



Heat Network (Metering and Billing) Regulations 2014: proposed amendments Response from The Heat Network

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 13 housing association and 6 local authority members, as well as representation from the National Housing Federation. Collectively, we represent over 47,000 homes on nearly 650 un-metered heat networks alone. This rises to over 80,000 homes on over 900 networks when you also include our metered schemes, 7% of all heat networks as defined by BEIS and 17% of all customers.

Our response to the consultation questions is below. However, we wish to particularly stress:

- The 6 month timescale for compliance is impossible to meet. We need 2 years to complete the cost-effectiveness assessments and until at least 2024 to install all the new meters.
- We agree with the approach of the cost-effectiveness tool but much of the information needed will not be known by many social housing providers and will require a site visit, adding to the time and cost involved.
- Internal staff time to carry out this work has been underestimated. Significant effort will have to be put into customer consultation, communication and support as well as project managing the installation process.
- We do not know if our schemes fall into the current Exempt Class: this in itself will require a site visit. However, there are other circumstances where we think schemes should be exempt from meters, but based on the residents rather than the technical specifications, for example extra care homes and emergency accommodation.
- The savings that will be accrued by customers from meter installs has been overestimated. We think the savings amongst social housing customers will be closer to 10% in many cases.

1. Technical Feasibility and Cost Effectiveness

Q1. Do you agree with adopting a system using building classes?

Yes, we agree that the use of different building classes is a good idea to help fast-track whether schemes need to be tested through the cost-effectiveness tool.

Q2. Do you agree that it is reasonable to assume that it would always be cost-effective to install individual heat meters in new buildings with a communal network?

Yes, we agree that individual heat meters should always be installed in new building with a communal network (even if they're slightly more expensive). This already required by Part L of the Building Regulations: MHCLG may also wish to consider the inclusion of retrofitting meters in viable heat networks in future iterations.

Q3. Would you suggest other categories of buildings which should be included in the 'Viable' or 'Exempt' classes? Are there other technical reasons we should consider for the 'Exempt' class? Please supply evidence to support your answer.

Although we agree with the introduction of building classes and understand their purpose, our members simply do not know if their schemes fall into the exempt class or not (ie with an operating temperature above 90°C or with more than one entry pipe for the flow and return pipes into dwellings). When we asked our members, only one member (a local authority with large, older

municipal schemes) could answer the questions: the other respondents either said 'no' or simply 'I don't know'. This means that to even get to the point of working out if a scheme is in the Exempt class or not, most social housing providers would have to conduct site surveys.

As social housing providers we also have concerns about introducing individual meters in sheltered / supported housing. If a customer in a one-bedroom flat is paying £200/year for their heating and hot water as part of a fixed service charge, a 20% saving (which we think is generous - see Q12) would represent £40. But the additional metering and billing costs will be £81, meaning that the customer is paying more than they were before. These customers are usually on fixed incomes, can sometimes be in vulnerable circumstances and so fuel poverty becomes a risk. While we want to encourage metering on the whole, we also advocate that social landlords should be able to use their discretion with regard to retrofitting meters in sheltered / supported housing, within agreed parameters or criteria. For example

- **Where there is high turnover of residents.** Members have a significant number of supported housing schemes providing self-contained accommodation which operate short term and emergency lettings. We have to ensure that residents have access to heat and hot water without requiring upfront payment in these circumstances. We have examples of new schemes providing homeless family accommodation where independent metering was installed at design stage but are not used as the basis of passing on charges to residents because of the impracticality of doing this where residents are only there for such a short time. Where vulnerable residents are housed for a short time, or if they do not have the income to pay for fuel when they are housed in the emergency accommodation, it makes no sense to install heat meters retrospectively, or even use heat meters for the resident's fuel charges, as the installation costs and administrative burden would be prohibitive.
- **Residential units for very vulnerable residents.** Care homes are already outside of the scope of these regulations because they do not generally provide self-contained accommodation. We have similar buildings providing supported living for very vulnerable residents however, where residents may not have mental capacity to exercise control over their heating, in many cases do not manage their own finances and where carers have responsibility to ensure that their living environment is safe and comfortable to meet their individual needs. In these settings it is important to give residents and their carers the ability to exercise choice in managing the temperature in their homes, for example by providing thermostatic radiator valves, but we would question whether the installation of individual metering would result in consumption reduction in these scenarios. One member has had a case where the management of heat metering causes more stress to the individual and the carer and we have had to change the management of the heat meter based on the resident. In these cases, a flat rate might be more suitable.
- **Complex units to suit vulnerabilities of residents.** Some supported housing schemes are fairly complicated, providing a mixture of shared and self-contained accommodation, with accommodation provided in some schemes falling close to the cusp of the definition of self-containment, e.g. schemes with bedsit units that provide only minimal cooking facilities and certainly not a separate kitchen. Operationally it would add an additional layer of complexity to the administration of charges if we had to manage collection arrangements differently for different residents within a service.

