Decision

Response to consultation on heat networks regulation: fair pricing protections

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In the Heat networks regulation: fair pricing protections consultation ('2025 consultation'), we consulted on a fair pricing framework for heat networks, including its structure, objectives, principles, and a 'fairness test' for implementation. We also consulted on:

- cost allocation proposals
- analytical methods for price and profit comparisons
- options for publishing price data centrally
- our approach to price investigations

The consultation built on our joint consultation with the Department for Energy Security and Net Zero (DESNZ) Heat networks regulation Implementing consumer protections consultation ('2024 ICP Consultation').

This document outlines our decisions on these proposals following consideration of the responses to our consultation.

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Executive Summary

The Energy Act 2023 named Ofgem as the regulator for heat networks in England, Scotland, and Wales (Great Britain). Our Forward Work Plan outlines the work we are doing in 2025 and 2026, including our ongoing preparations for our new regulatory responsibilities for heat networks and the commencement of the new regime in January 2026. We aim to develop a proportionate regulatory framework, balancing consumer protection and supporting investment in the sector and government targets for net zero.

This document provides a response to the feedback received as part of our 2025 consultation. Alongside this response, we are consulting on draft guidance which we have developed following the responses from stakeholders summarised in this document.

Response Overview

In general, stakeholders were supportive of our approach to the fair pricing framework, which is to use guiding principles and cost allocation guidance to improve consumer outcomes whilst balancing investment needs and market growth. However, there were several common themes among responses which were raised across consultation topics.

Respondents requested further clarity and asked for more detailed guidance and definitions and raised concerns regarding overlap with zoning and Heat Networks Technical Assurance Scheme (HNTAS) on rules and policies. They also asked for further clarifications on the interactions with Landlord and Tenant Legislation. We are working with DESNZ on zoning to ensure clear alignment. We are also collaborating with DESNZ to avoid unnecessary duplication of reporting.

We have been working with industry and across government to understand the interaction with existing housing legislation. As part of the Heat networks regulation: implementing consumer protections Government response ('2025 ICP government response'), DESNZ and the Ministry for Housing, Community, and Local Government (MHCLG) have committed to further exploring options for unbundling heat charges from housing charges. As part of this work, they will be exploring a number of legislative and practical impacts, including the relationship between existing leases and housing law.

This document accompanies the publication of our fair pricing and cost allocation guidance consultation. The responses from stakeholders to the guidance consultation will be used to finalise the first set of pricing guidance, which will be published in January 2026.

Introduction

This document makes references to the following previous consultations and government responses:

The '2020 consultation' refers to the Heat networks: building a market framework consultation published in 2020, which informed the provision in the Energy Act 2023. The subsequent government response is referred to as the '2021 government response.'

The '2023 consultation' refers to the Heat networks regulation: consumer protections consultation published in August 2023, which informed the Heat Networks Market Framework Regulations SI (2025 HNMFRGBR SI). The subsequent government response is referred to as the '2024 government response.'

The '2024 ICP consultation' refers to the Heat networks regulation: implementing consumer protections consultation published in November 2024. The subsequent government response is referred to as the '2025 ICP government response.'

The '2024 ARO consultation' refers to the Heat networks regulation: authorisation and regulatory oversight consultation published in November 2024. The subsequent decision document is referred to as the '2025 ARO decision'.

The '2025 consultation' refers to the Heat Networks regulation: fair pricing protections consultation published in April 2025.

Context

The 2018 CMA study did not find evidence of systemic high prices across the market, compared to those paid by consumers on gas or electricity, nor did it identify at that time an urgent need for intervention to reduce prices. The CMA did recognise there were some pockets of higher pricing. It recommended that the sector regulator should monitor that prices are not excessive and require all heat networks to comply with 'principles-based' rules or guidance on pricing. However, we recognise that energy price rises since the CMA study was published in 2018 may have significantly changed this market, and not all the findings from 2018 may still be relevant today. We have also received more recent anecdotal evidence of high prices in the market.

The government expects the sector to grow rapidly in the coming decades, and we are committed to facilitating that growth, whilst ensuring good consumer outcomes and standards across the sector.

In August 2023, a joint consultation was conducted by Ofgem and DESNZ on Heat networks regulation – consumer protection to inform secondary legislation and authorisation conditions ('2023 consultation'). An additional joint consultation, the 2024 ICP consultation, was launched building upon the 2023 paper.

In these consultations and the subsequent government response, we outlined the policy proposals of the fair pricing framework.

These proposals were developed further in two recent Ofgem consultations, the November 2024 Heat networks regulation: authorisation and regulatory oversight ('2024 ARO consultation'), which sought views on definitions, registration processes, and data, and the 2025 consultation.

Our fair pricing policy proposals outlined in the previous consultation seek to achieve good consumer outcomes, such as reliable heat and good customer service, delivered for consumers at a fair and transparent price. In developing the fair pricing framework and achieving this outcome, we must first consider that costs and prices will vary depending on network, technical and commercial characteristics. Secondly, as the heat networks sector is developing, the approach to pricing must be dynamic, flexible, and proportionate to support investment and market growth while addressing emerging challenges and protecting consumers.

Our fair pricing protection proposals aim to improve transparency and give us specific powers to protect consumers from disproportionate pricing and monopoly power through an outcome-based approach (the fair pricing framework).

Our focus will be on addressing pricing issues where these arise while keeping any burdens on heat networks to a proportionate level. This aims to minimise the impact of heat networks passing additional costs onto final consumers, while providing consumers with protections from disproportionate prices.

In addition to protecting against instances of disproportionate pricing, our fair pricing proposals, along with our monitoring initiatives, will help us identify if there are systemic issues of disproportionate pricing in the market. This will also inform future policy development.

Our decision-making process

We received 90 responses to our consultation. We asked stakeholders to provide answers to 34 questions and considered all views presented. Whilst not every single response we received for each individual question has been outlined in our summaries, we have considered and noted all responses during our analysis and response development. We have aimed, where possible and appropriate, to keep summaries succinct, catering to the readability and conciseness of the document.

Our Decision

We have considered responses to the consultation and provided our response under individual chapters.

1. Fair Pricing Framework

Section summary

In the 2024 ICP consultation we proposed a framework for pricing regulations which develops the general obligation on heat networks to provide fair and not disproportionate prices. This would be implemented through outcomes or principles-based authorisation conditions.

Our framework utilises six key principles to meet its overarching objective and deliver on a set of positive consumer outcomes and one industry outcome. These principles are: cost reflectivity, cost efficiency, fair and reasonable returns, affordability, regulatory control, and price transparency.

These principles, alongside definitions and limited examples of proposed best practice guidance, were published in the 2025 consultation for stakeholder feedback.

Stakeholders requested further clarity on terminology, scope of principles, desired outcomes, and market segments.

The following section provides a summary of stakeholder responses by question and Ofgem's position in response.

Question analysis

Q1. Have we identified the right set of fair pricing consumer objective, principles and outcomes and are these properly defined? If you disagree with this proposal, please specify what changes you would like to see and provide a justification.

Table 1: Response summary for consultation question 1

Response	Number of responses	Percentage of total responses
Agree	9	10%
Partially agree	36	40%
Neither agree nor disagree	16	18%
Disagree	7	8%
Not answered	22	24%

Comments	68	76%

1.1 Whilst the majority of respondents were broadly supportive of Ofgem's proposals, stakeholders provided feedback and comments which we discuss thematically below.

1.2 Lack of detail and implementation concerns: 10 respondents raised concerns around a general lack of detail in the proposals and implementation concerns, asking for stronger guidance, clear definitions of the roles and responsibilities, and definitions for terms such as 'fair', 'not disproportionate', 'not-for-profit', or 'small heat network'. Respondents also asked for further guidance on approaching competing principles, for example between industry growth and consumer-focused outcomes.

1.3 'Price promise' or 'cost avoidance' models: five stakeholders asked for guidance on how 'price promise' or 'cost avoidance' models will be treated, noting that it does not fully align with the cost reflectivity principle.

1.4 Regulatory burden: concerns were raised about the regulatory burden being placed on the sector, with five respondents concerned about the impacts on cost, especially on smaller networks.

1.5 Regulatory overlap: there were also concerns from 12 respondents around the regulatory overlap of the fair pricing framework with both HNTAS and zoning, with respondents commenting on the lack of clarity between the fair pricing framework and HNTAS. Eight respondents raised concerns about 'double regulation' in heat network zones, and the possibility of conflicting requirements or uncertainty for heat networks and investors. A minority of respondents suggested that Ofgem should be the sole regulator.

1.6 Non-domestic customers: three respondents suggested that fair pricing protections should not apply to non-domestic customers, particularly large commercial and industrial users, on the grounds that these consumers tend to have greater negotiating power and that such protections could distort commercial agreements and disincentivise investment.

1.7 Alternative approach: some stakeholders proposed an alternative approach to price regulation based on an external benchmark linked to alternative heat sources, arguing that this approach would be a simpler and transparent way to deliver fair prices for consumers. A few other respondents thought this should be the approach where rights to build were awarded via competitive tender (for

example, zoning), arguing this would focus regulatory resources where most needed while safeguarding the financial viability of compliant developers.

1.8 Principles outlined: stakeholders also provided feedback regarding how the principles are outlined in the framework. Some respondents worried that cost reflective pricing could lead to increases in costs on some heat networks, for example, where costs have previously been unknowingly under-recovered.

1.9 Fair and reasonable returns: one respondent was concerned about excessive shareholder dividends and debt loading, suggesting this risk be reflected in the definition of fair and reasonable returns.

1.10 Affordability: six respondents said that the principle of affordability should consider fuel poverty or whether prices are affordable in relation to income, with two proposing it be a central objective. Three respondents felt a separate affordability principle was unnecessary, arguing that fairness is already addressed through other principles and that affordability is a broader societal issue. However, some respondents called for further action on affordability, proposing Ofgem and DESNZ consider support mechanisms when fair prices remain unaffordable, such as existing fuel poverty schemes.

1.11 Clear guidance: stakeholders also mentioned the need for clear guidance, with four respondents finding the guidance on operating efficiently unclear, and another respondent asking for more clarity on whether cost-reflective pricing allows for recovery of costs related to safe operation, decarbonisation, and protection from unexpected plant failures.

1.12 Landlord and tenant legislation: interaction with landlord and tenant legislation is also a common theme raised, with four respondents mentioning that the principle allowing for profit must be balanced with obligations under the Landlord and Tenant Act, and called for clearer guidance for the social housing sector. Three respondents highlighted challenges in energy procurement within the social housing sector, noting that legal constraints, such as the Landlord and Tenant Act, limit the ability to hedge costs.

1.13 Outcomes: with regards to the outcomes of the framework, three respondents thought the industry growth outcome was weak and the current framework does not appear to support sector growth.

Ofgem response

We acknowledge the calls for further clarity and definitions related to specific terms. Whilst we are not predefining terms such as ‘fair’ and ‘not disproportionate’, we have

outlined how we will apply these concepts when implementing the fair pricing framework. We discuss this further in Q3 of this response document. We do not believe a formal definition of 'not-for-profit' nor one of 'small heat networks' is required for the application of the proposed first guidance iteration, as these are not categories used for market segmentation, though the individual circumstances of networks will be taken into account when considering compliance and enforcement. We are committed to ongoing stakeholder engagement to build on our understanding and evidence base in drafting the authorisation conditions and relevant definitions.

'Price promise' or 'cost avoidance' models can be compatible with the fair pricing framework, provided they deliver fair and not disproportionate prices for consumers. This means that prices should be aligned with broader fair pricing principles and outcomes. In order to evaluate this, the proposed fairness test will explore the extent to which prices are fair and not disproportionate according to the principles outlined.

We acknowledge the concerns about regulatory burden, particularly on smaller networks. We aim for the approach to be proportionate, and we are committed to minimising unnecessary burden by aligning with existing frameworks and engaging on guidance.

We understand stakeholder concerns about potential overlap between Ofgem's role and that of Zoning Coordinators within heat network zones. Ofgem pricing regulation will apply both inside and outside of zones. We are working closely with DESNZ to ensure clarity on how pricing protections and zoning policy will interact, including the responsibilities of Zone Coordinators and Ofgem. We believe it is important that fair pricing applies within zones so that all customers benefit from the protections. Though rights to build may be awarded through a competitive tender process, fair pricing regulation is needed to ensure key principles are followed on an ongoing basis.

For detailed technical standards and best practices, we have referred to the Heat Network Technical Assurance Scheme (HNTAS), which is being jointly developed by DESNZ and the Scottish Government. Once HNTAS requirements are further defined, we may review our guidance to enhance clarity if needed.

In the 2025 ICP government response we found that most respondents agreed that the fair pricing framework should be extended to non-domestic consumers, and this remains our position. However, given the limited feedback received on this specific point, we are seeking .additional views on the inclusion of larger non-domestic consumers within the scope of the pricing framework as part of the Fair Pricing Protection guidance consultation.

Regarding alternative approaches to fair pricing framework, we intend to use external benchmarks as part of our benchmarking methodology. However, given the diversity of

the market a single counterfactual linked to alternative heat sources is unlikely to reflect competitive prices for many networks, particularly over time. The approach risks turning this benchmark into a de facto price cap, with networks pricing at this level regardless of the underlying costs, potentially pricing significantly higher than they would otherwise price.

Fair Pricing Principles

We note the broad support for the set of principles and outcomes set out in the consultation and, accordingly, are not proposing changes to these or to their definitions.

Regarding the concern around the cost-reflectivity principle in cases where an operator may be subsidising the network, the operator may still decide not to increase prices if they believe it benefits consumers. We would not consider this, on its own, to breach the fair pricing principles. These principles should be considered in a manner consistent with the overarching objective and achieving the consumer outcomes. This may involve balancing different principles, such as cost reflectivity and affordability, where appropriate.

On the allowance for recovery of costs necessary for safe operations, decarbonisation, and protection from unexpected plant failures, the framework does not intend to stop the recovery of legitimate costs needed for the safe and effective operation of the heat network.

The 'fair and reasonable returns' principle recognises that some heat networks will include some level of profit. However, it does not override any existing legislation. Please refer to our draft guidance for further detail on the 'fair and reasonable returns' principle.

Some respondents provided comments on fuel poverty. We recognise that a fair price is not necessarily an affordable price for all consumers. We are working to ensure that our framework does not clash with existing legislation and vulnerable consumer protections. We also acknowledge that affordability is a broader issue, and some aspects may be addressed through wider government initiatives. We will continue to engage with these discussions to support consideration of heat networks in future support schemes and fuel poverty-related work.

On the need for an 'affordability' principle, in the consultation we clarified that this principle is in relation to what's within the control of heat networks, such as reducing the likelihood and impact of shock bills. While some of these measures will be covered under principles such as cost efficiency, not all measures, such as reducing the impact of shock bills, would fit under other principles.

Responding to the stakeholder comment that characterised the industry growth outcome as weak, our view is that the current framework balances consumer outcomes with industry growth, ensuring that there are attractive opportunities within the market to push industry growth whilst balancing transparency and fair prices for consumers.

Q2. Do you agree with our proposals to develop the fair pricing guidance in relation to the principles (please note that questions on cost allocation proposals, including guidance, are asked separately under Chapter 3: Cost allocation). In particular:

a) have we identified the right areas to be covered by the guidance implementing the fair pricing principles (see paragraph 2.53 for a summary of the areas we are proposing to develop in guidance under each principle)? If you disagree with this proposal or think other areas should also be included, please specify what changes you would like to see and provide a justification.

b) Do you agree with the specific proposals to develop each of these areas in guidance? If you disagree, please specify what changes you would like to see and provide a justification.

Table 2: Response summary for consultation question 2a

Response	**Number of responses**	**Percentage of total responses**
Agree	16	18%
Partially agree	19	21%
Neither agree nor disagree	19	21%
Disagree	2	2%
Not answered	34	38%
Comments	56	62%

Table 3: Response summary for consultation question 2b

Response	**Number of responses**	**Percentage of total responses**
Agree	7	8%
Partially agree	13	15%
Neither agree nor disagree	30	33%
Disagree	3	3%
Not answered	37	41%
Comments	53	59%

1.14 Respondents generally welcomed guidance, with some suggesting this was essential. One respondent recommended that Ofgem outlines its intentions for

the iterative development of the framework, including timelines for reviewing and adjusting the framework.

1.15 However, a minority of respondents sought further clarity on how the fair pricing principles that were not explicitly developed in guidance are in scope, or how they will be treated in Ofgem's monitoring and enforcement.

1.16 Cost efficiency: a minority of respondents felt that increasing cost efficiency might come at a significant cost. There were also concerns that a drive from Ofgem for heat networks to reduce costs is likely to result in poor consumer experiences as operators cut the level of service.

1.17 Clearer guidance: some stakeholders welcomed clearer guidance that inefficiency or avoidable costs should not be passed through without scrutiny, but requested more detailed support on cost efficiency, including worked examples, templates, and training to assist smaller networks.

1.18 Maintenance costs: a minority of respondents noted that social landlords may face limits on passing maintenance costs through heat charges and raised concerns about procurement practices, suggesting documentation of outsourcing decisions to ensure value for money. Similarly, one stakeholder suggested that the sector's specialised nature may limit the practicality of competitive tendering or full cost transparency.

1.19 Fuel procurement: four respondents explicitly supported guidance on fuel procurement, including best practice examples. Some respondents suggested Ofgem should explore a cap to prices for gas and electricity used in networks that supply residential consumers to avoid large price variations. Others proposed a centralised pricing framework that would undertake the fuel procurement and hedging on behalf of the wider industry, to help achieve better prices for networks.

1.20 Corporate risk: some stakeholders sought more specific guidance on how the treatment of corporate risk would be applied in practice.

1.21 Fair and reasonable returns: 15 respondents had concerns on the lack of clarity of what would be considered 'fair and reasonable returns for investors' under the framework, noting that clearer definitions would enhance transparency to the sector and reduce uncertainty for consumers, suppliers and investors.

1.22 Some respondents said that investors require a known return on investment and that any uncertainty would make this sector un-investable. Four respondents believed that Ofgem should provide an estimate of what constitutes a fair and

reasonable return and suggested different options such as using figures from gas and electricity network companies.

1.23 Cross-subsidisation and sinking funds: respondents requested further clarity regarding cross-subsidisation and sinking funds. Six respondents said they would like clarity on what forms and levels of cross-subsidisation are acceptable. Five respondents sought further clarity and guidance on how sinking funds should be used and set. A minority of stakeholders also raised concerns about the interactions between sinking funds and the Landlord & Tenant Act 1985.

Ofgem response

Respondents raised the point of clarity around guidance. We have published our consultation that seeks further views on the approach to guidance around the fair pricing framework. We also want to restate our approach to develop guidance iteratively over time, as we gather more data from the market. Any changes to guidance will be consulted with industry as per the authorisation conditions. However, we cannot commit to a timeline as this will depend on data collection.

We are following a principles-based approach which allows for interpretation of principles beyond detailed guidance. This means that all principles are in scope. However, in terms of monitoring and enforcement we aim to take a proportionate and pragmatic approach of what is reasonable to expect from industry, in light of the guidance provided. We also aim for the guidance to be generally accessible.

We are taking a segmentation approach to ensure that regulation and guidance is targeted to the right sectors of the market. We will continue to work with industry to develop this.

Respondents raised points related to guidance on cost-reflective pricing. We believe that guidance on cost-reflective pricing should remain as proposed in the Fair Pricing consultation. We expect new metering requirements to be introduced through the Heat Network Technical Assurance Scheme (HNTAS). We also outlined that we would expect networks to be able to explain how their prices meet this principle if asked. Further details on cost-reflective pricing can be found in our draft guidance.

Respondents cited concerns on the impact of efficiency requirements on cost and quality of service. We have been clear that consumers should receive an appropriate level of service. This is in the consumer outcomes set out in the consultation. HNTAS and the wider consumer protections should ensure that consumers receive a reliable and good quality of service, along with a fair price through the introduction of this framework. We expect heat networks to carry out activities in a cost-efficient manner and to be

transparent in cost reporting. Please see our draft guidance for further details and best practice.

We will keep working with industry to understand needs in terms of guidance and accompanying materials. However, this is unlikely to be ready from go-live in January 2026.

Respondents raised concerns about the ability of social landlords to include maintenance costs in heat charges. We acknowledge that certain proposals in this framework have dependencies on the unbundling of individual heat charges from wider charges such as rent. For more information on these proposals please see 2024 ICP consultation.

We understand not every part of guidance will be relevant to all networks. However, we would expect networks to be able to justify why they do not follow specific guidance, and how their choices align with the fair pricing principles, if requested.

Respondents requested best practice examples and templates for fuel procurement. On this topic, we are aiming to include information in guidance. Networks are expected to be able to explain how they have considered best practice guidance, if requested.

Some respondents raised the topic of a fuel input cap and industry-wide procurement framework. These proposals fall outside of Ofgem's remit but we have shared this feedback with the government to explore the feasibility of these proposals.

Respondents questioned how the treatment of corporate risk would apply in practice. At this stage we are unable to provide significant further guidance on corporate risk in relation to the fair pricing principles, but it is an important area that we want to monitor and keep under review as we gather more data and understanding of the sector. Further guidance in relation to corporate risk has been provided under cost allocation rules.

Respondents raised questions about the effectiveness of guidance on fair and reasonable returns. Our view is that this principle should be included in the framework, even if terms such as 'fair' and 'reasonable' are not defined, because profit is a key factor in pricing under monopoly. We consider that heat networks should be able to justify that their level of profit is fair and reasonable in relation to the risks, even in the absence of more detailed guidance from the regulator. Delaying the incorporation of this principle in the framework until data acquisition and analysis would not eliminate investor uncertainty. We believe that providing estimates without good data would not be appropriate and would risk sending the wrong signals to the market.

