

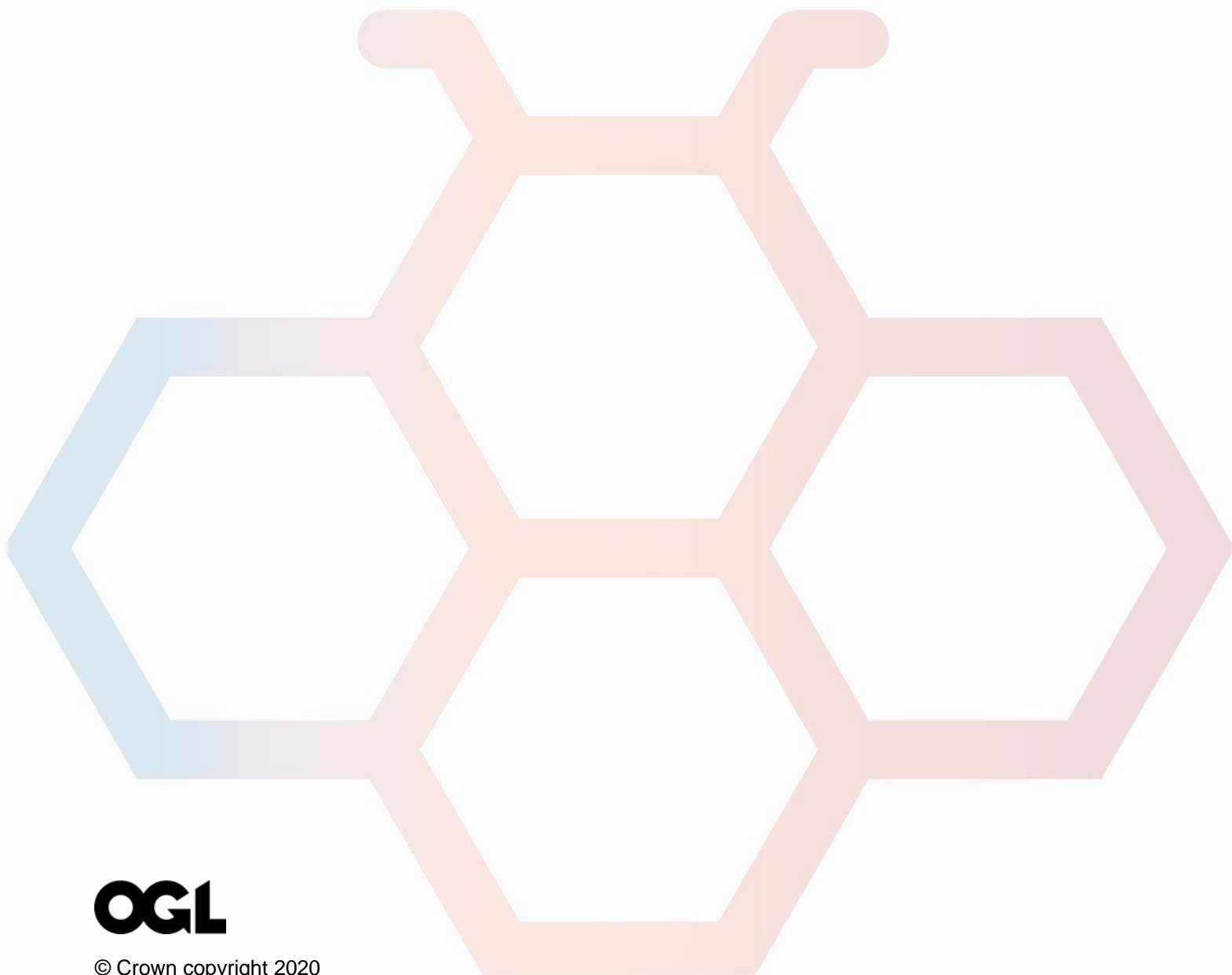
BHIVE Dynamic Purchasing System

Customer Guidance

Updated March 2023



Department for
Business, Energy
& Industrial Strategy

**OGL**

© Crown copyright 2020

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at:
BHIVE@tp-heatnetworks.org

Contents

Joint Statement from Crown Commercial Service (CCS) and the Department for Business, Energy and Industrial Strategy (BEIS) _____	5
Introduction _____	6
What is a Dynamic Purchasing System (DPS)? _____	7
Who can use the DPS? _____	8
What funding is available within BHIVE? _____	9
What is the duration of BHIVE DPS? _____	10
What are the benefits of BHIVE? _____	10
What is the estimated value of the BHIVE DPS? _____	11
What is the current situation? _____	11
What are the timelines for BHIVE DPS? _____	11
How does BHIVE work? _____	12
How to use the BHIVE DPS _____	13
Project Preparation _____	13
BHIVE Process Summary _____	15
Step 1: Defining your Requirements _____	15
Getting approvals to spend _____	15
Register on BHIVE _____	15
Defining your requirements _____	16
Agreeing how you want to contract with the selected Funding Provider _____	17
Pre-market engagement (optional) _____	17
Step 2: Creating your Tender Pack and Evaluation Panel _____	19
Information Day (required for Lot 1, optional for Lot 2) _____	19
Call for Competition Written Submission: _____	19
Creating an evaluation panel _____	20
Defining your evaluation criteria _____	20
Step 3: Issuing a Call for Competition _____	22

Refresh funding Lot and Services _____	22
Call for Competition _____	22
Step 4: Clarification and Evaluation _____	23
Funding Provider clarification period _____	23
Evaluating written responses _____	23
Step 5: Award of Contract _____	24
DPS Charges _____	26
Annex 1 _____	27
Lot 1 Services _____	27
Annex 2 _____	29
Lot 1: Investment Summary Template _____	29
Annex 3 _____	34
Lot 2: Asset Finance Term sheet _____	34
Annex 4 _____	36
Indicative Timetable for Procurement _____	36
Annex 5 _____	37
Standardised Due Diligence Set _____	37
Using the Standardised Due Diligence Set _____	37
Introduction _____	37
How financial investors identify and assess risk _____	37
The Financial Model _____	40
Using the SDDS _____	41
Commercial Models and Risk Allocation _____	43

Joint Statement from Crown Commercial Service (CCS) and the Department for Business, Energy and Industrial Strategy (BEIS)

Crown Commercial Service (CCS) and the Department for Business, Energy and Industrial Strategy (BEIS) have successfully collaborated for many years with the development and provision of end to end energy solutions for public sector organisations.

With the introduction of carbon net zero targets, we are pleased to come together once again with the development of two complementary solutions that will support public sector organisations in securing their end to end net zero journey.

Understanding the challenges faced by organisations, BEIS has developed a front-end financial service agreement which will provide customers with a competitive route to secure project funding for heat networks. BEIS has also provided a £1bn funding scheme via the Public Sector Decarbonisation Scheme, £500m via the Local Authority Delivery scheme, and launched the £288m Green Heat Network Fund in March 2022. BEIS also launched the Heat Network Efficiency Scheme¹ in February 2023 and will deploy up to £30m of capital grants and £2m of revenue grants.

More information on CCS' route to market can be found [here](#) as well as a [video](#) and [brochure](#). Should you require more information and assistance, please contact CCS at info@CrownCommercial.Gov.UK.

¹ <https://www.gov.uk/government/publications/heat-network-efficiency-scheme-hnes>

Introduction

The Department for Business, Energy and Industrial Strategy (the “Administering Authority”) has established a Dynamic Purchasing System (“DPS”) for heat networks - the BEIS Heat Investment Vehicle (“BHIVE”) DPS. The BHIVE DPS allows public sector heat network owners/developers in England and Wales (referred to as Contracting Authorities) to procure services ancillary to an equity investment, and asset finance, into their Heat Network Projects, from a range of potential providers (referred to as “Providers”).

UK heat networks represent one of the biggest growth potentials for energy networks in Europe. There are over 14,000 heat networks in the UK, providing heating and hot water to approximately 480,000 consumers. Our analysis shows that heat networks could provide about 20% of total heat by 2050. They currently provide about 2-3%. Delivering on the ambition will require investment of £60 – £80 billion and significant public and private sector collaboration.

The UK Government is working with industry and local authorities – and investing half a billion pounds in funds and programmes – to develop new heat networks and improve existing ones through the Heat Network Transformation Programme. This brings together a set of inter-related projects to set the UK on a pathway to realise the potential of low carbon heat networks. These include:

- Accelerating the deployment of low carbon heat through the Green Heat Network Fund (GHNF) and supporting heat networks through the final year of the Heat Networks Investment Project.
- Improving the performance of heat networks through raising consumer standards, introducing regulation, and providing financial support through the Heat Networks Efficiency Scheme.
- Introducing heat network zoning by 2025 to identify areas where heat networks are the lowest cost solution for decarbonising heat.
- Providing grant funding and guidance for heat network project development to local authorities, registered social landlords, NHS Trusts, universities, government departments and property developers through the Heat Networks Delivery Unit.
- Building up skills in the sector to encourage investment and jobs growth.

The Heat Network Investment Project (“HNIP”) was a £320m project that secured an increased number of heat networks in England and Wales and began to stimulate increased external investment to create a self-sustaining heat network market and the final funding closed in January 2022. The Green Heat Network Fund (GHNF) is the successor scheme. The BHIVE DPS will play a key part in creating a market that is economically attractive to investors, delivers and sustains jobs, exports and provides economic benefits and continues to promote the UK as one of the top global investment destinations.

