

Report for: Cabinet 17 January 2023

Title: Decentralised Energy Network Programme Decision to Start Design and Build (D&B) Procurement.

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Ward(s) affected: All

**Report for Key/
Non Key Decision:** Non Key Decision

1. Describe the issue under consideration

- 1.1. This report is to request approval to commence procurement for Design and Build (D&B) contracts for the Council's Decentralised Energy Network (DEN) programme.
- 1.2. Haringey Council has a programme of Decentralised Energy Network (DEN) projects which are an important element of its borough wide decarbonisation plan. Outline Business Cases (OBCs) for DENs at Tottenham Hale and Wood Green (TH/WG) were approved by Cabinet in December 2021, and for North Tottenham (NT) in January 2017.
- 1.3. The OBCs set out a detailed concept for the respective projects and gave details of what was required to prove the concept before a Full Business Case (FBC) could be prepared and presented to the Cabinet to make a final decision on whether to proceed with the projects. Cabinet approved the OBCs and provided authority for Officers to progress the projects to FBC. The FBC decision, if approved, would give authority to (amongst other things) enter into contracts to install infrastructure. Procurement of a contractor is required to inform the FBC on the costs that are to be incurred to build the infrastructure so that a decision can be taken on whether to proceed with the DEN project.

2. Cabinet Member Introduction

- 2.1. The Decentralised Energy Network work stream is a key project in our fight against Climate Change. If the Council agrees to implement this project, it will deliver a significant carbon reduction across the borough through the delivery of low carbon heating to our homes, businesses, and wider community.
- 2.2. Undertaking this procurement exercise now will enable the Council to secure binding costs for the works. This de-risks the project and will inform the Full Business Case (FBC) when it comes forward for determination.

- 2.3. The FBC is anticipated to be complete later in 2023 and will then be presented to Cabinet to allow the Council to make an informed decision on whether to proceed with the DEN project.

3. Recommendations

Cabinet is asked to:

- 3.1. Agree to commence the Design and Build (D&B) procurement for the Council's Decentralised Energy Network (DEN) Programme in accordance with the Utilities Contract Regulations (UCRs) utilising Negotiation with Prior Call for Competition as permitted under UCR 47.
- 3.2. Agree the procurement strategy set out in section 7 of this report.

4. Reasons for decision

- 4.1. Procurement of the DEN infrastructure must start in early 2023 in order to deliver the FBC by late 2023 and to support the Council to fulfil obligations in the Development Agreement at High Road West.
- 4.2. A full range of options has been considered and the proposed strategy will deliver best value to the Council.

5. Alternative options considered

Note a glossary is provided in Section 10 of this report to explain some terminology

5.1. Do nothing

If procurement is not commenced, the costs and contract terms for building DEN infrastructure would not be known and the Council will not be able to deliver the FBC for the DEN programme which in turn would not deliver the government requirements of the Heat Networks Investment Project (HNIP) funding.

This option has not been considered further.

See also further information on the Do nothing option in paragraph 5.1.1 of the Exempt Report,

5.2. Seek Third Party Investors

It is possible to run a procurement to select a third party investor who will then deliver the project directly (including procuring the infrastructure) or to simultaneously seek to find a third party investor as a partner while procuring the infrastructure (with this second route, the pool of investors is limited to those bidding for the works).

The OBCs for the various projects have considered the potential for 3rd party investors in the Haringey DEN projects. The projects are large, complex, at an advanced stage and the Council does not have control over significant parts of the projects. This makes it difficult to find a third party investor under either of the routes summarised above. Even if it were possible to attract third parties to invest

in Haringey's DEN projects, there are two principal reasons why this has been discounted. Firstly, there is a preference for the future provider created by the project to be publicly owned which suggests first seeking a partner and then procuring the infrastructure (rather than seeking an investor at the same time as procuring the assets). Secondly, the three opportunities are all time-limited and there is insufficient time for the Council to select a project partner and to then deliver the projects.

