



## Heat Network Zoning Consultation Response from The Heat Network, November 2021

The Heat Network is a peer group of social housing providers who meet to discuss and share good practice about district and communal heating. We bring together our own communal heat experiences and share the lessons we've learnt with colleagues across the sector through our [website](#).

We currently have 24 housing association and 4 local authority members, as well as representation from the National Housing Federation. Collectively, we represent over 106,000 homes on nearly 2,900 networks, 21% of all heat networks as defined by BEIS and 22% of all customers.

Our response to the consultation questions is below, however our key points are:

- We strongly support the UK's net zero carbon 2050 target and know that acceleration is needed in order for heat networks to play their role. Heat network zoning will provide a focussed approach to making this happen.
- We broadly support the zoning consultation proposals which are realistic, proportionate and flexible.
- We agree with the need for central, standardised methodologies for different aspects of zoning implementation in order to avoid duplication and confusion, and to save time and money. Local authorities on the whole are well placed to take on the role of Zoning Coordinator but this will require resource and specific expertise.
- Social housing providers will become a key heat network customer as communal heat networks in zones will be required to connect. It is critical therefore that our voice is heard both at the national and local level, and the voices of our customers. We are pleased to see that customer affordability plays a role in the zoning considerations, as does asset life cycles.
- At the moment, heat networks are often seen by the social housing sector as a management and financial headache. It's on the heat network sector to demonstrate just how good they can be in terms of reliability, customer service, cost and reduced carbon, to make them an attractive proposition. We – and third parties who may also have a stake in our assets (such as lenders) – may need to be convinced to give up control over our assets.
- Not all social housing providers are the same, not only in size but also in their experience and knowledge of heat networks. As a sector we have become 'accidental heat network operators', and for those without a strategic approach, heat network management is often reactive, data is poor and costs can be opaque. This is a risk not only to the zoning proposals, but to the wider Market Framework as well.

### Introduction

#### 1. Do you have views on how local area energy mapping and planning can best support heat network zoning?

We don't have any specific views on this but agree local area energy mapping and planning has a critical role to play. There should also be sharing of learning between local areas on the processes involved, to help develop good practice and save others from reinventing the wheel.

### Zoning process, and roles and responsibilities

2. Do you agree or disagree that the scope of the proposed zoning policy should prioritise district heat networks with cooling permitted but not required? If you disagree, please explain your reasoning.

We agree that the scope of the proposed zoning policy should prioritise heat networks with cooling permitted but not required. It makes sense to take a flexible approach to enable us to pro-actively respond to cooling loads as the demand grows.

3. Is there anything else we should consider with regards to cooling in the context of the zoning policy?

No comment

4. Do you agree or disagree that there should be no minimum threshold for heat supply or heat demand?

We agree that there should be no minimum threshold, provided that the network is deemed suitably strategic and the most cost-effective solution. Again, a flexible approach will work best as the heat network market expands.

We also want to explicitly acknowledge the statement in the consultation paper that “Communal heating systems will still be an important part of the market in zones. Existing communal networks may be connected to larger district heat networks in zones, and we are proposing that new buildings within zones should be required to install a communal system if appropriate to facilitate the later connection of the building to the larger district scheme.” Many communal heating systems lie within social housing ownership, which means we as a sector will be intimately involved in zoning and heat network policy and development more widely. It is vital that we are included in these conversations as critical stakeholders. The heat network industry must go beyond their own echo chamber and listen to the needs of their customers - and their customers in turn.

It must also be recognised that not all social housing providers are the same. Where planning policy has already been shaped around heat networks - for example in London - then social providers largely have the processes and skills to manage them. However, we suspect that for many social housing providers heat networks are a bit of a black hole. As we’ve said before, social housing providers have become ‘accidental heat network operators’: heat network management is often reactive, data is poor and costs can be opaque. They also have wider decarbonisation targets for the other 90% of their housing stock, which are more visible internally and likely to be a higher investment priority: the link between low carbon heat networks and low carbon housing still often has yet to be made.

The flip side for this for the zoning policy is that social housing providers also don’t realise the opportunities that heat networks can provide them - but in order for them to be convinced they need to be more reliable, less hassle and lower cost than they currently are.

Connecting to a district heat network is a risk, especially for existing buildings, not only in terms of affordability and reliability, but also in terms of a loss of control. Social housing providers go from being masters of their own destinies to smaller players in larger schemes, where they are likely to have less say over technical, commercial and customer facing decisions, as is often borne out by the headaches that ESCo/s106 schemes can often cause. Local authority involvement may help to mitigate this to some extent, but it will still be of central concern. It is also critical to consider the views of third parties who may also have a stake in the asset, particularly in terms of finance (eg mortgage lenders or bonds): they may take a very different view of control of the heating asset being lost.