This guidance has been produced by the Administering Authority to help you (the Customer or Contracting Authority) to understand how to use the BHIVE DPS. This document covers:

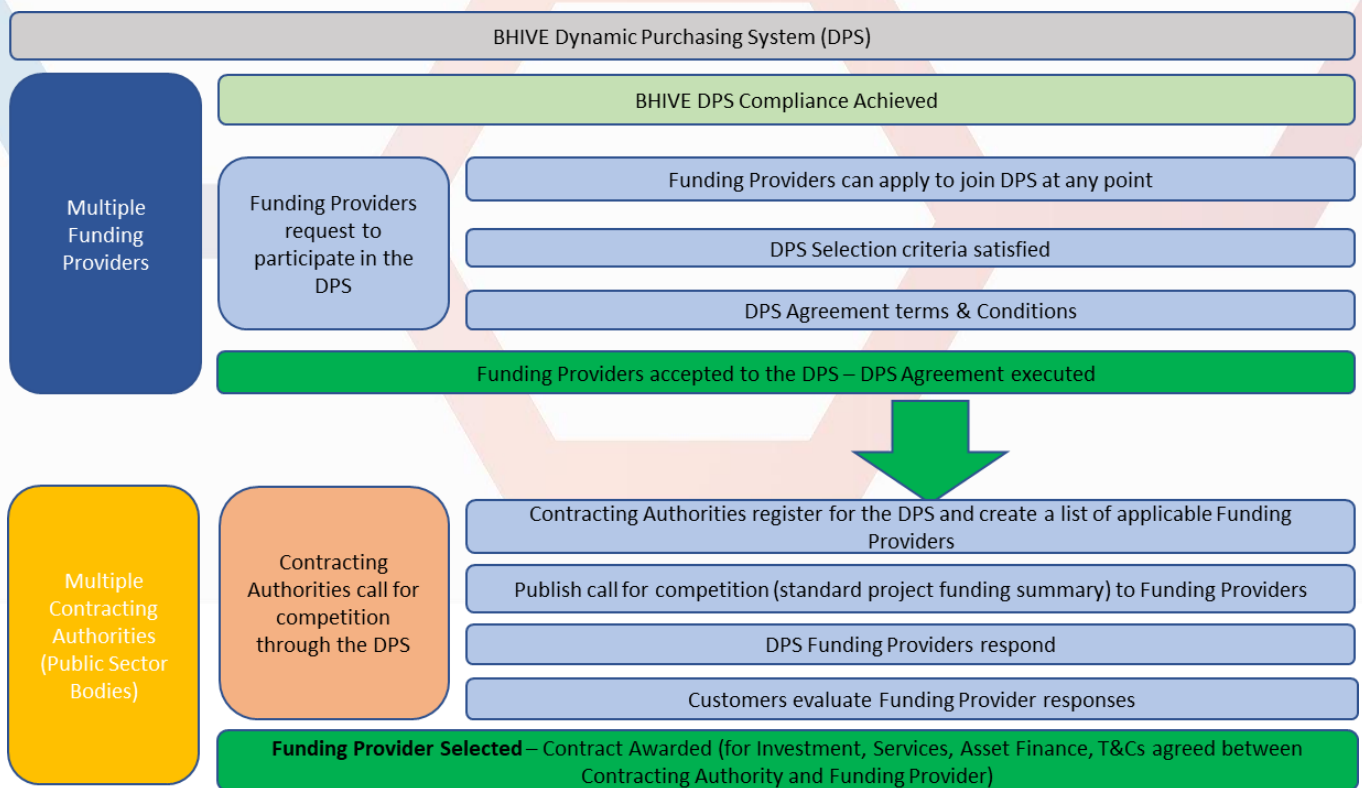
- The scope of the BHIVE DPS
- Preparation by Customers before using the DPS, and
- How to efficiently run a Call for Competition on the DPS to select the most appropriate Provider

Further assistance on how to use the DPS and to access the BHIVE DPS is available via the following link:

<https://tp-heatnetworks.org/bhive/>

What is a Dynamic Purchasing System (DPS)?

A DPS is a public sector sourcing tool for common goods and services under regulation 34 (Dynamic Purchasing Systems) of the PCR 2015. Providers can apply to join the DPS at any point and do not require any special IT equipment as a DPS eliminates unnecessary up-front activity for the bidder.



Who can use the DPS?

The BHIVE DPS is available to all Public Sector Bodies in England and Wales which are within the scope of the definition of "Contracting Authority" in regulation 2(1) of the PCR 2015 and/or Schedule 1 PCR 2015.

This includes any of the following:

- Ministerial government departments;
- Non ministerial government departments;
- Executive agencies of government;
- Non-Departmental Public Bodies (NDPBs), including advisory NDPBs, executive NDPBs, and tribunal NDPBs;
- Assembly Sponsored Public Bodies (ASPBs);
- Police forces;
- Fire and rescue services;
- Ambulance services;
- Maritime and coastguard agency services;
- NHS bodies;
- Educational bodies or establishments including state schools (nursery schools, primary schools, middle or high schools, secondary schools, special schools), academies, colleges, Pupil Referral Unit (PRU), further education colleges and universities;
- Hospices;
- National Parks;
- Housing associations, including registered social landlords;
- Third sector and charities;
- Citizens advice bodies;
- Councils, including county councils, district councils, county borough councils, community councils, London borough councils, unitary councils, metropolitan councils, parish councils;
- Public corporations;
- Public financial bodies or institutions;
- Public pension funds;

- Central banks; and
- Civil service bodies, including public sector buying organisations.

The full lists of eligible bodies can be found at:

- Those listed and maintained by the Government on their website at:

<https://www.gov.uk/government/organisations>

- Those listed and maintained by the Office of National Statistics (ONS) at:

<https://www.ons.gov.uk/methodology/classificationsandstandards/economicstatisticsclassifications/introductiontoeconomicstatisticsclassifications>

BHIVE DPS is open to Contracting Authorities wanting to access funding and, where relevant, ancillary services for their heat network projects to:

- finance a new heat network
- finance the expansion of an existing heat network, or
- facilitate the sale of part, or all, of an investment in a mature heat network - for example, where a Contracting Authority wishes to sell its stake in an operational heat network. This could also be part of a wider refinancing of the project.

The BHIVE DPS is not limited to projects receiving funding from the Heat Network Investment Project (HNIP), Green Heat Network Fund (GHNF) or from the Heat Network Delivery Unit (HNDU) – it is also open to Contracting Authorities who do not expect to receive any funding from these government schemes.

It is important that heat network projects coming to market through BHIVE are sufficiently well developed to meet Providers' expectations and requirements, and to be capable of attracting funding (taking account of the need, where relevant, for any commercialisation services).

What funding and services are available within BHIVE?

The funding categories available under BHIVE are divided in to two Lots, as follows:

- Lot 1: Equity Finance
- Lot 2: Asset Finance

For Lot 1, in addition to the provision of the funding itself, Contracting Authorities may also ask Funding Providers to provide a range of services which are ancillary to the funding – these are primarily commercialisation services i.e. services that relate to the development and finalisation

of the commercial arrangements for the project, including any financing and the procurement and negotiation of contracts, including supply chain contracts and energy supply contracts. Examples of these services are set out in Annex 1.

Any services procured under BHIVE must be ancillary to, and provided in conjunction with, the funding. BHIVE is not available for customers to procure supplies of works or services that are not funding-related, such as construction or operation and maintenance services, or stand-alone advisory services, such as financial advice or legal services.

What is the duration of BHIVE DPS?

The BHIVE DPS has been extended and will expire on 31st March 2025. In the event the BHIVE DPS is terminated, the Administering Authority will give Providers no less than three (3) months written notice.

What are the benefits of BHIVE?

BHIVE has the potential to deliver a number of significant benefits to the market:

Accessibility: By providing a central market place of Providers, all of whom have expressed an interest in funding heat networks and demonstrated that they have access to funds and are able to provide the ancillary services, BHIVE will provide an efficient route for Contracting Authorities to access funding and funding-related services for their heat network projects.

BHIVE will provide an effective way for Providers to access heat network funding opportunities.

Standardisation: Over time, and in conjunction with the HNIP Standardised Due Diligence Set (SDDS) and the Sales, Operations and Maintenance Set (SOMS), the BHIVE DPS will help to reduce the timescales and costs of funder due diligence and approvals and make for a more efficient fund raising process.

Flexibility: BHIVE will be diverse enough to provide a wide range of skills and experience alongside the funding, and potentially facilitate the creation of a secondary investment market.

Value for Money: Through competitions for individual projects, BHIVE will provide the means for Contracting Authorities to access the most economically advantageous terms for their project, with the optimum capital structure and lowest cost of capital.

In addition, the use of a DPS will provide benefits to both Providers and Contracting Authorities:

- A simpler and quicker process for Providers.
- A faster process for Contracting Authorities to access Providers.
- Use of an automated, electronic process, to streamline procurement.
- A more flexible way for Providers to join and update responses at any point.

What is the estimated value of the BHIVE DPS?

Initial indications estimate the value could be up to £150m.

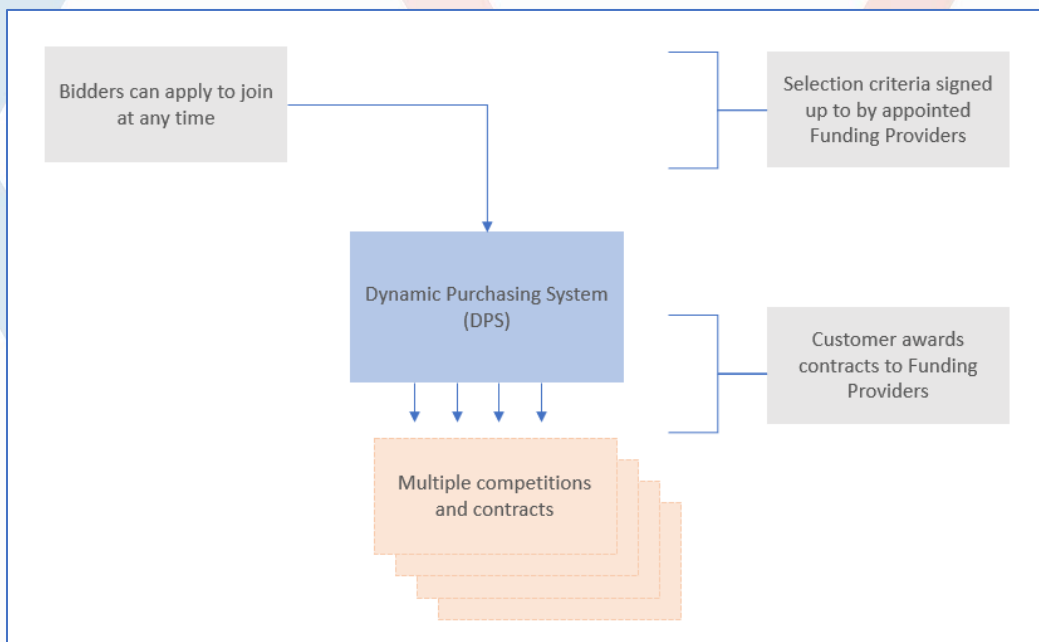
What is the current situation?