It is important to note two things. Firstly, that any effort to seek a third party investor will be time and resource intensive. Seeking to do this while also trying to get the projects off the ground is not recommended. Secondly, there is nothing preventing the Council from seeking investors in the projects at a later date.

This option has not been considered further.

5.3. Contract Aggregation Options

Given the above, it will be the Council procuring the infrastructure. The options for aggregating the different aspects of the project are discussed below.

5.3.1. Seek a turnkey Design, Build, Operate and Maintain Contract

One way of procuring infrastructure which helps to transfer performance risk is to combine the Design and Build contract with a long-term Operation and Maintenance contract into a single design, build, operate and maintain (DBOM) contract.

This option has been considered and discarded. The reason for ruling out this option is that the scale of the project is too large for the nascent district heating market in the UK. There is likely only a single contractor capable of bidding for such a contract and so there will be no commercial tension in the procurement (assuming the aforementioned bidder chose to bid).

Officers have run Soft Market Testing which supported the above conclusion. The Soft Market Testing also sought to attract companies from outside the UK to bid (working in partnership with those responsible for market development in the Government Departments for International Trade and for Business, Energy and Industrial Strategy) but no international interest has been forthcoming.

Therefore this option has not been considered further.

5.3.2. Seek to break the procurement into smaller Lots of Design, Build, Operate and Maintain Contracts

This option has been considered and discarded. The reason for elimination is because this would fragment the future Operation and Maintenance (O&M).

A single O&M contractor across the network simplifies interfaces, but the scale of a single O&M contract also leads to economies and allows for greater risk transfer to the contractor as it is set against a bigger opportunity.

A single O&M contract is therefore considered to give a better result and will need to be procured separately (and indeed this procurement is already in train by the Council).

The DBOM option (either turnkey or multiple smaller contracts) has therefore not been considered further.

5.3.3. Seek a turnkey Design and Build (D&B) Contract

Although it is not feasible to run an effective procurement for a turnkey DBOM contract, the mechanism explained in paragraphs 6.9 to 6.11 shows how D&B and O&M can be separated out in a way which achieves many of the benefits of a DBOM procurement and mitigates the downside of having to procure O&M and D&B separately (due to the lack of an effective market for DBOM for projects of this scale).

Given the Council will have an O&M contractor in place to oversee the construction of assets to the requisite standard, ideally the D&B would then be a single turnkey contract to allow the Council to transfer design risk and minimise the number of contractual interfaces.

This option was considered. However, similar issues apply as for DBOM in that there is only a single UK contractor capable of delivering a D&B contract of this scale.

Therefore a turnkey D&B contract has not been considered further.

5.3.4. Seek separate contracts for designing the entire system and building the entire system

While there would be multiple organisations capable of delivering the design of the entire system, there would only likely be one capable of delivering the entire build too, meaning that the procurement of the works would need to be broken up in order to create competitive tension.

If there are going to be multiple works packages, there are arguably benefits to separating out the design from the build and appointing a single designer across all works packages to help ensure compatibility between multiple works packages.

However, the downside of this is it means the Council has to accept design risk and also further increases the number of contractual interfaces complicating the project and increasing risk.

While a single design package was considered, it has been rejected as the alternative design review/oversight mechanism from the O&M contract (explained in paragraphs 6.9 to 6.11) is seen as an effective way of mitigating the risk from breaking up the works into smaller packages by ensuring the design is coordinated across the scheme and counters the need for the Council to take on the design coordination role directly.

Therefore separate contracts for design and construction have not been considered further.

5.3.5. Options to Use Existing Frameworks

A simple route to comply with the public procurement is to make use of a pre-procured framework should a suitable framework exist.

Officers have conducted a review of suitable frameworks (including e.g. Haringey's London Construction Programme, LCP, framework) and concluded that there are no suitable frameworks. This is because of the nature of the works (particularly buried pipes which do not easily fit within the LCP categories) and the expectation that the bidding organisations will be dominated by specialist SMEs.

Therefore it is recommended that a bespoke procurement be run.