One member of The Heat Network adds:

"The most up to date data indicates that there are circa 250,000 units that are sheltered or extra care. The imposition of meters and metering and billing would add £125m in capital expenditure and over £20m per year in additional costs. The latter would be a direct cost to vulnerable customers on fixed incomes that cannot choose suppliers and who in many cases would rather self-disconnect rather than risk high costs or debts. This would create a perverse outcome of what is trying to be achieved in the regulations; leading to significant further reputational damage to heat networks and their future roll out."

Q4. Do you agree with the assumption that operating temperatures of a heat network above 90 °Celsius significantly affect the accuracy of heat meters and the buildings should therefore be in the 'Exempt' class? Should this exclude networks which only reach operating temperatures above 90 °Celsius for limited periods of time (less than 10%)?

We have one member who is aware of schemes operating at above 90°C. Their comment on this question is as follows:

We have a small number of (quite large) networks that are MTHW and regularly operate at >90°C. However, these are two stage systems where the primaries are MTHW from the boiler house to the plant rooms, but from the plant rooms onwards, the secondary networks are LTHW so pipes going to final customers would always be <90°C. Final customer heat meters should therefore be normal LTHW meter, so I don't see why these systems would be exempt - i.e. I don't think it would cost us more to meter these schemes.

Q5. If you are a heat supplier, what percentage of buildings would you estimate to fall into the 'Exempt' class?

See Q3 above. Our members simply do not know if any of their buildings fall into the Exempt class. If we assume that this means that none are Exempt, 100% of our members existing non-metered schemes will have to be assessed through the cost-effectiveness tool.

Q6. How could a heat supplier evidence that installing metering devices is not technically or otherwise feasible for a specific building if not already in the 'Exempt' class? Would you consider OPSS to be best placed to assess a possible exemption?

No comment

Q7. If you consider metering and billing requirements to be a significant issue for social housing, please provide specific evidence that would justify a different approach to assessing feasibility of meter installation and billing based on consumption in these dwellings.

Social housing providers are by far the largest manager of heat networks, but have been poorly engaged or consulted on in the development of the latest regulations. So far only those who sell products and services, and not those who have to pay and consume for those services, have been consulted. It is essential that those who are at the front line of heat networks and their customers are better consulted on any future regulations. Failure to do so will lead to poor regulation and ultimately the increasingly poor reputation of heat networks as a solution to meeting the vital carbon targets.

The most significant issue is the need to understand the difference between 'general needs' housing and housing for vulnerable or elderly groups; most often called 'sheltered' 'supported' and 'extra care' housing. This has been one of the most successful housing initiatives undertaken in the UK and provides affordable, comfortable, safe and warm accommodation for those who are also on low and fixed incomes. Its funding and structure have directly led to this successful outcome, and it accounts for one of the largest sectors of heat networks in the UK. It is little heard of because it has been successful with high levels of customer satisfaction. The regulations as currently outlined would lead to significant additional expenditure being required both in capital and revenue, with the latter being a cost to the end customer.

Currently the customers in this sector have clear and transparent billing that gives them certainty on their heating costs - a vital health and well-being issue for customers in this sector. Customers are very happy paying an in all-in service charge, inclusive of heat, which is one of the benefits of being in this type of housing. There is a risk of 'double burden' if their heat costs rise (because they do not save as much heat as predicted), added to dissatisfaction with the new billing arrangements. It is essential that housing for vulnerable groups are excluded from the need for metering and billing, or at the very least for further and meaningful consultation be undertaken with the social housing sector before the regulations are finalised.

