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# Utilities

## Consultation Paper 142

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## *Utilities*

### Background

This consultation paper is presented as the first stage in the development of new Party policy in relation to Utilities. It does not represent agreed Party policy. It is designed to stimulate debate and discussion within the Party and outside; based on the response generated and on the deliberations of the working group a full policy paper will be drawn up and presented to Conference for debate.

The paper has been drawn up by a working group appointed by the Federal Policy Committee and chaired by Neil Stockley. Members of the group are prepared to speak on the paper to outside bodies and to discussion meetings organised within the Party.

Comments on the paper, and requests for speakers, should be addressed to: Christian Moon, Policy Unit, Liberal Democrats, 8 – 10 Great George Street, London, SW1P 3AE. Email: [policy.consultations@libdems.org.uk](mailto:policy.consultations@libdems.org.uk)

Comments should reach us as soon as possible and no later than Friday 16th October 2020.

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## **1. Introduction**

1,1 Liberal Democrats seek a fair deal for consumers. When the UK pursued the privatisation and liberalisation of previously state-owned monopolies, investment in networks increased and, in general, the quality of services improved. But price cap regulation was also needed to give suppliers incentives to seek cost savings, while capping the price to consumers. It has been retained for network monopolies in energy, water and rail. Further liberalisation has followed as retail markets have been opened up to competition.

1,2 Despite the gains for consumers, there are significant problems with the existing regulatory model. In energy and telecoms, firms charge higher prices to customers who have not recently switched provider, creating large gaps between the best and the worst deals received by consumers. In energy, there are concerns with the speed and reliability of the process for switching providers, and with late and unreliable bills. In telecoms, bundled packages of services provide a lot of choice but offers can be complex and difficult for consumers to compare.

1,3 We are especially concerned with the difficulties faced by vulnerable consumers, including elderly people, disabled people and people on low incomes. In the energy market, consumers in the most vulnerable categories are the least likely to be on good deals and therefore pay the most. In telecoms, elderly people are the group most likely to remain on a land line-only contract.

1,4 It is essential for modern life that citizens have access to the internet, as public service delivery increasingly moves online. But 12% of rural households do not have access to superfast broadband services and elsewhere, the quality of broadband services is highly variable.

1.5 Liberal Democrats seek to build a more prosperous, resilient and sustainable economy. We propose ambitious targets for reducing UK greenhouse gas emissions. If these goals are to be met, a radical

transformation in the UK's power, heating, transport and industrial systems will be required. Similarly, rail is a naturally low-carbon transport mode, but further decarbonisation of the rail network is needed. The climate emergency, and population growth, mean that there is a real and growing risk of water shortages, especially in the south east of England, over the next thirty years.

1.6 To address these multiple challenges, we want to facilitate future investment in infrastructure and increase innovation across the utilities sectors.

1.7 Liberal Democrats are considering what changes might now be necessary to the existing regulatory framework and/or ownership structures of the UK's key regulated utilities sectors: energy, water, telecoms and rail. The following paper expands on the challenges and identifies the key questions in developing our proposals for the regulation of utilities.

## **2. A Fair Deal for Consumers and Citizens**

2.0.1 In energy, telecoms and water, privatisation and the introduction of competition have brought considerable benefits to consumers in the form of significant investment, innovation and increased competition leading to higher quality services. Given that utilities provide essential services, there is still a role for regulation in protecting the interests of the consumers, especially where competition is not working well.

2.0.2 For key monopoly infrastructure services such as water, energy transmission and distribution, and rail, regulators control the price of, or access to, some of these services. We need to make sure that the regulatory process works in consumers' interests.

### **2.1 Consumers and competitive retail markets**

2.1.1 Liberalisation and competition have delivered greater choice, better service and increased value for consumers. In telecoms, for instance, barriers to switching have come down, between mobile and broadband providers, and commercial price comparison websites have made it easier for consumers to choose the best deal for them.