6. Background information

6.1. Cabinet approved the OBCs for North Tottenham DEN in January 2017 and for Tottenham Hale and Wood Green DENs in December 2021.

6.2. These OBCs set out a detailed concept for the delivery of the projects and Cabinet delegated authority to Officers to progress the projects to FBC.

6.3. Works required to reach FBC include:

- Developing a proposal for the set-up and governance of an appropriate corporate vehicle to deliver DENs as the heat supplier and manager of the network;
- Development and negotiation of a Heat Offtake Agreement with Energetik for the purchase of low carbon heat;
- Negotiation of connection and supply agreements for the sale of heat to developments in the borough, in accordance with planning and legislative frameworks;
- Undertaking all relevant consultation and engagement work with stakeholders.
- Undertaking procurements to understand how much it will cost to construct and operate the networks (including preliminary design) and to identify the bidders best able to deliver the Council's requirements;

6.4. The first four tasks were covered by specific decisions by Cabinet at the OBC approval stage. The latter task is the subject of this report where formal approval is sought to commence the procurement (noting that Cabinet will be recommended to approve contract award decisions in the event that the FBC is approved).

6.5. The construction of the DEN project is subject to a decision on the FBC which is anticipated in late 2023. Should approval be agreed, construction would be likely to commence in Q2 2024 with completion of the first phase in 2027/28 (i.e. outside of the current Medium Term Financial Strategy (MTFS)). The project is a long-term endeavour and is likely to continue to expand into the 2030s.

6.6. The procurement will cover c. £65m of infrastructure which can be broken down to three main categories:

1. Energy centre fit-out (c.£19m for energy centres in High Road West and Wood Green);
2. Buried Pipes (c. £42m of buried pipes running from High Road West to Tottenham Hale, Broadwater Farm and Wood Green); and

3. Building connections (c.£4m of building connections across >20 customer sites)

6.7. The proposed Lots are shown in Table 1 below

Group	Lot	Scope	Estimated value £m
Energy Centres	1	High Road West Energy Centre 1	5
	2	High Road West Energy Centre 2	5
	3	Tottenham Hale Energy Centre	2
	4	Wood Green Energy Centre	6
Network	5	From High Road West to Tottenham Hale	10
	6	Around Tottenham Hale	3
	7	From Tottenham Hale to Broadwater Farm	7
	8	From Broadwater Farm to Westbury Avenue	7
	9	From Westbury Avenue to Wood Green	8
	10	From Wood Green to Alexandra Palace	8
Final Connections	11	Connections in Tottenham Hale	2
	12	Connections in Wood Green	2

Table 1 – Proposed Lots – see 5 for detail of strategy for Lots

6.8. This procurement strategy has been developed through the following processes:

1. A Soft Market Testing event was held in September 2021 in collaboration with LB Sutton Council and with support from the Government Departments of Trade and Industry and Business, Energy and Industrial Strategy. Over 50 organisations attended and a dozen completed detailed feedback questionnaires. This has provided useful data on market capabilities and preferences which has fed into the strategy. Section 7 sets out the recommended procurement strategy and explains how it has been shaped by the Soft Market Testing.
2. The project team has developed a procurement strategy and stress tested proposals for evaluation and scoring. This has included obtaining external legal advice on the compliance of the proposed approach with public procurement regulations

6.9. It is worth noting that a consequence of the elimination of the DBOM options (as explained in 5.3.1 and 5.3.2) means that O&M will be procured separately from the Design/Build of the network and that a single contract is being sought. This procurement is in progress (the Council began procurement for a contractor in late-2021 and the second stage is due to complete in January 2023).

6.10. This O&M procurement is actually for two contracts; one contract for the O&M of Housing Revenue Account (HRA) heating systems (where the D&B of systems such as Broadwater Farm, Rosa Luxemburg Apartments and Walter Tull House has been procured separately meaning a separate O&M contractor is required) and a second contract that can be used for the three new DEN projects in North Tottenham, Tottenham Hale and Wood Green.