5. Do you agree or disagree that some functions should be carried out centrally? If you disagree, please indicate why.

We agree that some functions should be carried out centrally. Not only will this help to provide national consistency and an agreed standard we can all work to (similar to SAP), but it will also provide economies of scale and avoid local areas repeating work or re-inventing the wheel. That said, care must be taken to ensure a central authority can respond quickly enough to requests for information / data flows: agility needs to be built into the system.

6. Is there specific data you think should not be collated and managed at a national or central level?  
No comment
7. Do you think there are any additional functions that we should consider for the Zoning Coordinator? If so, please describe these functions and explain why they may be required.  
No comment
8. Do you think any of these functions are better situated with a central authority? If so, please explain why.  
We think the list of functions would sit best with the local Zoning Coordinator.
9. Which of the options do you consider is most appropriate for the Zoning Coordinator? A) where functions are fulfilled by a local authority or authorities jointly, B) where a local authority (or authorities jointly) establish a Zoning Coordinator as a separate entity or C) another design approach. Please explain your reasoning.  
We think there are benefits of both options A and B, and that both should be available for local authorities to pursue depending on their capacity and expertise.
10. Do you agree or disagree that in specific circumstances the Secretary of State should fulfil the functions of the Zoning Coordinator after consultation with the local authority? If so, in what circumstances would you consider this appropriate?  
Given that we support the 2050 net zero carbon target and acceleration that is needed in order for heat networks to play their role, enabling the Secretary of State to step in as the Zoning Coordinator where the local authority is not able to fulfil the role seems a sensible provision to make, as long as it was done in consultation with the local authority.
11. Are there additional functions that we should consider for the national regulator with regards to zoning? If yes, please describe these and explain why.  
Strong consumer protection and transparency across zoning and regulation will be key to building trust in heat networks. However, the cost of regulation must not be more expensive for those living in a heat network zone.
12. Considering similar functions in local government (such as those related to local plans, strategic flood risk mapping and clean air zones), what do you consider are the key resources and skills needed to fulfil the functions of the Zoning Coordinator at local authority level?  
We welcome the recognition in the Zoning Consultation that “heat network zoning policy will only be successful where local authorities have the right resources to implement their responsibilities effectively”. We all know how squeezed local authority budgets are, with Covid coming in the wake of the austerity cuts. While we can’t comment on how many staff would be required to fulfil all the required functions, we do know that the Zoning Coordinator is likely to require a team of people rather than one person (including a significant administrative load), and without proper obligations and support there’s a risk that roles will be underfunded or cut when budgets are set, especially if they are not a mandatory requirement. Pro-active and well-resourced local authorities will rise to the top while others are at risk from missing out on zoning opportunities.

### Local authority capacity and expertise: case study

A member of The Heat Network has recent experience of new build affordable properties within a heat network zone (within London). However, the local authority-lead district heating project is severely delayed, meaning that the building has been completed before the district heating network has even started. This has had a number of practical implications:

- A temporary boiler house has had to be tacked on to the side of the development, until the point the district heating scheme is built out and ready to connect.
- The developer has limited knowledge of the route of the district heating network and therefore where to design in future connections or what specification (in terms of space, pipe size or heat transfer station) to include in the buildings.
- Residents moving in have been asked to sign heat agreements that allow for the existing temporary arrangements and vague references to the future obligation to connect. However, due to the limited information available at this point in the time, there was no information about customer protection, future tariffs (rates or formulas/calculation, who would be involved etc.). This represents a very poor customer journey; to the developer facing project delays due to lack of information, to the housing association as the building operator and ultimately the end-customer, and to the heat consumer. This uncertainty and lack of clarity presents a future risk to the roll out and customer acceptance of heat networks.

This situation largely arose because the local authority is under-resourced and lacks experience of heat network development and operation, involving multi-stakeholder coordination, large procurement exercises and high-level project management. There was no budget to employ consultants with specialist expertise and experience.

Both the housing association involved and the developer have more direct experience of heat network development and management and therefore the potential pitfalls of the situation. They keep pushing the local authority to clarify arrangements and timescales but nothing has materialised. The local authority staff member is relatively junior and has limited experience in heat networks, contractor management or large-scale project management. This, coupled with long and bureaucratic local authority processes, has meant a sub-optimal process that has created real delivery risks for the district heating network.