BHIVE DPS is a new offering from the Administering Authority.

How does BHIVE work?

The BHIVE DPS is a wholly electronic process. This will be managed by Triple Point Investment Management LLP (“TPIM”) through the ProContract e-procurement system. There is no charge for Providers to get appointed to the ProContract System. For any technical support queries pertaining to the ProContract System please contact bhive@tp-heatnetworks.org

Providers will access opportunities on the BHIVE DPS through a two-stage process. The first is the selection stage, where Providers answer a series of questions to pre-qualify for a particular funding Lot. Once qualified as a Provider, they are then eligible to participate in the second stage of the process: the Call for Competition. This is where a Contracting Authority runs a competition for its project and selects a Provider based on the qualitative and quantitative assessment criteria defined in the Call for Competition. If a Provider is successful in a competition, it will then be awarded a contract.



How to use the BHIVE DPS

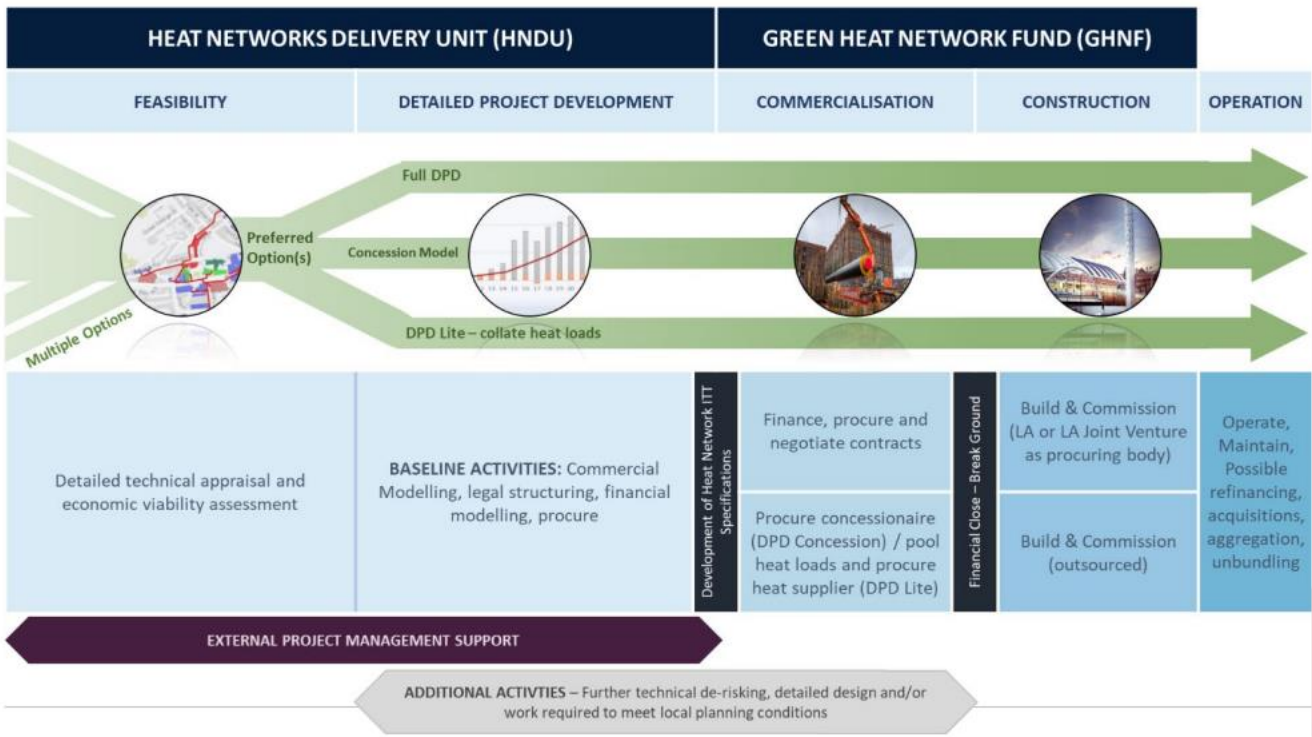
References in this section to “you”, means a Contracting Authority wishing to use the BHIVE DPS.

Project Preparation

Successful use of BHIVE depends on you being able to bring a project to market that is sufficiently well developed to meet Providers’ expectations and requirements, and to be capable of attracting funding (taking account of the need, where relevant, for any commercialisation services).

Whilst Lot 1 of the BHIVE DPS can be used for projects that have reached the later stages of commercialisation, or that are already in construction or operations, we expect that most projects will come to market at earlier stages of commercialisation and will require some or all of the services set out in Annex 1. Based on the BEIS Heat Network Delivery Unit Guidance (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1076502/hndu-r12-guidance.pdf), we would expect projects to have completed Feasibility and, in most cases, Detailed Project Development, prior to coming to market through the BHIVE DPS – see the diagram below.

Heat Network Development Stages

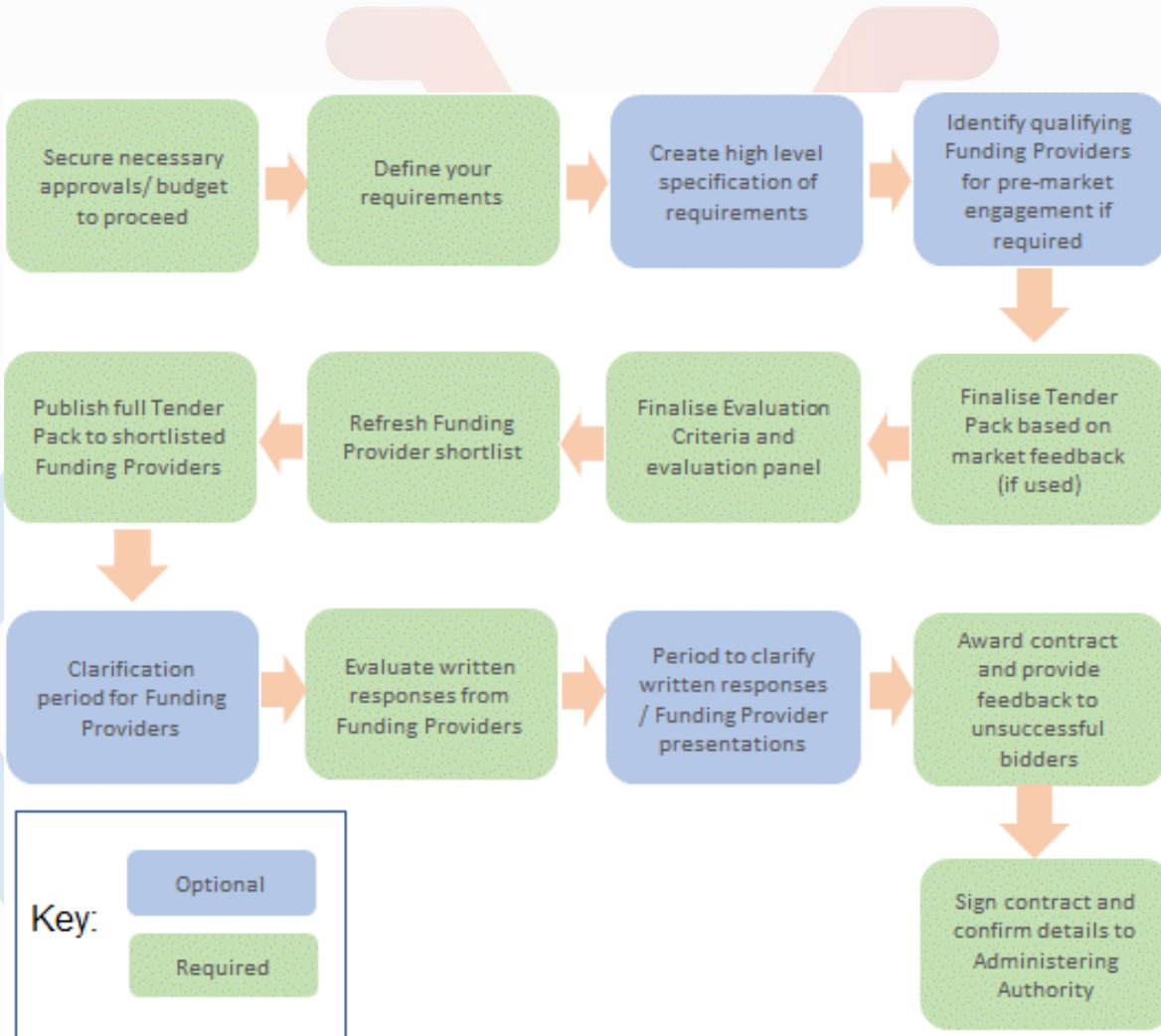


You should be aware of the due diligence requirements of Providers and prepare in advance of using the DPS to be able to meet these requirements. This is likely to require the appointment of suitable professional advisors (e.g. legal, technical and financial advisors). Further guidance on investor due diligence requirements is provided in Annex 5.

TPIM has been appointed to act as the Administering Authority's agent to provide you with support in using the BHIVE DPS. You can contact TPIM on the following email BHIVE@tp-heatnetworks.org. TPIM will arrange a call or meeting with you to discuss your project, its stage of development and your objectives from the procurement. TPIM will provide ongoing support as described in the following sections.

BHIVE Process Summary

The process diagram below summarises the best practice approach to using the DPS. The following sections describe these processes in more detail.



Step 1: Defining your Requirements

Getting approvals to spend

Before using BHIVE, you should ensure you have applied for and received the necessary budget approvals and agreed your procurement strategy.

Register on BHIVE

You can register to use BHIVE at <https://tp-heatnetworks.org/bhive/>

You will need to agree to the Access Agreement in order to access it.

Defining your requirements

You will need to define your requirements clearly for Providers to bid against. In doing so, you should consider:

- the funding Lot you want to use
- for Lot 1 only, the Services that are relevant to your requirements and
- the type, and level of detail, of information that Providers will need to provide meaningful bids.

The Investment Summary and Asset Finance templates provided in Annex 2 and 3 provide further detail on what information Providers will need. TPIM can provide support to help you understand Provider requirements.