When it comes to general needs housing, there is a strong argument for the roll out of the metering and billing outlined in the regulations. However, this should follow proper consultation with the sector. The metering and billing regulations will add significant additional costs for landlords and customers in the short term. Even just taking into account the 40,000 unmetered units managed by

our members, this represents £20m additional capital cost and at least £3m per year in additional costs that would be passed on to customers, not to mention the additional staff time required to implement the changes. This is at a time when significant additional expenditure is required to meet fire safety assessments and improvements following the Grenfell fire.

The regulations, rightly, or wrongly, also do not take into account another factor that has a huge impact on social housing: S106 and Joint Venture agreements where we, as the landlord, have varied input on the ‘heat providers’ approach to heat metering, and associated costs. Some of this will be addressed when heat becomes regulated but thought needs to be given as to how this is reconciled in the cost-effectiveness tool, eg how are complex contractual arrangements around S106 and JVs taken into account?

We would strongly urge proper engagement with the social housing sector and the development of a realistic timetable that would deliver the aims of the changes to regulations and not higher costs for the sector and low income households. The introduction of wider heat network regulation will also add additional requirements and costs on social housing providers. The implementation timetable for both the metering and billing regulations and the wider industry regulations need to be carefully considered.

2. Cost-benefit calculation

Q8. Do you agree that the assumption of a 10-year lifetime for a meter and heat cost allocators is reasonable and should be used as the period over which the costs and benefits are calculated?

Yes, we agree that a 10-year lifetime is reasonable and should be used in the calculation

Q9. Do you agree with the proposed discount rate of 3.5% to calculate the net present value of costs and benefits?

The discount rate should reflect the cost of finance for whoever is paying. For leaseholders, this might be closer to 9%

3. Energy savings and associated benefits

Q10. Do you agree with the proposed tool’s approach to estimating heat demand for buildings? Do you have suggestions for a different approach?

We agree that the approach for building a model of a heat network in the cost-effectiveness tool is a good one. However, having seen an early version of the tool - and now supported by the technical appendix to the consultation document - we think many social housing providers will have to conduct site visits to provide some of the data required: they simply won’t have the data to hand. In initial assessment of the data headings in the technical appendix provides for the following analysis:

A1	Building name	Easily available
A2	External wall u-value	Industry standards
A3	External wall construction type - summary	May require site visit
A4	External wall construction type - detailed	Will require expert input
A5	Average external wall fabric efficiency	Industry standards
A6	External floor u-value	Industry standards
A7	External floor construction type - summary	May require site visit
A8	External floor construction type - detailed	Will require expert input
A9	Average floor fabric efficiency	Industry standards
A10	External floor u-value	Industry standards
A11	Roof construction type - summary	May require site visit
A12	External roof construction type - detailed	Will require expert input
A13	Average roof fabric efficiency	Industry standards

B1	Plant name	Easily available
B2	Number of units in this plant type	Easily available

B3	Is the plant located in the building	Easily available
B4	Average distribution losses to the building*	Will require expert input
B5	Plant fuel	Easily available
B6	Cost of fuel	Published prices
B7	Plant thermal capacity allocated to the building	May require expert input
B8	Plant cooling capacity allocated to the building	Likely to be 0
B9	Plant thermal efficiency	May require expert input
B10	Plant cooling efficiency	Likely to be 0
B11	Plant overall energy conversion efficiency	May require expert input
B12	Plant availability	Easily available
B13	Heat dispatch hierarchy (if known)	Optional
B14	Cooling dispatch hierarchy (if known)	Likely to be 0

C1	Unit type name	Easily available
C2	Unit archetype	Easily available
C3	Total number of units of this type in building	Easily available
C4	Number of storeys in unit	Easily available
C5	Number of units with external roof	May require site visit
C6	Number of units with ground floor contact	May require site visit
C7	Average floor space per storey per unit	Easily available
C8	Average ceiling height of unit	May require site visit
C9	External perimeter of unit	Will require site visit
C10	Glazing as % of external perimeter	Will require site visit
C11	% external perimeter with glazing	Industry standards
C12	Glazing type - general	Easily available
C13	Glazing type - spacing	Can enter 'don't know'
C14	Window/glazing u-value	Industry standards
C15	Window/glazing u-value	Industry standards
C16	Enter air change/hour	Industry standards
C17	Average air change/hour	Optional
C18	Is there heating?	Easily available
C19	Is there cooling?	Likely to be 0
C20	Number of heat meters required	Easily available
C21	Can users change controls?	Easily available
C22	Average numbers of radiators per unit	Easily available