### Designation of heat network zones

13. Do you agree or disagree that a standardised national methodology would help to A) enable a transparent approach for identifying and designating heat network zones, B) increase overall efficiency, C) drive consistency, and D) improve understanding for stakeholders?

We strongly agree that a standardised national methodology is a sensible way forward, for all the reasons listed above. Just like SAP, the methodology will need to be industry-agreed and consulted upon, and then when it's agreed be straight-forward to follow and apply. It's vital that we don't duplicate efforts and cause confusion in the market, not only for investors and heat network developers, but also for potential heat network customers (at both the organisational and householder level). Any methodology must recognise that different zones will be starting from different district heating positions, and provide appropriate requirements in each case.

14. Do you agree or disagree with an 'approved document' approach whereby the methodology can be updated without legislative amendments? Would you recommend alternative approaches?  
See response to Q13.

15. Do you agree or disagree with our proposal for how zone identification should be undertaken?  
The zone identification proposals appear to be a sensible approach.

16. Do you agree or disagree that central government should carry out the national mapping identification stage? If you disagree, please explain why.  
For the same reason that we think central government should have a role in heat network zoning at all, we agree that central government should carry out the national mapping identification stage. It will avoid duplication, confusion and wasted costs.
17. Do you agree or disagree that the formal zone designation should occur at local government level (allowing for exceptional cases)? If you disagree, please explain why.  
We agree that the formal zone designation should be the responsibility of the local authority, and that they should be properly resourced to enable them to do so.
18. Do you agree or disagree that the BEIS Secretary of State should be able to require local authorities to designate a zone, or designate it him/herself where it has been identified? Please explain your reasoning.  
See response to Q10.
19. Do you agree or disagree that the legislation should set out a list of statutory consultees who must be consulted before a heat network zone is designated?  
A statutory list of consultees would help to ensure transparency and scrutiny of the zoning plans, and that key stakeholders are not 'forgotten' and have buy-in from an early stage. Given that social housing providers are potential heat network customers through their ownership of communal schemes, it will also make sure we are able to engage with the process and put forward our organisational and customer views.
20. Do you agree or disagree that the option 3 level of ambition is a proportionate approach to deliver the policy objectives of heat network zoning? Please provide evidence to support your answer.  
Given that we support the 2050 net zero carbon target and acceleration that is needed in order for heat networks to play their role then yes, the option 3 level of ambition is the right one to take. This includes large residential buildings which already have communal heating and so will definitely impact on social housing providers. At the moment, heat networks are often seen as a management and financial headache. It's on the heat network sector to demonstrate just how good they can be in terms of reliability, customer service, cost and reduced carbon.
21. Do you think it is likely or unlikely that buildings not required to connect will voluntarily connect to a heat network within a zone? Please explain your reasoning.  
We think this is a possibility and will become more likely as heat networks are more established, understood and accepted by both the housing sector and their customers. If the heat network is a success, then the possibilities are endless.
22. Please indicate the kind of buildings you think are likely to connect voluntarily.  
See response to Q22.
23. Do you agree or disagree that annual heat demand of over 100 MWh is the most appropriate threshold to use for large buildings which are required to connect? If not, what would you propose instead?  
No comment
24. Which of the above two broad options do you consider preferable regarding who should pay for connection costs and why? Are there other options we should consider? Option 1, Option 2, Other?  
Who pays for connection costs is at the crux of the zoning policy. We understand that heat is not free, and nor is the infrastructure that provides it. We also understand that by connecting to a district heating network we are avoiding other asset costs (such as new or replacement boilers). As the consultation paper recognises, "for existing buildings the cost of connecting to a heat network may be more significant" and this will definitely be where the trickier negotiations will be: planning to connect a new building is a comparatively straight forward process. On balance - and because social housing providers are on the customer end of the connection negotiations - we have a preference for option 2, where the government introduces

rules (and potentially cost caps) to prevent the heat network developer from taking advantage of their position, especially where connection is mandated.

25. Do you agree or disagree that a process is necessary to assess, where requested, whether an individual building should be exempt from the requirement to connect to the heat network within a zone?

The process to assess connection exemptions seems to be a sensible approach. Again, a standardised tool to assess exemptions would help to avoid local variations and market confusion.

26. Do you agree or disagree with the proposed exemption criteria that would be used to assess the viability of a particular building? If you disagree, please explain your reasoning.