In relation to Lot 1: Equity Finance, the Investment Summary will need to reflect the development stage of your project and the level of information available. If your project is in commercialisation some of the information listed in Annex 2 may not be available or required (or estimates may only be available) at the time of the Call for Competition. This is likely to be the case where you require some or all of the Lot 1 Services to commercialise your project.

You will need to consider carefully the scope of Lot 1 Services required and map those Services against the Investment Summary Template before finalising your Call for Competition Tender Pack. You will need to agree how the Services will be paid for – this might involve Funding Providers bidding an amount(s) for the cost of providing the Services, (i) in the event the project achieves financial close/Final Investment Decision or (ii) in the event the project is aborted during commercialisation (for example, due to insurmountable barriers being identified as part of commercialisation).

It will also be important for you to consider what project requirements or outputs you want to set out in the Call-Off Contract/Shareholder Agreement. For example, rather than specifying the heat network in terms of *inputs* – for example, specific heat/cooling technologies and locations, identified heat loads, length of pipework etc. - you might, instead, specify *outputs* for the network, such as the carbon intensity of heat, minimum heat loads to be connected, an indicative price of heat (or a mechanism to establish it) and/or minimum service standards (call-outs, outages, speed of hot water delivery).

TPIM can provide support and guidance on how to bring your project to market.

Agreeing how you want to contract with the selected Provider

The contracting arrangements for BHIVE depend on the funding Lot. The following draft contracts are included with the DPS documentation:

- Lot 1: Equity finance – standard Call-Off Contract and Shareholder Agreement
- Lot 2: Asset finance – standard Asset Finance Term Sheet

For Lot 1 you will need to develop the draft agreements to reflect your specific requirements.

For Lot 2, Providers will submit their lease/asset finance agreements as part of their bid submissions.

You should use the standard contracts to form your agreements, as they are aligned to the contract terms set out in the DPS agreement. There are some sections of the contracts that you can/will need to alter depending on your organisation and requirements.

Please note that the standard form documents are not a replacement for independent, specialist advice and you should take appropriate legal, financial, tax and technical advice in using the documents.

Pre-market engagement (optional)

You may find it useful to communicate with Providers ahead of finalising your Call for Competition, by undertaking a pre-market engagement exercise. Pre-market engagement will allow you to gather feedback from the market that may influence your requirements.

Pre-market engagement should be undertaken in a fair and transparent way with all Providers who meet the funding Lot and, for Lot 1 only, the Service requirements (these are relevant Providers referred to below). You should provide all relevant Providers an equal opportunity to participate.

If you decide to undertake pre-market engagement ahead of your Call for Competition, you must prepare an outline of your requirement before you contact them. This could be done using a draft Investment Summary or Asset Finance Term Sheet. You will need to contact all relevant Providers through the ProContract system.

This stage is for informal information gathering only and Providers that do not engage at this stage should still be invited to participate in the Call for Competition. All Providers who meet the funding, and for Lot 1 only the Service, requirements should have the option to bid when you issue your Call for Competition.

Dos and don'ts checklist for pre-market engagement:

Do

- ✓ Contact all relevant Providers
- ✓ Provide a reasonable time limit to email requests to make sure Providers know when they need to respond by
- ✓ Keep an audit trail of all communication

Don't

- X Limit contact to Providers that you know
- X Contact Providers in different ways; each Provider should be given an equal opportunity to respond (e.g. don't email some Providers and phone others to discuss your requirements)
- X Forget that all relevant Providers can bid when you issue your final specification



Step 2: Creating your Tender Pack and Evaluation Panel

Information Day (required for Lot 1, optional for Lot 2)

For funding under Lot 1 you will be required to hold a Call for Competition Information Day as part of the Call for Competition process. This should include a presentation of the proposed heat network project and an opportunity for attendees to raise questions and/or provide comments. All information presented at the Information Day should be made available to any party unable to attend, this should include any questions and responses (the Information Day Pack).

Call for Competition Written Submission:

A Call for Competition written submission is required for both Lot 1 and Lot 2. You will need to finalise the competition Tender Pack before issuing a Call for Competition. The Tender Pack contents will depend on the funding Lot, but should include, as a minimum, the following:

Lots	Tender Pack minimum requirements
Both Lots	Response Requirements and Evaluation Criteria
Lot 1: Equity Finance	Project Specification (including Investment Summary) Draft Call off Contract Draft Shareholders Agreement
Lot 2: Asset Finance	Asset Finance Term Sheet

As part of the tender pack, you can request the Provider's SQ response, ask for updates to responses and/or ask the provider to reconfirm any data/information. This includes evidence for any of the responses that were self-certified as part of the SQ and any other information which is permitted to be requested pursuant to the Public Contracts Regulations 2015.

If you intend to allow face-to-face (or virtual) presentations from Providers prior to contract award, then this should be stated in the Response Requirements.

A template Investment Summary is included in Annex 2. This sets out key aspects of the project that will be relevant to investors for Lot 1: Equity Finance (noting that not all the information may be available for projects in commercialisation).

A template Asset Finance Term sheet is included in Annex 3. This summarises the key terms of the asset finance relevant to Lot 2: Asset Finance. Certain terms, such as pricing, should be left blank for bidders to respond to.

Your Response Requirements should be proportionate to the value and complexity of your requirement. Providers will need a reasonable period of time to review and prepare a response. This includes allowing sufficient time for them to ask clarification questions and consider your answers before the deadline for written responses.

Creating an evaluation panel

You will be responsible for evaluating Provider responses and you should agree the membership of your evaluation panel before you run a Call for Competition, building in enough time to evaluate responses properly.

Defining your evaluation criteria

The evaluation criteria must be consistent with the award criteria set out in the DPS Agreement, as per the table below. Contracting Authorities are able to set the actual percentage weightings within the ranges shown.

Criteria	Percentage Weightings - to be set by the Contracting Authority
Quality	30% - 70%
Price / Funding Terms	30% - 70%

Specific evaluation criteria may include, but not be limited to, areas such as

Lot 1: Equity Finance

- Experience of the proposed team/staff where the quality of the staff assigned can have a significant impact on the level of performance of a contract
- Resourcing commitment (including any resources the Provider intends to provide through subcontractors)

- Pricing terms - for example, investor internal rate of return rate, financial close development fee, pricing of Services (e.g. for SPV management services)
- Willingness to accept development cost risk during the commercialisation stage of the project (i.e. before financial close)
- Percentage shareholding
- Debt pricing terms (if relevant)
- Work plan for delivering the Services required under the Call-Off Contract
- Qualification of the terms for the Call-Off Contract /Shareholders Agreement
- Any key assumptions underlying the bid, including an explanation of how the assumptions will be confirmed through due diligence
- Due diligence requirements following appointment (e.g. by reference to the HNIP Standardised Due Diligence Set)
- Ability to meet the programme to financial close

Lot 2: Asset Finance

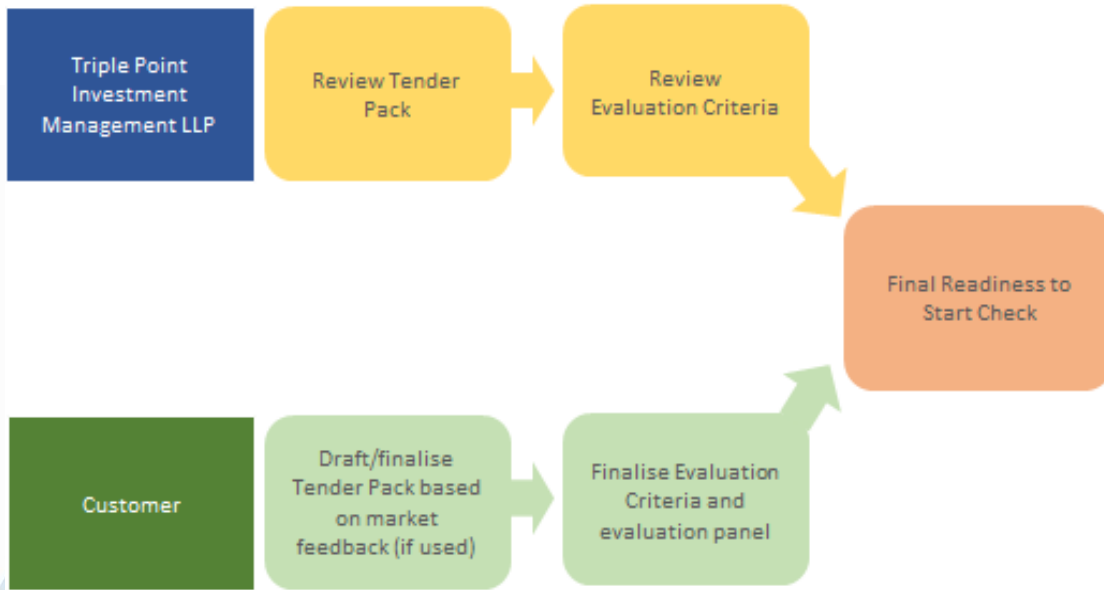
- Pricing terms (e.g. lease margin)
- Non-pricing terms
- Qualification of the terms of the asset finance term sheet
- Contracting Authorities should include quality of documentation within the Quality scoring criteria.

The evaluation criteria should be assessed on the basis of the following scoring methods:

- (i) Pass / Fail;
- (ii) Measured scoring i.e. minimum score required;
- (iii) Scored.

You should ensure your evaluation panel understands and has agreed to the evaluation criteria before starting the Call for Competition.