* With regard to B4: With no individual meters, we do not know how much heat is being delivered into dwellings. At best we'll be able to make an assessment of the boiler efficiency, but this does not account for pipework/distribution losses. The consultation proposes that distribution losses will be recorded in the cost-effectiveness tool only for district heating schemes: however, we regularly find communal schemes where up to 50% of heat is lost in pipework / distribution. Although this lost heat remains within the building envelope (often leading to overheating in corridors etc), excluding it from the calculation will distort the understanding of how much heat is being delivered to each flat and therefore what the potential savings are.

Approved assumptions / standards should be an option wherever possible, to be overridden by the heat network operator if actual data is available, especially as the quality and quantity of information improves. Whilst a tool is great, it does not take into account the complications of some housing schemes, and the way the building is being used to be 'fit for purpose'. If supported housing, or some classes of supported housing are not added to the exempt category then these factors would need to be taken into account in the assessment process.

Q11. Are you aware of additional characteristics which could be used to support the differentiation in the tool between existing buildings with regards to the capacity for energy efficiency?

No comment

Q12. Do you agree that the 20% figure for average heat demand savings should be applied to domestic units?

Although the 20% figure is the one used across EU Directives and is the basis of the smart meter roll-out, savings of this scale seem high. Heat networks provide two main services:

- Hot water (for showers, baths and washing etc.): customers do not tend to reduce consumption of these essential activities when they have access to consumption data. This is essentially a base demand that stays constant throughout the year and accounts for x% of domestic heat demand which we would not expect to see a reduction in.
- Space heating: there may be slight decreases/behaviour gains here (e.g. not heating when away from the property) however the bigger risk is that customers begin to ‘under heat’ due to issues of fuel poverty causing health risks and property issues (e.g. mould/condensation). Underheating can also lead to mould issues.

Typically, social housing customers are low energy users on the Ofgem TDCV scale. There is a risk that, if their new heat meters result in too-high bills, these customers will fall into fuel poverty and will simply disconnect. Many social housing providers are now installing PAYG meters which makes self-disconnection even easier, and so a bigger risk. The savings should reflect these low users’ ability to further change their behaviour without adverse outcome such as self-disconnection and impacts on the health of adults and children.

A 20% saving also assumes that customers are charged based on consumption, not just metered and billed (ie we need to send customers an invoice telling them how much heat they’ve used, but we don’t necessarily need to charge based on consumption). In some leases, customers pay a flat rate service charge which includes heat and hot water. Changing this to a variable charge will require considerable leaseholder consultation and possibly legal changes to the lease: S20 consultations also need to be factored into the implementation timetable. If the flat rate remains, the savings will be less than 20%.

Q13. Do you agree that the 10% figure for average heat demand savings should be applied to non-domestic units?

No comment

Q14. Energy savings in the first year are estimated to be half of the savings in subsequent years, to take into account the assumption that behavioural change will not occur immediately. Do you agree with this assumption?

We challenge this assumption. Customers tend to look at in-home displays (and therefore consumption data) only for the first few weeks of living in a property and then only again if they experience financial issues. For most households, most of the time access to data will be irrelevant and not reduce consumption. This would mean the potential for savings is higher at the beginning, with returns diminishing over time unless there is an ongoing and sustained awareness campaign.

In *Smart meters and energy usage: a survey of energy behaviour before and after upgrading to a smart meter* (October 2017), 86% of people with smart meters are reported to make energy savings, presumably from having an in-home display but no details are given on how the average energy saving. This real-life data would be useful to help assess the potential impact of heat meters.

Q15. There is limited evidence available on the energy savings generated by the installation of heat cost allocators. However, we are not aware of any reason to expect a difference in performance compared to meters in reducing energy use. Do you agree that the same percentage of energy savings should be used for heat cost allocators?