6.11. These O&M contracts include obligations on the contractor to oversee the design and installation of the assets they will operate and places long-term performance targets and minimum performance guarantees on the O&M contractor. There will be a contractor in place that will take on any infrastructure being designed and built by others but who is incentivised to ensure the assets are built to the right standard. Although less effective in transferring risk than DBOM (because some residual risk around the design will sit with the Council, especially for systems completed before the O&M contractor is appointed), this contractual construct does transfer significant risk to the O&M contractor and so achieves many of the outcomes of a DBOM procurement while also being compatible with the nascent market in the UK (where there is insufficient competition for projects of this scale to use the DBOM route effectively as set out above).

7. Proposed Procurement Strategy

7.1. The process of elimination used to determine the key aspects of the proposed procurement strategy is set out in Section 5

7.2. The remaining option is to procure Design and Build and Section 5 also set out why it was not feasible to either procure a turnkey D&B contract or to use a framework.

7.3. That leaves the recommended strategy as procuring D&B for the infrastructure via a number of Lots using a bespoke procurement. This section sets out the recommended strategy in more detail and explains how it responds to the outcome of the Soft Market Testing.

7.4. Seek to break the Design and Build into Lots

7.4.1. It is recommended that the D&B procurement is broken down into defined Lots. This recommended approach was supported through the soft market testing undertaken. The nascent district heating market in the UK is fragmented and dominated by small businesses. These smaller businesses do not have the capacity to deliver a project of the scale of the Haringey DEN individually but the capacity exists within the market to deliver it collectively.

7.5. Strategy for Lots

7.5.1. The recommended strategy for Lots will aim to

- i) separate out different types of work (such as energy centre fit-out, buried pipe and final building connections).
- ii) have defined geographic areas and
- iii) aim for a contract value in the £5-15m range (the bracket where there are numerous businesses with the capacity to deliver in order to ensure there is strong competition for the various contracts in order to create commercial tension and drive best value for the Council).

7.5.2. The procurement will seek to encourage interested parties to bid for multiple Lots (over and above their capacity to deliver) to maximise competition across Lots. To ensure this does not lead to bidders overstressing themselves, bidders will have the number of bids they can win limited by their financial capacity.

7.5.3. Note that the use of Lots does not preclude a single bidder from winning all of the Lots (although there is only expected to be a single UK company bidding with the capacity to deliver all Lots).

7.5.4. Further information on the proposed Lots is included in Table 1 in Section 6.

7.6. Route to Market and Applicable Regulations

7.6.1. Legal advice has been sought on the applicable regulations for this procurement. Having considered that advice, officers have concluded that the nature of the works/services being procured means it should be procured under the Utilities Contract Regulations 2016, UCR, rather than under the Public Contracts Regulations 2015, PCR, (which the vast majority of the Council's procurements need to comply with)

7.7. Choice of Procedure

7.7.1. When running a procurement under the UCR it must comply with a prescribed procedure. Procedures include e.g. open, restricted, competitive dialogue, negotiated (with prior call for competition), etc.

7.7.2. The soft market testing conducted by Officers has revealed that a key concern for bidders is the risk allocation within contracts. Therefore it is proposed to use the negotiated (with prior call for competition) procedure as this allows for a two stage tender. Bids submitted at the end of the first stage are binding and the Council can place orders based on initial tenders if these initial tender returns are considered to offer an acceptable level of quality and price. However, at this stage bidders are also invited to propose changes to the contract terms that will increase Value for Money (VFM) to the authority. It is expected that bidders will identify some key contractual terms that could be altered and these may be of benefit to the Council. If this is the case, a period of structured dialogue is conducted with the bidders and the Council can amend the contract terms if they choose to do so before inviting a second (and final) set of bids.

7.7.3. Because it is expected that there will be benefit in discussing key aspects of the procurement with bidders to improve VFM, the negotiated (with prior notice) procedure is recommended.

7.8. Evaluation, scoring, choice of contract, etc.

7.8.1. Operational matters such as detailed evaluation criteria, scoring, choice of contract, etc. will be determined by Officers who will work with Strategic Procurement to ensure the procurement is compliant.