STEP 2



Step 3: Issuing a Call for Competition

Refresh funding Lot and Services

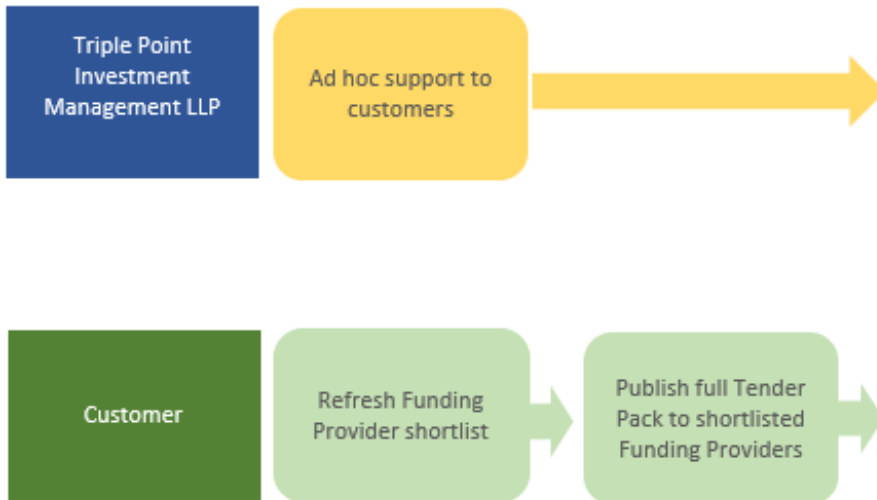
You should then refresh the list of relevant Providers who are capable of meeting your requirements prior to issuing your Call for Competition.

Call for Competition

The Call for Competition Tender Pack must be issued to all relevant Providers.

Your Call for Competition Tender Pack will be uploaded to the ProContract System. The relevant Providers will automatically be notified by email that the competition has started.

STEP 3



Step 4: Clarification and Evaluation

Provider clarification period

You should give Providers a period of time to raise clarification questions before they submit their responses to the Call for Competition. Questions will be uploaded to the ProContract system and you will receive automated email notifications when clarification questions are uploaded.

Evaluating written responses

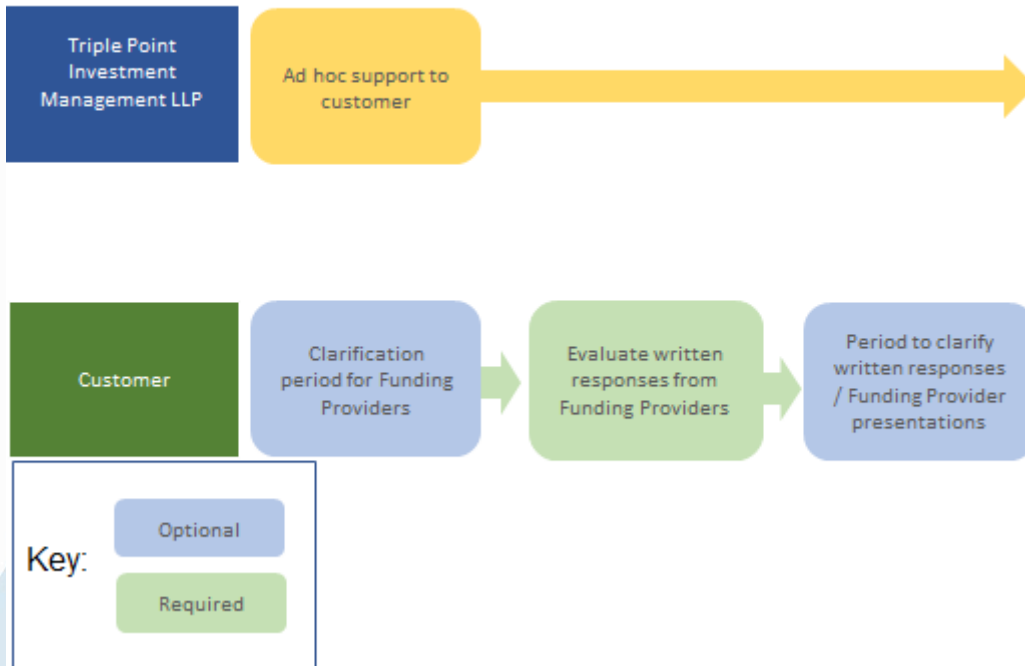
Following the clarification period, Providers will upload their written responses to the ProContract System. Your evaluation team will then assess the responses. You should maintain a fully documented audit trail of the results and final award decision, which will be useful when providing feedback to the participating Providers.

You may need a period to clarify responses with Providers. All clarification questions and responses will be uploaded to the ProContract System, which provides an auditable approach to the tender process.

If you specified face-to-face (or virtual) presentations from Providers, then these should take place prior to contract award.

The clarification process, and face-to-face presentations, should not introduce new elements to your requirements, nor should it allow Providers' to introduce new elements to their responses.

STEP 4



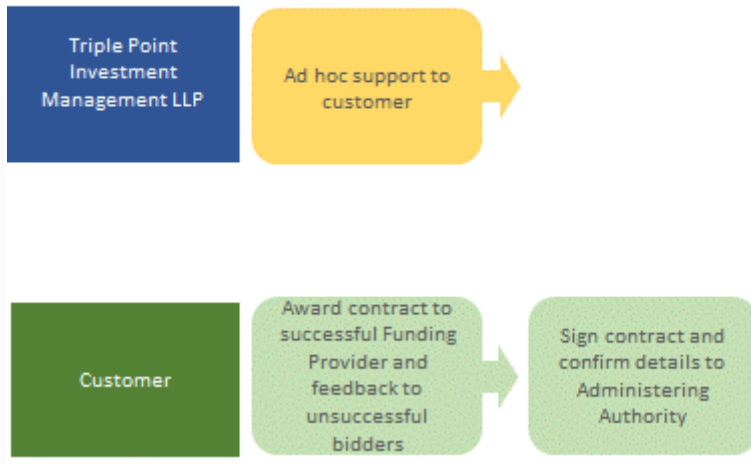
Step 5: Award of Contract

As part of your compliance check before awarding your contract, you have the option to request evidence of contract examples, insurance and cyber essentials certificates from Providers which were provided by Providers in their response to the Selection Questionnaire.

Following the successful completion of your competition evaluation, and once you have the relevant internal approvals in place, you can award the contract to the successful Provider and notify all participating Providers of the outcome. A standstill period is not mandatory but can be used voluntarily.

You should notify the Administering Authority that the contract has been signed. You should also provide constructive, written feedback to all participating Providers and include a breakdown of their scoring. Feedback comments should be objective and link back to the evaluation criteria. This will help Providers understand how they can improve for future opportunities.

STEP 5



DPS Charges

The DPS Charges comprise:

- the DPS Initial Charge; and
- in relation to Lot 1 only, the DPS Support Charge.

DPS Initial Charge

- Lot 1 only, a charge of one percent (1%) of the aggregate total of Lot 1 Funding;
- Lot 2 only, a charge of one percent (1%) of the capital cost of the equipment (excluding VAT),

DPS Support Charge

In relation to Lot 1 only, TPIM will agree with each Contracting Authority the nature and level of support to be provided by TPIM in respect of the Contracting Authority's heat network project. The Support Charge will depend on the size of the funding requirement, complexity of the project and affordability. The DPS Support Charge will not exceed two percent (2%) of the aggregate total of Lot 1 Funding.

Please note the following:

- No charges will be payable until financial close of a project
- The charges payable will be clearly set out in the Call for Competition Tender Pack to allow Providers to incorporate the fees into their bid responses.

Annex 1

Lot 1 Services

1	Support and/or assistance in relation to financing a project, including the preparation of market facing documentation, testing market conditions, financial structuring, and negotiating and agreeing the terms of any other third party financing, including the relevant documentation. Providers may be asked to procure senior debt offers as part of their Call for Competition Bid Response
2	Support and/or assistance in relation to the commercial structuring of heat network projects/transactions, including, inter alia: <ul style="list-style-type: none"> • in finalising the allocation of risk between the parties, including, inter alia, where relevant, one or more Contracting Authorities, equity investors, sub-contractors/suppliers and customers • consideration of different contract and commercial options; and • finalising an agreed commercial/contract structure
3	Support and/or assistance in relation to the procurement of supply chain parties including, inter alia, for construction, operation, maintenance and customer management
4	Support and/or assistance in appointing and managing third party advisers including legal and commercial advisers and due diligence advisers for any other third party funding
5	Support and/or assistance in setting, negotiating and agreeing the commercial terms between the various project parties
6	Assistance with obtaining any relevant authorisations, approvals or consents in relation to the relevant heat network project
7	Assistance in the preparation of tender documentation, financial modelling, bid evaluation and contract negotiation support (including, inter alia, with senior debt and mezzanine debt providers), and agreeing other ancillary documentation required for financial close

8	Support and/or assistance in relation to managing any due diligence exercise e.g. technical, legal, financial, tax or insurance
9	Preparation of timetables of events, liaison with other parties and process management of the relevant heat network project
10	Support and/or assistance in project managing the commercialisation and financial close process
11	Support and/or assistance regarding the development and periodic update of a business plan for the special purpose vehicle
12	Provision of board directors and active participation in board meetings before, during and after financial close of the relevant project
13	Provision of SPV management services which may include management of insurance policies and ongoing credit monitoring of all material project counterparties until the SPV is self-sufficient in these activities
14	Support and/or assistance on value enhancement including project expansion, refinancing and cost management

Annex 2

Lot 1: Investment Summary Template

An Investment Summary should be included in the Call for Competition Tender Pack for Lot 1.

The headings below are intended only as a guide for Contracting Authorities. The Investment Summary will need to be tailored to your requirements and the specific characteristics of your project. The Investment Summary is intended to provide Providers with sufficient information for them to be able to understand the project, the key risks and the business plan/financial parameters, and to make a bid submission. As an indication of the level of detail required, the Investment Summary is expected to be no more than 20-30 pages, but this will depend in part on how developed the project is and the level of information that is available.

The Investment Summary will need to reflect the development stage of your project and the level of information available. For projects in commercialisation some of the information listed below may not be available or required (or estimates may only be available) at the time of the Call for Competition. This is likely to be the case where a Contracting Authority requires some or all of the Lot 1 Services to fully commercialise their project. Contracting Authorities will need to consider carefully the scope of Lot 1 Services required and map those Lot 1 Services against the Investment Summary Template before finalising their Call for Competition Tender Pack.

The successful Provider may require detailed due diligence to be completed after they have been appointed, to verify the key assumptions underlying their offer.

1. Executive Summary

- Overview of the project
- Location
- Boiler (e.g. MW)
- Heat delivered at run rate
- Length of pipe
- Technology
- Customers (split between domestic and commercial, with key anchor loads named)
- Heat Source

- Overview of project development stage e.g. feasibility study, stage of design, outline business case, planning, permits, contracts, due diligence, agreed customer connections, associated terms of connection and critical milestones, etc
- Programme to financial close/ construction commencement
- Funding requirements
- Other funding available (e.g. HNDU, HNIP etc.)