We have little knowledge of HCAs and so need more information on their technical robustness (eg how do they measure heat use, what are the tamper risks?) and management options (eg how do heat network operators manage billing?) Until the case is better made for HCAs we would be reluctant to install them in our properties (where individual meters are not viable): we would rather wait until the price of individual meters falls sufficiently to make them cost effective.

Q16. Would you consider it useful if the tool allowed input of actual heat /cooling supplied to a building where a building level meter has been installed to calculate savings in multi-apartments or multi-purpose buildings?

Yes, we agree that users should be able to use actual data in the cost effectiveness tool if they have it available.

Q17. Do you agree that we should use the price for different fuels to estimate the costs and therefore benefit of savings?

Yes, we agree that the tool should use different prices for different fuels to most accurately reflect the potential cost of meter upgrades.

Q18. Are there any other comments you would like to add on the calculation of the benefit arising from energy savings in the cost-effectiveness assessment?

Nothing additional to add.

4. Costs associated with heat meters, heat cost allocators, temperature control devices and billing

Q19. Do you agree with the costs as provided in Table 4 above? Please provide evidence and comments and specify which cost you are referring to.

- **Heat meter supply and installation (domestic): £372**

It is unclear if this includes VAT or not, which is important as this is passed through to customers. As a side note, there is also some confusion as to what the level of VAT should be as it is different on the provision of fuel to housing providers (20%) than for residential customers (5%). Ideally, housing providers should be charged 5%, or be able to reclaim costs, otherwise the cost has to be passed through to residents.

As a rule of thumb, our members would expect to pay in the region of £500 per retrofitted meter installed (especially for PAYG meters): this is just for straight-forward installs where there are no complications with wiring, MBUS, etc. One member has seen costs closer to £700-800/unit once include initial site surveys, gateway equipment and lines, site set up fees etc are also factored in. And this is just the price paid to the supplier/installer and it excludes social housing staff time/costs to oversee the project and to carry out the extensive customer communications that are often required with this type of work.

- **Data gathering system supply (heat meters and heat cost allocators): £64/building**

No comment

- **Data gathering system installation (heat meters and heat cost allocators): £96/building**

No comment

- **Operational costs (including meter reading, data processing and billing information): £81/meter/year**

This cost feels about right for the market average: we understand prices vary from around £65/meter/year+VAT to around £100/meter/year+VAT. Some Metering and Billing providers charge additional annual or monthly fees for access to dashboards, reporting or tariff reviews.

- **Water meter supply and installation cost: £155/building unit**

No comment

- **Temperature control devices (installed): £50/unit**

No comment

- **Additional costs for billing where meters already installed: £35**

We do not understand what this additional cost would cover. In most cases, these units would be rolled into the wider metering contract (at ~£81/meter/year)

Q20. Would you expect the cost profile for domestic and non-domestic units in a mixed purpose building to be the same? Are there other characteristics which would better indicate the cost of heat meters, such as floor space in m2?

Our members do own some schemes where there are a number of flats plus a community centre, small office or a couple of shops. We would expect the profile for the non-domestic units to be different.

Q21. Would you expect significant regional difference in supply and installation costs, e.g. in remote locations or areas with less developed markets?

Heat networks have suffered from a poorly developed supply chain for many years including Metering and Billing providers (although this is improving), repairs and maintenance suppliers and network consultants. There is more supply in London, but their costs are high. Outside of London there are fewer suppliers and tend to be in pockets (eg Switch2 and Sycous are both based in Leeds). The introduction of the revised regulations combined with the unrealistically short time frame will only exaggerate these issues and lead to higher costs and in many cases unskilled providers coming into the market to take advantage of an instant and lucrative market. The capacity in the market to deliver these regulations must be a central consideration in the final timescales. There may also be a Brexit impact, for example with the reduced availability of capacity in the construction sector more generally.

Q22. Do you agree with the proposed £81 operational costs, including billing? And do you agree that this should constitute the cost threshold of cost-effective billing per dwelling?

£81/meter/year feels about right for the market average: we understand prices vary from around £65/meter/year+VAT to around £100/meter/year+VAT. In most cases, we agree that this should constitute the cost threshold of cost-effective billing per dwelling.