7.9. Social Value

7.9.1. The DEN programme has identified a number of wider benefits that can be delivered through the projects and has a Benefits Realisation Strategy which oversees the project to ensure the benefits are delivered. Many of the benefits are delivered via the procurement whether that be related to community wealth

building, local jobs/apprenticeships, supporting the Councils environmental and green priorities, or delivery of an efficient and reliable network.

- 7.9.2. Officers will finalise the approach to social value building on work to date on similar procurements which have used the Social Value Portal and the National Themes Outcomes and Measures.

7.10. Timescales

- 7.10.1 The procurement will launch in late-January and is anticipated to conclude in October 2023 to feed into the FBC for the projects.

7.11. Contract Award

- 7.11.1 Once the procurement exercise has been completed a report will be tabled for Cabinet to decide on the award of contracts in the event that Cabinet approves the FBC for the Haringey DEN Programme. Should the FBC show that the Haringey DEN Programme is not viable, then this process of procurement will stop.

- 7.11.2 Note also that it is yet to be decided whether the Council will make use of the contracts (and then transfer assets to the proposed Council-owned energy company) or whether the contracts will be novated to the energy company. The procurement will be designed in a way that allows flexibility on this matter.

8. Contribution to strategic outcomes

- 8.1. The development of the DEN project is reflected in Borough Plan commitments which require the Council to explore DENs.
- 8.2. The Council declared a Climate Emergency in March 2019 and adopted a Climate Change Action Plan (CCAP) in March 2021. The DEN Project is the biggest single contributor to delivering the CCAP goal of being net zero carbon by 2041.
- 8.3. There is policy support for the development of DENs across a number of national, local and regional priorities. For example, the National Planning Policy Framework, the London Plan and the Council's Local Plan require planning authorities to progress DENs where viable. Working in partnership with the GLA and other boroughs also shows that a large trans-borough DEN fed from the NLWA's Energy Recovery Facility is the leading method for decarbonising heating in Haringey.
- 8.4. The Council's Affordable Energy Strategy (2020) highlights that DENs can be a more efficient and affordable form of heat than the alternatives. Alongside this, municipally owned energy companies can often be designed to support those in fuel poverty with direct and indirect financial support.

9. Statutory Officer Comments (Director of Finance (procurement), Head of Legal and Governance, Equalities)

9.1. Finance

- 9.1.1. The recommendation of the report is to undertake a procurement process for a range of requirements for the DEN programme. The cost of the procurement, estimated at £450k, will be funded from the commercialisation grant that the Council received from HNIP.
- 9.1.2. The tender returns will be an essential component of the FBC for the DEN's. The Pre-tender estimate of the works is £65m. Once received the costs of the works will be input to the financial model and an assessment made of the impact on the affordability of the DEN programme. The acceptance of the recommendations does not mean that the Council will be committing to any course of action.

9.2. Procurement

- 9.2.1. Strategic Procurement have been consulted in respect of the procurement strategy stated in this report. Strategic Procurement are supportive of the use of Negotiation with Prior Call for Competition as permitted under the Utilities Contract Regulations (UCRs) and the approach to procuring the separate packages for the DEN project,
- 9.2.2. The project undertook an initial pre-market engagement exercise to assess the capability within the market. The findings from the pre-market has informed the Strategy being recommended in section 7 of this report.
- 9.2.3. Splitting into packages will introduce interfaces between the different elements of the work and these will need to be carefully managed as this is an area of risk in relation to warranties between different potential contractors responsible for the separate packages.
- 9.2.4. Strategic Procurement will be supporting the procurement activity throughout the project, alongside experienced consultants to provide assurance in respect of compliance and best value is achieved for the Authority.
- 9.2.5. See also paragraphs 9.2.6 – 9.2.8 in the Exempt report

9.3. Legal

- 9.3.1. The Head of Legal and Governance confirms there are no legal reasons preventing Cabinet from approving the recommendations in the report.
- 9.3.2. In addition, see paragraphs 9.3.3 and 9.3.4 in the exempt report.