2. Ownership structure and key project counterparties

- Special Purpose Vehicle (SPV) or other structure
- Current ownership percentages
- Any Liens or Encumbrances on the project
- Proposed ownership percentages after the transaction
- “Know your customer” information on existing shareholders
- A diagram summarising the key counterparties and split of responsibility
 - customers
 - SPV
 - principal construction contractor
 - key construction subcontractors
 - O&M contractor
 - Heat supplier

3. Project Team

- Customer team
- External team, including advisors (such as design, legal, financial and insurance advisors)

4. Construction Phase

- Design development
 - composition of external design team
 - summary of level of design carried out
 - programme for completion, including timeline to connect to retrofits and new builds
 - consistency with regulations and codes of practice (e.g. part L building regulations)

- heating/cooling plant
- primary and secondary distribution systems
- track record of working with developers
- capex estimates
- Planning, consents and permits
 - planning permissions, easements, operating parameters etc
 - Environmental Impact Assessments
 - highways authority / rail / transport permissions
 - utility connection offers
 - Environment Agency licenses
- Technology
 - what technology/technologies are proposed to be utilised?
 - are they tried and tested?
 - plant sizing
 - suppliers
 - expected service life
- Primary and secondary distribution - description of networks
- Construction/EPC contract
 - ground condition, environmental and connection surveys
 - procurement stage/process
 - proposed construction/EPC contractor(s)
 - name
 - experience
 - financial information
- form of contract, key terms and exclusions e.g.
 - scope
 - value
 - performance testing/guarantees
 - liquidated damages
 - liability caps

- financial security / bonding
- breakdown of key components of construction price
- construction programme
 - key milestones
 - phasing
 - critical path
 - risk (e.g. long lead time items) / float
 - commissioning and testing

5. Operations, Maintenance and Customer Management

- Procurement stage/process
- O&M provider
 - name
 - experience
 - financial information
- Form of contract and key terms e.g.
 - scope – operations, maintenance, billing
 - value
 - performance testing/guarantees
 - financial performance incentives
 - liability caps
 - financial security / bonding
- Services self-performed by the SPV
 - scope
 - management and staffing
 - experience

6. Customers / Revenues

- Description of customers
- Distinction between commercial and domestic customers
- Financial and heat load information on anchor-load customers
- Connection charges, including the basis for calculation (e.g. what is the counterfactual)

- Charging regime and indexation
- Status of commitments to connect and commitments to pay any applicable connection charges
- Term of connection agreement
- Terms of energy services agreement, does this cover exclusive use of the network for the provision of heat? Does it cover conditions for disconnection?
- Contractual underpinning for revenues
- Timeline over which the customers and load will connect

7. Business Plan and Financial Projections

- Key outputs from the financial model (some or all of these may be estimates)
 - capex
 - repex (replacement of major components)
 - revenues
 - operational costs (including split by fuel, fixed and variable)
 - EBITDA
 - tax
 - shareholder cashflows
 - funding requirement and any other funding sources sought (e.g. HNIP, GHNF, HNDU etc)
- Key assumptions underpinning the revenues, operational costs, capex and repex
 - principle risks
 - considerations
 - analysis
 - parameters
- Key ESG performance indicators e.g. CO2 avoided
- Key upsides
 - possibility to retrofit nearby buildings
 - planned future connection points

Annex 3

Lot 2: Asset Finance Term sheet

The headings below are intended only as a guide for customers. The Asset Finance Term sheet will need to be tailored to your requirements and the specific characteristics of your project. The Asset Finance Term sheet is intended to provide funding suppliers with sufficient information for them to be able to understand the project and to make a bid submission.

The successful funding supplier will be required to provide a copy of their proposed lease documentation alongside their response.

Heading	Note
Type of Lease	Full Pay-out Lease Residual Value Lease
Purpose of facility including rationale for acquisition	
Asset	
Capital Cost of the Asset	£ + VAT
Term	In Years
Repayment Profile	Quarterly, Annually etc. Advance or Arrears payments Payment holidays Balloon Payments
Anticipated Start Date / Anticipated signing date (if different)	
Drawdown Profile	Is a prelease agreement required? Are stage payments required? Will there be one lease or multiple schedules?
Lessee (Obligor)	Signatory of the lease

Guarantor (if applicable)		
Supplier		
Manufacturer		
Maintenance / Service Provider		
Asset Details		Description Itemised values Specification Will the asset become a fixture? Age of asset Warranty/Guarantee details Maintenance/service details
Asset Location		Include details of land leasehold/freehold where applicable
Insurance Details		Insurer Policy Cover limit Exclusions
End of Lease requirements		Sales Agency Peppercorn Rentals Stated Residual Value Fair Market Value Extensions
Specific Documentation Requirements		Specific terms the Obligor requires the Lessor to include within the lease documentation provided

Annex 4

Indicative Timetable for Procurement

The indicative timetable below may need to be extended for larger, more complex projects.

Stage	Lot 1: Equity Finance	Lot 2: Asset Finance
Issue Call for Competition Tender Pack – start of Call for Competition	Start Date	Start Date
Clarification Period for Providers	Start date + 2 to 4 weeks	Start Date + 1 week
Written submissions by Providers	Start date + 4 to 8 weeks	Start Date + 2-3 weeks
Clarification of written submissions	1 to 2 weeks from written submission date	1 week from written submission date
Notification of award	Following evaluation	Following evaluation

Annex 5

Standardised Due Diligence Set

Customers should refer to the Heat Network Investment Project Standardised Due Diligence Set (“SDDS”) which provides heat network sponsors and developers with a better understanding of the detailed due diligence requirements of commercial funders.

<https://www.gov.uk/government/publications/standardised-due-diligence-set-sdds-for-heat-networks>)

Using the Standardised Due Diligence Set

Introduction

This guidance note aims to provide an additional overview of how financial investors carry out due diligence to identify and assess risks in heat network projects.

The first section of this updated Guidance aims to provide a high-level view of how financial investors use due diligence to identify and assess risks in heat network projects. It is not intended to be an in-depth guide or to provide a detailed description of the types of risk across all heat network projects, but, rather, to set the context for how developers/owners should use the SDDS.

How financial investors identify and assess risk

Before financial investors consider investing in a heat network project, they carry out a comprehensive appraisal of all aspects of the project to evaluate its commercial potential. This is known as due diligence. The due diligence process identifies and assesses a wide range of risks which could impact the heat network, including; legal risks, technical risks, commercial risks and financial risks.

Some financial investors have in-house expertise to carry out this due diligence. Others rely on external professional firms, such as technical consultancies and financial and legal advisers, to undertake detailed or specialist due diligence.

In general, the primary aim of financial investors’ due diligence is to identify and assess risks that might impact on a project’s future cashflows. This is because the component assets of a heat network (e.g. the heat/cooling source and the pipes), once installed, are likely to have limited value for any use other than as part of that heat network and/or to be prohibitively

expensive to uninstall. Instead, the value of a heat network to investors is derived from the future net cashflows that it can generate, i.e. the future revenues from heating/cooling/ electricity sales minus the future costs of building, operating and maintaining the network. It is these net cashflows that repay the investor's original investment in the project and provide a rate of return on that investment. Therefore, it is important for investors to identify and assess those risks that might impact either the revenues or costs of a project.

The table below identifies a number of high-level risks and their potential impact on the net cashflows of a heat network project.

Table 1: Example High-Level Risks and Impact on Cashflows

High-Level Risks	Potential Impact on Cashflows
<p>Design/Construction/ Commissioning</p>	<p>Poor initial design of the project may lead to delays in commissioning and/or higher construction/operating costs. Delays in construction completion and commissioning are likely to delay revenues. The project may also incur significantly higher costs than budgeted for the construction and commissioning phase, for example where unforeseen risks arise (e.g. in respect of ground conditions).</p> <p>Investors may seek to mitigate these risks by passing them to an experienced engineering, procurement and construction contractor, under a fixed price, date certain subcontract, but may be left with residual risks, such as insolvency of the subcontractor and risks which cannot be properly mitigated through the subcontract.</p>
<p>Customers/Revenue</p>	<p>Revenues may come from various sources, including connection charges to new customers joining the network, the supply of heating/cooling to customers, the sale of electricity (for example, via a private wire), subsidies and the electricity capacity market.</p> <p>Revenues may be linked to the roll-out of new commercial/residential developments, completion of which could be beyond the control of the heat network owner, or to existing buildings, for example public sector buildings.</p> <p>Key commercial anchor loads may get into financial difficulty, reducing overall heat demand and revenues. There may be minimum and maximum heat take thresholds, performance requirements and penalties for loss of supply under the commercial supply contracts.</p>

	<p>Revenues from domestic customers may be impacted by rental voids and bad debts. Domestic customers may choose to switch to a different heating/cooling solution – although, on new developments, domestic customers may have limited options to switch to alternative sources of heat - e.g. where new developments do not have gas connections – giving investors greater certainty over revenues.</p>
Operations	<p>There are a range of heating/cooling sources for heat networks, including gas CHP, energy-from-waste plants and heat pumps. The cost of operating these heating/cooling assets may include fuel and consumables costs. Variations in these costs versus forecast will impact on net cashflows, particularly if there is a mismatch between changes in costs and prices paid by customers. Inefficient plant operation of the assets may increase operating costs and/or lead to more plant downtime.</p> <p>Investors may seek to mitigate these risks by passing them to an experienced O&M contractor through a subcontract, but may be left with residual risks, such as insolvency of the O&M contractor and risks which cannot be properly mitigated through the subcontract.</p>
Maintenance	<p>Unexpected plant downtime/lower availability may increase costs and/or be detrimental to customers. Capital replacement might be required earlier than scheduled and/or at a higher cost than forecast.</p>
Metering & Billing	<p>The cost of providing metering and billing services to customers, including compliance with regulations, may exceed the budgeted costs. Changes to regulations may impact future costs.</p>
Financial/Economic	<p>Mismatches between heat prices and fuel costs may reduce net cashflows. Tax rates may be higher than forecast, reducing post-tax net cashflows.</p>

It is important to note that not all risks have the same significance to investors. Whilst technical risks will always be important, especially if there is new or innovative technology involved, the most important risk for investors often relates to revenues. As per Table 1 above, heat networks often have characteristics that increase the level of revenue risk to investors, including:

- multiple customers of varying credit quality;
- revenue dependent on the future completion of new commercial and/or residential developments;
- risk on heat demand, rental voids and bad debts; and
- short term supply agreements that allow customers to switch to alternative heat sources.