2.1.2 The liberalised market does not, however, always serve all consumers well. In the telecoms and energy markets, price discrimination– the ability of providers to charge higher prices to people who do not, or cannot, switch on a regular basis – has emerged as a major problem. This 'loyalty penalty' in five essential markets (mobile, broadband, cash savings, home insurance and mortgages) was investigated in 2018 by the Competition and Markets Authority (CMA), following a 'supercomplaint' from Citizens Advice.

2.1.3 The CMA found that "the elderly, those with physical disabilities or mental health problems, those on a low income or those who struggle to use or access online services, were in general more likely to experience difficulties switching or renegotiating to get a better deal."<sup>1</sup> It recommended that industry regulators must investigate market

practices that they think are harming the interests of consumers, and to report regularly on their actions to ensure consumers are not being penalised. In June 2019, the CMA found that regulators had started to take steps to address issues but had not yet done enough to solve the problems.<sup>2</sup>

2.1.4 For energy consumers, Ofgem implemented in 2019 a temporary, absolute cap on the price of standard variable and default tariffs, as required under legislation. The CMA 2016 report into energy markets found that customers were overpaying for their energy, largely because since privatisation, most customers remained on default tariffs, often with the 'big six' suppliers, and had not switched, leaving them on poor value deals.

2.1.5 The default price cap is meant to last until the end of 2020, but the legislation provides for it to continue until 2023 if conditions for effective market competition are not met.

2.1.6 According to its proponents, a cap protects consumers who don't switch from tariffs which do not reflect the true cost of energy. Opponents argue that a cap damages competition in the market by removing the incentive to switch, and risks losing efficiency gains.

2.1.7 When designing alternative policies, the priority is to ensure that consumer engagement has increased. If price discrimination is addressed by limiting competition, the result may be that consumers who actively switch pay higher prices; there will be 'losers' as well as 'winners'.

### Questions

1. *What can be done to increase the ease of switching between mobile and broadband providers, bundling of services, out-of-bundle charges and contractual commitments?*
2. *In energy, what policy, if any, should replace the default tariff price cap? Should we support the allocation of fixed costs across all consumers, as recommended by the Cost of Energy Review?<sup>3</sup>*

## 2.2 Consumers and monopoly networks

2.2.1 For natural monopolies – the owners and operators of wires, pipes and train tracks – the sector regulators, Ofgem, Ofwat and the Office of Rail and Road (ORR), determine the investment required to meet the standards of performance expected in each price control period and the rate of return that companies can receive. Every eight years, Ofgem sets price controls for the companies that operate Britain’s gas and electricity networks. The controls provide allowances for the costs, and targets for companies’ performance. Every five years, Ofwat sets the price, investment and service package that customers receive from water and sewerage companies. Every five years, the ORR defines what Network Rail must achieve, along with the funding and incentives required. It has no role in the regulation of fares<sup>4</sup>.

2.2.2 However, recent decisions made by regulators have allowed network companies to earn significant profits over and above what was expected

2.2.3 In its report *Energy Networks* (January 2020), the NAO concluded that “under Ofgem’s current regulatory framework, electricity network companies have provided a good service, but it has cost consumers more than it should have.” The NAO charged that “targets were set too low, budgets too high, and the impact of these decisions was compounded by Ofgem extending the regulatory period from five years to eight.”<sup>5</sup>

2.2.4 In some cases, Ofgem did not use the best information available to it at the time: on financing costs, for example, where better use of evidence could have saved consumers at least £800 million, according to the NAO.

2.2.5 The Citizens Advice Bureau conducted their own research and estimated that Ofgem’s most recent network price controls could have cost consumers up to £11bn over eight years<sup>6</sup> due to the controls being set in the networks’ financial favour. They proposed in such situations,

consumers should receive a rebate, to ensure that trust in the system is maintained.

2.2.6 The *Cost of Energy Review*<sup>7</sup> made similar criticisms and recommended scrapping the eight-year price control regime. It also proposed a national system operator (NSO), with regional system operators (RSOs), all in the public sector, to take over from the regulated transmission and distribution companies the responsibilities to decide what network maintenance and improvements were required. The NSO and the RSOs would, where practical, open up the various functions and enhancements to the networks to competitive auctions and, at the local level, invite bids for network enhancements, generation and storage, and demand-side response (DSR) from energy service companies.