9.4. Equality

- 9.4.1 This recommendation to Cabinet to approve the launch of the D&B procurement and progress more detailed work on the FBC allows equalities issues to be considered in more detail in advance of further decisions being made. Any further delegated authority and Cabinet decisions will need to consider equality issues and some may require detailed Equality Impact Assessments.

9.4.2 The Council has a Public Sector Equality Duty (PSED) under the Equality Act (2010) to have due regard to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act
- Advance equality of opportunity between people who share those protected characteristics and people who do not
- Foster good relations between people who share those characteristics and people who do not.

9.4.3 The three parts of the duty applies to the following protected characteristics: age, disability, gender reassignment, pregnancy/maternity, race, Page 10 of 12 religion/faith, sex and sexual orientation. Marriage and civil partnership status apply to the first part of the duty. In the discharge of its functions, the Council also considers the impact on those who experience socioeconomic disadvantage with regards to the three duties of the PSED.

9.4.4 The planned locations for DENs in Haringey in the OBCs are Tottenham Hale, and Wood Green. It follows that those most affected by the decision will be the residents of these areas. Haringey Ward Profiles indicate that these areas tend to have younger populations with higher proportions of residents coming from BAME communities.

9.4.5 The overall likely impact of the DEN Project will be to reduce local carbon emissions and air pollution. It is notable that climate change and air quality are likely to have disproportionate impacts on vulnerable groups. There is currently no indication that this decision will have any adverse effects for any individual or group who share protected characteristics.

10. Glossary

Term	Explanation
Decentralised Energy Network	This refers to a network of buried pipes transporting heat from heat sources (in Energy Centres) to heat consumers in buildings.
Design, Build, Operate and Maintain Contract	This type of contract sees a single main contractor responsible for designing the system, constructing it and then running and maintaining that system. Alternative ways of procuring a system would break this down into smaller scopes (see e.g. 'operation and maintenance' and 'design and build'). A design, build, operate and maintain contract helps buying authorities reduce risk as a single entity is responsible if the system does not work due to either how it was designed, how it was built, how it is being run or how it has been maintained.
Design and Build	A design and build contract is a works contract where the contractor is responsible for finalising the design of a scheme and then building it. It helps buying authorities reduce risk as a single entity is responsible if the system does not work due to either how it was designed or how it was built.

Term	Explanation
Energy Centres	Energy centres are the hubs on decentralised energy networks from which heat is distributed to customers. Energy centres will typically have pumps to distribute energy around the network of buried pipes as well as plant for generating and/or storing heat prior to its distribution.
Final Connections	In the context of decentralised energy networks, final connections refers to the point of connection between a new network and an existing network. In many cases, a DEN will connect to an existing building with an existing smaller network within it.
Lots	Lots break down a procurement into separate packages of works/services. Bidders are asked to provide a separate quotation or proposal for each Lot. The overarching procurement will wrap several Lots together so that the entirety of a scheme is delivered in a single procurement. Splitting into Lots can help generate competition and spread risk but is more work for the buying authority to manage and introduces risks at the interfaces between different packages
Networks	In the context of decentralised energy networks, network refers to the system of pipes between energy centres and final connections
Operation and Maintenance	An operation and maintenance contract is a services contract with a provider who will run and repair a system on behalf of the system owner to agreed standards as set out in the contract.
Soft Market Testing	This is a process of structured engagement with potential suppliers to help buyers such as the Council understand the requirements and preferences of the wider market. This helps buyers shape their purchasing strategy to better fit with what the market is willing / able to deliver.
Third Party Investors	This refers to investors in the DEN project other than the Council (i.e. someone putting money into the project with the expectation of generating a return)
Turnkey	A turnkey contract refers to the delivery of a complete system that is delivered ready for use

11. Use of Appendices

Exempt Appendix

12. Local Government (Access to Information) Act 1985

N/A