Respondents raised concerns around cross-subsidisation. We understand that cross-subsidisation amongst customers might happen in different circumstances and for different reasons. However, we remain of the view that, at this stage, guidance should

remain high-level, not setting direct restrictions but requesting that individuals or groups of consumers should not face disproportionate prices as a result.

We will not be providing specific guidance on sinking funds at this time. We aim to gather more data and knowledge of good practices in the sector and may provide best practice examples in further iterations of guidance. Whilst we are not providing detailed guidance at this stage, any sinking funds in place should adhere to the principles outlined in the fair pricing framework.

Q3. Do you agree with the proposed 'fairness test'? In particular:

a) Do you agree with the high-level features of the fairness test (principle based, reasonableness, case-by-case basis, and objectivity)?

b) Do you agree with our proposals to implement the fairness test discussed in Appendix 1: Fairness test?

Table 4: Response summary for consultation question 3a

Response	**Number of responses**	**Percentage of total responses**
Agree	17	19%
Partially agree	30	33%
Neither agree nor disagree	7	8%
Disagree	4	4%
Not answered	32	36%
Comments	58	64%

Table 5: Response summary for consultation question 3b

Response	**Number of responses**	**Percentage of total responses**
Agree	6	7%
Partially agree	12	13%
Neither agree nor disagree	12	13%
Disagree	2	2%
Not answered	58	65%
Comments	32	36%

1.24 Overall, respondents welcomed the high-level fairness test as a mechanism to apply and implement fair pricing principles. Support was given by 34 respondents

for the process being principle-based and case-by-case application due to the diversity of the sector.

1.25 18 stakeholders voiced appreciation for the flexibility of the approach, which strikes a balance between provision of guidance and allowance of contextual differences in network characteristics.

1.26 Definitions: 17 respondents that were partially supportive gave feedback on a need for clarity on definitions of terms and how the fairness test would be applied in practice. Stakeholders requested clearer definitions for key terms and considered that these could be interpreted differently between industry parties leading to potential regulatory inconsistency and disputes.

1.27 Although several respondents viewed the case-by-case approach as a positive, six stakeholders highlighted the risk of a proliferation of disputes, increased administrative burden and higher costs for operators.

1.28 Interaction with other regulatory tools: there were also concerns raised about how the fairness test would interact with other regulatory tools, such as benchmarking and profitability analysis. Five respondents questioned whether the test would be applied universally or only in cases that are flagged through monitoring or other mechanisms.

1.29 Accurate data and benchmarking: there was general acknowledgement that benchmarking and accurate data are key inputs into the effective implementation of the fairness test. However, nine of the respondents also raised concerns about the availability of data across the heat network sector and the implications this could have on effective benchmarking within the fairness test. They stressed that, in the absence of more strict definitions for 'fair' and 'disproportionate' pricing, at least two years of data would be needed before meaningful comparisons could be made across the industry.

1.30 General concerns were also voiced about the way in which benchmarking models would be applied during the fairness test. Eight respondents asked for more detail on which benchmarks would be used in any given instance and the way that the remainder of the fairness test would be conducted around this application.

1.31 Vulnerability: two respondents argued that the fairness test should explicitly incorporate vulnerability, levels of income and other markers of detriment when determining which cases deserve earlier intervention.

1.32 A minority of stakeholders also stressed the need for the fairness test to be contextual in its application, particularly around networks operating under an

Energy Services Company (ESCo) model, which might have tariffs set with reference to a long-term methodology resulting in early years of operation at a loss before profits are generated in later years.

1.33 Support mechanisms: six respondents advocated for the provision of tools and support mechanisms to assist network operators in adhering to the fairness test and the fair pricing framework in general, such as worked examples, standardised templates, checklists and training.

1.34 There was also support amongst a minority of respondents for an independent review or appeals process, to allow consumers a pathway to challenge fairness test outcomes.

1.35 Zoning framework: a minority of stakeholders raised concerns about the interaction of the fairness test with the future zoning framework. They suggested that the application of the fairness test after a heat network zone has been established creates uncertainty and raises perceived regulatory risk, undermining investor confidence in long-term infrastructure.

1.36 Additional questions: in response to the second part of the question, three respondents offered suggestions for additional questions to be included in the fairness test:

- "What steps have been taken to ensure costs are efficient?"
- "What is the source of high prices?"
- "Is there a pattern of high profit taking and debt-leveraging associated with disproportionate pricing?"

Ofgem response

We welcome the broad support for the proposed fairness test and its high-level features. The test is designed to help us implement the fair pricing authorisation condition and principles effectively by utilising a variety of tools, such as benchmarking and profitability assessments. A case-by-case approach also allows us to account for the diversity within the sector and consider the unique characteristics of heat networks.

We acknowledge the points raised by stakeholders regarding clarity on definitions and practical implications of the fairness test. This theme has been raised in previous questions, please refer to our response to Q1 for a discussion on this.

Some respondents interpreted the fairness test to be a regulatory tool that is separate from benchmarking and profitability assessments. The intention is for the latter tools to be utilised as inputs as opposed to standalone tools, feeding into the fairness test and more specifically into the identification of disproportionate pricing.

We received a strong consensus from stakeholders on the role of benchmarking and accurate data within the fairness test. We also acknowledge the concerns around the availability of data and implications for benchmarking. We will continue to engage with industry on this with a view to allowing operators to better prepare for data expectations. With regards to the concern around timeframe, we continue to view benchmarking as a process that will develop in phases. New data will be ingested and used to evaluate models that will be changed and refined to improve effectiveness where possible. Please see Q6-Q9 for more discussion on data requirements.

Respondents raised several themes related to the application of the fairness test to different segments of the market. Regarding the first theme on vulnerability and consumer detriment, A1.3 in the consultation asks questions with the intent of identifying groups of consumers that are affected by disproportionate pricing, the size of the affected group and the extent to which this group is affected. This information will allow us to take a more targeted approach with any follow up actions to maximise the benefits of regulation.

The fairness test is designed to be flexible and would consider any unique contracts and pricing methodologies when assessing prices.

We acknowledge the request for further support to assist networks in adhering to the fairness test. We will explore the options related to the provision of materials in the future and will further consult on key elements of the fairness test such as benchmarking and price investigations.

In relation to the calls for pathways allowing consumers to challenge fairness test outcomes, we will take consumer complaints and information into account. However, at this stage, we are not planning to include a consumer appeal process to challenge the results of fairness test. We will however consult further on the detail of price investigations in the future.

We acknowledge that reasonable profits need to be made to incentivise investment and our approach will allow for this. We are working closely with DESNZ to ensure clarity on how pricing protections will interact with zoning, to reduce uncertainty and improve confidence in investment.

Some respondents offered suggestions for additional questions to be included in the fairness test. The list of questions in appendix 1 of the consultation was intended as an illustrative example of the type of questions we would consider, and they are not exhaustive. The suggested questions cover areas that we are likely to explore either as part of initial screening or in price investigations. The list of questions in the draft guidance appendix has been updated to reflect some of these.

Q4. Does the revised authorisation condition, 'fair pricing', reflect the policy intent?

Table 6: Response summary for consultation question 4

Response	Number of responses	Percentage of total responses
Agree	27	30%
Partially agree	17	19%
Neither agree nor disagree	1	1%
Disagree	1	1%
Not answered	44	49%
Comments	46	51%

1.37 There was general agreement that the revised AC reflects policy intent with 44 respondents either agreeing or partially agreeing with the statement.

1.38 11 respondents noted that the AC was very high level and generally lacked detail. Some respondents voiced the detail in the guidance would be key to determining whether the AC reflects the policy intent. Three of them reiterated that the framework should define terms such as 'disproportionate', for example through the use of thresholds.

Ofgem response

We note the general support for the wording of the AC and its reflection of policy intent. In relation to the comments referring to the high-level nature of the AC and general lack of detail, we refer to our response to Q1 where we discuss stakeholder concerns on clarity and definitions

Q5. In relation to market segmentation (please note that we are asking in relation to the considerations discussed in paragraphs 2.58-2.61, segmentation considerations in relation to price benchmarking are considered under Chapter 4: Price comparison and benchmarking methods):

a) Have we identified the right characteristics for market segmentation, and are these correctly defined?

b) Do you agree with the segmentation approach discussed for each of these characteristics?

Table 7: Response summary for consultation question 5a

Response	**Number of responses**	**Percentage of total responses**
Agree	17	19%
Partially agree	33	37%
Neither agree nor disagree	3	3%
Disagree	6	7%
Not answered	31	34%
Comments	59	66%

Table 8: Response summary for consultation question 5b

Response	**Number of responses**	**Percentage of total responses**
Agree	7	8%
Partially agree	30	33%
Neither agree nor disagree	2	2%
Disagree	6	7%
Not answered	45	50%
Comments	45	50%

1.39 Segmentation: between the two parts to this question, there was general support for both the identified characteristics for market segmentation and the proposed approach for each one. Some respondents said that segmentation may be the wrong or inadequate word to use regarding this approach and more needs to be done to illustrate the interconnections. They also asked for definition on 'not-for-profit'.

1.40 Requirements: a minority of stakeholders suggested that we should distinguish where suppliers and consumers are the same organisation, with lower requirements in these situations. One respondent did not support pre-legislation networks having a longer transition period on data reporting requirements as this could create data and regulatory asymmetry, but suggested that it may be appropriate to tailor reporting requirements for very small or not-for-profit networks (although it was noted that this should not compromise regulatory oversight). Another felt that shared ground loops (SGLs) should be excluded.

1.41 Additional segment characteristics: amongst respondents, there were several suggestions for additional segment characteristics: geography (specifically island and rural networks), heat source or control of heat source, freehold vs leasehold, generation fuel type, carbon intensity, temperature of heat and proportion of vulnerable customers.

1.42 Several respondents also raised points related to the existing list of proposed segments. Two respondents suggested type of network should not be a consideration as there are currently many customers connected to communal heat networks which are not being managed well.

1.43 Some respondents said that the amount of suggested segmentation characteristics may lead to over complication or confusion, with one respondent mentioning that a heat network may find itself in several different segmented groups at once.

Ofgem response

A few respondents raised concerns related to our proposed segmentation approach. Market segmentation involves considering whether and how rules and requirements may need to be adapted for different types of heat networks in the market, to ensure that the application of the regulation is relevant and proportionate (2025 consultation paragraph 2.58). This is separate to the grouping conducted in price benchmarking.

Respondents asked for self-supply networks to be distinguished from conventional requirements. In line with the wider consumer protection position, where an authorised person takes all heat generated on a network, the fair pricing framework will not apply.

In relation to SGLs, these networks are included in the scope of regulation under current proposals. However, we acknowledge that different approaches may be required to account for different charging mechanisms and services provided.

Respondents raised questions related to the existing list of proposed segments. The intention of market segmentation is not to reduce pricing protection standards for some

segments, for example communal heat networks. As explained above, this is to identify whether regulations need to be adapted to different segments. This might be needed in some cases given how diverse the market is.

Most of the additional segment characteristics raised by stakeholders seem to be relevant for price benchmarking, given that they could explain differences in pricing. We believe these characteristics are broadly captured in the factors that we have identified in the benchmarking work. Please refer to the chapter on benchmarking in the 2025 consultation and our responses to the benchmarking section in this document. It is also worth noting that in our case-by-case approach to pricing investigations, individual characteristics will be considered, even if they are not identified as a specific 'market segment'.

In the consultation, we identified a long list of characteristics that could be relevant for segmentation in relation to fair pricing requirements. In the draft fair pricing guidance consultation we have included a shorter list that reflects the segments that are relevant for the guidance first iteration and sought to further clarify how segments should be interpreted in relation to the guidance. Generally, where the need for segmentation is identified, this will be clearly explained in guidance.

We are aware that networks might fall in more than one characteristic. This should not be problematic, as these segments are not mutually exclusive. As noted above, this is different from our benchmarking approach.

Q6. Of the information listed in Table 3 below, what do heat networks already regularly collect and can be easily reported?

Table 9 - Response summary for consultation question 6

Response	Number of responses	Percentage of total responses
Comments	46	51%

1.44 46 respondents provided an answer to this question. A minority of respondents said that they did not support the need for such a large and complicated dataset, referencing the increased cost of delivery and stating that they did not understand the requirement for quarterly reporting when most of the data types will change annually.

1.45 Three stakeholders noted concerns more generally about resources and timing to collect these datapoints across a large portfolio. Concerns were also raised about

parallel reporting with Heat Network Metering and Billing Regulation (HNMBR) and the Scottish housing regulator.

1.46 Challenging data collection: respondents raised a range of areas which may prove challenging in data collection**.** A minority of respondents suggested requests for data such as the costs passed into, and the bill split between, standing charges or unit rates, may be difficult to provide. Others suggested older or not-for-profit networks may face challenges in providing the requested data. More generally, respondents noted that this information changes rapidly and often, which would need to be considered in any reporting requirements. Three respondents mentioned concerns regarding the overlap with HNTAS.

1.47 Areas easy to report: 17 respondents mentioned that they collect the majority of the information outlined in the table, although some reported they may need further development to allow their network to share the broader list. Consumer types, pricing structure and total energy consumption were mentioned as areas which would be easy to report. Respondents suggested newer and commercial networks should be able to provide all the requested data. One respondent mentioned that most suppliers already collected metered heat consumption, main supply total consumption, tariff details (standing and unit rates) and fuel costs.

1.48 Other general comments: one respondent recommended that Ofgem define a "core reporting pack" for small networks and allow phased reporting for legacy networks. Another respondent argued that Ofgem should consider these practical implications when determining reporting requirements and frequencies, ensuring that the administrative burden remains proportionate while maintaining effective oversight.

1.49 Four respondents disagreed with quarterly reporting, with another respondent highlighting that the regularity of any reporting requirement is considered and proportionate to the benefit as there may be a significant administrative burden created by regulation if this is not considered carefully.

1.50 Our response to stakeholder feedback for question six is covered in conjunction with questions seven and eight in the section below.

Q7. Of the information listed in Table 3 below, which items would be more challenging for heat networks to report?
Q8. Of the cost drivers listed in Table 7, which items would be more challenging for heat networks to report?

Due to the overlap between these question topics, we have decided to address and summarise stakeholder feedback to both question 7 and 8 in a joint section below.

1.51 Areas challenging to report: respondents listed a range of items that may be challenging to report. The most frequent data points were network length, age and type of properties supplied, other efficiency measures, standing charges, and network generation. Additionally, respondents also commented on the general burden of reporting created by the table items.

1.52 Scope and frequency of reporting: several stakeholders raised concerns about the scope and frequency of data reporting, with a minority preferring annual over quarterly submissions and others questioning the need for detailed cost allocation information and Earnings Before Interest and Tax (EBIT) data.

1.53 Definitions: further clarification was asked for definitions of network generation, number of customers, age of the network, other efficiency measures and operating temperature.

1.54 Data points reported as difficult to obtain were especially noted for older legacy networks, smaller networks, not-for-profit, and unmetered networks.

Ofgem response

Stakeholders again requested clarification and definitions in key areas. For this point, please refer to our response in Q1.

Based on the stakeholders' responses, we understand that some metrics (annual network generation, network generation type, operating temperature) are more challenging to report than others (metered versus unmetered, type of network).

Respondents have also noted that some segments of the market might find reporting challenging due to resourcing constraint, or the nature of the heat networks themselves (for example, unmetered networks).

Based on the consultation responses, we expect most heat networks will be able to report their prices, charges and cost allocation practices regularly as listed in Table 3. We also expect heat networks to comply with future HNTAS data requirements and registration requirements.

For the reporting of financial metrics, please refer to our response to Q24. For the detailed discussion of some metrics listed under 'cost drivers', please refer to our response to Q19-Q20 on cost drivers.

Note that this longlist of cost drivers has not been finalised. For the cost drivers that will not be reported through HNTAS and registration, we expect iterations of modelling and engagement with stakeholders to continue to inform the list. In addition, we will consider exploring suitable proxies for the more challenging metrics, or consistent ways to estimate these metrics where appropriate, for some subsets of heat networks.

Q9. Should certain types of heat networks have more limited data reporting requirements? If so, which heat networks should these reduced requirements apply to, and what data should they be exempt from reporting?

Table 10: Response summary for consultation question 9

Response	Number of responses	Percentage of total responses
Agree	21	23%
Partially agree	16	18%
Neither agree nor disagree	6	7%
Disagree	7	8%
Not answered	40	44%
Comments	50	56%

1.55 Reduced reporting requirements: respondents suggested several types of networks which they believed should have reduced reporting requirements. Operators on a cost avoidance model, public sector owned limited companies, not-for-profits, unmetered networks, older legacy networks, housing providers, and smaller networks were all raised as networks which should have reduced reporting requirements or be exempted from the process entirely.

1.56 A minority of respondents suggested that for a public sector owned limited company, subject to detailed annual financial audit, an alternative proxy assessment of financial performance or viability is unwanted and unnecessary.

1.57 Similarly, stakeholders mentioned that housing providers may not know some of the cost drivers (such as network length), whilst not-for-profits or older legacy networks may struggle to provide high levels of data granularity. It was also

suggested that the reporting burden on smaller networks, who would require more resource to fulfil these requests, could impact their customers.

1.58 Six respondents explicitly disagreed with the proposal of different data reporting requirements. One respondent commented that a heat network should be treated equally and fairly for the benefit of the consumer, and if the information is to be collected and deemed useful enough for some heat suppliers to report on, then it should apply to all. Another respondent, along similar lines, mentioned that having different reporting requirements is likely to lead to unequal consumer outcomes.

Ofgem response

Stakeholders have asked either for uniform requirement for data across the market but at a reduced frequency, or for certain segments of the market to be exempt or have a reduced reporting burden. We aim to take a proportionate approach to data reporting, balancing the regulatory and reporting burden on the heat networks with the need for accurate and timely data.

At this point, the approach outlined in the consultation remains our preferred approach, whilst minimising duplication and avoiding unnecessary burden. Further guidance on monitoring will be consulted on in due course. Over time, we aim to review the frequency of data reporting to ensure that we are still striking the appropriate balance. We also aim to leverage our digital tool to help streamline the data reporting process for heat networks.

Some stakeholders pointed out that the requirement for the data reporting should be the same for everyone to ensure fair consumer outcomes across the market. Due to heterogeneity in the market, there will be different requirements for different entities. For example, usage data would only be required from metered networks whilst unmetered networks would be expected to provide an estimate based on appropriate proxies. However, all heat networks will be required to submit their data at the relevant cadence proposed in the consultation.

Some stakeholders pointed out that for smaller heat networks, they will have difficulty obtaining a granular level of data. Whilst we acknowledge this, the data that we require for regular reporting represents data points that heat networks should know in order to comply with fair pricing framework or other regulatory requirements such as consumer protection or the registration process. For example, heat networks should know their cost breakdown in order to be able to set tariffs that are cost reflective. As such, we

expect heat networks to be able to give us the data points that we are asking for the purpose of regular monitoring.

2. Cost Allocation

Section summary

Cost allocation refers to how heat suppliers allocate costs to the various charges they levy on consumers, and how prices are structured more generally. Currently, suppliers use diverse pricing structures — including different combinations of connection charges, standing charges, unit rates, and other fixed charges – and allocate different costs to these charges. These differences may complicate price benchmarking.

We have previously set out that there is potentially a case for us to set prescriptive rules on how heat suppliers should allocate their costs when setting charges. However, imposing prescriptive cost allocation rules also has potential downsides, including limiting the ability of heat suppliers to adopt pricing structures that suit their diverse customer bases and business needs, as well as the extra regulatory and resource burden of reporting, monitoring and enforcement.

In general, stakeholders' responses indicate agreement with the use of high-level guidance at this stage, given the nascent state of the sector and the heterogeneity within it. Given the lack of data, it is not advisable to provide a large number of prescriptive rules at this stage as without adequate data, the impact of such rules cannot be estimated. Based on the responses from stakeholders in the 2025 consultation, we will be going ahead with providing high level guidance for cost allocation. In addition to the guidance, we will be imposing only one prescriptive rule initially: payments, compensations, fines, penalties and other redress provided to consumers should not be passed through to customers.

Stakeholders have requested more information on how the prescriptive rule of not passing on compensations, fines, penalties and other redress would work for not-for-profit heat networks. Heat networks may be subject to fines, penalties and redress from January 2026. These are deemed to be within the control of heat network entities and as such should be avoided by complying with the regulations. We will be consulting further on our approach to GSOPs as these will not be in place from commencement and we will need to review our cost allocation AC once these are introduced.

Question analysis

Q10. Do you agree with our proposed prescriptive rule that GSOP payments, compensations, fines, penalties and other redress provided to consumers should not be passed through to customers?

Table 11 - Response summary for consultation question 10

Response	Number of responses	Percentage of total responses
Agree	23	26%
Partially agree	32	36%
Neither agree nor disagree	1	1%
Disagree	3	3%
Not answered	31	34%
Comments	59	66%

2.1 Among the stakeholders that provided a response to this question, the majority agreed with the proposed prescriptive rule. However, a substantial number of stakeholders provided nuanced comments discussed below.

2.2 Funding in not-for-profit entities: 12 respondents agreed with the intention but raised concerns about funding in not-for-profit entities, Similarly, respondents pointed out that if the payments come from other sources such as rent, the fines are socialised across the customer base and consumers would end up paying in the end. Some suggested that social landlord heat networks and/or not-for-profit entities should be exempted

2.3 Implementation concerns: there were also implementation concerns raised by stakeholders. One respondent suggested that small networks may need flexibility over time, and perhaps Ofgem could introduce mechanisms to amortise unexpected liabilities. One stakeholder felt that this rule can only effectively be achieved through transparent pricing. Three stakeholders asked for more details on planned enforcement to ensure costs are not passed on to consumers, whilst two respondents had concerns regarding implementation of cost allocation rules due to the interaction with housing legislation and bundled charges.