Revenue risk is project specific. For example, a campus project (e.g. for a hospital or university campus), with a single customer (the NHS Trust or university), contracted under a long term supply agreement, will have a different risk profile to a project that is dependent on the future completion of large-scale residential development, with customers on short-term supply contracts.

Investors will focus on how robust the revenue stream are, and the risks that could impact on net cashflows. For this reason, we strongly recommend that heat network developers focus on revenue risk at an early stage of project development. Projects should carefully consider what revenues the project will generate, both initially and with any expansion opportunities, whether the revenues will support the business plan, and what risks there are to the revenues.

The Financial Model

The financial model is a key decision-making tool for investors, containing all the financial information to enable investors to understand the base case returns from a project and to quantify the impact of risks to the project cashflows. The model will typically be structured to reflect:

- Inputs: capital, replacement and operating costs, general input data (inflation rates) and sensitivity analysis;
- Calculations: supporting calculations for the outputs; and
- Outputs: financial statements, financing, summary dashboard.

Developers/owners should ensure that the financial model functionality and format is built to a standard that supports the information typically required by investors. Additionally, investors will require separate due diligence is undertaken in relation to the financial model - a financial model audit - which will check that the calculations are materially free from omissions and errors and that the key terms for the investors are accurately reflected in the financial model.

Investors will typically want to see:

Cashflows – to understand how secure the revenue is and what costs have been included within the model. They will be particularly interested in the free cash available to service financing costs and, where there is senior debt, the model will calculate cover ratios to

determine whether there is a sufficient 'buffer' to provide comfort that cash is available to service that debt;

Rates of return – investors will want to understand the returns generated at a project level to equity investors and will want to see this on a pre- and post-tax basis;

Sensitivities – investors will require a range of sensitivities to support their investment decision and the financial model will need to be capable of flexing key assumptions, such as customer pricing and demand (both of which impact revenues), costs, economic assumptions and financing terms, to show how these might impact returns to the investor. Typically, the model will feed from a techno-economic model that contains details of heat loads and generation capacity along other key data; and

Finance plan – the model will calculate returns to investors either as equity, via dividends, or subordinated/shareholder debt payments. It will also include the terms of any other financing (where relevant) such as senior debt.

Using the SDDS

The SDDS was created to help heat network developers/owners to understand the due diligence requirements of investors and other funders at an early stage of project development. Giving greater certainty over what is required to achieve 'bankable/ investable' projects.

However, because no two heat network projects are the same, no two projects will have the same risk profile. For example, a network may involve installation of a new heat source (such as a heat pump or CHP engine) or be linked up to an existing heat source (such as an energy-from-waste plant). Similarly, a network may contract with existing public sector/commercial customers under long-term supply agreements or may rely on residential customers under short-term supply agreements linked to future residential development. The SDDS provides a common framework for assessing risks in different types of project.

The SDDS is set out under the following section headings:

- Technical
- Legal / commercial, and
- Financial model

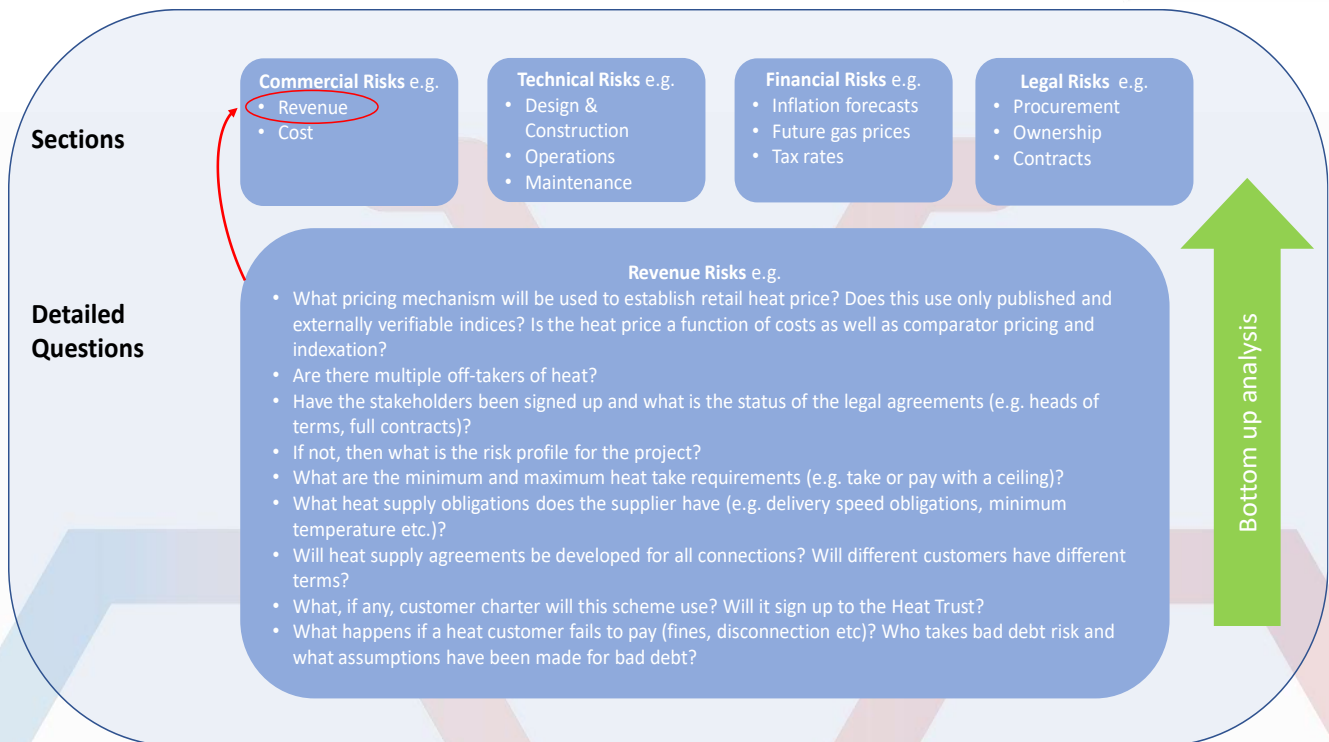
The technical section is split into a number of sub-categories:

- General / design, planning, consents and permits
- Technology, primary distribution system
- Secondary distribution system, Commercial

- Procurement, Construction phase
- Operations and post occupancy

Each section (or sub-category) has a list of detailed questions designed to identify and assess specific risks. This approach mirrors the way that investors and due diligence advisers typically identify and assess risks, starting from a detailed, bottom-up analysis and ending with a high level of assessment of the key risks. This allows investors to form an overall assessment of the commercial potential a heat network project.

An example of this approach is shown below.



Heat network developers/owners wishing to attract commercial investment should consider the due diligence requirements of investors at an early stage of project development.

Commercial Models and Risk Allocation

The commercial structure of a heat network project will, in part, drive the allocation of investment risk. There are a number of commercial models for delivering heat network projects - some of these are explored in the Guidebook to Financing Heat Networks in the UK².

For this Guidance we have focused primarily on heat network projects that are financed on a project basis, i.e. where the investor finances a stand-alone project, usually through a Special Purpose Company (“SPC”) or Energy Services Company (“ESCO”) set up to deliver the project, and generates a financial return solely from the performance of that project.

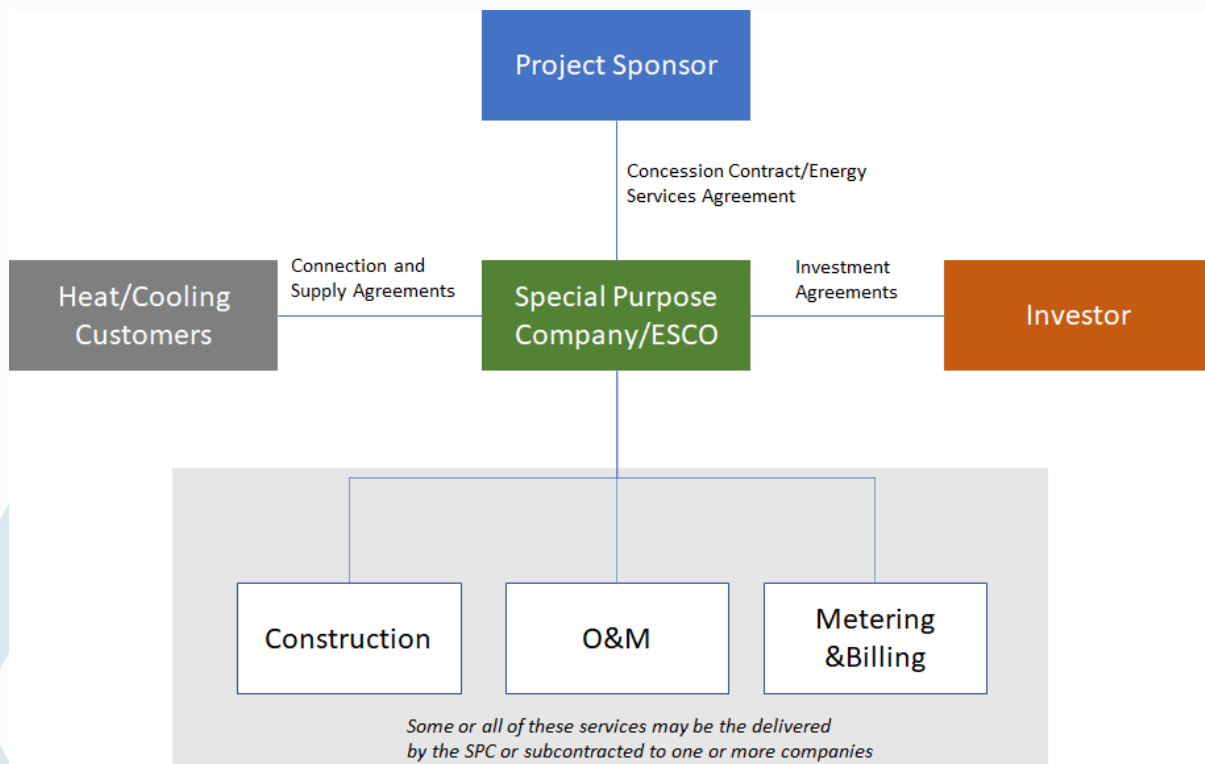
Bundled Projects

Diagram 1 below shows a typical commercial structure for a project where the funding, design and construction, operation (including customer management and billing) and maintenance of the project is bundled together under a single contract with an SPC/ESCO. This might be under a concession contract or energy services contract from the project sponsor. The SPC/ESCO

² <https://www.gov.uk/government/publications/financing-heat-networks-in-the-uk-guidebook>

may choose to subcontract some, or all, of its obligations to specialist subcontractors, or it may choose to self-deliver.