We agree with the proposed exemption criteria (thresholds on heat load, distance to the heat network, existing heating system condition/age, carbon performance and impact on customers' bills/affordability). Of these, we particularly welcome the focus on customers' bill/affordability, "for example, where the ownership structure of a building may increase the risk that residential occupants of a building enter fuel poverty because of being required to connect". This of particular concern to the social housing sector, where many of our customers are low income and often some current heat costs are absorbed.

27. Do you agree or disagree with the proposed trigger points for requiring buildings to connect to heat networks?

We were very pleased to see the proposed timescales and trigger points for connecting to a heat network in a zone. The approach is proportionate and takes account of different asset lifecycles and management approaches. The trigger points listed, particularly development completion dates, major refurbishments and the replacement of existing heating systems, should all be adopted.

28. Do you agree or disagree with the proposed grace period of 10 years for buildings to connect where an earlier trigger point does not apply? Please explain your response and suggest alternatives if you disagree.

The 10 year grace period is both generous, and at the same time realistic for asset management and planning cycles and we agree with this approach.

29. Are there any reasons why owners of heat sources should not be required to provide information to the Zoning Coordinator?

No comment

30. Are there any reasons that we should not include powers to require heat sources to connect to a heat network (provided it is technically and economically viable)? Please explain your reasoning.

No comment

31. Do you agree or disagree that a legislative requirement for third parties to provide relevant information would be necessary to help ensure the successful designation of heat network zones?

This seems to be a sensible approach.

32. Do you have views on the scope of the proposal to require information, specifically: A) who can request the information; B) the information/data that may be sought, C) the range of parties to whom the requirement could apply?

No comment - other than to say that any data requests should be proportionate and that sufficient time should be given for the data to be provided.

33. What rules and mechanisms do you consider should be in place to protect the interests of parties who are subject to the requirement?

No comment

34. Do you agree with the proposal that the Zoning Coordinator should be able to delegate these powers to a limited number of heat network operators/developers in the zone in some circumstances to facilitate build-out of the zone and as long as there was appropriate oversight from the Zoning Coordinator?

If this was to go ahead, oversight from the Zoning Coordinator with appropriate scrutiny and governance would be critical.

35. Do you agree or disagree that heat networks developed in zones should be subject to a low carbon requirement?

Absolutely. This is the whole point of zoning - to accelerate our shift towards net zero carbon. If heat networks are not low carbon, then it is a huge, missed opportunity and waste of money.

To improve transparency and to help housing providers on their journey to net-zero carbon, we would also advocate for the annual public publication of the carbon content of a unit of delivered heat, including how this compares to both gas and electricity to show the benefits. This could also be included as a performance standard of heat network provision to ensure that housing associations are meeting their decarbonisation targets/obligations.

36. Do you have a view on what level, or what mechanism, we should use to set a level of CO<sub>2</sub> emissions per kWh as appropriate?

No comment

37. Do you agree or disagree that the low carbon requirement should apply to all new connections in zones (including new connections of existing heat networks), but not to heat delivered to existing connections? If you disagree, please explain your reasoning.

If heat networks are to play a serious role in our decarbonisation journey, we shouldn't be picking and choosing which buildings benefit from low carbon requirements. Although existing buildings are likely to be more difficult to transition and may need longer timeframes to comply - especially in order for the economics to stack up - they shouldn't be excluded from our ambitions.

#### **Delivering and operation of heat networks in zones**

38. Do you consider there to be a potential conflict of interest between a local authority fulfilling the functions of the Zoning Coordinator and delivering the heat network in a zone? If yes, how could this be mitigated?

This is a possible risk, but we don't have any views on how this could be mitigated.

39. Do you agree or disagree that the Zoning Coordinator should have the flexibility to determine whether a zone is delivered by one developer or several developers?

We think flexibility is a good thing, and so agree with this proposal.

40. Do you agree or disagree that some zones could opt for heat network developers to have exclusive rights to connections in a zone/area of a zone?

This should be an available option, but can taken in the wider context of excellent customer protection that will be coming forward in the Market Framework.

41. Do you agree or disagree that use of outline conditions should be mandatory where exclusive rights are proposed?

As we've said before, standardised outline conditions and guidance for granting exclusive rights should be put in place to avoid conflict and confusion, to ensure the customers' rights are protected.

42. Do you agree or disagree that all the models described in Table 4 could be employed in zones? Do you consider there to be any other delivery options? Please provide evidence to support your view.

