

EUA response to the RIIO-2 sector specific methodology consultation

About us

The Energy and Utilities Alliance (EUA) provides a leading industry voice helping shape the future policy direction within the sector. Using its wealth of expertise and over 100 years of experience, it acts to further the best interests of its members and the wider community in working towards a sustainable, energy secure and efficient future. EUA has eight organisational divisions - Utility Networks (UN), the Heating and Hotwater Industry Council (HHIC), the Industrial & Commercial Energy Association (ICOM), the Hot Water Association (HWA), the Manufacturers' Association of Radiators and Convectors (MARC), the Natural Gas Vehicle Network (NGV Network), Manufacturers of Equipment for Heat Networks Association (MEHNA) and the British Energy Efficiency Federation (BEEF).

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Response

GDQ5. What activities beyond those outlined in paragraph 3.12 should we consider when defining the role of the network companies in supporting consumers in vulnerable situations?

We believe the networks are well placed and willing to provide emergency call out assistance. We also believe that the networks would be able to recommend and promote the importance of annual boiler servicing. Annual boiler servicing will help save consumers money by prolonging the life of a boiler and helps to ensure there are checks to minimise the risk of carbon monoxide leakage. This would go a long way to ensuring vulnerable customers are looked after and people are spending less on energy, given their boilers will be less likely to break down if they are serviced.

The networks are willing to comply with all the activities outlined in 3.12 to support vulnerable consumers. Moreover, the networks have a good track record of helping the vulnerable and believe it is an important part of their work. Having said this, there should be some consistency in the obligations so that a consumer in Manchester has the same protections as a consumer in Leeds. This would require a change, in order to apply all the obligations to every network provider in the interests of fairness, and consumer protection.

The GDN's are well placed to provide gas grid connections, but should not be responsible for providing insulation, as this is not their remit and they do not possess the tools, or the resources to do so. We expect to see more innovation carried out as business as usual and we will expect companies' business plans to describe how they will deploy innovations developed in previous price controls in their ongoing business.

GDQ6. Can you provide any evidence that shows how the boundary we have set out for the networks' role in consumer vulnerability could impact the benefits received by consumers in vulnerable situations?

We do not believe the boundaries set out will negatively impact the benefits received by consumers in vulnerable situations. Providing subsidised connections to fuel poor households and giving additional assistance are likely to help them reduce their energy bills and possibly escape fuel poverty, if they have access to a gas boiler. Having said this, Ofgem should ensure that all network companies share the same responsibilities, so that the level of care is the same in every area. However, all of this is dependent upon the UK

Government continuing such schemes and if they were to discontinue them, the network companies would clearly no longer be able to continue.

GDQ10. What should we include in the FPNES eligibility criteria in RIIO-GD2 to facilitate a well targeted, but effective scheme?

All of the available fuel poverty schemes should be aligned to provide a whole house solution to fuel poverty and enable the most effective targeting. FPNES eligibility criteria should be aligned with the ECO Flex eligibility criteria in order to target people better and increase connections to the gas grid. This will help more people in low income areas lower their bills and increase their EPC ratings, which in turn will help the Government reach EPC targets. More guidance is required from Ofgem on the schemes available that the gas networks can work with. The Affordable Warmth Solution fuel poverty tracker tool is one tool that could be employed to improve the targeting of the FPNES. This tool uses software to collate all the data on households to give the clearest picture to local authorities about the fuel poverty status of the home in question.

GDQ11. How should we incentivise the GDNs to improve the targeting of the FPNES?

The Affordable Warmth Solution fuel poverty tracker tool should be used to improve the targeting of the FPNES. The accuracy of the current method of targeting the fuel poor would be improved by the AWS tracker tool as it makes all the necessary data available to local authorities via a software programme. This would ensure those that are really in need get the help they are entitled to, and decrease the amount of homes that receive help when they are not in fuel poverty.

GDQ12. How can we ensure that the FPNES is better coordinated with other funding sources to provide a whole house solution for the household?

The FPNES eligibility criteria should be brought in line with the other funding sources to provide a whole house solution for the fuel poor. This will allow a unified approach when tackling fuel poverty and will not leave individual households out in a given area. The FPNES should keep its alignment with ECO and add the ECO flex criteria. Using the AWS

tracker tool to identify the houses in fuel poverty will then allow the schemes to be made use of in the most efficient manner. Further, Ofgem should set out clear guidance to the networks, providing information on all the available fuel poverty schemes so that homes receive all the help they could possibly get.

GDQ13. What are your views on us requiring or incentivising the GDNs to ensure that households receiving FPNES connections also achieve a target level of energy efficiency?