2.2.7 Many people living in more remote areas, particularly in south west England, north Wales and the north of Scotland, pay significantly more for their energy, with people in the Scottish islands paying an additional surcharge. In both Germany and Italy, distribution charges are harmonised these costs ensuring that those in remote areas pay the same amount for their energy.<sup>8</sup> Proponents of regional pricing argue that it is more economically efficient, and means that people and businesses located in more densely populated areas don't subsidise those who live in more remote areas.

2.2.8 Water price controls may not have worked for consumers as well as they should. An analysis in 2018 by Greenwich University's Public Services International Research Unit concluded that water customers are paying about 25% too much, the equivalent of about £100 per household per year, for their water.<sup>9</sup>

2.2.9 Other issues with the current price control process for water include:

- The level of complexity and the amount of information required from water companies.

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- Whether the five-year price control period is too short to allow long-term planning.
- Whether the price control process should focus more on environmental outcomes.
- Whether Ofwat can ensure better engagement with customers and their long-term priorities.

2.2.10 Approximately 45% of rail fares are regulated by the Department for Transport, except for ScotRail and Arriva Trains Wales, whose regulated fare increases are set by Transport Scotland and the Welsh Assembly Government respectively. But regulated fares have increased more rapidly than wages.<sup>10</sup> A major reason has been reduced government subsidies. The profit margins of train operating companies is only 2 to 3%, meaning that even if they were to make no profit, fares would only reduce by a very small amount.

## *Questions*

3. *How can the regulation of monopoly networks be reformed, in order to give consumers a better deal?*
4. *Should the government consider harmonising the regional networks cost of distributing electricity and gas across the UK, or does the current regional pricing work better?*

## **2.3 Quality of Service**

2.3.1 Regulation does not always ensure consumers have a satisfactory quality of service. In the retail energy market, there are on-going concerns with the reliability and speed of the switching process, inaccurate or late bills, ease of contact and complaint handling.<sup>11</sup> Since 2018, sixteen energy suppliers have collapsed, affecting over 1 million customers.<sup>12</sup> Ofgem has moved to tighten up the entry requirements for the market.<sup>13</sup>

2.3.2 In water, CCW reports show that customers are generally satisfied with the service they receive from their water company, though levels of satisfaction fell slightly between 2017 and 2018. But customer views in other areas, such as fairness of charging plateaued, at low levels.<sup>14</sup>

2.3.3 CCWater received 11,254 consumer complaints about water companies in 2018–19, an increase of 17% on the previous year (due largely to sustained high complaint numbers from non-household customers. Over half of the cases were around billing issues, particularly unexpectedly high bills.<sup>15</sup>

2.3.4 The National Rail Passenger Survey (NPRS) for 2020 showed passenger satisfaction scores at some of their lowest levels since 2007. While overall satisfaction stood at 82%, satisfaction levels varied significantly according to the Train Operating Company (TOC) and the issue (e.g., station facilities, crowding on trains). Only 47% of passenger rated 'value for money on the price of your ticket' to be as 'good' or were satisfied.<sup>16</sup>

2.3.5 The number of trains arriving “on time” has remained at between 60 and 65% since 2015.<sup>17</sup> Possible explanations are that the tools at the ORR's disposal do not provide sufficient incentives or that the franchise system constrains the authority of the regulator.

### *Questions*

5. *How should energy and water regulation address the issues with quality of service identified above?*
6. *Do you have any examples of regulated utilities delivering a poor quality of service? How might they be addressed by regulators?*
7. *Are there other consumer detriment issues that regulation needs to address? If so, how?*

## **2.4 Helping vulnerable consumers**

2.4.1 Vulnerable consumers face on-going challenges with the of essential utility affordability services. In 2018, the total number of energy customers in arrears or repaying a debt was 1,309,768 for electricity and 1,048,834 for gas, an increase of 4.2 per cent from the previous year.<sup>18</sup>

2.4.2 Latest government statistics indicate that around 2.4 million households in England (10.3 per cent) were in fuel poverty in 2018.<sup>19</sup> Over the past four years, fuel poverty rates have remained in the 10-12 per cent range.