No comment

43. What would need to be in place for an open market model to work? Do you see any risks with this approach?

No comment

44. Do you agree or disagree that the Zoning Coordinator should have the flexibility to choose the ownership and delivery model? A) agree, B) neither agree nor disagree or C) disagree.  
A) We agree that the Zoning Coordinator should have the flexibility to choose the ownership and delivery model that suits them best, taking into account their local circumstances.
45. We estimate that it may take a heat network developer one full day to familiarise themselves with the requirements of the regulation and disseminate to teams. Based on your view of the proposals in this consultation, do you agree or disagree with this familiarisation assumption? If heat networks are the developer's core business, they should have in-depth knowledge and understanding of the regulatory requirements, which we would expect more than one person more than one day.
46. Do you agree or disagree that a requirement to connect provides sufficient justification for extending certain consumer protection measures to all consumers who are required to connect, including owners of large non-domestic buildings?  
We agree that anyone required to connect to a heat network and are not already covered by consumer protection in the Market Framework, should also be able to benefit from certain protections to reflect the shift in negotiating power.
47. Do you agree or disagree that the approach to pricing outlined above is proportionate for consumers who are required to connect within a zone? If you disagree, what alternative approach could be taken to support consumers required to connect within a zone?  
We agree that anyone required to connect to a heat network and are not already covered by pricing regulation in the Market Framework, should also be able to benefit from certain protections to reflect the shift in negotiating power.
48. Do you agree or disagree that the proposed market framework quality of service standards are sufficient for domestic and micro-business consumers within zones?  
We are strong advocates of the quality-of-service standards and are looking forward to hearing further updates on how this will be implemented in the Market Framework. There is no reason why these standards should be different inside or outside of a zone.
49. Do you agree or disagree that large non-domestic consumers may not require the above listed quality of service outcomes? If you disagree, which of the outcomes listed above do you believe should be extended to large non-domestic consumers within zones?  
No comment
50. Do you agree or disagree with the suggested priorities for transparency and information provision during each stage of zoning implementation?  
We are strong advocates of transparency and information provision in all aspects of heat networks, and zoning implementation should be no different. Potential customers and other stakeholders all need to be brought along on the journey, to understand what their role is, what the risks are and why this is the direction of travel. They should all be able to answer the question 'what's in it for me?'
51. Do you agree or disagree that large non-domestic consumers will not require the same pre-contractual information as domestic and micro-business consumers?  
No comment
52. Do you agree or disagree that large non-domestic consumers may not require a specific consumer advocacy body, or a pre-determined arbitration route to have been identified, prior to zone designation?  
No comment
53. Do you agree or disagree with our proposed approach to technical standards within zones? If not, please explain why.  
We are looking forward to gaining more information on what the technical standards within the Market Framework will look like, for new - but also perhaps more importantly - for existing heat networks. If the Market Framework is not in place in time for the first zones, then CP1



seems to be a sensible bridge for new buildings. However, what standards would existing buildings have to meet?

54. Do you agree or disagree with our proposal for the Zoning Coordinator to carry out local enforcement functions? A) agree, B) neither agree nor disagree, or C) disagree. Please explain your reasoning.

B) This question links to question 38, which asks if there are potential conflicts of interest in local authority roles in heat network zones. It is a risk that would need to be mitigated if they were to be responsible for local enforcement.

55. Do you consider the payment of a fine to be an appropriate route to come into compliance instead of providing A) required information or B) connecting a building to a heat network where required? (Y/N for A) and B)).

No comment

56. Do you consider civil (non-criminal) penalties to be proportionate for non-compliance with requirement to provide information and requirement to connect? If not, please explain your answer.

We agree that civil penalties are proportionate.

57. Do you agree or disagree that a monitoring and reporting framework for heat network zoning is necessary?

We agree that a monitoring and reporting framework is necessary for heat network zoning. However, the requirements should not duplicate and monitoring/reporting required through the Market Framework. Standardisation would again help here.

58. Do you consider that specific information should be provided to A) the central authority, B) the heat network regulator, C) the Zoning Coordinator? Please specify what this information should be and who you consider should be responsible for providing this information.

No comment

### **Zone review**

59. To what extent do you agree or disagree that a zone review may be necessary at some point? A) Agree, B) neither agree nor disagree, C) disagree. Please explain your answer.

A) Our theme through this response has been flexibility, and this is no different. Zone reviews should definitely be on the table.

60. In addition to material triggers being set out in legislation, should others be able to call for the review of a zone? Indicate all that you agree with: local Zoning Coordinator/authority, local stakeholders, heat network developer/operator in the zone, other (please specify).

We agree that there should be other mechanisms by which a zone review could be called, in order to provide the best customer protection possible. At the same time, this also needs to be proportionate and not leave the operational parties at risk of constant challenges.