2.4 Two respondents cautioned that these costs will reduce funds for reinvestment or require higher future tariffs.

2.5 Clarity: a minority of stakeholders asked for more clarity. Two respondents would like to understand Ofgem's views on the potential for liability for GSOP payments or some other forms of compensation through third party contracts, where the effective risk of such redress payments may be reflected in the contracts. One respondent emphasised the need for definitions on fines and raised questions on the passing of fines in cases of communal heat networks that are owned by the residents themselves.

2.6 Three respondents did not agree with the proposed rule. One mentioned that in cases where the fines are incurred due to events beyond the control of the authorised person, it may be appropriate to pass on these costs. Two others mentioned that fines, compensations and penalties are legitimate costs of doing business and will be included in some form or other within the costs passed onto the consumers.

Ofgem response

Heat networks are expected to be run efficiently with the aim of providing fair pricing and good consumer outcomes. In cases where investigation, enforcement, and compliance activities result in fines, penalties, or redress, such costs are reflective of the heat network not achieving the standards that are expected of them and therefore should not be borne by the final consumers.

As in the 2025 ICP government response, following an analysis of consultation responses, and subsequent stakeholder engagement, we are consulting further on our proposals. Heat network GSOPs are planned to be phased in from 2027. In developing these proposals, we will take note of stakeholder suggestions, which included a tiered approach to compensation payments, and the further phasing-in of GSOPs to give authorised persons more time to adjust their network infrastructure.

Q11. Do you agree with the draft best practice guidance provided? Is there anything that should be added? Should any of the best practice guidance be strengthened to prescriptive rules?

Table 12 - Response summary for consultation question 11

Response	Number of responses	Percentage of total responses
Agree	8	9%
Partially agree	46	51%
Neither agree nor disagree	0	0%
Disagree	1	1%
Not answered	35	39%
Comments	55	61%

2.7 Key issues: respondents offered general feedback on the draft best practice guidance. Some of the key issues that respondents noted should be taken into consideration when drafting guidance included bespoke arrangements for non-domestic consumers, and the variety of pricing methods such as cost avoidance and price promise models.

2.8 Clarity: some stakeholders asked for more clarification on what costs are allowed or not allowed to be passed through, treatment of certain costs and further guidance and templates, for example, around treatment of shared costs across a portfolio and apportionment of shared assets, connection charges and decarbonisation costs. Stakeholders also asked for more clarity on the interaction with the Landlord and Tenant Act, with one respondent asking for rules around consumers being double charged maintenance costs through both rent and heat charges.

2.9 Cost passthrough: in terms of cost passthrough, there were recommendations for prescriptive rules to not allow certain types of debt costs to be passed onto consumers, and developer incurred costs to not be recovered through resident tariffs unless transparently justified and agreed at handover.

2.10 Evolving best practice: one stakeholder noted that as the market moves towards statutory regulation, it is important that best practice evolves into enforceable standards where appropriate to ensure consistent outcomes.

2.11 One respondent did not agree with the draft best practice guidance provided, arguing that in their view "all parties" (such as developers, landlords, tenants) should pay for any incremental costs they impose on the system.

Ofgem response

We welcome respondents' broad agreement with the best practice guidance and feedback suggesting we adopt a flexible, holistic approach. We recognise that guidance in this area must evolve where appropriate as regulation develops and matures within the sector.

Whilst several responses indicated a preference for greater prescription or detail within the best practice guidance and respondents have provided feedback on key areas to be strengthened within the guidance, we consider that it would not be appropriate at this stage to provide prescriptive rules on specific aspects of cost allocation. This is due in part to the existing level of unknowns around the cost allocation practices of heat networks and concerns that offering any prescriptive rules within best practice examples could result in unintended consequences for both heat networks and consumers. Therefore, at present, we believe flexibility within the best practice guidance is key to allow operations to continue as required in conjunction with our pricing principles.

Q12. Do you think that the best practice approach to cost allocation should differ for different types of heat networks, or different types of suppliers? If so, for which types and how?

Table 13 - Response summary for consultation question 12

Response	**Number of responses**	**Percentage of total responses**
Agree	4	4%
Partially agree	32	36%
Neither agree nor disagree	1	1%
Disagree	13	14%
Not answered	40	44%
Comments	50	56%

2.12 Difference in approach: 36 respondents agree that the best practice approach to cost allocation should be different for different types of heat network, mentioning factors such as size (with regards to administrative burden and simple cost templates), profit versus not-for-profit (especially around GSOP payments),

metered versus unmetered, technology (treatment of shared ground loops that tend to not have unit charges), and ownership.

2.13 A minority of respondents suggested that social landlords should be allowed to have portfolio-level cost smoothing to avoid large bill variations, standing charges to cover unavoidable replacement costs, and simpler allocation models where costs are recovered at break-even.

2.14 Consistency: whilst stakeholders broadly agreed with the need for a segmented approach, a minority of respondents felt that the guidance should be high level only and consistent across the market. One respondent commented that the current proposal was sufficiently high level as to apply to all heat networks. One respondent suggested there shouldn't be any cost allocation rules at all, with a focus on only the outcome of fair pricing instead

Ofgem response

We welcome feedback that best practice approach guidance should differ for different types of heat network but acknowledge the minority arguments against use of segmentation. We consider that in some cases the cost allocation guidance will be sufficiently high level or consistent as to be applicable to all and expect that some of the high level guidance, such as the application of the Cost Efficiency principle can be followed by all authorised persons irrespective of network type. However, we maintain that the differing circumstances of various heat network types will make it difficult to have a single, prescriptive piece of guidance.

We have incorporated the feedback regarding some of the factors to consider when developing the guidance, particularly around the network types identified by respondents, such as metered vs unmetered, district versus communal, and profit versus not for profit. We also note that in certain cases the guidance may need to consider landlord and tenant legislation.

Q13. Does the authorisation condition, 'cost allocation', reflect the policy intent?

Table 14 - Response summary for consultation question 13

Response	Number of responses	Percentage of total responses
Agree	29	32%
Partially agree	9	10%
Neither agree nor disagree	9	10%
Disagree	2	2%
Not answered	41	46%
Comments	49	54%

2.15 Suggestions to strengthen the authorisation condition: most respondents that provided an answer to this question agree that the cost allocation AC reflects the policy intent. Respondents made several suggestions to strengthen the authorisation condition and guidance, mentioning the need to refer explicitly to proportionality and transparency, and to avoid blanket requirements for smaller entities. One also suggested the use of prescriptive rules to reduce the risk of inconsistency and diminished consumer protection. Two respondents mentioned that the condition should be extended to include that costs of certain types of debts or handling upheld complaints should not be passed onto consumers. Finally, one stakeholder suggested that the drafting should be amended to mirror some of the words in the fair pricing conditions.

2.16 Policy clarification: two stakeholders asked for further policy clarification on how this would work for not-for-profit.

2.17 Against cost allocation as an authorisation condition: one respondent argued that cost allocation should not form an explicit authorisation condition as operators could still achieve fair pricing through different practices such as cost avoidance or recovery. Another suggested that the guidance should not yet be prescriptive until actual data from regulated operating networks has been gathered for a number of years.

2.18 One stakeholder that disagreed with the question raised the point that the cost allocation AC does not reflect the fair pricing objective, whilst another raised concerns regarding Ofgem's ability to assess whether the AC has been fulfilled.

2.19 Ability to meet the policy intent: a minority of respondents mentioned difficulty in their ability to meet the policy intent or outlined concerns regarding the policy intent but provided no response to the AC drafting and whether it reflects the policy intent.

Ofgem response

We note the general support for the wording of the AC and its reflection of policy intent. In relation to the comments referring to the policy objective, we refer to our response to Q10 where we discuss the policy intent.

With regards to the comments about the proportionality, prescriptive rules and blanket requirements, the cost allocation guidance has been drafted at a high level to take into account the heterogeneity of the market at the outset of the regulation, and therefore has been drafted with proportionality in mind, avoiding prescriptive rules (except one rule mentioned in Q10) and blanket requirement to allow the market to adjust and move towards a more uniform cost allocation methodology with time.

Some of the comments suggested costs that should not be allowed to be passed onto consumers. These suggestions have been considered when drafting the cost allocation guidance.

For the comments related to how the AC would work for not-for-profit segment of the market, please refer to our response to Q10 above.

Q14. What other feedback do you have on the proposed approach to cost allocation?

Table 15 - Response summary for consultation question 14

Response	Number of responses	Percentage of total responses
Comments	32	36%

2.20 Changes in price: one respondent noted that changes in price should track downward movements in cost at the same rate as upward movements in cost. We have had feedback from consumers that it is perceived that prices increase swiftly in response to supply costs but the inverse is not necessarily the case.

2.21 Interaction with the Landlord and Tenant Act: few respondents noted the interaction between the heat network regulation and the Landlord and Tenant Act.

2.22 Standing charge review: a minority of respondents made comments regarding the standing charge review and how they would impact standing charges in heat networks.

2.23 Separate rules for district heating: one respondent mentioned the need for separate rules for district heating and residential heat networks, as many of the differences in business model exist in the District Heat network sector and not so much in residential heat networks.

Ofgem response

Comments about a range of issues outside of the scope of cost allocation guidance were raised such as undercharging and back billing, discussion on standing charges, enforcement and penalties issues, and unbundling. These comments will be considered within related areas of policy and regulation. Regarding downward price changes, authorised entities are expected to adhere to the principle of cost reflectivity, requiring them to ensure that any cost reductions are reflected in the final tariff charged to consumers in a timely manner.

We have noted the interaction between the regulations when it comes to cost recovery and we recognise that, for some, the supply and operation of a heat network is one part of a broader housing service being provided. In these instances, the authorised persons and their consumers will be subject to both our authorisation conditions and housing legislation. We are working with government and stakeholders to explore opportunities to align requirements where possible, with the aim of achieving consistent consumer outcomes in the sector while mitigating unnecessary regulatory burden.

We are aware of ongoing work within the gas and electric retail market on standing charges. At this time, we are not proposing any reform to standing charges within the heat network sector. Any significant changes to prescriptive rules on tariff structure will be accompanied by relevant consultations.

Regarding separate rules for district heating and communal heating, our proposed cost allocation guidance should provide room for flexibility to accommodate the wide-ranging business models that currently exist in the market.

3. Price comparison and benchmarking methods

Section summary

Price comparison and benchmarking methods are essential for identifying potential disproportionate pricing. Price comparison involves defining heat prices in a consistent way (for example, total annual cost per consumer) regardless of diverse tariff structures in the sector. Benchmarking uses these definitions to compare prices against reference points such as external benchmarks (cost of alternative heating technologies), comparator benchmarks (expected prices based on cost drivers), and own past price benchmarks (historical prices).

Most respondents supported defining prices based on total consumer cost rather than individual tariff components, with some suggesting additional metrics and checks on individual components. There was broad support for external benchmarks using gas boilers and heat pumps, though concerns were raised about applicability to low-carbon networks and the need for robust, transparent methodologies. Comparator benchmarking was seen as valuable but complex, with objections citing data burden and feasibility. Respondents also highlighted challenges in reporting some cost drivers and called for phased implementation, clear guidance, and robust and transparent benchmarking methodologies.

We expect to adopt a phased, iterative approach, starting with simple definitions and external benchmarks, while developing comparator benchmarking as data reporting phases in. We will consult on methodologies further in a future consultation. We will consider the level of detail on publishing methodologies and explore worked examples to ensure transparency. We acknowledge concerns about complexity and data reporting burden but view complementary benchmarking methods as essential for identifying potential disproportionate pricing, prioritising and informing price investigations.

Question analysis

Q15. Do you agree with our proposed approach for defining heat network prices in a comparable way? Are there any other ways to define price that we should consider?

Table 16 - Response summary for consultation question 15

Response	Number of responses	Percentage of total responses
Agree	15	17%
Partially agree	23	26%
Neither agree nor disagree	13	14%
Disagree	7	8%
Not answered	32	36%

3.1 Respondents expressed broad support for the proposed approach for defining heat network prices in a comparable way. Stakeholders showed support for the proposal of capturing the total amount paid by consumers instead of comparing individual elements of charges such as unit charges or standing charges. They also agreed that it is sensible to focus on the whole cost to heat network consumers as it facilitates comparison under the diverse charging practices adopted by heat networks.

3.2 Given the diverse charging practices in the market, one respondent recommended conducting a rapid evidence review on pricing to explore the current practices and to inform the review of Ofgem's proposal.

3.3 Tariff comparison: four respondents supported the proposed approaches outlined in the consultation document for tariff comparison of comparing the average amount paid by consumers and alternatively comparing the typical amount paid by consumers of certain usage. Stakeholders commented that defining usage bands is consistent with the Typical Domestic Consumption Values or Standard Consumption Values used in the wider energy sector. One respondent reasoned that it is important for price definition to consider household consumption to uncover pricing issues masked by usage differences. The 20th percentile, average, and 80th percentile of usage were suggested by stakeholders to be used as low, medium, and high usage.

3.4 Two respondents welcomed a tool like Tariff Comparison Rate (TCR) from gas and electricity modified for heat networks, which includes unit charge, standing charge, other fees, calculated based on typical domestic consumption values.

3.5 Conversely, one respondent urged Ofgem to avoid splitting customers by low, medium, and high usage to reduce administrative burden on collating the data.

3.6 Cost of heat per square metre: a minority of respondents proposed that prices can be defined as the cost of heat per square metre because it indicates the efficiency of heating and makes the comparison with the cost of heating using boilers easier, or using a ranked price list of all companies by defining the heat cost of a 'standard dwelling'.

3.7 Definitions and comparability: several respondents raised issues around definitions and comparability. One respondent criticised the definition of the amount paid per customer as this fails to consider factors such as usage, tenures and pricing structure. Others noted that the proposed definitions of price overlook different property archetypes (such as a five-bedroom detached house versus a one-bedroom flat) and heat network and building efficiency.

3.8 Two respondents raised concerns over the omission of costs over time and proposed lifetime or annualised cost comparison because annualised or lifetime cost is the true cost burden for consumers, especially for vulnerable consumers to manage seasonal fluctuations of prices.

3.9 Unusual tariff structures: a minority of respondents were concerned that proposed price definitions may allow high standing charges or unusual tariff structures to be obscured. Respondents suggested instances of unusual tariff structures which could be obscured may have disproportionate impact on certain consumer groups, such as those with low usage. Stakeholders recommended granular assessment on how different user groups are affected. Legacy networks were also raised as another area of concern where unavoidable fixed costs could be hidden in standing charges and would not be addressed by the proposed definitions.

3.10 Price comparison: several responses discussed different approaches to price comparison. Respondents suggested price comparisons between networks without definitions of cost categories would be inconsistent and misleading. Price comparison by element, such as by both standing charge and unit rate, was suggested to allow customers to better understand and compare prices.

3.11 On top of the comparison of total effective prices, one respondent suggested that there should be additional benchmarking for standing charge and unit charge for metered networks.

3.12 Modifications: 11 respondents pointed out instances where the proposed price definitions may be less appropriate and suggested some modifications regarding distinguishing commercial and domestic customers, district and communal heating, mixed tenure type and usage, SGL, and bundled charges.

Ofgem response

Current definitions include use of the term 'heat price' to mean 'cost of heat for consumers' in the consultation document and both terms are used interchangeably. We will proceed with these definitions and will also consider applying Typical Domestic Consumption Values with potential modifications for the heat network market, focusing on the cost of heating for different consumer groups. Our intention is to keep the definitions general such that they can be used in different benchmarking approaches.

We welcome the support from respondents on the two proposed definitions focusing on the total effective price facing consumers: average heat prices per consumer and heat price for consumers at certain usage levels for comparing prices, and we understand the caveats raised by the respondents. We are aware that the average cost per consumer may mask unusual tariff structures, however, our view is that this definition is more relevant when there is limited data, such as for unmetered networks. This definition considers the total amount charged so it provides an initial screening of potential disproportionate prices. We also agree that standard practice in the wider energy market such as setting Typical Domestic Consumption Values can be useful for comparison. We intend to explore whether and how this can be modified in the heat network context.

Another suggestion from respondents is the comparison of cost of heat per square meter or per dwelling. We view this as a sensible way to define heat prices but are mindful that differences such as building insulation will be embedded in the prices for comparison under this definition (if the cost of heat per square meter or per dwelling is not defined at a certain heat consumption as in the Tariff Comparison Rate (TCR) or similar measures). This may result in two heat networks of the same specification with two different heat costs or prices, requiring some care in using this definition in benchmarking. Despite this, as pointed out by one respondent, the heat cost per dwelling or per square metre would facilitate the comparison in external benchmarking or the use in combination with tools such as the Heat Trust Cost Calculator.

We intend to use the general definitions of total effective cost as a starting point. We agree with the suggestion that additional comparison of standing charges would be

useful, but we intend to start with the total effective cost in benchmarking to keep the models manageable and explore the possibility of including additional comparison of individual cost elements. As data becomes more standardised, we expect that the comparison by elements would become more meaningful.

Other modifications

Although we agree that factors such as distinctions between commercial and domestic customers, district and communal heating, and various heat networks such as older heat networks, heat networks with mixed tenure types and mixed usage, and SGLs, should be considered in price comparison, we intend to account for these factors in comparator benchmarking (see Q18 on comparator benchmarking). The price definitions set out here do not aim to construct a price measure that adjusts for all complexities among heat networks, but to provide a few simple measures that are flexible enough for different approaches of benchmarking. We intend to explore whether it is more suitable to explicitly define prices for these cases or keep these differences in implementing benchmarking. We consider providing more information on the benchmarking methodologies and worked examples in a future consultation.

Q16. Do you agree with our proposal to use gas boilers and heat pumps as external reference benchmarks?

Table 17 - Response summary for consultation question 16

Response	**Number of responses**	**Percentage of total responses**
Agree	11	12%
Partially agree	24	27%
Neither agree nor disagree	7	8%
Disagree	8	9%
Not answered	40	44%
Comments	49	54%

3.13 Most respondents that provided a response to the question were broadly in agreement with the proposed approach, acknowledging that gas boilers and heat pumps are relevant and fair alternative technologies to use as external benchmarks for heat networks, and highlighting that external benchmarking is an important indicator for determining whether heat network consumers are paying disproportionate prices compared to consumers using different heat sources.

3.14 Whilst most respondents were broadly supportive of the outlined approach, some have provided further comments or concerns which we have thematically discussed below.

3.15 Network characteristics: multiple stakeholders emphasised that the gas-boiler counterfactual must not be applied to low-carbon heat networks, with 15 respondents agreeing with the proposal that the gas boiler benchmark should be applied to gas powered heat networks, and the heat pump benchmark should be applied to low-carbon networks.

3.16 While most respondents supported the use of gas and heat pumps as external benchmarks, seven stakeholders also proposed the inclusion of additional counterfactual technologies to better reflect the diversity of the sector. There were suggestions of direct electric heating as a counterfactual, given its prevalence in apartment buildings and social housing retrofits. Oil boilers were another technology suggested in the responses, predominantly found in rural areas off the gas grid. In a similar line of argument, one respondent emphasised the need of a heat pump counterfactual.

3.17 Four responses raised concerns regarding the gas-boiler counterfactual and its applicability in an energy landscape that is focused on decarbonisation. Three local authorities stated that the gas-boiler benchmark is not compatible with the government's net zero policy agenda while eight other stakeholders questioned the long-term applicability given the likely reduction in gas-fuelled networks in favour of low-carbon technologies.

3.18 20 respondents voiced the need for benchmarks to take network characteristics into account such as building types, consumption patterns, geographical costs.

3.19 Methodology concerns: several respondents raised concerns about challenges they saw with the development of a heat pump counterfactual. Variability in performance was a common factor, with two respondents stating that heat pump efficiency varies significantly depending on installation quality and building characteristics.

3.20 A minority of respondents questioned how Coefficient of Performance data would be collected and kept up to date. A couple of respondents emphasised that benchmarks should be based on measured performance and not assumptions.

3.21 15 respondents raised the need for robust methodologies accompanied by clear and transparent guidance to ensure the effectiveness of external benchmarking, with several respondents highlighting that the benchmarking methodology should

account for the full lifecycle costs of technologies, such as installation, ongoing operational and maintenance costs.

3.22 11 stakeholders emphasised that benchmarks should be accompanied by clear explanations of assumptions and calculations used in methodologies. They also requested that Ofgem provide detailed guidance on the application of benchmarks and how deviations would be interpreted. There was also a general agreement that Ofgem should align benchmarking tools with existing models such as the Heat Trust Calculator and National Zoning Model.

Ofgem Response

Respondents emphasised the need for benchmarks to take network characteristics into account with a particular subset of respondents raising objection to the application of the gas boiler counterfactual against low-carbon heat networks. With regards to the latter point, the gas-boiler counterfactual will be applied to heat networks using gas as an input fuel. For low-carbon networks under the current proposal, we aim to develop a low carbon counterfactual for the purpose of external benchmarking (for example, air source heat pump) to ensure a valid comparison.

We are developing a gas-boiler benchmark as most networks currently use gas as their fuel source but recognise that this will become less relevant as more low-carbon networks appear. If a network uses a blended approach, then we will take that into consideration when applying the external benchmark. We understand that modelling the cost of gas is more complex given that heat networks are not subject to the retail price cap. Our aim is to ensure that the benchmark reflects a fair and realistic cost of gas heating for all consumer types.

We recognise the diverse nature of the sector and the importance of considering these differences between networks. The external benchmark is intended to be a computationally straightforward indicator of how a network is pricing in comparison to the counterfactual. It is intended to be used in conjunction with the comparator and own-price benchmarks, of which the former will be better suited to capturing comprehensive network characteristics.