Diagram 1: Bundled Project Structure



Under this structure, investors need to get comfortable with the bundled risks, including any risk mitigation through the subcontracts. This structure is well-suited to projects where the scope is clearly defined (for example, campus projects under a concession contract) and where the risks can be clearly identified and assessed by investors.

Unbundled Projects

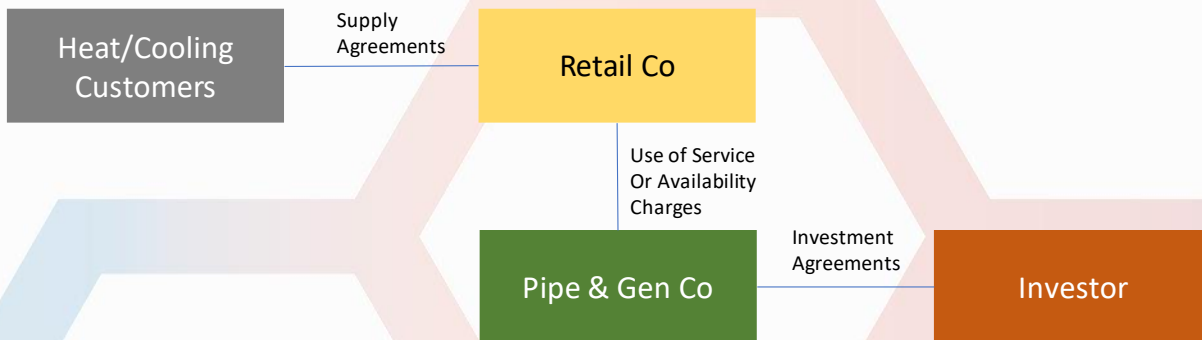
An alternative approach is to unbundle a project into component parts that have different risk profiles. Unbundling may be appropriate where:

- (i) there are risks in a project that would not be acceptable to investors, but another stakeholder is willing to accept the risks. Unbundling allows risks to be allocated to separate commercial vehicles with different ownership structures, contractual relationships, and risk profiles;
- (ii) a stakeholder wants to retain control over one or more elements of a project, for example customer service, billing, and credit control. Unbundling allows different parties to own/control different parts of a project;

- (iii) there are opportunities for future competition or contestability. Unbundling can allow one element of a project (e.g. heat generation) to be competed and/or for additional generation to be contracted in at a future date, for example as the network expands.

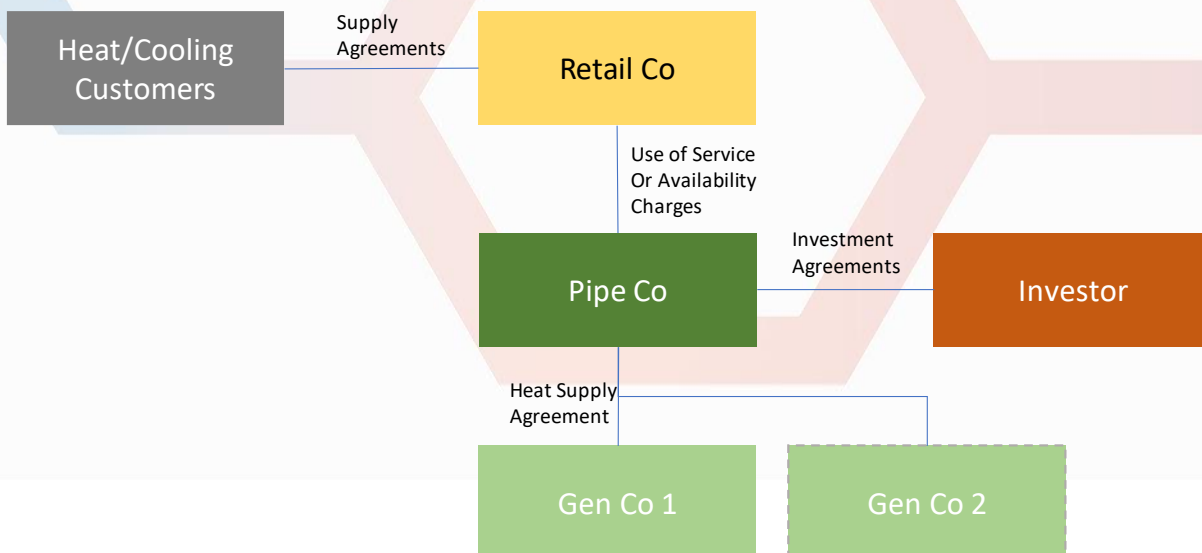
We have set out below some examples of how projects could be unbundled. However, we would recommend that professional advice is sought on these options at an early stage of project development.

Diagram 2: Pipe & Generation Co



Under this approach, one company (Retail Co) is responsible for all customer service, billing, and credit control. Retail Co buys heat from another company (Pipe & Gen Co), which owns the heat generation and pipe assets. Retail Co may pay for heat on a volume basis or a take-or-pay basis, depending on how risk is allocated.

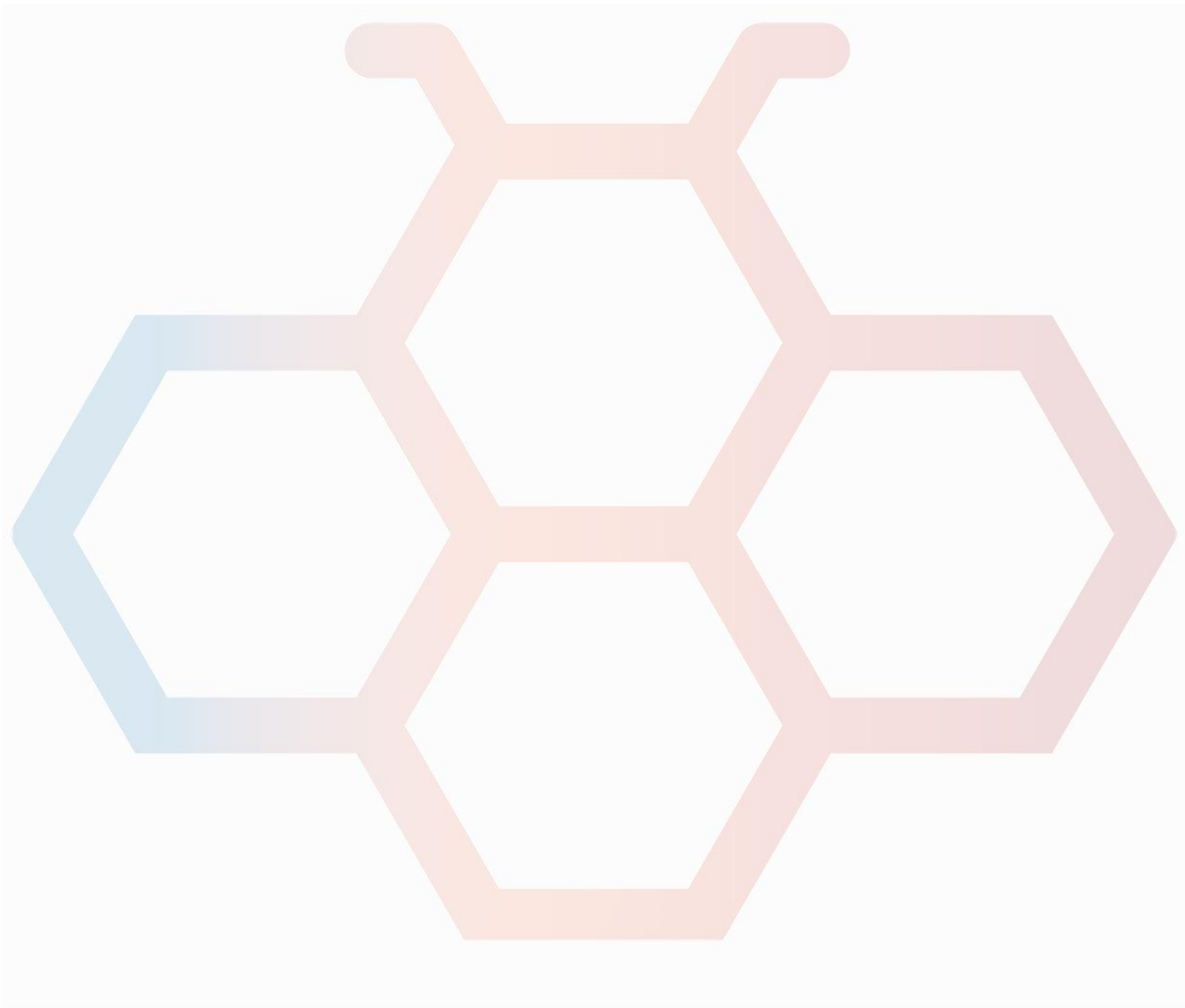
Diagram 3: Separate Pipe Co and Gen Co



Under this approach, one company (Retail Co) is responsible for all customer service, billing, and credit control. Retail Co buys heat from another company (Pipe Co), which owns the pipe

assets. Pipe Co initially contracts with Gen Co (Gen Co 1) for the supply of heat. Pipe Co has the option to contract in additional heat from different heat suppliers (Gen Co 2) as the network grows.

We recommend that heat network developers/owners take advice on suitable commercial structures at an early stage of project development.



This publication is available from: <https://tp-heatnetworks.org/bhive/>

If you need a version of this document in a more accessible format, please email BHIVE@tp-heatnetworks.org Please tell us what format you need. It will help us if you say what assistive technology you use.