2.4.3 The picture in water, a price-regulated market, is hardly more encouraging. According to CCWater, 3 million water customers (one in eight) in England and Wales say their bills are not affordable.<sup>20</sup>

2.4.4 Almost 700,000 low-income customers received bill reductions through water company assistance schemes, such as WaterSure and social tariffs, in 2018/19. This was a 28 per cent increase on the previous year. CCWater estimates that the schemes currently in place are likely to leave more than half of the problem unaddressed, and the amount and type of help varies considerably from region to region.<sup>21</sup>

2.4.5 There are other issues facing vulnerable customers. The rapid development of new telecoms technologies, and obsolescence of old ones, is challenging for vulnerable customers, such as people on low incomes who cannot afford replacement equipment and older people who are less comfortable with technology.

2.4.6 BT has announced that it will stop supporting analogue phone lines (PSTN) by 2025 and will migrate all of its customers to digital IP technology. As well as voice telephones, the PSTN is still widely used for other applications such as burglar alarms. Mobile operators are likely to close 2G (GSM) and 3G (WCDMA) services within a few years (GSM is likely to outlast 3G, because it is widely used in embedded applications such as vending machines).

2.4.7 Some tools for addressing these challenges are outside the remit of regulation. The main drivers of fuel poverty, for example, are income, energy efficiency and fuel prices. Relevant Government policies include the Warm Home Discount Scheme, the Home Upgrade Grant, the Winter Fuel Payment and the ECO, the supplier obligation for the delivery of energy efficiency measures in homes, administered by Ofgem. Ofgem does not, however, regulate the energy efficiency of housing or household appliances. Departments, rather than Ofgem or energy companies, are more likely to have accurate information on low income and vulnerable households.

2.4.8 The extent to which regulation should be used to address questions of income distribution presents important democratic questions. Someone must be accountable for deciding “who wins and who loses”. Ministers and not utility regulators are directly accountable to the public for decisions that affect their sectors. Regulators act independently from government. This independence is crucial for ensuring continued investment in the regulated sectors. The 2011 Principles for Economic Regulation<sup>22</sup> states that “high level decisions that involve political judgement are taken by Government and day-to-day regulatory decisions are undertaken by regulators.”

2.4.9 The issues are, however, more complex than simply allowing regulators to take decisions entirely based on economic efficiency, with government repairing any unfair impacts using the policies at their disposal. There are clearly overlaps between political and regulatory decisions and some of the latter will impact some groups of consumers more than others.

Successive Governments have recognised that ministers should provide guidance on how regulators should approach such choices. Ministers have statutory discretion to issue strategic statements to Ofwat and Ofgem (the latter under legislation passed by Liberal Democrats in government), a general guidance to the Office of Rail and Road and a strategic statement for telecommunications, to which Ofcom must have regard.

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2.4.10 But ministers often fail to provide adequate guidance in respect of protecting vulnerable consumers. For example, the current Government has chosen not to issue a strategy and policy statement relating to the functions of Ofgem.

2.4.11 The formal ministerial guidance to the ORR simply says that the Government “wishes ORR to play an active role in improving accessibility, supporting vulnerable consumers”.<sup>23</sup>

2.4.12 Some guidances are relatively new, possibly making it difficult to assess their usefulness. The government’s strategic statement for Ofwat<sup>24</sup>, which emphasises the need to protect vulnerable customers, was issued in 2017. The statement for telecommunications<sup>25</sup>, which addresses how Ofcom should support consumers, including the most vulnerable, was issued in 2019.