Several respondents suggested the inclusion of additional counterfactuals such as direct electric heating and oil boilers. We understand the rationale for these suggestions, but at this stage we are proposing to focus on gas-boilers and individual heat-pumps as the primary external benchmarks. These technologies are the most widely used and best understood comparators for most of the heat networks market. We will continue to consider additional and alternative low-carbon counterfactuals, evaluating the feasibility of development based on available data.

Heat pump counterfactual

We understand that heat pump performance can vary significantly depending on a range of factors. We are exploring how to base the benchmark on measured and performance-based data alongside assumptions made in existing literature. We aim to draw on existing models, such as the National Zoning Model, the Heat Trust Calculator and wider work when developing the counterfactual. Our goal is to ensure that the low-carbon counterfactual reflects real-world costs and performance as accurately as possible while minimising model complexity.

Methodologies and guidance

We acknowledge the support for clear and transparent benchmarking methodologies, please refer to the response given to Q21 for further discussions.

Q17. Do you agree with the proposed method for calculating a heat pump benchmark, including the key input parameters outlined? Are there any additional factors that should be considered to ensure a robust heat pump benchmark?

Table 18 - Response summary for consultation question 17

Response	Number of responses	Percentage of total responses
Agree	10	11%
Partially agree	16	17%
Neither agree nor disagree	9	10%
Disagree	2	2%
Not answered	53	60%
Comments	35	39%

3.23 Actual performance data: eight stakeholders emphasised the importance of ensuring that the heat pump benchmark reflects actual performance data and not assumptions or manufacturer estimates. Particular reference was made to measures of efficiency such as Coefficient of Performance (COP) and Seasonal Coefficient of Performance (SCOP) values. Respondents urged Ofgem to carefully consider options when setting key parameters within the benchmarking model, with some asking for values to be made public to aid transparency.

3.24 Lifetime costs: 11 respondents requested that the benchmark methodology should consider all costs incurred over the lifetime of a heat pump to ensure a fair

and like-for-like comparison with heat networks, raising the need for more clarity on the treatment of replacement costs within the methodology. Respondents also questioned the inclusion of one-off internal work (radiator replacements) as CAPEX for the purpose of total annualised costs. In general, respondents advocated for the inclusion of installation, maintenance, servicing and replacement costs within the benchmarking methodology.

3.25 Some respondents raised the point of ancillary costs related to heat pumps and their importance in ensuring a fair benchmark. One response said that counterfactual benchmarks often overlook non-core costs of heat pump installations such as: electrical grid upgrades, on-site infrastructure costs, noise and vibration mitigation measures and ancillary control systems.

3.26 Several respondents highlighted the need for the heat pump benchmark to reflect variations in property characteristics, which can influence installation costs and heating performance. Respondents suggested the consideration of building type within the benchmark methodology, including factors such as building fabric, property size and density. One respondent suggested the development of two separate benchmarks for new builds and retrofits since their cost profiles can be different.

3.27 Tariff structure: another theme raised by respondents was that of electricity pricing and tariff structure. Two responses noted that heat networks often use two-part tariffs, consisting of standing and unit charges, while individual heat pump users often face a single-rate electricity charge. They requested for this to be considered in the methodology. Four responses highlighted the regional difference in electricity prices along with domestic versus non-domestic rates. They cautioned the use of domestic price cap as a universal reference. Five respondents recommended that the benchmark be regularly updated to reflect evolving tariff structures and policy changes.

3.28 Stakeholders also emphasised the importance of aligning the heat pump benchmark methodology with existing work being conducted by government bodies and industry associations. Four responses supported the alignment of the heat pump counterfactual with the National Zoning Model developed by DESNZ, stating that this would ensure consistency across the sector. Five responses also mentioned the WSP report on counterfactual costs, urging Ofgem to engage with DESNZ to build on this existing base.

Ofgem Response

Respondents raised the need for real-world performance data in constructing the heat-pump counterfactual. We recognise that heat pump performance varies between units in practice, due to many unique variables. We aim to work with a wide range of stakeholders, including industry experts and DESNZ, to ensure that the data we are feeding into benchmark methodologies strikes a balance between cost and precision.

Respondents emphasised the importance of including full lifecycle costs and the inclusion of ancillary costs within the benchmark. We appreciate the responses that have highlighted components of a heat pump's lifecycle that need to be considered when constructing the counterfactual cost. Our current approach looks at the annualised costs of both installation and replacement at end-of-life in addition to factors such as maintenance, operation and fuel. We will take these additional components into consideration when evaluating the proposed methodology. We will also review the comments on ancillary costs further and engage with stakeholders on existing reports to ensure that relevant factors are not overlooked in the benchmarking methodology.

Heat pump characteristics

Respondents asked for the methodology to reflect variations in property characteristics, which can influence heat pump costs. We will explore the feasibility of developing counterfactual benchmarks with options to adjust individual characteristics, while balancing this with computational feasibility, straightforward implementation and minimising data burden on both the regulator and heat networks. Currently we are not looking to develop two separate low-carbon counterfactuals for retrofits and new-builds, however this information would be taken into consideration when assessing the performance of a given network against all three of the benchmarking models.

Respondents raised the difference in tariff structure between individual heat pumps and heat networks. We recognise that the two-part tariff of most networks is different to the single-rate charge paid by some heat pump consumers. We will consider this difference when constructing the counterfactual benchmark to ensure comparability. Our current proposal looks at the total annual cost of heat which would allow for the comparison between tariffs of varying parts. We will also explore alternative methods of modelling the cost of electricity for non-domestic consumers, acknowledging that the domestic price-cap is not likely to be suitable as a universal reference. In general, we expect the implementation of benchmarking to be an iterative process. Models will be revised in response to new data and phased in. We will explore the frequency at which this process is feasible and engage further with the industry on this.

Respondents urged Ofgem to align the heat pump benchmark methodology with existing work being conducted by government bodies and industry associations. We will continue to work alongside DESNZ and relevant industry bodies to ensure that our benchmarking work is informed by existing projects and literature.

Q18. Do you agree with the proposed approach to comparator benchmarking, and our list of potential cost drivers set out below and in Appendix 3: Cost driver? Are there any relevant cost drivers that we haven't considered?

Table 19 - Response summary for consultation question 18

Response	Number of responses	Percentage of total responses
Agree	9	10%
Partially agree	30	33%
Neither agree nor disagree	6	7%
Disagree	12	13%
Not answered	33	37%
Comments	57	63%

3.29 The majority of stakeholders that provided a response to this question supported comparator benchmarking and the listed cost drivers in principle, with some providing further commentary and concerns. Respondents recognised comparator benchmarking to be of value in identifying potential disproportionate pricing, playing an important part in the implementation of a fair pricing market framework in a diverse heat networks market. Two respondents supported the use of comparator benchmarking as a secondary approach in addition to external benchmarking (see our response to Q16), or as an internal metric for setting tariffs. A respondent acknowledged the adoption of a similar benchmarking approach in energy network price controls.

3.30 Complexity: however, 12 respondents (mainly ESCos, heat network operators and trade associations) were against comparator benchmarking, although they did not object to benchmarking in principle. The concerns raised by the respondents who disagreed with the comparator benchmark mentioned issues around its complexity, omission of crucial elements and impracticality in the heat network context, relative to the additional benefit of the benchmark. Respondents also argued that having an external benchmark would suffice and may be more meaningful to assure consumers about the prices.

3.31 Reliability of comparator benchmarking: a minority of respondents had reservations on the reliability of the comparator benchmarking approach. One doubted whether the approach will be reliable due to the highly localised nature of network infrastructure, which varies in terms of delivery models and underlying costs. Others questioned the effectiveness of the proposed approach to identify potential disproportionate pricing. The approach was also criticised by some stakeholders as failing to account for factors such as price changes over the investment lifetime, the price profile over the portfolio of heat networks, risk management, existing long-term contractual arrangements, and the need for stability in a nascent sector. Further response details pertaining to the above aspects can be found within our technical considerations appendix (Appendix 1).

3.32 Cost drivers: we asked stakeholders to comment on the rationale for including the list of cost drivers in the consultation. The challenges of reporting these cost drivers are discussed in Q19 and Q20.

3.33 Concerns: concerns were raised by respondents about use of fuel input price, network pipe length, and number of customers or number of properties supplied as medium to high importance cost drivers.

3.34 Fuel input prices: three respondents reasoned that inefficient fuel input prices should not be taken as a given as inefficient procurement of fuel is not entirely out of the heat network's control (also see Appendix 3 Cost Drivers, paragraphs A3.6-A3.8 of the 2025 consultation). Instead, a respondent suggested using an average market fuel input price as in the electricity and gas price cap in the price prediction model. Their view is that heat networks should be required to have strategies in place to minimise fuel input costs and to hedge risk, so it is under the control of heat networks to a certain extent and thus is not an appropriate cost driver.

3.35 Network pipe length: four respondents expressed concerns about including network pipe length as a cost driver in the model. Two respondents suggested that temperature loss per metre of network pipe could be a more useful cost driver than network pipe length as this would take the quality and specification of pipe work into account.

3.36 Number of customers or number of properties: some respondents suggested the number of customers or number of properties supplied metric to be of limited value because it does not capture cost efficiency implications of an underutilised scheme, for example, where a high proportion of customers self-disconnect,

which may have an impact on the system's ability to achieve higher cost effectiveness.

3.37 Alternatively, three respondents suggested use of the number of successful connections for an area compared to what was originally expected, or the proportion of actual customers out of potential customers, as these are more likely to capture cost efficiency implications.

3.38 A respondent also suggested including the total number of customers per heat network, the total number of heat networks supplied by a regulated entity as costs are to be averaged across different heat networks.

3.39 High importance cost drivers: the following areas were mentioned in responses as being high importance cost drivers: carbon intensity, efficiency metrics, geographic location, metered versus unmetered, annual network generation, network age, and operating temperature.

3.40 Carbon intensity: one respondent proposed adding the carbon intensity of the tariff as a cost driver of high importance, due to the fundamental difference in cost structure between wholesale fuel costs of a gas-led tariff and of a zero-carbon tariff using Renewable Energy Guarantees of Origin (REGO) backed electricity or sleeved Power Purchase Agreements (PPAs). Respondents also raised the consideration of sleeving arrangements on existing network or network expansion.

3.41 Efficiency metrics: a minority of respondents questioned the rationale for not including various efficiency metrics as high or medium importance cost drivers. One respondent acknowledged that heat generation efficiency may be partially captured via technology and fuel type but argued that it should be listed as a cost driver. The proposed metrics included heat generation efficiency, operational efficiency (including thermal losses), network efficiency (measured as coefficient of performance) and network losses (primary or secondary).

3.42 Others argued that operational efficiency has a clear engineering and economic rationale to be driving costs. One respondent recommended distinguishing secondary network losses from primary ones as losses in secondary networks can vary widely depending on building layout, designs and installation quality.

3.43 Geographic location: three respondents highlighted the importance of capturing geographic location as a cost driver. One respondent argued that geographic location should be a cost driver of high importance because location has significant influence on network CAPEX. They also raised that local terrain, urban infrastructure, and the costs related to accessing third party land property will

affect physical route of the network and thus the costs of constructing and maintaining pipework.

3.44 Metered versus unmetered: a minority of respondents argued that the consideration of metered versus unmetered should be categorised as high importance due to the evidence on the impact of consumer-level metering on end user consumption. However, a respondent also argued that this should be excluded as a cost driver for two reasons: first, although there may be some additional costs associated with installing and maintaining meters, these are likely to be minimal over time; second, this poses great risk for consumers to face different prices from being on a metered or unmetered network.

3.45 Annual network generation: a respondent argued that annual network generation should be classified as high importance rather than annual network demand, because this is under the control of the heat network supplier and has a significant effect upon heat network efficiency.

3.46 Network age: two respondents argued that network age should be classified as high importance from medium importance. The rationale is that older assets, which were installed without contemporary controls or insulation standards, or have retrofitted or optimised, can have significantly different performance and efficiency.

3.47 Operating temperature: three stakeholders argued that operating temperature should be identified as a high importance cost driver due to its impact on the efficiency of the heat source. Similarly, return temperature measured via volume-weighted average return temperature (VWART) should be included as a cost driver, as it can have material impacts on system performance.

3.48 Additional factors: respondents also suggested additional factors which should be considered as cost drivers.

3.49 Tariff structure: two respondents called for including tariff structure as a cost driver because whether a network recovers costs through a predominantly fixed or variable charging model can significantly influence the total charges perceived by consumers (as evident in studies on standing charges) and should be accounted for in any comparison exercise.

3.50 Contractor availability: a minority of respondents suggested the inclusion of contractor availability as a cost driver because the costs incurred from outsourcing activities such as maintenance, and metering and billing service are affected by the lack of contractors in some geographical or service areas.

3.51 Compliance costs: three respondents urged that compliance costs such as carbon taxation, decarbonisation investment obligations and regulatory costs such as from HNTAS, Health and Safety Executive (HSE) inspection regimes, and local authority planning agreement should be included as cost drivers.

3.52 Stages of development: several respondents highlighted the importance of accounting for stages of development of the heat networks as a cost driver, or at least a factor that should be considered in comparator benchmarking.

3.53 The respondents highlighted that the distinction between growing networks and static networks should be made and emphasised that heat networks should not be penalised for (observed) inefficiencies at early stage of development. They stressed the importance of futureproofing capacity and optimising values, especially for developing large-scale district heating. A respondent also raised the consideration of delayed build-out. To account for these factors, they recommended including stage of development and installed primary heat capacity as high importance cost drivers.

3.54 Various cost components: six respondents challenged the exclusion of various cost components, such as investment cost, replacement cost, cost of financing (and investor type), metering and billing cost, network maintenance cost, and service fees (when outsourced) as cost drivers.

3.55 A respondent suggested applying knowledge from the price calculation and cost regulation of gas and electricity to heat networks to account for substantive cost components such as cost of network build-out and maintenance especially for district networks with varying number of connected customers.

3.56 Customer mix: three respondents suggested incorporating customer mix, such as the proportion of social housing tenants and the proportion of vulnerable customers, as cost drivers. The respondent stated that networks serving a higher proportion of social housing tenants might be under different subsidy arrangements or have different service expectations compared to private or commercial customers. It is also suggested that the proportion of vulnerable customers will affect costs and revenues of the network.

3.57 Changes to comparator benchmarking approach: 10 respondents proposed some changes to the comparator benchmarking approach discussed in the consultation document.

3.58 Segmentation in benchmarking: some respondents raised points relating to segmentation in benchmarking. These included focusing monitoring on legacy networks that present higher risks to consumers, separating SGLs and ambient

loops for benchmarking, and separating primary bulk suppliers from secondary network operators.

3.59 Phasing in the approach: seven respondents acknowledged the lack of real-world pricing and cost driver data at this stage. Therefore, respondents also made suggestions on how the approach can be phased in and refined in the process of data collection.

3.60 Three respondents suggested that the benchmarking approaches can be reviewed as datasets grow. One respondent also acknowledged the need for the approaches to evolve over time and ongoing refinement while gaining deeper understanding of the sector to ensure that the approaches remain accurate, relevant and reflective of the wide range of types and operating models. A respondent pointed out that initial benchmarks will be highly influential in price setting, so in-depth engagement is needed with suppliers and urged for review every two years to ensure consumer benefits.

3.61 It was also suggested that pricing data should be made available for the public for academics and consumer advocates with expertise to analyse the data to identify concerns and help inform the regulator, and for heat network operators or local authorities to be informed of the sector.

3.62 One respondent also urged for the approaches to remain flexible during the phase in to allow for margin of error when predicting prices, and the flexibility to allow the approaches to evolve as new insights and data become available.

3.63 A minority of stakeholders also suggested that a simpler and less precise approach than the proposed comparator benchmarking should be considered for broader and earlier scrutiny of the sector, at least as a starting point. A simpler approach can be setting thresholds for each group of heat networks based on carbon equivalent counterfactual (external benchmarking) or calculating averages for a group of heat networks based on type of technology. According to the respondent, these should be sufficient as an initial approach to constrain prices and can be used to screen potential disproportionate pricing. Providing explanation or initiating investigation using some of the more data-intensive methods such as profitability analysis can be the next step.

3.64 Extending the approach: a respondent suggested that benchmarks could also be used to generate (for internal and external use) indicative paths for pricing for different types of technology based on expected efficiency savings over time.

3.65 One respondent also commented that comparator benchmarking should inform wider conversations around whether certain types of heat networks are

economically unviable in terms of providing heat at a genuinely fair and affordable price to consumers.

Ofgem response

We welcome the detailed discussion on our proposed approach to comparator benchmarking and the list of cost drivers. We respond below on the main areas of concern raised by stakeholders.

We acknowledge the arguments made by stakeholders that the adoption of a relatively complex approach such as comparator benchmarking may not be justified if there was little additional improvement in consumer outcomes on top of the external benchmarking approach. It is our intention to adopt all three benchmarking approaches (comparator benchmark, external benchmark, own past price benchmark) because they complement each other to screen potential disproportionate prices by comparing prices holistically in three dimensions – own past price benchmark compares prices over time, external benchmark compares prices with potential alternatives, and comparator benchmark compares prices within groups. Having a holistic approach is important to avoid having to take a more granular approach that would be needed for external benchmarking, to account for individual characteristics of heat networks for determining the appropriate counterfactuals, for example, the feasible counterfactuals might depend on location, and other factors affecting efficiency. We emphasise that heat networks will not automatically be judged as pricing disproportionately based solely on the benchmarking results, or based on any benchmarking approach in isolation.

We will continue to explore the balance between costs and additional benefits on consumer outcomes for benchmarking approaches as more data and information become available.

<u>Omission of elements</u>

We acknowledge the concerns from stakeholders that comparator benchmarking is prone to technical problems resulting in misidentification of potential disproportionate pricing, or failing to identify disproportionate pricing. We would like to stress that we do not only see these benchmarking approaches as a part of a screening tool to identify potential disproportionate pricing, but also a first step to explore the underlying reasons for prices being flagged. When certain prices of heat networks are flagged, we intend to seek further information to understand the reasons, which could include technical inefficiency or procurement inefficiency, for instance. This could mean suggestions and opportunities for improvements for some, before any further actions or investigations are considered.

We also intend to keep the approach flexible to allow for differences in a diverse sector and refinement of the approach as more data becomes available. In addition, as more data becomes available, we plan to explore more sophisticated regression models to manage omitted variable bias.

Some respondents were concerned that comparator benchmarking appears to be considering prices and cost drivers at a particular point of time, therefore ignoring the price and cost fluctuations over the lifecycle of heat network investments. We would like to emphasise that our proposal is not to compare prices of heat networks at any particular point of time. We are exploring ways to smooth or account for these fluctuations, including comparing the prices to total cost on an annualised basis, or comparing heat networks of similar ages, which are more likely to have similar cost fluctuations.

Some respondents also raised concerns about how existing pricing practices or business models in the sector, such as pricing over a portfolio of heat networks or existing long-term contractual arrangements, will be assessed under comparator benchmarking. As stated in para 2.43 on page 27 of the 2025 consultation, we would like to reiterate that we understand that cross-subsidisation among consumers of a heat network might happen depending on the pricing strategy. We are not proposing to set direct restrictions on cross-subsidisation as the fair pricing principles do not prevent cross-subsidisation, however, individuals or groups of consumers should not face disproportionate prices as a result. We also seek to explore the impact on pricing arrangements stemming from long-term contractual arrangements.

We understand that growth of the heat network sector will be facilitated by certainty and stability provided under market framework regulations, including pricing protections. We seek to continue our engagement with the stakeholders to refine the benchmarking approaches and intend to publish a high-level methodology in a future consultation.

Feasibility

We appreciate the experience of other markets and acknowledge the difficulty of adopting similar benchmarking approaches. We seek to explore the approach further including looking into the trade-offs between including a smaller set of costs drivers and a more comprehensive set of cost drivers, and the level of confidence of the price predictions using regression models.

We would like to reiterate that desirable cost drivers should be exogenously determined (outside heat networks' control after they become operational). Also, cost drivers should be factors driving costs but not prices directly. Therefore, some factors suggested by the respondents may not be appropriate to be included as cost drivers, although they can be

factors driving prices that can be taken into consideration. For example, the availability of alternative heat supply can drive what prices a heat network can charge but it is not necessarily a cost driver, unless the geographical location is the reason why alternative heat supply is unavailable, and the location also increases the cost of network investment.

We intend to explore further the combined list of cost drivers proposed in the consultation document and the additional cost drivers proposed by the respondents. We agree that many of the proposed additional cost drivers are valid on their own as individual cost drivers. However, we need to be cautious about including cost drivers that are highly correlated. For example, many respondents raised that efficiency metrics should be included as cost drivers of high importance. However, we intentionally left some efficiency metrics out for two reasons: first, if we included efficiency as a cost driver, it would imply accepting that any price differences driven by efficiency differences would be outside heat networks' control after they become operational; second, some efficiency metrics are likely highly correlated among themselves or with many relevant network characteristics such as age of network and generation of network. Including all these may produce inaccurate estimates of how much each cost driver drives the prices, affecting the identification of potential disproportionate pricing.

We will continue to explore the most appropriate cost drivers, having model accuracy, efficiency and administrative costs of heat networks in preparing and reporting data in mind. The list of cost drivers and specifications of the model are expected to evolve as more data becomes available.

Suggestions

We agree broadly with the respondents' suggestions on phasing in and expect to start with the simpler approaches as a data collection initiative and move onto the more complex and data intensive comparator benchmark after data reporting is more standardised. As the model improves, we may explore the cost model and comparator benchmarking model further to evaluate their suitability for related purposes such as assessing the economic viability of heat networks with different sets of attributes.

