 2025. Heat network zoning will revolutionise the development of heat networks in towns and cities across England.

By designating zones where heat networks offer the most cost-effective solution for decarbonising heat, local authorities and heat network developers can swiftly identify where new large-scale strategic heat networks should be constructed. This strategic approach aims to enhance the efficiency of the heat network development process, helping to streamline and target the multi-billion-pound investment needed to deliver heat networks on the scale required to meet the UK's net-zero goals.

The development of the heat network zoning process will be supported by the Energy Act, providing the government with the authority to implement zoning in England. This will involve creating a nationwide methodology for identifying and designating heat network zones, establishing a Zoning Coordinator role, and possibly a Central Authority to oversee zoning at a national level.

Access to skilled consultants is vital for the zoning process's success, and this procurement aims to establish a consultant framework as we move from the pilot phase towards a business-as-usual process in line with the national heat network zoning policy coming into force in 2025.

This Framework Agreement is split into the following Lots:

<u>Lot 1 – National Zoning Methodology</u> (Aiming to support ~50 towns & cities in years 1 & 2)

Delivery shall be made in the following Work Packages:

Work Package 1 - Local data collection and stakeholder engagement

The following deliverables shall be required as a minimum for WP1:

1. Baseline assessment:

A table showing the key anchor loads, potential low carbon heat source types available, existing district and communal heat networks, key constraints in the study area using a DESNZ-provided template. An assessment of any existing data sources and relationships with key stakeholders related to each of the above, conducted in conjunction with LA stakeholders, captured in the above template.

2. Stakeholder Communications Plan:

A document detailing the governance of and channels and approach to be used for stakeholder engagement, to be approved by DESNZ and LA, developed using a DESNZ-provided outline template.



3. Customised stakeholder communication materials:

Communication materials or content in any format for use with stakeholders relevant to the study area and project. These should be based on DESNZ-provided templates and starting materials (e.g., Joint DESNZ and LA-branded introductory letters and presentations).

4. Study area stakeholder directory and stakeholder communications log, key meeting records:

A database of organisations and contacts relevant to the study area, and a tracker of stakeholder engagement with those stakeholders, using a DESNZ-provided format. Records of key meetings held with stakeholders, including decisions made.

5. Study area dataset directory, datasets and other documents provided by stakeholders:

- A table providing meta-data about incoming project materials provided by stakeholders relevant to the study area and project, using a DESNZ-provided format
- A set of folders aligned with entries in the dataset directory, which hold the materials provided by external stakeholders, including "raw" datasets.

6. Data transformation log:

A table in a DESNZ-provided format, in which key data cleaning, enhancement and transformations made to the raw datasets for use in the MID formats are recorded. This provides an audit trail on the provenance of the data uploaded to the National HNZ Model.

7. Local data in MID formats:

A study-area-level geopackage and tables containing data which have been collated and transformed (see item 6) to match a format specified by DESNZ, ready for import into the NZM. This will allow revised HNZs to be generated by the NZM for the local refinement exercise. **A geopackage is** a structured set of map layers and geocoded data for a given geographic boundary.

8. Project management deliverables,

As specified in the project management section, below, including general information management requirements for project filing. Examples deliverables may include Supplier contact list and regular project reporting (progress vs. deliverables, RAID register, budget and spend tracker, project-level consolidated deliverable trackers for all work packages).

Work Package 2 – Refinement of HNZs

The following deliverables shall be required as a minimum for WP2:

1. Refinement log:



A table in DESNZ-provided format which categorises and explains any major changes to model-output HNZs and boundaries (e.g., expanding a HNZ to include a new property development). This acts as an audit trail of decision making for DESNZ and the LA.

2. Study-area level map outputs:

This comprises a set of maps developed using DESNZ-provided templates which show the before-refinement and after-refinement size and boundaries of HNZs, as well as maps showing typology (building type/usage), anchor loads, heat sources and potential energy centres, constraints identified etc.) The maps are to be generated in industry-standard output formats (.jpg, .png, .pdf)

3. Refinement map outputs:

These are detailed map views developed using DESNZ-provided templates, showing the before and after image for key refinements made within HNZs.

4. A study-area geopackage:

A GIS file in a structure specified by DESNZ containing all study area-level and HNZ-level map and other data generated in WPs 1 and 2 for upload to the NZM and use within the ZMP (see WP3 below).

5. Storyboard presentation:

This is a presentation in a DESNZ-defined format which is used to summarise key changes made to HNZs during refinement for discussion and sign-off by DESNZ and the LA. It includes:

- a. Maps showing before and after study-area level HNZs maps
- b. Key refinement detail maps with commentary and assumptions
- c. City-level maps detailed above
- d. Strategic HNZs identified with justification for categorisation as strategic / non-strategic
- e. Proposed names and HNZ development approach for each strategic HNZ
- f. IZO candidates in each Strategic HNZ

6. Public consultation support materials and services:

Support LA with HNZ public consultation by providing, for example, consultation design advice and materials, remote consultation systems and services, stakeholder recruitment, collation and presentation of public consultation findings.