## *Questions*

8. *What combination of regulation and Government spending policies (funded from taxation) should be used to ensure that low-income and vulnerable energy and water customers can receive support? Or does the way financial assistance is provided to address energy and water affordability need a more fundamental rethink?*
9. *Do existing strategic statements to industries and/or regulators provide adequate guidance to regulators on the distributional impacts of their policies? How can they and the process by which minister provide guidance be improved? For instance, should regulators be able to seek explicit guidance from ministers on strategic policy direction and distributional choices, as recommended by the National Infrastructure Commission<sup>26</sup>?*
10. *What measures may be needed to support vulnerable telecoms customers, especially when legacy services (such as analogue phone lines, 2G and 3G) are discontinued?*

## 2.5 Financing companies

2.5.1 There has been a trend, especially in the water sector, for companies to increase their gearing significantly, reducing their cost of capital but increasing the risk that companies may not be able to keep up with their obligations. In 2018, 14 out of the 17 water companies had higher gearing than the level of 62.5 per cent assumed by Ofwat in their 2014 price control determination, and eight had gearing ratios in excess of 70 per cent.<sup>27</sup> Similarly, in energy, much of the argument between the regulator and network companies is around what is the cost of capital for these companies, which is heavily influenced by the assumed gearing ratio.

2.5.2 Cheap debt can finance investment that benefits consumers, without significant increases in bills. However, high gearing levels increase the risk of company failure, and regulators may, even unconsciously, become lenient on highly geared companies during price determinations. (Also, if a company were to fail the costs of company failure would still fall to consumers through bills.) But the benefits of gearing higher than that assumed by the regulators in reducing companies' overall cost of finance have not been shared with consumers.<sup>28</sup> Ofwat has now ordered water companies to share more equally benefits of gearing with their customers.<sup>29</sup>

2.5.3 There are also long-standing complaints about excessive remuneration and benefits for senior water and other utility company executives, which are not linked to company performance or customer satisfaction.<sup>30</sup>

### Questions

11. *When, and how, should regulators ensure that consumers can share in the benefits that equity investors achieve from high gearing?*
12. *How can the efficiency and performance of the rail network be improved, given the failures in the past by the privatisation of elements such as rail track?*

## **2.6 Consumer representation**

2.6.1 A variety of organisations have a statutory duty to represent the interests of consumers and to support individual consumers with advice and complaints about service providers. Citizens Advice is responsible for energy and postal services, and for water in Scotland; CCW is responsible for water in England and Wales; Transport Focus covers rail and road users; and the government is currently consulting on replacing the Communications Consumer Panel with Citizens Advice in telecoms.

2.6.2 Where complaints are not satisfactorily resolved by the providers, they can be escalated to ombudsman services in the energy, telecoms and rail sectors.

### *Question*

13. *How could the current arrangements for consumer representation and complaint resolution be improved?*

## **2.7 Citizens and Utilities**

2.7.1 Utilities also provide services to people as citizens, enabling them to play a full role in society. In the last decade, mobile telecommunications have changed from being a discretionary item to being seen as a utility with expectations of universal service.

### *COVID-19*

2,7,2 The COVID-19 pandemic has massively increased people's dependence on communications technologies to keep in touch, even with close family. The effects of isolation on those who cannot access these communications have had a severe impact on mental and physical wellbeing, and there are questions about the impact of extended use of these technologies. Isolation has also increased anxiety about paying for increased electricity and gas usage, especially where job security has been affected. Concerns have also been raised

regarding the long-term impact the COVID-19 pandemic will have on rail passenger numbers.

### *Accessibility*

2.7.3 The rail network should be accessible for all members of society, especially those unable to travel by car due to disability and/or cost.

2.7.4 Areas that have higher proportions of vulnerable citizens are often poorly served by rail services. Increasing fares have made rail travel increasingly unaffordable for the poorest households.

### *Streetworks*

2.7.5 Utility street works can often cause significant and costly disruption, especially in urban areas, and worsen pollution and congestion associated with construction. Since its introduction in 2010, the number of local highways authorities (LHAs) with a permit scheme has steadily increased.<sup>31</sup> The remaining LHAs continue to operate a notice regime. Lane rental schemes were piloted from 2012 in London and Kent and the Government has since expanded the scheme as a way of reducing the impact of street works on the busiest roads at the busiest times.