We welcome continued engagement with stakeholders on this topic. We will consider providing more information on the methodologies and worked examples in a future consultation.

Q19. What is your view on the ease with which data could be reported on the four 'High Importance' cost drivers set out in paragraph 4.33? What information do heat network operators and suppliers already collect, and what would be challenging to provide?

Table 20 - Response summary for consultation question 19

Response	Number of responses	Percentage of total responses
Comments	52	58%

3.66 Technology and fuel type: 30 respondents found technology and fuel type to be not challenging to report, with few challenges reported. This is likely due to the static nature of this data and its relevance to operational planning, so it is a well-documented attribute for most heat networks. A respondent also commented that this attribute is also routinely captured in contractual documents such as operation and maintenance agreements or ESCo service contracts as well as Office for Product Safety and Standards (OPSS) notifications for new and existing heat networks. Conversely, two respondents stated that reporting can be challenging for legacy networks as they may have different classification or when networks have multiple technology and fuel types in mixed systems, especially when sleeving is involved.

3.67 Fuel input price: 28 respondents found reporting fuel input price to be not challenging. Two respondents commented that it could be challenging for heat networks to disaggregate fuel costs from bundled supply contracts or when diverse contractual structures such as spot purchases or hedged contracts are involved. They urged for guidance to be provided for consistent reporting. One respondent also pointed out that the metric could be challenging for heat networks that do not buy their fuel in burnable quality such as biomass systems which process raw materials in-house to a burnable fuel.

3.68 Network pipe length: 19 respondents found network pipe length challenging or somewhat challenging to report. Although this is often readily available for modern heat networks, respondents (mostly housing associations and local authority) highlighted that there is a lack of historical design documentation containing this metric for older networks. One-off surveys or manual estimation might be required to provide reliable figures. In some cases, the metric can be known via calculating gas pipe maintenance, but resources would be required to gather the information for every network in portfolio. In addition, three

respondents found the metric ambiguous as to whether to include inactive or underutilised segments of pipes, or whether to include both buried and exposed pipes.

3.69 Annual network demand: we received mixed response to the reporting of annual network demand, with 18 respondents finding it not challenging and 17 respondents finding it somewhat challenging or challenging.

3.70 Two respondents agreed that while metered networks found this metric straightforward to report, other networks, especially unmetered or communal systems may find it more challenging due to the lack of individual consumption data. It was also mentioned that the schemes operating without automated building management systems (BMS) may need to rely on estimation methodologies or back calculations with assumptions and it is unclear what approaches would be acceptable. A respondent commented that the difficulty of providing this metric is in compiling up-to-date and accurate data from domestic customers over a large network.

3.71 Additional comments: in terms of types of stakeholders, it is more common for smaller operators, local authorities and housing associations operating legacy networks to find the reporting challenging. These respondents emphasised the need for flexibility and proportionality as data collection costs could affect affordability for vulnerable consumers. They highlighted the need for transition periods and support to build data infrastructure. They urged for simplified reporting templates to ease administrative burden on reporting. They expressed concern about the extra resources required and warned that this might have a knock-on impact on all customers, not only heat network customers.

3.72 Other common themes raised by respondents include calling for guidance and definitions on these cost drivers, flexibility for unmetered networks, a streamlined approach to ensure efficient data reporting along with HNTAS.

Ofgem response

We understand that some metrics (network length and annual network demand) are more challenging to report than others (technology and fuel type, fuel input price). We will consider exploring suitable proxies for the more challenging metrics, or consistent ways to estimate these metrics where appropriate, for some subsets of heat networks. We intend to minimise duplications in data reporting across different requirements, such as HNTAS, registration and our wider regular monitoring.

We are also aware that some segments of the market might find reporting challenging due to resources or the nature of the heat networks (for example, unmetered networks). We would like to stress that we would not request reporting of data items that are not applicable, such as meter data for unmetered networks.

We expect most heat networks will be able to report their prices, charges and cost allocation practices regularly as listed in Table 3. We also expect heat networks to comply with HNTAS data requirements and registration requirements that may feed into modelling of benchmarks. Note that the list of cost drivers has not been finalised. For the cost drivers not reported through HNTAS and registration, we expect iterations of modelling and engagement with stakeholders to continue to inform the list. Along with prices, charges and cost allocation practices listed in Table 3, other cost drivers might be requested through monitoring. We will set out definitions and instructions in an upcoming monitoring guidance along with other metrics. We are also considering the appropriateness of obtaining information on some cost drivers through one-off requests for information. With all reporting and requests for information we will weigh the benefits against the additional burden on the sector. We will also be mindful of whether the information request is relevant and appropriate for all networks or just certain types of networks.

Q20. What is your view on the ease with which data could be reported on the remaining 'Medium Importance' cost drivers set out in paragraph 4.33? What information do heat network operators and suppliers already collect, and what would be challenging to provide?

Table 21 - Response summary for consultation question 20

Response	Number of responses	Percentage of total responses
Comments	50	56%

3.73 Respondents generally found some medium importance cost drivers easier to report than others, depending on the age, metering infrastructure, and data management systems (or digital maturity) of their networks. While some respondents agreed that some data is technically available, it is not always centralised or standardised, making extraction and reporting burdensome.

3.74 Legacy networks, unmetered systems and private freeholders were more likely to report difficulties. A respondent also remarked that these cost drivers are of limited relevance to SGLs. To mitigate the reporting challenges, one respondent suggested that estimation tools, guidance or standard input models should be

provided. Another respondent recommended to allow for reporting ranges for some cost drivers that are challenging for small and legacy networks to report.

3.75 Annual network generation: 16 respondents found annual network generation in kWh to be challenging to report. This is especially true for old and legacy networks. Several respondents agreed that a high-level estimate of annual network generation is possible, but they may not be able to report this metric accurately without further investment due to the lack of infrastructure or data capabilities.

3.76 Network generation type: 17 respondents found network generation type to be challenging to report. The key challenges include the lack of clarity regarding the classification and definition of network generation types. Several respondents urged for definition and explanations to be provided for different generations especially for older networks, as these are not commonly known among some stakeholders.

3.77 A respondent also raised the complication that the generation type of a network is not constant - the same network can be classified as a different generation type in different time of year (for example, 4th generation in summer and 3rd generation in winter due to capacity issues in bottlenecks).

3.78 Type of network: from the responses, type of network (district or communal) is generally well understood and already recorded by heat networks. Only 7 out of 32 respondents found that reporting the type of network can be challenging. One respondent emphasised that reporting this metric should be straightforward, given that preset categories with definitions are provided.

3.79 Network age: the respondents generally agreed that network age is available for most networks. Only 15 out of 36 respondents found that reporting network age can be challenging. Two respondents sought clarification on the definition of network age: whether it refers to age of the building or different parts of the plant.

3.80 Three respondents suggested that reporting age brackets would be useful for older networks. One respondent pointed out that there is no clear definition of network age, making reporting challenging. Another respondent doubted whether a single age figure is meaningful because networks can contain phases.

3.81 Utility supplied and metered or unmetered networks: 27 respondents found utility supplied and whether the network is metered to be easy to report because most organisations already collect these metrics. No respondents specifically commented on the challenges specific to these metrics.

3.82 Operating temperature: in general, respondents found reporting the operating temperature more challenging. 12 out of 28 respondents found reporting operating temperature challenging. Respondents commented that operating temperature is not constantly monitored. Two respondents stated that operating temperature would vary during a day, across the year and across the network, making reporting challenging. A respondent commented that they know the temperature range that their networks operate at but do not constantly monitor this.

3.83 A respondent caveated that while annual network generation and detailed operating temperature data may be available through BMS or SCADA systems, not all operators will have the infrastructure or data capture capability to report this accurately without further investment. A respondent requested that more time to gather this data.

3.84 Number of customers or properties supplied: out of 28 respondents, ten respondents found it challenging to report the number of customers or properties supplied. Two respondents argued that reporting the number of properties supplied is more appropriate than reporting the number of customers because it is more accurate and is more likely to be stable. A respondent caveated that the ease of reporting will depend on the definition because they serve different types of customers such as commercial customers, residential customers, housing associations and developers.

3.85 Cost recovery approach: the views on these metrics are split – with 10 out of 24 respondents finding cost recovery approach or level of costs not passed on to be challenging to report. The respondents seem to agree on the key challenges for reporting the cost recovery approach, which are the diverse practices of cost recovery approaches, the complexity of categorisation when it evolves over time and where a blend of approaches is used, and the lack of commonly agreed definitions.

3.86 A respondent urged for definitions on level of costs not passed on. One respondent explained the difficulty of rationalising cost entries (development costs and operational costs) on a network-by-network basis as the network expands over time. One respondent discussed the challenges of categorising cost recovery approaches (cost-recovery, fixed-profit or commercial profit model) cleanly, especially where historic charging policies have evolved over time or where a blend of approaches is used.

3.87 Geographic location and network function: 23 respondents found the geographic location and function of the network to be easy to report. No respondents specifically commented on the challenges specific to these metrics.

Ofgem response

We understand that some metrics (annual network generation, network generation type, operating temperature, cost recovery) are more challenging to report than others (metered versus unmetered, type of network, number of customers or properties, network age, function, utility supplied, location). We will explore ways to facilitate data reporting, including preset options or reporting brackets for some metrics, or tools to standardise reporting.

We are aware that some segments of the market might find reporting challenging due to resources (for example, need for upgrading data infrastructure) or the nature of the heat networks (for example, unmetered networks).

Note that the list of cost drivers has not been finalised. For the cost drivers not reported through HNTAS and registration, we expect iterations of modelling and engagement with stakeholders to continue to inform the list. Along with prices, charges and cost allocation practices listed in Table 3, other cost drivers might be requested through monitoring. We will set out definitions and instructions in an upcoming monitoring guidance along with other metrics. With all reporting and requests for information we will weigh the benefits against the additional burden on the sector. We will also be mindful of whether the information request is relevant and appropriate for all networks or just certain types of networks.

Q21. What is your view on our proposal to publish a high-level methodology for each benchmark (once data is collected and methods have been tested), to provide an accessible overview of the approach?

Table 22 - Response summary for consultation question 21

Response	Number of responses	Percentage of total responses
Agree	48	53%
Partially agree	0	0%
Neither agree nor disagree	0	0%
Disagree	0	0%
Not answered	42	47%
Comments	48	53%

3.88 All of the respondents that provided a response supported the proposal of publishing a high-level methodology for each benchmark, with 15 respondents emphasising the importance of transparency and building trust, while also highlighting the need for technical robustness, clarity and accessibility, and the importance of iterative development alongside with ongoing engagement. Four respondents also demanded some worked examples on how benchmarking works in practice.

3.89 Nine respondents commented on the positive impacts of the publication of benchmarking methodologies, including building trust among consumers, advocacy groups and heat networks investors, ensuring accountability and supporting compliance from heat network entities. Four respondents also urged as much clarity as possible on the methodologies and further consultations on the methodologies prior to implementation.

3.90 Respondents emphasised that the methodology publication should be understandable not only to heat network entities but also to consumers, with three respondents stressing the importance of consumers' comprehension of benchmarking methodologies because they would expect consumer complaints to rise due to misunderstanding of pricing and cost models.

3.91 Communication to consumers: some stakeholders did raise risks and some mitigations, particularly around communication to consumers. One respondent cited examples of misinterpretation of benchmarking including Energy Performance Certificates (EPCs), Nutrition Labelling and Appliance energy

declarations. Three respondents suggested including case studies or worked examples to aid understanding, with suggestions on, for example, providing operator-facing examples including assumptions or examples illustrating how weighting of cost drivers is applied.

3.92 Respondents also commented that they would find it useful to understand how their data would be used in benchmarking.

3.93 For the development of the methodologies, four respondents demanded that benchmarking methodologies should be published and further consulted before implementation, and a feedback loop allowing stakeholder input on modelling assumptions and specifications would be essential to ensure robustness. Similarly, two respondents also mentioned the need for iterative development of benchmarking methodologies as more data are collected and as the market evolves.

Ofgem response

We welcome the strong support from stakeholders for our proposal to publish high-level methodologies for each benchmark. Respondents recognised the importance of transparency in building trust and ensuring that benchmarking is understood and accepted across the sector.

We acknowledge the feedback that methodologies must be both technically robust and accessible to a wide range of stakeholders, including consumers, housing providers, and smaller operators. We also note the value of including worked examples and case studies to illustrate how benchmarks are applied in practice.

In response, we will consider the following:

- publishing high-level or more detail methodologies alongside worked examples in the later consultations
- ensuring methodologies are subject to stakeholder engagement and creating a feedback loop on modelling assumptions and specifications
- updating methodologies periodically as more data becomes available and the market evolves
- providing accessible versions to support consumer understanding

We are aware that some respondents expressed their strong interests in accessing the full methodologies for replication. We will explore the appropriate level of detail to be published to balance between transparency and clarity. We expect to further consult with stakeholders on the methodologies in a future consultation.

Q22. Do you have any other feedback on the proposed approach to price comparison and benchmarking?

Table 23 - Response summary for consultation question 22

Response	Number of responses	Percentage of total responses
Comments	53	59%

3.94 Own past benchmarking: two respondents highlighted that own past price benchmarking appear to be appropriate, with one respondent preferring the simplicity and power of own past price benchmarking compared to the more complex comparator benchmark which they considered to provide limited value; the other respondent considered own past price benchmarking appropriate for shared ground loops, alongside with comparator benchmarks within the SGL operators.

3.95 Three respondents raised some concerns on how various situations would obscure the findings of own past price benchmarking, including when changes driving prices such as change in fuel prices or unplanned maintenance work are not considered, or when prices have been undercharged or subsidised. One respondent thus recommended that both an industry-led expected price increase and an organisational expected price increase should be constructed to reflect organisational-specific factors. The respondent also queried whether several years of data would be required at first submission.

3.96 General comments on benchmarking: a minority of respondents suggested that the benchmarking approach for specific groups such as biomass fuel sources, not-for-profit operators, and communal heat networks have not been adequately considered in the current benchmarking proposal.

3.97 One respondent questioned that the current benchmarking proposal does not consider whether higher prices are justified where service characteristics (such as better environmental performance, higher reliability) are more in customer interests and conversely, whether lower prices reflect poorer performance.

3.98 Another respondent expressed their concern as to what happens to a network where it is determined to be priced 'unfairly', commenting that in practice the only way of resolving this is to put the network owner into a situation where they have to reduce prices so that they make a recurring loss due to the underlying characteristics of the network (that is, excessive heat loss which cannot be remedied) or to allow the operator to continue with 'unfair pricing'. The

respondent questioned what the long-term solution would be for this network that operates at a loss or is pricing 'unfairly'.

3.99 Three respondents reiterated their concerns about potential for 'double regulation' and conflict from Ofgem price benchmarking and zone coordinators within zones.

3.100 Two respondents expressed their concerns about how inability to access efficient fuel procurement would be reflected in benchmarking results. They also welcomed more support on accessing better deals for fuel procurement.

3.101 Three respondents supplied additional comment and suggestions on pricing formulas, heat offtake arrangements from Energy from Waste facilities and examples of emerging technologies as reasonable heat network alternatives, respectively. The additional information adds to the complexity of benchmarking.

Ofgem response

For the key themes on benchmarking, please refer to Q15-Q21.

Own past price benchmarking

We note that respondents find that own past price benchmarking could be of limited value given the presence of external benchmarking. Please see our response in Q18 on comparator benchmark for how we see the three benchmarking approaches working complementarily.

We would like to clarify that the own past price benchmarking would not only compare the raw price changes over time but would also consider the changes in factors that drive price changes. Therefore, the own past price benchmarking would aim to identify changes that are not explained by changes in input cost factors. In addition, if price changes exceeding the expected changes are observed from own past price benchmarking, the other two benchmarking approaches would be in place to assess the prices. Heat networks will not automatically be judged as pricing disproportionately, based solely on the benchmarking results, including own past price benchmarking.

We are aware that there are many different types of networks that do not fall into the definitions or general cases that we set out in our benchmarking proposals. We are exploring whether some of these differences, including SGLs, can be accounted for in the price definitions or the benchmarking approaches.

General Comments on benchmarking

The suggestion to include industry-wide factors and individual circumstances appears to urge for analysis accounting for individual heat network circumstances, which is what the comparator benchmarking intends to achieve. By applying the three complementary

benchmarking approaches, these individual organisational circumstances are expected to be considered to a certain degree.

On the need for data over time, we agree that time series data of a certain length will need to be collected before we can expect own past price benchmarking to be implemented fully and produce robust results. However, we propose for heat networks to collate data from April 2026 for their first submission, with the potential for data submissions to be backdated once a heat network has completed registration.

Regarding some of the concerns raised about the benchmark approach for specific groups, we will further develop if and/or how the groups mentioned by respondents are to be accounted for in benchmarking. We will explore whether smaller groups such as heat networks with biomass fuel sources are comparable among themselves. Note that fuel types, not-for-profit status and communal heat networks are outlined as either segments or cost drivers. We intend to explore these groups as the benchmarking approaches develop.

It is correct that the proposed benchmarking approaches work under the assumption that as long as HNTAS obligations are met, service quality is expected to be at least at a certain reasonable level, including reliability and other performance metrics. We are also aware that some respondents urged that environmental performance such as carbon intensity should be considered in benchmarking. Please see our response in Q18 to Q20 on comparator benchmarking and cost drivers for our rationale of selecting cost drivers. In addition, a feature of the heat network may not be included in the set of cost drivers for various reasons but it does not mean that the feature is not considered when price differences are observed.

Responding to concerns of recurring losses, we would like to clarify that benchmarking is a component of the fairness test of the fair pricing framework, which includes both the principle of 'fair and reasonable returns' and the aim of not discouraging industry growth, set out as a framework 'outcome'. Therefore, we would not generally expect networks to be forced to operate at a loss as this would not align with our objectives set out in fair pricing principles. When certain prices charged by heat networks are flagged in benchmarking, we intend to proceed to identify the reasons, which could include technical inefficiency or procurement inefficiency, for instance. We may make suggestions and opportunities for improvements before considering further actions or investigations.

On the interaction with zoning, our benchmarking approach will seek to identify potential cases of disproportionate prices, taking into account the individual circumstances of a

network. We are working closely with DESNZ to ensure the interactions between zoning conditions and Ofgem pricing regulation are clear.

Regarding the comments about fuel procurement, please refer to the section on fuel procurement in the upcoming guidance consultation. Some respondents raised the topic of an industry-wide procurement framework. This falls outside of Ofgem's remit but we have shared this feedback with the Government.

We welcome the additional comments and suggestions, information and examples provided and these are considered in the iterative development of benchmarking approaches.

4. Profitability analysis

Section summary

Profitability analysis is an integral part of price benchmarking to help identify the causes of potential disproportionate pricing. The primary metric suggested is EBIT margin (Earnings Before Interest and Tax as a percentage of revenue), which serves as an initial screening tool to identify potential cases of disproportionate pricing. More in-depth assessment has also been proposed as a next step.

Stakeholders were divided on the proposal. Some supported EBIT margin monitoring as a simple, high-level indicator aligned with existing accounting practices. They saw it as useful for early detection of consumer harm and for building market oversight. However, many respondents raised concerns about the limitations of EBIT margin (such as ignoring lifecycle costs, reinvestment, capital intensity), the potential market impact on a nascent market, applicability for certain groups (such as not-for-profit and networks operating under strict cost recovery models) and complexities in reporting data at a network level. Respondents also suggested more informative alternative metrics.

We acknowledge the limitations of the proposed metrics and consider exploring how EBIT margin can be contextualised to a point that it can function effectively (to avoid misinterpretation) and efficiently (to avoid excessive reporting) as an early screening tool for the sector, before moving to more complex financial metrics and in-depth analysis for some heat networks.

Question analysis

Q23. Do you agree with the proposal for ongoing monitoring of profitability through data collection on EBIT margins for all heat networks?

Table 24 - Response summary to consultation question 23

Response	Number of responses	Percentage of total responses
Agree	6	7%
Partially agree	20	22%
Neither agree nor disagree	12	13%
Disagree	14	16%
Not answered	38	42%
Comments	52	58%

4.1 26 respondents broadly agreed with the proposal for ongoing monitoring of profitability through data collection on EBIT margins for all heat networks, with 14 respondents objecting to the idea of monitoring of profitability or return in general.

4.2 Among the stakeholders that agreed with the overall proposal, 11 respondents showed various degrees of support of the EBIT margin as a high-level indicator, screening tool, measure, and a starting point for a monitoring framework in the sector. One respondent commented that the approach is sensible as long as there is flexibility of how collected data is used and whether action is taken, and that a one-year figure is not assessed in isolation, with another respondent viewing the proposal as a good option for monitoring margins as it imposes no extra data reporting than is necessary for statutory accounts. Stakeholders also urged for correct language when discussing not-for-profit networks. Under-recovery, breakeven and over-recovery should be used when referring to not-for-profit networks.

4.3 Another respondent pointed out that this proposal is consistent with the approach used in the Competition and Markets Authority's 2018 heat networks market study, which will allow for comparison with the findings of that work.

4.4 Extended approach: three respondents suggested that the proposal of EBIT margin monitoring should be extended to detecting more instances of consumer detriment such as inefficiencies in operations or high input costs, linking the monitoring results to enforcement or using the results to request more data including margins for previous few years from heat networks and explanations for consistently high EBIT margins.

4.5 Role of the regulator: a minority of respondents criticised that the EBIT margin monitoring approach is inconsistent with other regulatory frameworks, and it is not the role of the regulator to directly monitor short-term profitability in a regulated market, with one response suggesting this removes incentives for efficient operation. Some suggested that the regulator should focus on enhancing technical and administrative efficiency.