7. Project Management deliverables.

As specified in the Project Management section below, including general information management requirements for project filing.

Work Package 3 - Zoning market prospectus development and HNZ designation support

The following deliverables shall be required as a minimum for WP3:



1. Techno Economic Model per IZO:

A DESNZ-provided assessment tool populated with technical and economic parameters and run per IZO to generate technical and economic metrics for use in the ZMP.

2. HNZ-level map images:

A set of map images generated to match DESNZ-provided templates, in industry-standard output formats, (.jpg, .png, .pdf), some for inclusion in the ZMP

3. A study-area geopackage:

A GIS file in a structure specified by DESNZ containing all Study-area-level and HNZ-level map and other data generated in WPs 1, 2 and 3 for upload to the NZM and use within the ZMP

4. Zonal Marketing Prospectus:

The prospectus documents information about the study area, the LA decarbonisation plans and ambitions for the area, the HNZs and IZOs identified. This is presented as a short document with embedded tables, graphs and map images.

5. Project management deliverables:

As specified in the project management section, including general information management requirements for project filing.

Lot 2 – Advanced Zoning Delivery which is sub lotted as follows:

Aiming to support Zonal Development Plans & Delivery for up to 15 zones, with a goal to take projects to commercialisation/ get them to market with a delivery partner.

- Sub-Lot 2.1 Project Management Support
- Sub-Lot 2.2 Technical Support
- Sub-Lot 2.3 Commercial Support
- Sub-Lot 2.4 Financial Support
- Sub-Lot 2.5 Legal Support

Delivery is expected the following Work Packages:

WP1 - Information review and project scoping

Tasks will vary depending on the extent of previous work undertaken in the study area. All tasks undertaken should clearly relate to completing an effective assessment of the needs and requirements for delivery of zonal-scale heat networks.

The following tasks can be used to form a non-exhaustive checklist which the Supplier can draw on upon:

- Review existing material
- Define local needs and requirements
- Revise/produce a City Overview
- Identify specific aspects of project set-up and governance required for the LA.



Outcomes

Upon the successful completion of this WP, background information has been reviewed, summarised and assessed prior to review with the LA and DESNZ. The LA is ready to progress onto other WPs required and there is a clear scope of tasks for subsequent WPs highlighting where specialists from each sub-lot will be required. A decision gate upon completion of this work package will inform next steps in project development.

WP2 - Zonal Network Concept Definition and Delivery Planning

The specific tasks to be undertaken as part of WP2 will vary by local circumstance, and be defined during WP1, but an indicative list of actions/tasks that may be included is provided below for reference:

- Assessment of heat off-takers
- Analyse and collect additional data where available
- Investigation of potential new heat sources where these are prudent and necessary to support the project
- High-level TEM to inform an outline business case and commercialisation discussions.
- Undertaking, and supporting the wider team to undertake stakeholder engagement and potentially LA-directed market engagement.
- Assessment and recommendations for phased network delivery options within the agreed zone(s)
 - Develop a technical zone delivery plan in liaising with the Client, the LA, and the market to seek feedback and ensure relevance and robustness.
 - Develop an outline programme of activities for technical delivery of the project including critical path, milestones, Gateways, Governance, key interdependencies, phasing and sequencing.
 - Populate key risks and issues register.
 - Develop a delivery plan resourcing assessment.

Outcomes

Upon the successful completion of this WP, LAs will possess a solid grasp of the opportunity at hand and a clear roadmap for bringing it to the market. A decision gate upon completion of this WP will inform next steps in project development.

WP3 - Detailed Business Case and Commercialisation Support

The specific tasks to be undertaken as part of WP3 will vary by local circumstance, but an indicative list of actions/tasks is provided below for reference:

- Evaluation of evidence gaps in the business case development process.
- Business case project management.
- Support on the specification, evaluation and quality assurance of any technical, design, commercial or legal investigation required to inform the business case.



- Support on engagement with project funders/financers.
- Ongoing engagement with stakeholders on project development at key milestones as directed by the LA.
- Drafting heads of terms with key heat off-takers and project delivery partners.
- Evaluation of preferred delivery vehicles on the basis of detailed evidence provided.
- Drafting of the business case and presentation of the business case to key stakeholders and decision makers within the LA
- Options appraisal of procurement routes
- Support for production of suitable procurement specifications and assessment criteria
- Identification of suitable sector businesses to bid and market warm-up / outreach activities ahead of the procurement
- Assistance to run the procurement process, including review and assessment of tenders submitted.

Outcomes

By the end of this process, the LA and any partners will have taken a final decision on the project, including any appropriate investment decisions. The project will be ready to be taken to market in whatever form/route deemed most appropriate by the business case, and the market will be primed to respond.

The LA will have been supported to bring the project to market through a successful procurement exercise.