An efficient boiler, with efficient radiators is the best and most cost effective way to improve energy efficiency. Incentivising the GDNs to ensure fuel poor households have a gas connection is an effective way of utilising network assets. Network extensions to the fuel poor are an important tool to pull vulnerable people out of fuel poverty, given the money that can be saved with new central heating. Therefore, we believe requiring a target level of energy efficiency is not the responsibility of the GDNs. This is not their area of expertise and they do not have the tools to enable this.

The act of connecting a house to the gas network and having central heating is already going to radically improve the EPC of any house, therefore the additional energy efficiency requirement is not necessary. Further, the GDNs have said that they are not equipped to install energy efficiency measures, given this is not their remit as measures like insulation installation require experts from different sectors. The ECO scheme is already offering energy efficiency measures to fuel poor homes. Better coordination between the schemes should lead to more whole house solutions. However, this should not become a constraint for GDNs providing gas connections.

GDQ14. Do you think the value of the FPNES voucher would need to be amended if the targeting of the scheme is increased? Please provide any evidence to support your view.

We believe the IMD is too lax, because matching the identity of the fuel poor is too restrictive and does not pull enough people out of fuel poverty. The problem is

compounded by the fact that ECO flex uses a different definition of fuel poverty, so there exists two competing definitions that diverge to exclude some households. In order to rectify this situation, the fuel poor definition should be aligned with the ECO flex criteria. Aligning the definition would result in more fuel poor households being connected to the grid and supplied with boilers, helping thousands more and reducing fuel poverty. We do not believe the value of the voucher should be reduced even if more people are targeted. Another benefit of this approach would be that more energy efficiency targets are met, which will help to reduce carbon emissions. Not only this, but the ECO definition is a much simpler identifier of fuel poverty and will allow the decarbonisation and fuel poverty agenda to work simultaneously.

If the targeting of the scheme is increased and requirements to carry out EPC assessments, and surveys to assess the effectiveness of the scheme are introduced, funding will also need to be increased, as this drives up costs.

GDQ30. What are your views on the priorities we've identified for the gas distribution sector in delivering an environmentally sustainable network? Should measures proposed for electricity and gas transmission, such as BCF reporting and strategies for including in Business Plans, also apply to gas distribution? In addition to the above questions, where relevant, please see the supplementary output specific questions below. Supplementary output specific questions Decarbonisation of heat.

Requirements should be improved in order to drive down the networks' carbon footprint and reduce leakage from the system, given leakage accounts for 95% of emissions. We agree that companies should set out environmental initiatives through their business plans and report on it annually, including data on shrinkage. A mechanism that would enable the price control to be responsive to future policy decisions on the decarbonisation of heat would also be welcome.

GDQ31. Do you agree with our proposed approaches to funding GDN activities over RIIO-GD2 related to Heat decarbonisation? Distributed Gas Connections Guide and distributed gas information strategies.

Gas, and the gas grid is going to be key for the decarbonisation of heat over the 2020's. 85% of heat in homes is supplied by gas, therefore it is essential that extra funding is allocated to decarbonise the grid. Indeed, given our increasing population, demand for gas is set to increase, so clearly RIIO-GD2 does require the largest amount of funding possible, to ensure we meet our decarbonisation targets. Funding will be required to help enable new innovative technologies come to market, such as introducing green gasses to the grid, like hydrogen.

Gas currently accounts for nearly 50 per cent of non-transport UK primary energy needs – for power generation and heat. It offers the flexibility to back-up renewables (wind and solar) when our weather patterns dictate and can be used as baseload too, if nuclear becomes unaffordable. But the environmental cost is that gas accounts for 40 per cent of the UK's greenhouse gas emissions. This needs to change and green gas is therefore central to the UK's future energy mix, and the funding for its development must be readily available.

GDQ38. Do you think we should set an output for replacing non-PE services?

We agree that there should be an output for replacing non PE services as steel has been responsible for leakage and therefore improving the quality of the pipes will help to reach emissions targets and reduce callouts. Further, plastic pipes are needed if the hydrogen route is adopted, so this output would future proof the Grid and reduce the instances of call outs for gas leaks, saving money in the long run.

CSQ44. Do you agree with our proposals to encourage more innovation as BAU?

We believe that Ofgem should recognise that not all innovation will be successful, and this is in fact an important process of innovation, as it shows which innovations are to be discounted. Networks do require rewards for taking such risks, otherwise there is no

incentive to innovate and the improvements made to the grid could stagnate, or even deteriorate. The profit motive, whereby networks are allowed to make returns after taking risks, facilitated by innovation funding will allow further efficiencies and technologies to be employed, to further decarbonise and reduce bills for consumers. Given the monopolist nature of the energy market and the extensive regulations, it is an industry which will inevitably require funding channels to innovate, and removing these channels could result in a bare minimum service, unresponsive to change.