4.6 Future growth: two respondents were concerned about the proposal's impacts on the existing and contracted investments, and subsequently future growth of an emerging market. They suggested to facilitate growth, incentives should exist for entities to earn a reasonable return where the risk of return on investment is relatively high in an emerging market. One respondent also suggested that the approach might be more appropriate when market dominance emerges. Another

felt findings based solely on EBIT margins should be kept confidential to prevent reputational damage.

4.7 Not-for-profits: three respondents challenged that profitability analysis is not meaningful for not-for-profit organisations and heat networks operating under strict cost recovery models because they do not operate a profit and loss account and any surpluses must be considered when setting charges for the next year.

4.8 A number of stakeholders raised concerns over how cost recovery models will be assessed under this proposal. Two respondents explained that most heat suppliers are landlords that operate the heat network as part of their building service obligations under housing regulations, so they are legally restricted to recovering costs incurred and they have no profit margin.

4.9 Some respondents questioned the need for a profitability assessment unless under specific circumstances. Four respondents suggested that profitability assessment or EBIT margin data collection should not be carried out unless the heat networks have been flagged from price benchmarking for further investigation. At that stage, the regulator could take EBIT margins into consideration on a case-by-case basis. Two respondents challenged the need for profitability assessment at all because it duplicates with price benchmarking and it is unnecessary if customers receive good service at a fair price.

4.10 Input costs: one respondent stressed that the only meaningful way to address high prices is by monitoring and benchmarking the different elements of input costs to heat prices, including input commercial gas and electricity costs, metering and billing costs, operation and maintenance costs, capital replacement costs and bad debt. They urged that these costs must be monitored at the same frequency as heat prices, rather than annually as suggested in the consultation document.

4.11 Concerns about use of EBIT: across the respondents supporting or opposing the proposal of EBIT margin monitoring, they raised concerns about the use of EBIT margin for profitability assessment. This included criticism and consideration of factors such as its lack of a multi-year comparison, development lifecycle, reinvestment and capital intensity, revenue recognition, and potential for misinterpretation of the EBIT margin. These factors are discussed in detail within the technical considerations appendix for this question (Appendix 2).

4.12 Alternative metrics: respondents also suggested use of a range of alternative metrics to be used in conjunction with or in place of EBIT.

4.13 One respondent proposed using EBITDA as it provides a like-for-like comparison of operating performance irrespective of the capital investment undertaken. As depreciation is a non-operating expense, EBITDA gives a better view of the business's underlying profitability and therefore provide a better indication of whether excess returns are being generated. Another supported the analysis of Return on Capital Employed (ROCE) and Weighted Average Cost of Capital (WACC) for all heat networks concurrently.

4.14 Cost recovery ratios: similarly, a respondent recommended adopting alternative indicators of financial sustainability, such as cost recovery ratios, rather than applying EBIT margin reporting universally. Respondents also suggested that we examine surplus after capital expenditure, price formula or adopt a broader definition of value.

4.15 Need for segmentation: respondents called for various degree of segmentation for the proposed EBIT margin monitoring:

4.16 One respondent proposed exempting not-for-profit networks from EBIT margin monitoring. 12 respondents shared the view that clarity is needed on whether data collection applied to not-for-profit networks and urged for the definition of not-for-profit heat networks.

4.17 Two respondents commented that there could be a case for excluding the social landlords from the financial data collection because sufficient protections already exist where the heat network entity is covered by the social housing regulatory framework. Similarly, one respondent would like to see reduced reporting requirements for not-for-profit heat networks which are managed by social landlords as Scottish Housing Regulation already monitors compliance.

4.18 One respondent suggested that new heat networks should be exempt from profitability analysis for a certain period, provided they charge within the commitments they made during the zone recruitment process. On the contrary, another respondent suggested that existing schemes should be treated differently from future schemes because they do not collect data on EBIT at an individual scheme level for existing networks but at a portfolio level. They argued that the metric will be burdensome but will not provide additional insight.

Ofgem response

Role of regulator and market growth

We would like to clarify that the proposal of profitability assessment does not aim to regulate the amount or percentage of profits. Instead, the profitability assessment

proposed is a component of the fairness test, with the main objective of identifying the causes for potential disproportionate pricing. It is worth noting that the fair pricing framework includes both the principle of 'fair and reasonable returns' and the aim of not discouraging industry growth, set out as a framework 'outcome'. At this stage, and given the limited availability of market data, we believe that our approach, which avoids imposing direct restrictions on profits such as profit caps, strikes an appropriate balance between ensuring fairness for consumers and not discouraging industry growth.

Relevance of profitability assessment for certain segments

We acknowledge that not-for-profit organisations and heat networks operating under strict cost recovery models may find profitability assessment to be irrelevant to them. We would like to clarify that our proposed metric for profitability assessment, EBIT margin is applicable to and can be calculated for not-for-profit heat networks or those operating under cost recovery models. We understand that the confusion might have been caused by our use of the term 'profits' or 'profitability' when we mean the comparison between revenue and cost in general and as suggested by respondents, 'over-recovery', 'breakeven' and 'under-recovery' might be more appropriate in this context.

Profitability assessment unnecessary until later investigation

We acknowledge that some respondents see profitability assessment as a reasonable next step if prices are flagged to be potentially disproportionate, but not as a general screening step that should be applied to all heat networks. We would like to stress that profitability assessment is an integral part of the fairness test in identifying the underlying causes for potential disproportionate prices. It also gives the regulator an early oversight of a diverse and nascent market so that regulatory approaches can be reviewed and decisions can be informed by evidence.

Controlling input costs

The suggestion of an input cost cap falls outside of Ofgem's remit, but we have shared this feedback with the government to explore the feasibility of these proposals.

Lack of multi-year comparison

We would like to clarify that we do not intend to draw definitive conclusions from a single-year EBIT margin. We are aware that EBIT margins can fluctuate over time and the comparison of EBIT margin across heat networks of a certain year alone would not enable us to draw conclusions. We intend to collect annual cost and revenue figures for calculation and are open to exploring ways to contextualise the calculations. Note that these calculations will be a component to help prioritise price investigations, instead of a

single determinant flagging disproportionate pricing. Conclusions will be drawn based on a range of evidence, not a single metric at one point in time.

Development lifecycle and interpretation of EBIT margin

Our view is the EBIT margin is a simple metric that is relatively easy and applicable to all heat networks. We agree that it is essential to consider lifecycle stages, stages of development and capital intensity for heat networks when we interpret EBIT margins, if we proceed to detailed considerations of a heat network's financial performance. Timing of revenue recognition can also make EBIT margins misleading. However, it is beyond the proposed EBIT margin to be able to account for these elements. We would like to emphasise that the proposed EBIT margin calculations intend to act as an early screening tool and an element forming a wider range of evidence. It is an option to enrich this screening metric to include these considerations, but our current view is that it may not be proportionate to introduce more data reporting requirements for all heat networks. Therefore, our current proposal is to keep the general screening simple for the entire market and leave these considerations as a next step and more in-depth analysis as outlined in the consultation document. We will consider exploring how EBIT margin can be contextualised to a point that it can function effectively (to avoid misinterpretation) and efficiently (to avoid excessive reporting) as an early screening tool, before moving to more complex financial metrics and in-depth analysis. To contextualise the EBIT margin, we are considering the regular reporting of information such as capital expenditure and investment for relevant heat networks. Further guidance on regular reporting will be consulted on in due course.

Alternative Metrics

We welcome the suggestions from respondents on these alternative metrics that are likely to be more informative than EBIT margins as they include the omitted elements highlighted by the respondents in the previous section. We agree that WACC, ROCE, surplus after capital expenditure and cost recovery ratio contain more information and are less likely to be misinterpreted. The submission of pricing formulae could also provide a high level of clarity. As outlined in the consultation document, our view remains that WACC and ROCE are more appropriate as a next step in-depth analysis after the initial EBIT margin screening. The submission of pricing formulae might be appropriate for some heat networks but may not be suitable as a sector wide screening tool. We will consider exploring surplus after capital expenditure and cost recovery ratio as initial screening tools for all heat networks, which are more likely to give a more holistic view on capital expenditure and investment. We are also mindful of the balance between the added complexity of reporting and the additional benefits of a more informative metric than EBIT margins.

On the broader definition of value, our view is that profitability assessment as an initial screening of fair pricing does not include the assessment of social values of heat network operations but we agree that not-for-profit heat networks should not be disadvantaged in profitability assessment by the choice of metrics. We welcome further evidence on how social values of heat network operations differ and whether and how these differences are reflected in pricing.

Need for Segmentation

Our view is that heat networks that are not-for-profit, or operating under cost recovery models will still be required to report basic financial data such as costs and revenues for EBIT margin calculation and initial screening for all heat networks. This holds for new developments within zones and heat network entities covered under Social Housing Regulation. As mentioned earlier in our response to this question, we are mindful of how EBIT margins can be misleading for these groups, and we will continue to explore how EBIT margins can be contextualised.

Q24. How challenging would it be for heat network operators and suppliers to provide the data outlined for calculating EBIT margins? What barriers, if any, might affect the accuracy and completeness of the data?

Table 25 - Response summary for consultation question 24

Response	Number of responses	Percentage of total responses
Comments	36	40%

4.19 The majority of the respondents who answered this question found the data reporting for calculating EBIT margins challenging, with some stakeholders experiencing challenges depending on whether the EBIT margin is reported at the heat network level or organisation level.

4.20 General concerns: general concerns around the reporting of EBIT margins include reporting financial data at the network level instead of at the organisational level or across a portfolio, attribution challenge on how shared costs are apportioned to each network, accounting issues that include the lack of separate financial ledgers and the need for reconfiguration of accounting systems and additional administrative burden. Respondents also stated barriers to data accuracy, availability and completeness which includes revenue recognition timing and current accounting practices. Please refer to Appendix 3 for a detailed technical discussion on these barriers.

4.21 Four respondents did not find reporting EBIT margins to be challenging at all. They commented that data required for EBIT calculation is already reported in company accounts for commercial operators and suppliers and EBIT is calculated as standard for large companies.

4.22 One respondent found the reporting requirement reasonable but demanded clear guidance on which costs items can be included, and which cannot be included.

Ofgem response

We welcome that respondents agreed that reporting the data for EBIT margin calculations is not unreasonable as EBIT margin is often calculated at an organisation level. We acknowledge the challenges of reporting financial data at a heat network level, instead of at organisation level or portfolio level, and understand how these challenges hinder data accuracy and completeness. We maintain the view that financial data for calculating EBIT margin or a similarly simple measure should be reported for all networks, regardless of their pricing strategies or status. We would also stress that the reporting of financial metrics at heat network level complements the pricing data, which is assessed at heat network level.

Given the general responses commenting on the difficulties in attribution issues and apportionment of costs and thus reporting financial data at heat network level, we are considering phasing in the requirement of reporting financial metrics at heat network level. We are considering starting with providing the option of reporting financial metrics at organisational level (excluding non-heat network activities) and continuing to explore when the reporting of financial metrics could be standardised for all heat networks to be reporting at heat network level. During this period of transition to more standardised reporting, we expect to explore methods of cost apportionment that would be appropriate in the heat network context and consider providing instructions or examples in a later consultation.

Nevertheless, we would like to reiterate that heat networks are encouraged to report financial data at heat network level if available. Note that the reporting described in this section does not replace the organisation level metrics under financial stability and step-in outlined in the Heat Networks Authorisation and Regulatory Oversight decision.

Q25. As data collection improves, do you agree that more in-depth profitability assessments, for example using Return on Capital Employed (ROCE), should be conducted for networks identified as outliers through benchmarking?

Table 26 - Response summary for consultation question 25

Response	Number of responses	Percentage of total responses
Agree	10	11%
Partially agree	9	10%
Neither agree nor disagree	8	9%
Disagree	9	10%
Not answered	54	60%
Comments	36	40%

4.23 The majority of respondents who responded to this question agree that more in-depth profitability assessments should be conducted for networks identified as outliers through benchmarking, but some have provided some caveats, such as ensuring that it does not place excessive burden on heat networks, or that it should be reserved for heat networks that are flagged. One respondent agrees with having more in-depth assessment but did not support specifying a benchmark ROCE or WACC for heat networks, and two respondents commented that more evidence is needed to determine what might be the best metrics to be adopted.

4.24 Support for ROCE: stakeholders expressed support for ROCE-based assessments, particularly for larger commercial schemes or where EBIT margins flag concerns. One respondent argued that ROCE should be assessed from the outset for all heat networks because ROCE provides a more complete picture of financial performance that is masked in the EBIT margin. The respondent did not anticipate significant additional burden on heat networks by using ROCE with WACC for assessment because the only additional metric required is capital employed, which is a standard financial metric. WACC in heat networks can also be estimated using the comparative level of risk adjusted from electricity and gas networks.

4.25 Concerns about ROCE: however, five respondents raised some concerns about the ROCE methodology. These included a recommendation to explore alternative options such as gross margin per customer or net present value of the project

over the length of the project, a note that ROCE is unsuitable for some heat networks (such as small heat networks or heat networks in rented properties), and that ROCE faced some of the same limitations as EBIT margins (such as not accounting for annual variations in financial metrics).

4.26 Segmentation and regulatory burden: raising the issue around market diversity, five respondents specified segments of heat networks market that the proposed in-depth profitability assessment should not be applied to. In addition, seven respondents expressed their concern on the burden placed on heat networks by in-depth profitability assessment and suggested under what conditions the in-depth assessment should be conducted. Refer to Appendix 4 for these discussions.

4.27 One respondent requested greater clarity on which networks would be in scope for profitability assessment as they would like to avoid duplication of any emerging profitability analysis being done on heat networks progressed through zoning schemes, given DESNZ have shared proposals with industry for potential profit-sharing mechanisms for these schemes.

Ofgem response

We welcome stakeholders' general support of more in-depth profitability assessment for heat networks flagged as outliers from price benchmarking.

We maintain the view that financial data for calculating EBIT margin or a similarly simple measure should be reported for all networks, regardless of their pricing strategies or status. The proposed in-depth profitability analysis such as ROCE and WACC is expected to be conducted as a next step for a subset of heat networks that are flagged as outliers.

We are mindful of the additional administrative burden the data reporting might exert on some heat networks, for some, considerable resource and time is to be put on fulfilling the initial proposed reporting requirement. We view the focus on data reporting in this area is currently on moving from no reporting or organisation level financial data to reporting by network. This can be facilitated by keeping the reporting metrics simple as a starting point. Note that the reporting described in this section does not replace the organisation level metrics under financial stability and step-in outlined in the 2024 ARO Consultation.

We would like to reiterate that at this stage we are open to exploring more appropriate metrics or tools for in-depth profitability analysis and we expect that as data collection improves and becomes more standardised, the set of tools or metrics that are feasible would also expand.

We are working closely with DESNZ to avoid duplication of profitability analysis and ensure that interactions with DESNZ policies are clear.

Q26. Do you have any other feedback on the proposed approach to profitability assessment?

Table 27 - Response summary for consultation question 26

Response	Number of responses	Percentage of total responses
Comments	44	49%

4.28 One general theme in the response is around factors that affect the proposed metrics of profitability assessment. Five respondents mentioned factors such as service quality should be considered when assessing returns, and that there should be a greater focus on validating network performance for entities providing poor consumer outcomes, and taking a holistic approach which considers elements such as fuel poverty.

4.29 One respondent criticised that the proposed profitability analysis is unlikely to capture the most important drivers of disproportionate pricing such as wholesale gas prices.

4.30 Additional factors: there were also suggestions on additional factors that should be included in the assessment, with one respondent suggesting that capital expenditure or interest on loans spent on capital expenditure should be included as the costs for the EBIT calculation to encourage investment in capital project or efficiency projects.

4.31 Minimum level of profitability: finally, some respondents made suggestions for the assessment to consider a minimum level of profitability to ensure self-sufficiency, that the results of the analyses should be published to ensure accountability, to consider the lifetime profitability of a project, and that direct engagement be held with different types of investors to understand the risk profiles of investments.

Ofgem response

We welcome the feedback on what stakeholders think should be further considered in the approach for the profitability, and what alternative methods should be considered, including a lower bound for profitability, accounting for service quality and investment

incentives, a review framework considering social values and the alternative metrics such as gross margins, and examining pricing formulas of heat networks.

We would like to reiterate that at this stage we are open to exploring more appropriate metrics or tools for in-depth profitability analysis and we are open to the idea that different segments of the market may require different tools. We expect that as data collection improves and becomes more standardised, the set of tools or metrics that are feasible would also expand.

Although we agree with having clear accountability from price benchmarking and profitability analysis, we do not expect to publish interim results for EBIT margins because EBIT margin is only one component for identifying the underlying causes of potential disproportionate pricing and we do not intend to draw conclusions based on this metric alone.

We agree that engagement with different types of stakeholders is essential. We expect to continue to engage different stakeholder groups in the process and ideally establish a feedback loop during the early stages.

5. Central Price Transparency

Central price transparency aims to make heat network pricing more visible and understandable for consumers, enabling them to challenge unfair charges. We consulted on three options for publishing price information: grouped comparisons (compare their network's prices with similar networks based on characteristics like size and technology), pooled market averages (compare against market-wide averages and alternative heating options such as gas boilers or heat pumps), and RAG (Red-Amber-Green) ratings (accessible, colour-coded indicator of whether certain conditions are met, such as when prices are higher than a certain level, possibly connected to benchmarks).

Respondents broadly supported transparency but highlighted challenges. Many favoured grouped comparisons for their analytical robustness, though concerns were raised about complexity, data reliability, and consumer comprehension. Pooled averages were seen as easy to understand but criticised for being too general and potentially misleading. RAG ratings were praised for simplicity but risked oversimplification and misinterpretation without context. Stakeholders stressed the need for explanatory materials, consumer education, and testing to ensure usability. Concerns were also raised about risks of price convergence, disclosure of commercially sensitive data, and increased complaints if comparisons are poorly contextualised.

We are working towards a phased, iterative approach, starting with simpler options while building towards more detailed and robust comparisons as data reporting phases in. We also commit to engaging stakeholders and exploring consumer research to refine tools.

Question analysis

Q27. What are your views on the three options? Please comment on each option in terms of the price information to be centrally published, how the price information is presented and what prices are compared to.

Table 28 - Response summary for consultation question 27

Response	Number of responses	Percentage of total responses
Comments	59	66%

5.1 Unclear purpose: across all three options, stakeholders consistently expressed their concerns over the unclear purpose of central price transparency, risks around misinterpretation and complexity, unintended consequences and data challenges.

Option 1: Grouped Comparison

5.2 Informative and analytical robustness: this option received high level of support among respondents. This approach allows consumers to compare prices with similar heat networks based on characteristics such as size, age, and technology. Respondents appreciated its potential to provide meaningful, like-for-like comparisons while avoiding the disclosure of commercially sensitive data, with three respondents finding this option to be the most informative and analytically robust and a more valid approach than comparison to individual gas or heat pump systems.

5.3 Complexity: one broad theme of concern raised by stakeholders is about the complexity and reliability of comparison of this approach. Three respondents raised the concern that grouping networks meaningfully is inherently difficult due to the diversity of configurations. Respondents warned that imperfect grouping, or use of groups which contain too few networks, could erode trust, undermine the robustness of comparison, and lead to unfair conclusions.

5.4 Accessibility: another concern raised by stakeholders is around accessibility for consumers, particularly those with low digital or financial literacy, and the need to ensure valid grouping based on sufficient data. This included concerns that customers may struggle to identify which group their network belongs to, that scatter plots or charts could be confusing without adequate guidance, and that the proposed approach may be more suitable for industry comparison than for consumers.

5.5 One respondent suggested that the information needed for consumers to understand the comparison would need to be signposted through various channels including welcome letters, annual statements and online dashboard, where there may also be options to pre-enter based on unique network identifiers.

Option 2: Pooled Market Average Comparison

5.6 Simplicity: this option was supported by respondents for its simplicity and ease of understanding. Stakeholders noted that comparing prices to market-wide averages and counterfactuals (gas boilers or heat pumps) could help consumers assess their charges, and three respondents endorsed building on existing tools like the Heat Trust cost calculator. One respondent also noted that comparisons to counterfactuals are more meaningful than comparisons to other heat networks.

5.7 Comparison validity: however, some respondents raised concerns about its comparison validity, and the risk of the approach being potentially misleading. 12

respondents criticised this option for being too generalised and potentially misleading, with one respondent arguing that consumers primarily care whether their price is fair, not how it is calculated.

5.8 Raising similar concerns around the validity of the approach, another respondent also pointed out that the comparison does not imply prices are cost reflective or efficient. Further to this, three respondents raised the concern that comparisons to gas prices may unfairly disadvantage low-carbon networks. Another respondent argued that this option risks presenting heat networks as uniformly poor value, even where schemes are operating efficiently but constrained by legacy or structural design.

5.9 Risk of misunderstanding: another concern raised is around risks of misunderstanding the information. Six respondents warned that this option may create misunderstandings in instances where outliers or regional affordability gaps, age of schemes (newer versus older schemes) and national assumptions around building types, are not accounted for. One respondent emphasised the importance of keeping comparisons simple to avoid consumer confusion

5.10 Two respondents proposed rebuilding the Heat Trust calculator for the purpose. But two other respondents also noted that gathering property size data would be challenging for older schemes. Five respondents proposed including full lifecycle costs or carbon intensity in the comparison.

5.11 Two respondents suggested using this option as an interim measure from January 2027, before more data is collected for Option 1.

5.12 Two respondents noted that Option 2 is best suited for domestic customers or SGL networks.

<u>Option 3: RAG Ratings Indicating Comparison with Benchmarks</u>

5.13 Simplicity and accessibility: this option received mixed feedback. Respondents supported it for its simplicity and accessibility especially for non-technical audiences**,** noting that a colour-coded system could help consumers quickly understand whether their prices are above or below benchmarks.