WP4 – Delivery support post-commercialisation

Indicative tasks to be undertaken during WP4 are varied and too numerous to list, but could as an example include the following:

- Technical submittal review from Contractor, during 'stage 4' technical design phase
- Undertaking due diligence structural loading quality assurance on contractors forconstruction design
- Commercial progress against spend review for contractor's claims under contracts
- Commercial advice to LA on how to develop fair pricing methodologies for the heat network to not disadvantage social housing
- Programme management of the LA's programme board
- Witnessing of welding on-site and generating a QA report, on behalf of the LA
- Chairing a risk management workshop with the Contractor
- Attending an engagement with Network Rail alongside the Contractor, relating to delivery of a rail-crossing heat network pipe
- Reviewing an Environment Agency consent application, relating to delivery of an aquifer-led, borehole-fed, heat pump system
- Delivery of community engagement workshop on Heat Networks relating to disruption in their local area
- 'Snagging' post-construction of and Energy Centre, on behalf of the LA



- Reviewing data from network operations, to confirm availability targets have been met and carbon content of heat is as per the Benefits Realisation Plan
- Developing quarterly cost management reporting for the Programme Board, relating to spend and progress, and expected out-turn cost
- Managing change and risk throughout the project, raising Compensation Events for the contractor and supply chain

Outcomes

Upon the completion of this WP, the following indicative outcomes are expected to be delivered:

- Successful delivery of the HN project
- Achievement of the HN project/programme(s) benefits outlined by the FBC (or equivalent)
- Delivery of works to time and budget
- Delivery of quality final project, leading to commercially viable HN infrastructure and commercial vehicle
- Carbon savings as outlined by the FBC (or equivalent)
- Heat provision to the entities within the brief
- Meet all of the HN project(s) KPIs as outlined by the FBC (including system-wide energy efficiency, financial performance, carbon savings, resilience, regulatory compliance, etc.)

WP5 – Further support

Given the probable evolution in the standard methodology and location-specific nature of the support that may be required in a study area, DESNZ recognises the need to access as yet undefined consulting support. DESNZ expect the need to potentially engage consulting resources with suitable expertise from Lot 2 Suppliers across the following areas to support zoning implementation at national, regional and local levels:

- Heat network technical advisory, design and delivery
- Project and programme strategic advisory
- Project, programme and design management, schedule, risk, quality, cost, assurance, integrated controls, reporting, business case, procurement and administration
- Stakeholder engagement and management
- Data collection and management
- Information management
- Model development, management and operation
- Communications, branding and marketing
- Heat network zone consultation, refinement and designation
- Central Authority design, development and operation
- Technical and non-technical training material development and training delivery





- Zoning coordinator support
- Lessons learned & programme/project review support
- Typical HNDU Feasibility and Detailed Project Development studies
- Legal advisory
- Financial advisory
- Commercial advisory

Lot 3 - National Zoning Model which is sub lotted as follows:

- Sub-Lot 3.1 Network Zoning Model Development
- Sub-Lot 3.2 Network Zoning Model Management and data analytics and management

Broadly, sub-lot 3.1 seeks to appoint Suppliers to enable the further development, operation and ongoing assurance of the NZM while sub-lot 3.2 seeks to appoint Suppliers to provide NZM delivery management services and associated data collection, management and analytical services to support the model and wider HNZ lifecycle.

Bidders may apply for one or more lots however the bids for each lot will be evaluated separately.

Call off Procedure / Allocation of work Lots 1 & 2

The ranking for the framework (city allocation) will be in order of consultant scoring at procurement stage. The highest scoring, successful consultant will be allocated the first project, in consultation with DESNZ, of one location then the second highest scoring consultant will be allocated the second project, in consultation with DESNZ. This will continue down the list of consultants and revolve back to the start of the consultants list until the cities are fully allocated.

A consultant can decline to take on additional cities after Allocation Round 1 if they are not able to resource further cities.

Services under these lots will be agreed on a Task Order basis, with the scope detailed in advance and budget allocated to it.

Call off Procedure / Allocation of work Lots 3

Services under Lot 3 of the Framework shall be awarded following a further competition.

When running a further competition, all suppliers awarded under the lot will be invited to bid.

Before suppliers are invited to bid, a document suite including a Specification of the requirements and Contract will be drafted.

Once the documents have been prepared in alignment with the Departments requirements, suppliers will be able to bid. Further competitions will be issued via the Departments eSourcing tool (Currently Jaggaer).



Suppliers will be allowed sufficient time to respond to the further competition and a permitted timeframe for bidders to raise clarification questions will be advised. Responses to clarifications will be shared to all suppliers invited to tender.

After the deadline for submissions has passed, suppliers will be evaluated based on the responses and assessment criteria defined and included within the tender pack

Framework Duration

The Framework duration shall be for a period of two years with optional extensions of 12 months + 12 months (2+1+1) from commencement of the Contract.

This total value of this framework is £42 million over the full term. The framework will not commit DESNZ to this spend and further approval will be sought if these options are exercised.