Q23. Do you have evidence for the cost of a complete metering and billing service per unit? If so, could you state if this includes or excludes the installation of the metering devices. Would this vary with geographic location? If this information is commercially sensitive and you prefer to send it in confidence, please send separately direct to our email address provided in the "How to respond" section and mark accordingly.

See our response to Q22. We understand metering and billing prices vary from around £65/meter/year+VAT to around £100/meter/year+VAT. The installation of metering devices is in addition to this.

5. Other costs

Q24. Do you agree with the assumptions made and the total cost for the familiarisation with the Regulations and dissemination of information?

Yes, we agree that it will take about a day for social housing heat network operator leads to familiarise themselves with the amended Regulations and disseminate the information to staff.

Regarding the hourly rate quoted in the consultation for a manager of £24. There were 253 working days in 2019, equating to £45.5k/year (assuming 7.5 hours/day). This is now on the lower end of the pay scale for Heat Network Manager posts currently being recruited. This cost also excludes other salary costs (NI, pension, etc) and overheads. We therefore recommend this rate is increased to £34/hour.

The rate of £23/hour is also used to notify OPSS of the heat network, stating this would apply to an estate manager or consultant. This equates to £172.50/day, way below any consultancy prices. One member has shared that Energy Manager consultancy costs for their organisation is £70/hour + VAT.

To manage these retrofits, including managing contractors and customer communication, it is estimated a housing provider would need to hire a Heat Network Retrofit Project Manager/Officer (or equivalent) which we estimate would be on a salary of £40k plus on costs. This recruitment will also obviously add delays into the delivery timetable.

Q25. Are there any other costs to business not discussed that should be considered (for example engagement with customers and changes to billing systems)?

Engagement with customers is the critical missing jigsaw piece. The time this takes cannot be under-estimated. A communication strategy must be carefully planned for each scheme, giving customers the time to ask questions and be comfortable with the new system. Projects where our members have retrofitted individual meters in the past have often also involved resident meetings and drop-in sessions, and sometimes complaints handling too where customers are not happy with the increased costs to their heat/hot water bills. The increased debt risk to heat network operators, compared to the low risk of paying for heat through service charges, will also increase the cost of financial accounting.

There will be other costs incurred by social housing heat network operators to implement these regulations, including

- Various project inception and strategy reports
- Project management
- Specification
- Procurement
- S20 consultation
- Prelims
- Resident engagement
- Charging consultation and changes to legal agreements

Many of these are fixed costs, regardless of the size or number of heat networks in question. These costs are, on the whole, currently absorbed by social housing providers, meaning that heat/hot water costs for social housing customers on heat networks are often cheaper than those in the private sector.

Another cost not mentioned in the consultation is the maintenance aspect. The £65 - £100/year does not include meter maintenance and as there is a requirement in the regulations to ensure that meters are continuously operating and maintained, and that Heat Trust rules recommend inspection every 24 months, heat network operators will need to ensure maintenance to comply with these requirements is provided. Some maintenance costs can be passed on to leaseholders. However due to the Landlord and Tenant Act, social housing providers can't pass the cost of maintenance on to customers with shorthold tenancies and so we will have to bear these costs.

We would also bring attention to the total cost of these works. The Impact Assessment estimates that the administrative, assessment and capital/installations costs across the sector to comply with these Regulations will be £543m (table 10). This assumes that 65% of schemes will have to be upgraded. We anticipate that most social housing schemes will be deemed viable for individual meters, yet the sector does not have the capital to invest, especially in light of other demands on asset improvement (eg following the Grenfell disaster).

Q26. In the accompanying Impact Assessment analysis, we use the above time estimates in Table 6 to calculate the administrative costs of undertaking the technical feasibility and cost-effective assessment. Do you agree with these assumptions?

It is important to understand that heat networks only represent a small proportion of the social housing stock and for most housing providers it is less than 10% of their portfolio. The result is that in most cases they do not have dedicated staff to deal with heat network issues because their costs cannot be covered by the heat network charges. The assessment of schemes including customer engagement and the installation of meters will require specialist support. Depending on the size of the heat network portfolio this may also require the procurement of those services that is OJEU compliant.