Innovation by definition is not business as usual, as there is an element of risk, as not all projects will be used, therefore revenue can be lost. If something requires cultural, or union changes, then it is not business as usual, as business as usual is enhancement and continuous updates, without an element of risk- they are tried and tested methods. If innovation is moved to BAU this could result in future innovations not being shared by the networks and could lead to just one company innovating in isolation. This could impact the supply chain and have negative consequences for the jobs that have been created by the SME's.

CSQ45. Do you agree with our proposals to remove the IRM for RIIO-2?

We believe that there are better ways of helping an innovation reach Business As Usual than through IRM. Whether an innovation succeeds or fails has less to do with the stimulus being offered, and much more to do with the company and people who make decisions around it. It is important to have the right team in place to ensure that an idea can be given the opportunities it will need to reach the real world. There are many great ideas that will have qualified for funding, but would never have worked because they have not had the right people managing them. While we support some sort of innovative assistance, we believe the qualifying process should be more stringent, and include a full business plan or case and demonstration of the background support being afforded to the project to make sure it is adequately backed with a clear path to enable it to see the outside world, ie senior level sponsorship. The investigation phase should ensure that there is adequately resourced potential for field trials, and a clear path of stop/go

gateways to ensure accountability for the continuing development or timely abandonment of trials.

In this way, funding can be released incrementally, once certain gateway conditions can be evidenced and the innovation is in its next evolutionary phase. It will also prevent less scrupulous companies engaging in “research for the sake of research” to take advantage of the funding without showing any real benefits for it.

CSQ46. Do you agree with our proposals to introduce a new network innovation funding pot, in place of the Network Innovation Competition, that will have a sharper focus on strategic energy system transition challenges?

We believe that any new funding pot should be providing more money for heat decarbonisation, in order for the networks to hit their targets, and contribute to meeting our Paris agreement commitments. Given the scale of such a commitment to extensive heat decarbonisation, the fund should begin by combining the current value of gas and electricity NIC funds and then consider going even further and ensure a focus on heat, as it is a harder to decarbonise area. This is an area that needs extra funding because to meet our Paris agreement commitments, or even comply with our own environmental laws we need to be rapidly decarbonising heat by at least 2030.

Moreover, a decision will have to be taken on the best solutions to heat decarbonisation in the mid 2020's and we believe that preparing the gas grid for hydrogen blending is a good way to future proof the system. It now seems unfathomable that the Government would decommission the gas grid, given their recognition that hydrogen is one viable option for decarbonisation- thus it makes sense to ensure the networks are ready for it. If the NIC is replaced with something else, or amended it must have a sharp focus on preparing the gas grid for decarbonisation.

While we recognise that the regulator wants to avoid a culture of on-going research without seeing return on its investment, there should still be a mechanism in place which enables resources to be aimed away from regulatory targets towards innovation. The majority of new ideas do not come into fruition, but we still believe there should be at least

a safe space for blue-sky research, which can generate unexpected results in the right circumstances. Companies should be allowed to fail in the development of an idea without losing their business in the process. We support a concept of gateways which act as checks and monitors to progress, to enable an innovation to be funded in life-cycle phases.

While we do agree that there should be a better way of making it more challenging to obtain funds, removing it altogether makes it less attractive to engage in speculative research that will make a long term difference.

Among options we would suggest to help regulate the distribution and spending of research funding in future are:

Shared reward, in which the fund could “buy in” to an idea in exchange for part ownership of the concept. In this way, any financial rewards from the launched innovation could be used to pay back into the fund.

Shared risk, in which the fund, as a part share holder will stake an amount of funding which can be “lost” in the project, as long as it is proportionately or appropriately matched, using a ratio of investment commensurate with the company’s ability to pay.

Gateways to success, in which an innovation must reach pre-defined key stages in its lifecycle prior to qualifying for funding. In this way an innovation might qualify for stage one and two funding, but not make it to phase three, if it doesn’t live up to its initial potential

Innovation exchange. Innovations which have already received investment and development have a monetary value. An innovation which has been through gateways one and two, but not yet ready for stage three may have a lot more inherent value than an early concept. The regulator could act as a broker for part-finished ideas to sell them on to a third party which could develop them to the next level. This would be a way to ensure both the innovation fund and the company who researched it, could recoup some of their lost investment while giving the innovation a “second chance”.