5.14 Two respondents suggested that RAG ratings could gamify performance and encourage improvement.

5.15 As a recommendation, two respondents proposed that planners could use RAG ratings to set conditions for new developments.

5.16 Communication: respondents had raised general concerns regarding communication to consumers when using this approach. Six respondents raised

the concern that red ratings could cause undue alarm without context. Three respondents cautioned that RAG ratings could lead to increased complaints without resolution. One respondent feared media misuse of RAG ratings to promote negativity. Two respondents queried how rating changes would be communicated to consumers.

5.17 Effectiveness: in terms of the effectiveness of this approach, four respondents questioned the usefulness of RAG ratings without price data.

5.18 Unintended impact: concerns around unintended impact have also been raised, with two respondents arguing that red ratings may unfairly penalise environmentally friendly networks. Two respondents also warned that green-rated for-profit operators may be incentivised to raise prices.

5.19 Some respondents proposed that Option 3 should be used internally for suppliers or operators. Three respondents recommended combining RAG ratings with Option 1 or 2. Two respondents also suggested using RAG ratings as a high-level overview until Option 2 is available.

5.20 General feedback and alternative recommendations: stakeholders proposed alternative approaches or enhancements to the three options presented, often advocating for a blended or phased approach to central price transparency. A recurring theme was the need to balance clarity, accessibility, and contextual accuracy while avoiding consumer confusion or misinterpretation.

5.21 Four stakeholders proposed alternative metrics for comparison, such as carbon intensity, network efficiency, or total lifecycle costs, arguing that price alone may not reflect the full value of a heat network. Two respondents suggested that grouping should be more granular, incorporating factors like ownership model (for example, not-for-profit versus commercial), customer type, or network generation.

5.22 In providing some alternatives, some respondents expressed support for a full public register of heat network prices, similar to models used in Denmark. One respondent expressed concern that this option had been prematurely ruled out, despite its potential to deliver the highest level of transparency, with another respondent commenting that a full register of heat-network prices, including detailed cost-allocation and procurement elements would enable meaningful benchmarking, empower managing agents and consumers, and lay the groundwork for a potential future price-cap, if deemed necessary, based on real cost drivers.

5.23 Some respondents also provided comments around implementation. Four respondents advocated for a consumer-facing online tool to input network characteristics, usage, and charges and receive tailored comparisons. Six respondents emphasised the need for explanatory notes, factsheets, and infographics to support consumer understanding. They suggested collaborating with consumer advocacy bodies to develop guidance, testing all three options with consumer panels before rollout, and educating consumers on heat networks and tariffs before publishing price data.

Other Comments

5.24 There were additional comments provided by stakeholders around pricing transparency that are not within the scope of the fair pricing framework, but has been communicated and considered in their relevant regulatory areas. This includes proposal around clearer routes for consumers to challenge pricing, including referral to the Energy Ombudsman, and authorisation requirements for heat network owners to disclose cost data to residents with management rights.

5.25 One respondent expressed concerns that supplier interests were given undue weight in rejecting the full register option.

5.26 One respondent argued that Ofgem should ensure consumer-facing data is explained clearly and not withheld due to perceived complexity.

5.27 Two respondents viewed the transparency tool as more than a consumer aid, suggesting it could support evidence-led policy and accountability.

Ofgem response

We welcome the stakeholders' comments on the proposed options and the suggestions to enrich the options. We plan to progress with further developing all three options outlined in the consultation. We recognise that each option presents different strengths and limitations. At this stage, we do not see strong reasons to exclude any of these options, as they could be combined to complement each other in different aspects. For example, a grouped comparison can be presented with pooled market averages accompanied by RAG ratings. We acknowledge the risks associated with each option as discussed by respondents and we consider modifying and further developing these options, or combination of these options as we continue to engage with stakeholders. We are also considering undertaking consumer research to test these options with consumers as we develop these options.

We acknowledge that some respondents expressed their concerns about the objectives of central price transparency and the burden on consumers. We would like to clarify that

one of the objectives of central price transparency is to empower heat network consumers or their representatives to challenge their bills based on evidence, by providing market data and assistance for comparison. Central price transparency works in conjunction with the billing and transparency obligations in authorisation condition (AC9), to ensure that the consumer has relevant information to compare their individual bill to comparable heat network prices or charges across the market and take appropriate complaint and redress routes if they have concerns. We see that the key for achieving this objective is to ensure that information is presented clearly to consumers and this comprises of these elements: ensuring that the pricing and billing information are in an accessible format and providing supporting materials such as infographics to aid consumer understanding, and including clear signposting for consumer complaint and redress routes.

In this respect, we also acknowledge that the comparison may not be straightforward, and the importance of the role of consumer advocacy bodies in achieving the objective, by providing independent analysis for consumers and facilitating consumer understanding and knowledge of the market over time. We are currently considering providing additional and more granular data for this purpose, on top of the options presented in the consultation that are primarily designed for consumers.

We acknowledge the respondents' views that the option 'full price register' has been discounted prematurely. In the 2024 government response, we received many objections to this option. After consideration, this option was discounted along with other options receiving similar objections. Although we agree that this option offers the most transparency, we did not proceed with this option for two reasons: first, although consumer advocacy bodies and research teams will have resources to analyse the full register, Ofgem has potentially commercially sensitive data that is not published alongside the prices and public data reported that contributes to decisions. This increases the risk of misinterpretation. Second, this option could lead to gaming of the data in response to price investigations.

We understand that stakeholder engagement, including heat network entities, consumer advocacy bodies and consumers, is essential in this area. We also acknowledge the strong call from stakeholders for further consumer research and testing of the proposed options. We agree that consumer understanding and usability must be central to the development of any transparency tool. We will therefore consider undertaking further engagement and testing to ensure that the options are effective in practice and deliver clear value to consumers.

For discussion on combination, phasing in, and options for different groups, please refer to Q29-31.

Q28. Do you think the options have the right balance between providing a good level of transparency, burden on consumers to interpret the information, risks of misinterpretation by consumers, disclosure of commercially sensitive information, and risk of price convergence?

Table 29 - Response summary for consultation question 28

Response	Number of responses	Percentage of total responses
Comments	54	60%

5.28 In this question, respondents were asked to comment on the balance between achieving transparency objectives and avoiding potential risks. 54 respondents commented.

5.29 Transparency: eight stakeholders had indicated their preferred price transparency option that they think could achieve the right balance. Four respondents supported Option 2 for balancing meaningful comparisons with low consumer burden. One respondent supported Option 3 for its accessibility and clarity, especially for digitally excluded consumers. Two respondents argued that transparency should be prioritised above other factors and supported Option 1 for delivering the necessary level of consumer insight.

5.30 Four respondents expressed their concerns that the options or combination of options do not provide the right balance.

5.31 Communication: there were concerns raised around communicating the price information to the consumers and the potential effect of the options proposed. Few respondents raised concerns that publishing detailed price comparisons could lead to increased complaints and regulatory action, even when prices reflect actual costs. Six respondents raised concerns on the complexity of the options or made recommendations. They recommended a user-centred design approach with explanatory materials to ensure tools reflect consumer needs and special care for presenting information to vulnerable consumers.

5.32 Additionally**,** three respondents urged that the expectations and burden on consumers to understand the quality of their prices should be re-examined. Respondents argued that Ofgem and the Energy Ombudsman should lead on

identifying and addressing unfair pricing and that proposals should focus on system design and enforcement, not consumer-led action.

5.33 Competition: on the effect of these proposals on industry and competition**,** one respondent warned that universal transparency could undermine competitive positioning and lead to artificial price convergence. This view is echoed by other stakeholders that acknowledged the risk of price convergence. To mitigate this price convergence, two respondents argued that tariff change submissions (or regular benchmark updates) would reveal convergence.

5.34 Arguing against the concern about the impact on competition and commercial sensitivity, two respondents believed commercial sensitivity could be managed through anonymisation. One respondent also stated that sensitivity concerns are irrelevant due to monopoly positions.

Ofgem response

We welcome stakeholders' views on the balance between transparency, consumer burden to interpret the information, risks of misinterpretation, commercial sensitivity, and price convergence. We recognise that these factors are interdependent and must be carefully managed to ensure central price transparency delivers meaningful benefits to consumers without unintended consequences.

We acknowledge the concerns raised regarding the complexity of price comparison tools and the potential for misinterpretation, particularly among vulnerable consumers. As noted in our response to Q27, we agree that consumer understanding must be central to the design of any transparency tool. We are considering incorporating explanatory materials, FAQs, and infographics to support comprehension. We also recognise the need to avoid placing unrealistic expectations on consumers to interpret complex data unaided. As such, we will explore ways to embed clear signposting to complaint and redress routes, and work with consumer advocacy bodies to support independent analysis and education.

We agree with respondents that transparency should not be sacrificed due to complexity but rather addressed through thoughtful presentation and support. We consider undertaking consumer testing to ensure that tools are accessible and usable across demographics.

We note the mixed views on the disclosure of commercially sensitive data. As highlighted in Q27, we recognise that grouped comparisons and anonymisation can mitigate risks while still providing meaningful insights. We agree that transparency should be

prioritised but must be balanced against the risk of undermining competition or enabling price convergence. We will continue to assess the appropriate level of granularity and anonymisation to avoid these unintended consequences while enabling consumer empowerment.

We appreciate the range of views on whether the proposed options strike the right balance. As stated in our response to Q27, we are considering progressing with all three options, recognising that each offers different strengths. We agree with respondents that a composite approach, combining elements of Options 1, 2 and 3, may offer the most effective balance. For example, grouped comparisons (Option 1) could be presented alongside pooled averages (Option 2) and supported by RAG ratings (Option 3) to aid interpretation.

We also acknowledge the suggestion to expand existing tools such as the Heat Trust Cost Calculator and will consider how these can be integrated or enhanced. We agree that phasing in options and monitoring unintended consequences is a prudent approach and will undertake further engagement and testing to refine the balance between transparency and associated risk.

Q29. Do you support focusing on one option or a combination of options in paragraph 6.69?

Table 30 - Response summary for consultation question 29

Response	**Number of responses**	**Percentage of total responses**
One option	14	16%
Combination of options	21	23%
Rethink options	4	4%
Ambiguous	9	10%
Not answered	42	47%
Comments	48	53%

5.35 Out of the 48 respondents who gave a response to this question, 21 of them preferred proceeding with a combination of options, 14 respondents preferred to focus on developing one options, while four respondents suggested that the options are to be reconsidered. Six respondents suggested that these options should be tested with consumers.

5.36 Amongst the stakeholders that preferred to proceed with developing one option, five respondents expressed their preference for focusing on Option 2 and two respondents supported Option 3. The rest of the respondents did not specify which single option they preferred. One respondent commented that more than one option would be too confusing for consumers.

5.37 21 respondents supported developing a combination of options, with two stakeholders supporting developing all three options. Six respondents supported developing both Option 1 and Option 2, with one respondent commenting that the availability of existing tools that enable early adoption of Option 2 and the broader applicability of Option 1 make it appropriate to develop both options. Another respondent also commented that combining Option 1 and Option 2 is a powerful approach and they should be shown in parallel for consumers as an interactive tool and relevant support information.

5.38 Four respondents did not support any of the options as they believed that none of the options offer the price comparison outcomes that were to be achieved. In similar lines of argument, two respondents criticised that these options were anonymised and that they would not offer sufficient transparency. They suggested that actual price of each company and statistics on prices should be published.

Q30. Do you support the phasing in of the options described in paragraph 6.70?

Table 31: Response summary for consultation question 30

Response	**Number of responses**	**Percentage of total responses**
Agree	23	26%
Partially agree	10	11%
Neither agree nor disagree	7	8%
Disagree	7	8%
Not answered	43	47%
Comments	47	52%

5.39 Stakeholders that agreed with the proposal of phasing in the options provided two main reasons: data readiness and compliance, and the balance between a quick start and robust approach.

5.40 Benefits of phased approach: among the respondents that highlighted the benefits of phasing in the options, ten respondents requested clarity for consumers when options are in development, clear narrative and supporting information.

5.41 Timelines: 10 respondents advocated for compressing the timeline for faster implementation. In contrast, two respondents suggested a more realistic timeline for phasing in these options. One respondent suggested at least five years after go-live, and another respondent pointed out that at least two years (three years preferred) for the benchmarking data to be useful or useable so this should be considered for central price transparency options.

5.42 For the seven respondents who disagreed, two respondents were against phasing in of options because they only supported Option 2. Four respondents were against phasing in of options because they believed it would create confusion, distrust and misunderstanding for consumers with potentially conflicting information available at different times.

5.43 Two respondents suggested conducting consumer research and feeding the findings into determining improvements that may be required before an option is rolled out more widely.

Ofgem response (Q29, Q30)

A majority of respondents expressed support for progressing with a combination of options, while others favoured a single approach or raised concerns about the suitability of the proposed models. We also welcome the broad support for a phased approach to implementing centralised price transparency options. Respondents highlighted the importance of allowing time for data readiness, system development, and staff training, particularly for smaller and not-for-profit networks.

Considering this feedback, we plan to progress with all three options outlined in the consultation. We recognise that each option offers distinct benefits and may serve different consumer needs and network contexts. We also recognise that each option may be suitable depending on the maturity of data systems and network characteristics. Our aim is to ensure that any central price transparency approach is both meaningful and accessible to consumers, while remaining proportionate for heat networks. A phased approach allows us to introduce simpler options initially, while building capacity and data quality for more complex comparisons over time.

We also acknowledge the strong call from stakeholders for further consumer research and testing of the proposed options. We agree that consumer understanding, and usability must be central to the development of any transparency tool. We will therefore consider undertaking further engagement and testing to ensure that the options are effective in practice and deliver clear value to consumers. This will help us assess how consumers interpret and engage with the information, and inform the sequencing and presentation of transparency tools.

We are mindful of the potential risks associated with a phased rollout, including the possibility of inconsistent consumer experiences and confusion. As we develop our approach, we will carefully consider how to maintain clarity across the sector, ensuring that all consumers receive accessible and comparable information.

Q31. Do you support the adoption of different options for different heat network groups described in paragraph 6.71?

Table 32 - Response summary to consultation question 31

Response	**Number of responses**	**Percentage of total responses**
Agree	22	24%
Partially agree	8	9%
Neither agree nor disagree	4	4%
Disagree	15	17%
Not answered	41	46%
Comments	49	54%

5.44 Out of the 49 respondents, 30 supported the adoption of different options for different heat network groups and 15 disagreed. Note that in this question, many respondents focused on the data reporting aspect instead of differentiating the adoption of the central price transparency options for different heat network groups. This is out of the scope of this question, but the discussion and analysis are kept here for information.

5.45 Among the stakeholders that agree with the adoption of different options for different heat networks**,** 11 respondents focused on the 'not-for-profit' status of the heat networks or the organisations, especially for housing associations and communal heat networks, but one respondent commented that reporting duties should apply equally to all heat networks and added that differing data

requirements should arise out of the nature of the heat network rather than the commercial arrangements.

5.46 Two respondents commented that communal heat networks are often managed by organisations with less expertise in data collection and reporting and they should be treated differently from large district heat networks.

5.47 Complexity: whilst agreeing with the general approach**,** seven respondents warned that this would add complexity and create confusion unless clear guidance is available, and the proposal is further consulted. They are also concerned how certain groups of customers from historically poor performing heat networks would be categorised, and stressed that they should have full visibility of pricing and costs as for the rest of the consumers of other heat networks.

5.48 Against differentiating options: amongst the stakeholders that disagree with the approach of differentiating options for different heat networks, one respondent stated that all entities should face similar reporting requirements and focus should be on ensuring that these are simple and easy enough for all heat networks to comply to regardless of type or operation or resources available for each entity to comply. Seven respondents were in favour of simplicity and argued that the complexity of differentiated approaches would confuse consumers, especially at the beginning of the regulations

5.49 Consumer confusion: raising the issue of confusion to consumers, four respondents argued that different approaches to central price transparency for different groups of heat networks risks making the sector even more confusing to consumers. One respondent warned that it also risks embedding, instead of reducing, market segmentation. They argued that market segmentation should be reduced or removed over time. This supports the overall goal for all consumers to receive the same level of protections, experience good outcomes and pay fair and transparent prices.

5.50 Exclusion of consumers: three respondents were wary that certain consumers would be excluded from aspects of consumers protection because of their tenure, or the categorisation of their landlord.

Ofgem response

Note that the question intended to focus on the choice of options presenting price information centrally, which is different from data reporting requirements. In the context of this question, we are considering whether to present information differently (through

the options), assuming that the information required for each network group is the same. We retain the discussion on differentiated data reporting in the discussion for information purposes. Please refer to the questions on segmentation and data for details.

We note the mixed views on adopting differentiated approaches for different heat network groups. While some respondents supported tailoring options to reflect differences in network size, ownership model, or data capability of heat network entities, others raised concerns about complexity and fairness for consumers.

We are cautious about the risks of a differentiated approach. Several respondents highlighted the potential for consumer confusion, reduced comparability, and the risk of increasing segmentation within the market.

Our overarching aim is to ensure that all consumers— regardless of the network they are served by— receive clear and easily understandable information. We will therefore carefully assess the implications of any differentiated implementation and explore whether there are sufficient benefits for a differentiated approach.

Q32. Do you agree that central price transparency measures are unlikely to put additional administrative burden on heat networks in addition to data reporting for benchmarking? Do you have concerns on the administrative burden from any options?

Table 33 - Response summary for consultation question 32

Response	**Number of responses**	**Percentage of total responses**
Agree	23	26%
Neither agree nor disagree	3	3%
Disagree (concerns raised)	25	28%
No answer	39	43%
Comments	51	57%

5.51 Out of the 51 respondents who answered this question, 23 of them agreed that central price transparency measures are unlikely to put additional administrative burden on heat networks in addition to data reporting for benchmark, while 25 respondents raised some concerns explaining that they could foresee additional burden.

5.52 Administrative burden: from the stakeholders who agreed, one respondent expected no additional burden given that Ofgem would be undertaking the benchmarking and publishing information on price transparency. Similarly, nine

respondents agreed that there would be no to very little administrative burden given that the central price transparency measures are created from the same data as the data used for benchmarking and given that the data infrastructure is already in place. Two of the respondents urged for data reporting across different regulatory areas to be streamlined to avoid double reporting. One respondent also demanded regular communications and clear data templates for data reporting to reduce data reporting burden.

5.53 On the other hand, among the respondents that disagreed, three respondents pointed out that the additional administrative burden for heat networks regarding implementation of central price transparency may not be on data reporting (because the same data is submitted for benchmarking), but on managing customer dissatisfaction and addressing confusions caused by oversimplified or poorly contextualised comparisons. One respondent added that this could be positive if it leads to education and better understanding for consumers.

5.54 Finally**,** 17 respondents raised concerns on the general administrative burden of data reporting, instead of additional burden from implementation of central price transparency.

Ofgem response

We would like to clarify that Ofgem intends to collect data from heat networks, analyse them for benchmarking and compile them for central price transparency tools (the options we set out). Therefore, heat networks' obligation in this respect will primarily lie in data reporting, with the possibility that consumers might react to the published pricing data and make enquiries with their heat networks. We acknowledge that it is possible for heat networks to receive more queries in response to the data published depending on which central price transparency options are presented. As mentioned in the consultation document, we intend to explore providing supporting materials such as infographics to aid consumer understanding.

Q33. Do you think it is appropriate to link central price transparency with benchmarking?

Table 34 - Response summary for consultation question 33

Response	Number of responses	Percentage of total responses
Agree	27	30%
Partially agree	10	11%
Neither agree nor disagree	5	6%
Disagree	9	10%
Not answered	39	43%
Comments	51	57%

5.55 Linking price transparency and benchmarking: 37 out of 51 stakeholders who responded to this question agreed that central price transparency should be linked to benchmarking, with four respondents who supported linking central price transparency with benchmarking explaining that they saw these two approaches as intrinsically linked. Few other respondents favour the linkage because it minimises duplications of data reporting, empowers consumers through shared data and methodology, ensures consistency metrics used by consumers and the regulator and helps contextualising the pricing data for consumers

5.56 Communication: one theme raised by few stakeholders as a point of concern is around communication to consumers. One respondent suggested that the benchmarks should be explained clearly so there would be no confusion, and we should ensure that consumers are directed to their relevant benchmarks in the system. Some stakeholders warned against scope for significant confusion or complaints to Ofgem should consumers see benchmarks or comparisons which are not relevant, with two respondents raising concerns about the risk of confusion or overcomplication, which may undermine the central aims of price transparency.

5.57 Enhancing price transparency: one respondent commented that they understand that benchmarking is not developed for transparency, but they agreed that the link should be utilised if the work undertaken on benchmarking also enhances central price transparency.

5.58 One respondent highlighted the risk that the data provided is not closely associated with the time when the consumer needs it, depending on the publication time and frequency.

5.59 Five respondents disagreed with the question, arguing that it is not appropriate to link benchmarking and central price transparency. One respondent doubted it would be possible to make a benchmark showing the true picture of the situation.

5.60 One respondent believed that benchmarking and central price transparency should be treated as separate tools although they are related, arguing that benchmarking should compare a network's price against a technical counterfactual and is primarily a tool for assessing fairness versus comparable technologies. Central price transparency should compare prices across the market, giving consumers and policymakers insight into how one heat network compares to others. Even if they use similar inputs, they serve different audiences and different regulatory objectives. As a result, they recommended keeping them as separate, clearly defined tools, while allowing them to cross-reference each other. Another respondent also pointed out that benchmarking is not an appropriate tool for direct customer-facing comparison without full transparency and explanation.

5.61 Three respondents stated that benchmarking and central price transparency are separate topics that should not be conflated.