The consultation paper and Impact Assessment assume to complete the cost-effectiveness tool will take 12 hours per scheme at £23/hour (estate manager or consultant). The amount of time for this is probably right for the desk-based work, but the day rate for a consultant is too low. We also believe that many social housing providers will have gaps in their data (eg external perimeters of different flat types), meaning that site visits will additionally be required before the cost-effectiveness tool can be completed, adding to the cost.

Costs are also provided in the consultation and Impact Assessment for a technical feasibility to be carried out to ensure the building is suitably designed for the installation of meters. This is costed at 1 hour at a rate of £24/hour. Again, this cost is too low for the level of expertise that will be required to make this assessment. It is also likely one hour will not be long enough. There are also significant concerns as to whether there is enough capacity in the market to carry out all the technical assessment required in the timeframe available.

6. Compliance deadline and scope of amended Regulations

Q27. Do you agree that a six-month implementation period, which includes one complete summer period, is appropriate? If you disagree, please state what length of implementation period you consider reasonable and why.

There is some confusion about the implementation period: the consultation document states 6 months, but the Impact Assessment talks of an installation period of between 2020 and 2024 (Exec Summary para 4, also paras 36 and 107). When we queried this with BEIS there was no clear answer: clarity is urgently needed.

That said, 6 months to assess all schemes and then install individual meters where viable is logistically impossible. The assessment phase itself will take a minimum of 6 months, and longer if social housing providers have a large heat network portfolio (one of our members have 65 unmetered schemes and another has 100, three others have over 30). There is also not enough capacity in the technical sector nor the metering/billing sector itself to cope with what would become a tsunami of demand. The customer engagement arc for each heat network can also easily take 6-9 months, from when the project is first communicated to when the bulk of meters are installed (and even then, it can take a further 6-9 months for 100% compliance).

We therefore recommend that a minimum 2-year timeframe be given for schemes to be assessed through the cost-effectiveness tool, and then heat network providers be given until at least 2024 to install all the meters (as implied in the Impact Assessment). This will also give time for longer-term investment budgets to be approved. Social landlords should be able to make the case for further extensions where the installation of meters can be aligned with other major works or as part of a rolling voids programme.

The direct result of imposing this unrealistic timetable will be to create a bonanza for consultants and assessors and will lead to poor assessments and outcomes for both landlords and customers. It also runs the risk of metering and billing being put in place that is poorly designed, installed and commissioned with resultant poor service and costs to customers. Furthermore, the wider industry regulation timetable needs to be considered alongside the metering and billing regulations timetable: most teams who will be working on metering and billing regulation changes will be the same team who will have to work on changes required as a result of wider industry regulation, thus reducing available resource.

Q28. Do you agree with the assumption that from October 2020 most newly installed metering devices should be remotely readable? If you disagree, please provide additional information.

Yes, we agree that newly installed metering devices should be remotely readable. All the individual meters that our members use are already compliant with this requirement.

Q29. Should heat suppliers ensure that all installed meters and heat cost allocators accurately measure, memorize and display consumption?

Yes, we agree that heat suppliers should ensure that installed meters are working as they should and correctly charging customers for the heat and hot water they use. Getting this data correct is also vital to evaluate the efficiency of the network and to then make improvements.

Q30. Should heat suppliers ensure, so far as possible, that all meters and heat cost allocators installed are (a) continuously operating, and (b) properly maintained and periodically checked for errors?

Yes, as with Q29, we agree that this should be the responsibility of the heat supplier.

Q31. Do you agree that billing should be based on consumption for all installed meters and heat cost allocators where this is technically possible and economically justified?

The whole purpose of this Regulation is to implement the principle that end-customers should be billed for the heat and hot water that they use. We therefore agree that billing should be based on consumption where technically possible, economically justified and appropriate for (vulnerable) customers.

Q32. Would you consider a requirement for billing based on consumption to prevent a Heating as a Service model?

We think 'Heating as a Service' is an interesting model and would welcome its development: customers don't usually understand kWh and early trials carried out by the Energy Systems Catapult have had positive outcomes. However, this would need derogation from the current regulations (also see our comments on service charges for leaseholders above). Further work needs to be done however to fully understand how we can use this to continue to drive efficiencies but at the same time ensure everyone lives in a warm, affordable home. As part of this, energy efficiency must be prioritised: we cannot expect customers to reduce their heating demand if we don't also invest in the fabric and systems themselves.