Shared IP. We recognise that companies which apply for public funding should not expect to retain their IP, but there may be a potential for companies to make use of the

innovation fund as an IP broker, in which they can auction a portion of their IP to another company which is engaged in similar research. For example, if company A is investigating a way to make an object, they might sell a share of their IP to company B, through the investment broker. In this way, both companies would be free to develop the concept independently, but company A would receive a windfall payment for the use of their concept.

CSQ48. Do you think there is a continued need for the NIA within RIIO-2? In consultation responses, we would welcome information about what projects NIA may be used to fund, why these could not be funded through totex allowances and what the benefits of these projects would be.

We believe there is a continued need for the NIA and it is working well, providing many tangible improvements to the networks. Gas is the most popular heating solution in the UK, with over 80% of homes using gas heating, so it is important that these projects continue. Given these realities, we would also like to see a rebalancing of the distribution of funding pots to gas so that consumers can continue to benefit from the successes of innovation and that the gas grid can provide solutions to other problems. For example, harder to decarbonise vehicles such as HGVs could be powered by different types of low carbon gas, and facilitating the already extensive gas grid to power them would solve air quality problems as well as reducing carbon.

Networks must be supported in undertaking low technology readiness level projects, or ones that do not pay back in one control period, as this is an essential part of innovation, given that taking small risks that are expected to pay off in the future is how companies usually progress and reduce their prices. The GDNs believe there has to be an incentive for gas companies to take on a new piece of kit. Ofgem must therefore retain the NIA or provide an alternative fund, which allows this to continue and ensures networks continue to innovate.

The ENA smarter networks portal, has details of all NIA funded innovations, including project analysis, their budgets and savings. We took a sample of 80 of these projects and

calculated that the NIA budget was **£27,743,065**, the yearly savings were **£283,575,698**, and over 5 years, this would save **£1,417,878,490**. Clearly, this represents value for money, and if all of the NIA innovations were analysed, it would show even greater savings. Not only are there economic benefits to projects funded through the NIA, but there are also societal, and environmental benefits, such as carbon savings, and time saved digging up roads.

For example, the remote ECV innovation aimed to make gas detection and reporting instantaneous, in care homes and the homes of the disabled, by using air quality monitors, linked to the gas networks. This would save time in reporting a leak, and could also prevent deaths or illness resulting from such a leak, reduce CO emissions, and speed up identifying the source of the leak.

It is estimated that in the UK around 50 lives per year are lost due to the effects of CO poisoning. If this could reduce this by 5% this would result in a saving to the UK economy of around £4m. In 2014/15 there were 240 non – fatalities in the gas industry that were reported under RIDDOR (Reporting of injuries, diseases and dangerous occurrences regulations). Of these 23 were explosions or fires caused by Natural gas and 214 confirmed CO. All of these incidents have to be investigated at an average cost of 1K per incident. This innovation had a budget of just £50,000 and arguably the amount of time and lives it could save far outweigh the cost. Further, the direct savings of such an innovation are harder to quantify, given they have wider societal benefits, than purely an economic benefit.

Most companies will include innovation as Business as Usual (BAU) in order to drive down costs and increase efficiency, although by definition innovation is not business as usual. This is because innovation is a risk, and not all projects will be successful or implement. Given the price controls, networks are working with smaller returns than other industries, so it is harder for them to innovate without a funding source. Tightening the limits on returns, whilst also expecting companies to innovate more will create a conflict of interests and could lead to severe monetary problems for the companies.

We recognise that there have been instances of projects going through the innovation process and then not being utilised as BAU. In order to rectify this, Ofgem should work with the networks to develop a stricter process to ensure viable innovation products are always utilised after production. One other problem that innovation projects face are the barriers to a UK wide roll out. An innovation project may be cleared for use in one area of London, but not another area, so more work will need to be done to ensure a speedier UK wide roll out. This will require collaboration and transparency across the networks.

CSQ49. If we were to retain the NIA, what measures could be introduced to better track the benefits delivered?

If Ofgem were to recognise the importance of the NIA and retain it, they could simultaneously introduce record and reporting requirements on the GDNs and ask for specific details on the benefits they have delivered. Any network who fails to comply could automatically lose their NIA funding, thus providing a strong compliance incentive. Part of the problem Ofgem appear to have with the NIA is that there was no such binding obligation to report back the benefits of the NIA, therefore companies may not have kept extensive data. Further, there should be a requirement that all NIA funded projects should be subject to a route map that ensures successful innovations are rolled out, because currently there is a concern that some are not utilised after development. Ofgem should require more reporting of NIA funded projects, so that is clear where the money has gone, and why some projects failed. Given the nature of innovation, some projects will inevitably fail, which is a big cost to the business, if there is no NIA funding.