Ofgem response

We agree with the respondents' views that linking benchmarking with central price transparency would help contextualise the price data and statistics published. The transparency would help build trust between heat networks and consumers. However, these benefits could only be realised if the results are communicated clearly to consumers. We are mindful of the risks of misinterpretation and the need for balancing accuracy and simplicity.

We also agree that benchmarking and central price transparency can be completely separated as two areas with different objectives and audiences. But the linkage could be beneficial as benchmarking would help contextualising the pricing data.

We believe that this is an area of further research, testing and stakeholder engagement. Given that the phased approach of central price transparency and the data requirement of robust benchmarking, we expect the link between central price transparency and benchmarking would be phased in, if it is to be developed.

6. Price Investigations

Ofgem will have the power to investigate where prices for consumers appear to be disproportionate. Price investigations in this context refer to Para 42 of Schedule 18 of the Energy Act and to the methodology we will introduce with regards to how these tools and processes will be used in cases of potential disproportionate pricing. Our fair pricing framework includes benchmarking and profitability assessments, alongside other information sources and activities such as monitoring and compliance, which will inform our price investigations. It will take time to develop the full fair pricing framework and therefore these types of price investigations will not start before January 2027 at the earliest as we have set out in the 2025 consultation document. Heat networks however, will still be expected to follow the authorisation conditions from the point they enter into effect in January 2026. It is possible that Ofgem may take compliance or enforcement action on unfair and disproportionate prices prior to January 2027, where there is sufficient evidence to do so.

Stakeholders broadly welcomed our proposed approach to price investigations. Many respondents supported the case-by-case flexibility, recognising the diversity of the heat networks sector and the need to tailor investigations to different network types.

Concerns were raised about the interim period between regulatory go-live in January 2026 and commencement of this form of price investigations no earlier than January 2027. There was also emphasis on the importance of clear guidance.

In our response, we reaffirm our desire for a tailored and proportionate approach to price investigations, recognising the need to differentiate between network types and minimising burden on smaller operators and suppliers. While we do not currently plan to initiate this form of price investigations before 2027, Ofgem has the power to request information from January 2026 and can engage with authorised persons to seek to address potential compliance concerns, including taking compliance and enforcement action where there is sufficient evidence and it is proportionate to do so. We also intend to consult on further guidance on price investigations ahead of January 2027, to build confidence and understanding around the process.

Question analysis

Q34. Do you agree with the approach to price investigations set out so far? Please provide reasons and views to support your response.

Table 35 - Response summary for consultation question 34

Response	Number of responses	Percentage of total responses
Agree	21	40%
Partially Agree	16	31%
Neither agree nor disagree	14	27%
Disagree	1	2%
Comments	51	57%

6.1 Case by case approach: the majority of the respondents that provided a response to this question broadly agreed with our approach to price investigations. 30 respondents expressed support for the price investigation proposals, particularly welcoming a case-by-case approach.

6.2 Respondents noted that this approach was essential given the diversity of the heat networks market and a one-size-fits-all solution would not be effective. Eight respondents emphasised the need to distinguish between not-for-profit and commercial networks, with arguments that the former often has no incentives to overcharge. In similar comments around diversity of the market, four respondents suggested that legacy networks should be assessed differently to newer and more efficient systems.

6.3 Timing and implementation: another broad thematic concern raised by stakeholders involved the timing and implementation of the proposal**.** Seven respondents expressed concerns that the proposed timeline for the commencement of price investigations, no earlier than January 2027, could leave consumers vulnerable to disproportionate pricing for lengthy periods in the interim. Four respondents advocated for exceptional or "emergency" investigations to be allowed before 2027 where there is evidence of "egregious pricing" or "significant consumer harm", given that networks will be obligated to price fairly from January 2026.

6.4 Consumer detriment: six respondents were supportive of the proposed intentions of using consumer detriment as a key factor when prioritising price investigations,

with the approach seen as a way to efficiently allocate regulatory resources. One respondent suggested that Ofgem conduct randomised investigations to keep all operators alert and encourage wider compliance. A couple of other stakeholders suggested prioritising networks with the largest customer bases to maximise consumer protection.

6.5 Accessibility: another common theme amongst respondents was the need for clear, detailed and accessible guidance to accompany the implementation of price investigations. Nine respondents specifically requested clarity on what constitutes disproportionate pricing, how benchmarking methods would be applied, what data would be required from networks and how investigation outcomes would be determined. On this final point, respondents stressed that guidance must ensure consistency in how investigations are triggered and processed. Two respondents recommended that Ofgem maintain a publicly accessible record of price investigations, including any enforcement actions that were undertaken. Seven respondents welcomed the commitment of further engagement on price investigations and recommended wider consultation before finalising the approach.

6.6 Burden of requirements: finally, eight respondents, while supportive of an evidence-based approach, expressed concern about the volume and potential complexity of the data requirements associated with the fairness test and price investigations. Stakeholders warned that the proposed data collection could be an administrative burden for smaller operators. They suggested that reporting requirements should be proportionate for such networks and that Ofgem should implement requirements with a sufficient transitional phase to allow for proper preparation. Three respondents requested that Ofgem provide templates and tools to support operators in meeting data requirements efficiently.

6.7 One respondent disagreed with the current proposals, stating that it was inappropriate to apply the same regulatory standards between non-domestic and domestic networks.

Ofgem response

We welcome the support for the proposed case-by-case approach to price investigations. As highlighted in the consultation and in many of the responses, the heat networks market is highly diverse and a one-size-fits-all approach would prove potentially ineffective. We recognise the importance of distinguishing between networks with different characteristics, and this is reflected in the segmentation approach section of the

consultation. With regards to proportionate data reporting requirements, please refer to our response to Q9.

Stakeholders raised concerns about the potential data burden associated with price investigations, particularly for smaller networks. While the availability of data is important to support our evidence-based approach, we are committed to ensuring that data requirements are proportionate and practical. Please refer to our responses to Q6-9 for more detail on data reporting requirements.

Interim protection

We acknowledge the concerns raised by stakeholders on the potential gap in consumer protection timeline between the commencement of the fair pricing obligation in January 2026 and the start of this form of price investigation no earlier than January 2027. Our phased in approach aims to balance the need for consumer protections with the requirements of new regulation, such as the collection of data and development of analytical tools. While we do not currently plan to initiate this form of price investigations before 2027, Ofgem has the power to request information from January 2026 and can engage with authorised persons to seek to address potential compliance concerns including taking compliance and enforcement action where there is sufficient evidence and it is proportionate to do so.

Stakeholders broadly support our intention to use the size of potential consumer detriment as a key factor when prioritising price investigations. Our approach will be consistent with the enforcement guidelines that we publish and may also take into account other relevant considerations. We are currently consulting on our proposed enforcement guidance and penalty policy for heat networks.

We understand that stakeholders are keen for clear and accessible guidance on the conduct of price investigations. As outlined in the consultation, we intend to consult on and publish further guidance on this form of price investigations ahead of January 2027 to build confidence and understanding around the process in identifying disproportionate pricing.

Appendices

Appendix 1 – Technical discussion of Q18

Omission of elements

A1.1 Three respondents criticised the effectiveness of using regression-based benchmarking approach to identify potential disproportionate pricing. One criticism is that all heat networks could be pricing excessively, and it would go unnoticed as long as they are not an outlier. Similarly, if current (potentially unfair) prices and costs are fed into the model, systemic issues in (potentially unfair) pricing will be built into the model. If technical problems such as omitted variable bias are not addressed, disproportionate prices may not be identified accurately.

A1.2 Three respondents criticised that the proposed approach fails to consider the following:

A1.3 Price profile over the lifecycle of heat networks: The approach does not account for price changes over the investment lifetime, for example, maintenance costs tend to be low at an early stage but increase significantly after five years.

A1.4 Price profile over the portfolio of heat networks: When operators operate a portfolio of heat networks, similar prices are charged across different networks so that customers of some networks are not disadvantaged.

A1.5 Risk management across stakeholders: Prices could reflect level of risks being passed onto certain entities in the supply chain.

A1.6 Existing long-term contractual arrangements: The approach does not account for established business models in the sector and long-term and pre-existing contractual arrangements.

A1.7 Need for certainty and stability for a nascent sector: Heat networks do not know how their prices compared to similar heat networks until after comparator benchmarking is applied. This imposes uncertainty on how much heat networks can charge and affects investment decisions.

Feasibility

A1.8 A respondent cited the experience of the Danish Energy Agency that they explored a similar approach of cost drivers at some point but found it infeasible in practice due to complexity. However, they also mentioned that there are possibilities that they have not explored, including the approach of using regression to predict prices.

Appendix 2 – Technical discussion of Q23

Criticisms on profitability monitoring and EBIT margins

Relevance of profitability assessment for certain segments

A2.1 Two responses raised that elements in cost recovery network accounts are forecasts based on current charges and this can lead to over or under recovery when realised. They urged for guidance on how under or over recovery is claimed or returned to residents.

Controlling input costs

A2.2 One respondent stressed that the only meaningful way to address high prices is by monitoring and benchmarking the different elements of input costs to heat prices, including input commercial gas and electricity costs, metering and billing costs, operation and maintenance costs, capital replacement costs and bad debt. They urged that these costs must be monitored at the same frequency as heat prices, rather than annually as suggested in the consultation document.

Approach suitability

A2.3 Across the respondents supporting or opposing the proposal of EBIT margin monitoring, they raised concerns about the use of EBIT margin for profitability assessment in particular (as opposed to other measures):

Lack of multi-year comparison

A2.4 One respondent urged for EBIT margins to be considered over a reasonable period (for example, five years). They were concerned that any short-term analysis of profitability analysis could be misleading or misinterpreted given the differential investment requirements of networks, and the uneven profile of the typical investment in replacements and upgrades to systems, for example.

A2.5 One respondent also commented that EBIT margins can be volatile depending on the assets and operations. Factors such as the weather and outages of generating equipment can lead to volatility from year to year. Therefore, a level of "excess profit" is required sometimes to smoothen the volatility and maintain normal profits in the medium term.

Development lifecycle

A2.6 Six respondents raised the criticism of EBIT margins ignoring lifecycle stages. As one respondent explained, heat networks require significant capital investment

at different points in their lifecycle, creating natural fluctuations in profitability that may not reflect the true long-term financial health of the network. For example, early-stage projects may incur design, commissioning, and optimisation costs, whilst mature assets benefit from operational efficiencies and customer growth. Stages of operational networks might appear more profitable purely due to lifecycle timing, not inefficiency or overpricing. A snapshot view through EBIT margins or short-term EBIT margins could provide a distorted picture of network performance and potentially lead to incorrect conclusions about pricing fairness. They urged the regulator to contextualise EBIT margin data within business or revenue models and lifecycle stages.

Reinvestment and capital intensity

A2.7 Seven respondents expressed their concerns on that EBIT margin calculation does not reflect reinvestment by a network and capital intensity of the network in a capital-intensive industry because the metric focuses on operational revenues. Two respondents warned that this metric might penalise older networks due to their needs for renovation and reinvestment. Respondents also urged for recognition of reinvestment in the assessment as it improves network efficiency.

Revenue recognition

A2.8 One respondent criticised that the approach does not capture timing of revenue recognition and could be misleading. The respondent stated that heat networks revenue can be subject to connection timing and commercial arrangements with customers, regulatory constraints, delays in metering and billing. This creates revenue recognition lags that can make EBIT volatile or misleading, especially when timing differences skew annual earnings.

Interpretation of EBIT margin

A2.9 Five respondents commented on the problems related to how EBIT margins can be misleading and easily misinterpreted. The respondents provided the following examples:

A2.10 EBIT margins may not be instructive or helpful, given the range of financial constraints on heat networks that may have implications for substantial differences in tax and interest payment liabilities.

A2.11 EBIT misrepresents reinvestment and charitable surpluses, finance and debt.

A2.12 High EBIT margins might indicate that heat pumps have been installed and EBIT needs to be high to repay over time, instead of high profits.

A2.13 Profitable networks and those being run on a loss-making basis while the sector is developing would have similar EBIT margins.

A2.14 Costs can be allocated to reduce EBIT by considering how allocation of costs to networks from a portfolio of an organisation including costs servicing existing networks and corporate or organisation costs.

A2.15 A heat network with a low EBIT could still be unfair to consumers if the operator is poorly managing their input costs. Conversely, a high EBIT operator may be still offering fair low prices but generating higher profits through acting efficiently.

Appendix 3 – Technical discussion of Q24

Q24. How challenging would it be for heat network operators and suppliers to provide the data outlined for calculating EBIT margins? What barriers, if any, might affect the accuracy and completeness of the data?

Disaggregation of accounts and attribution challenge

A3.1 Seven respondents shared their concerns on reporting financial data at the network level instead of at the organisational level. These respondents pointed out that reporting data and assessing profitability should be at the company or organisation level or across a portfolio because it is common practice for organisations to price at a portfolio level, balancing prices and costs among different networks in the portfolio. This practice enables organisations to manage a wide and varied portfolio of networks to spread out network profitability and maintain price stability. Also, respondents explained that entities only analyse EBIT at company level but not at scheme level, so they argued that an artificial EBIT at scheme level is nonsensical.

A3.2 Two respondents raised concerns over attribution challenges stemming from how financial data is reported. The respondents elaborated that portfolios often share overheads, services, or procurement contracts across multiple networks, making attributing these costs to each network and reporting at network level problematic and unreliable.

A3.3 Three respondents commented on the lack of separate financial ledgers. For example,

- Small networks may lack separate financial ledgers for reporting on heat network operations
- For social landlords operating multiple schemes within the same accounting structures, individual heat networks are not separated in financial ledgers
- Landlords may not segregate the operating and maintenance costs of communal heat networks from other costs associated with operating and maintaining a building

A3.4 The comments from respondents also indicated that this is not only a problem for smaller networks. Five more respondents found separating the cost for

operating each heat network or from the rest of the non-heat network operations difficult. The respondents provided examples of these instances:

- a council run district heating network may not be ringfenced out of their operations
- a heat network may not be an independent entity running a single network
- large ESCos may not assess specific EBIT of an individual site
- large ESCos may take time and resource to determine site level information out of their complex portfolio (where EBIT is already calculated) solely for reporting purpose
- accurate separation of EBIT for a particular network against the rest of its business operations including apportionment of any central or development charges the business incurs could be challenging

Accounting complexity

A3.5 Nine respondents raised their concerns on providing the EBIT margin estimates at heat network level due to existing the existing accounting practice which includes issues around timing, accounting systems and data segmentation.

A3.6 Three respondents pointed out that accounting periods may not align with reporting and financial data is often 12-18 months behind, especially when accounts are managed by third parties.

A3.7 One respondent pointed out the need for reconfiguring accounting systems because depreciation and overhead allocation are treated differently under housing regulations.

A3.8 Two respondents elaborated on challenges in compartmentalising costs and charges within their operations.

A3.9 One respondent highlighted challenges such as data segmentation, accounting complexities because of multiple businesses, variation in financial systems for small and large organisations that could affect accuracy, completeness, and consistency across the sector.

Administrative burden

A3.10 A total of seven respondents expressed their concern over the administrative burden of reporting for the proposed approach.

A3.11 One respondent objected to the proposal because they are already subject to financial audit so a different proxy is unnecessary. Five respondents shared

concerns about the resources needed for producing specific accounts at a heat network level. The respondents found it particularly difficult when the organisation needs to attribute costs to each heat network, when heat network costs are embedded in estate operational accounts, when they do not have the in-house expertise for these activities, or when specific finance system codes need to be set up (for example, heat network related costs are captured either under general staff, maintenance or major works costs). The additional costs might be passed on to customers as a result. A respondent suggested that the network-specific EBIT margin can only be reported from 2027 earliest after changes are implemented starting the next financial year.

Barriers to Data Accuracy and Completeness

A3.12 Data availability and accuracy: two respondents had doubts on whether the data is recorded by not-for-profit or local authority run heat networks, and whether the person responsible for purchasing energy and billing consumers is also responsible for financial reporting.

A3.13 Revenue recognition timing: two respondents raised concerns over the one-year delay of EBIT data compared to other price data and that revenue would depend on connection timing and commercial arrangements.

A3.14 Accounting practices: five respondents raised instances of accounting practices that would affect data accuracy and completeness:

A3.15 Many residential heat networks run by the building owners will not have the necessary processes and accounting procedures in place to allocation costs and revenue in a consistent way and detailed guidance is needed on cost allocation and reporting.

A3.16 Since site-level EBIT margins are not calculated annually, even for large ESCos, the accuracy and completeness of any network level data would be compromised by the level of assumptions that would need to be made to provide the calculation.

A3.17 When operators report a low EBIT as a result of an excessively high cost of capital from an intercompany loan.

Appendix 4 – Technical discussion of Q25

Q25. As data collection improves, do you agree that more in-depth profitability assessments, for example using Return on Capital Employed (ROCE), should be conducted for networks identified as outliers through benchmarking?

Not Appropriate for All Networks

A4.1 Some stakeholders feel that this approach is not appropriate for certain segments, and the proposed in-depth profitability assessment should not be applied to.

A4.2 Three respondents were against using this approach for not-for-profit schemes. One explained that ROCE would produce misleading results, as capital is often grant-funded and profits are reinvested and depreciated over the useful life of the asset. They recommended profitability assessments for not-for-profit providers to focus on cost recovery. The other respondent also held the view that ROCE calculation would not be feasible for smaller or older schemes with missing capital data.

A4.3 One respondent supported ROCE-based assessment for larger commercial schemes and schemes flagged as pricing outliers and unusual cost recovery patterns. Another respondent commented that in-depth profitability assessments may be suitable for district networks but not communal heat networks.

A4.4 One respondent suggested that it might be useful to separate the organisations whose primary function is heat network operation from those who are only heat network operators as an ancillary activity to their core function for analysis.

Situations when in-depth profitability assessment should be conducted

A4.5 Respondents were also concerns about the additional burden placed on heat networks and discussed situation when this assessment would be useful.

A4.6 Seven respondents expressed their concern on the burden placed on heat networks by in-depth profitability assessment and under what conditions the in-depth assessment should be conducted.

A4.7 Four respondents emphasised that in-depth profitability assessment should only be conducted when fully justified, such as when price benchmarking has identified clear outliers.

A4.8 Two respondents were critical that more granular data would be required for heat networks in general. Another respondent warned that the proposed in-depth assessment should only be used as a diagnostic tool but not a regulatory trigger.

A4.9 One respondent suggested that self-declared ROCE figures, the basis of valuation, and whether intangibles excluded could be reported and the responses could indicate the need for further investigation.

Appendix 5 – Draft Authorisation Conditions

A5.1 The following provides a draft version of the proposed Fair Pricing and Cost Allocation Authorisation Conditions. Please note that some minor changes have been made to the draft Fair pricing AC to align with the draft Cost Allocation AC.

Condition Title: Fair Pricing

Condition Number: [4]

Introduction to condition

This condition imposes an obligation on each authorised person to ensure that charges are fair and are not disproportionate.

The condition will be interpreted in accordance with guidance published by the Authority.

Proposed text of condition

The authorised person must ensure that charges imposed on Applicable Consumers are fair and not disproportionate.

This authorisation condition shall be interpreted in accordance with guidance published by the Authority for the purposes of this condition.

Before this authorisation condition [4] comes into force, the Authority shall publish the guidance referred to in paragraph [4.2].

The guidance referred to in paragraph [4.2] shall:

make provision about how the Authority is to determine; and

give examples of some of the methods that may be used by the Authority to determine,

whether charges are fair and not disproportionate.

Before the Authority publishes the guidance referred to in paragraph [4.2] the Authority shall consult with such persons or bodies as it considers appropriate to consult.

The Authority may from time to time revise the guidance referred to in paragraph [4.2] and before issuing any such revised guidance the Authority shall consult such persons as specified in paragraph [4.5] setting out the text of, and the reasons for, the proposed revisions.

For the purposes of this authorisation condition, an "Applicable Consumer", in relation to the authorised person, means a Consumer who is supplied by means of a relevant heat network in relation to which the authorised person is authorised, or treated as authorised, to carry on a regulated activity.

Condition Title: Cost Allocation

Condition Number: [x]

Introduction to condition

This condition imposes an obligation on each authorised person to ensure that charges are structured in a way that is consistent with charges being fair and not disproportionate, having regard to the guidance published by the Authority.

Proposed text of condition

The authorised person must ensure that the charges imposed on Applicable Consumers are structured, and are attributable to costs, in a way that is consistent with the outcome of charges being fair and not disproportionate, having regard to the guidance published by the Authority on cost allocation for the purposes of this condition.

Charges that are attributable to all or any part of a Relevant Payment shall be presumed to be unfair and disproportionate by the Authority, except in exceptional circumstances set out in the guidance (if any).

Before this condition [1] comes into force, the Authority shall publish the guidance referred to in this condition.

Before the Authority publishes the guidance referred to in this condition, the Authority shall consult with such persons or bodies as it considers appropriate to consult.

The Authority may from time to time revise the guidance referred to in this condition and before issuing any such revised guidance the Authority shall consult such persons as specified in paragraph [1.5] setting out the text of, and the reasons for, the proposed revisions.

For the purposes of this authorisation condition:

an "Applicable Consumer", in relation to the authorised person, means a Consumer who is supplied by means of a relevant heat network in relation to which the authorised person is authorised, or treated as authorised, to carry on a regulated activity; and

a "Relevant Payment" means:

any penalty imposed under regulation 31;

any amount payable to a heat network consumer pursuant to a consumer redress order; and/or

any specified amount payable by an authorised person (whether pursuant to contract or regulation) as compensation for a failure to meet specified service standards or service levels, including any amount payable pursuant to any regulations made (including after the launch date) under paragraph 58 of Schedule 18 to the Energy Act 2023.