### *Questions*

14. *Are there any lessons from COVID-19 how to utilities can help people handle any future pandemics?*
15. *What measures can be taken to make the rail network more accessible?*
16. *What changes to the regulation of street works should Liberal Democrats support? How can we encourage more cooperation and coordination between local authorities?*

### **3. Investing in Resilient Infrastructure**

3,0,1 Utilities are vital to the country's economy and future prosperity. The UK's economic success in the future, and peoples' quality of life, will depend on its infrastructure's ability to respond to future challenges. Utility regulation must facilitate investment in a strategic way to address these challenges effectively.

#### **3.1 Building a twenty first century economy**

3.1.1 The rail sector contributes £36 billion to the economy, generates £11 billion in tax revenue each year and supports some 600,000 jobs<sup>32</sup>. Liberal Democrats recognise that improved rail services are essential to improve the UK's productivity record, provide a sustainable solution to the regional divide and build a green economy. We aim to build capacity and make train services more affordable and reliable. Meeting these aims will require significant investment.

3.1.2 Digital connectivity is now vital to the economy and to the wellbeing of citizens. It is essential for modern life that citizens have access to the internet: as public service-delivery increasingly moves online. The UK needs fast, reliable internet connections.

3.1.3 However, broadband and mobile phone networks have significant gaps in their coverage. Nearly a quarter of homes and businesses in the UK do not have good indoor 4G coverage from all operators, with rural areas in Scotland and Wales the worst affected.<sup>33</sup>

3.1.4 Consumers left without access to new technologies such as 5G and full fibre to the home may be left at a disadvantage as more services become digitised. For instance, the best energy deals may only be available to consumers willing to transact exclusively online and pay by direct debit. In a competitive telecoms market, there is a risk that companies will target the most profitable customers, leaving others without adequate provision. Liberal Democrats are committed to ensuring investment in the infrastructure necessary to provide every property in the country with the minimum standard of broadband.

3.1.5 The total level of investment required for the national roll out of full fibre is estimated to be around £30 billion, with the Government committing £5 billion to tackle the “hardest to reach” 20% of UK premises. Mobile operators will need to invest £1.3 billion each year to provide 5G coverage to most of the country by 2027.

3.1.6 Other utilities benefit from digitalisation. By allowing trains to safely operate more closely together, Digital Rail could deliver up to 40% more capacity on certain sections than at present, at around 30% lower cost than conventional line construction.<sup>34</sup> However, even after recent Government announcements, the pace and ambition of implementation is modest.

## **3.2 Addressing the climate and environmental emergency**

3.2.1 Liberal Democrats have ambitious targets for reducing UK greenhouse gas emissions by 75 per cent by 2030 and to net zero by 2045 at the latest.<sup>35</sup> The power sector will be the key enabler. Growth in locally based renewable electricity generation means that networks will need to be designed differently. Some low carbon technologies, such as CCUS and hydrogen, will require supporting infrastructure. Others, such as electric vehicles and heat pumps will require expansion of existing electricity distribution grid capacity to meet increased electricity demand.

3.2.2 In 2019, an NIC study found that reducing the electricity and gas networks’ greenhouse gas emissions to meet the government’s existing statutory climate commitments will require £20 billion of investment a year in the power sector until 2050. This is £9 billion more than current annual investment.<sup>36</sup> Considerable innovation will also be needed, for example in the heating sector.

3.2.3 Other utility sectors have vital roles to play. Rail is a naturally low-carbon transport mode<sup>37</sup> and there is big potential for reducing greenhouse emissions from a modal shift of freight transport from road to rail.<sup>38</sup> But only 42% of track in the UK is electrified<sup>39</sup> and 29% of Britain’s current train fleet is run solely on diesel fuel<sup>40</sup>. Yet

## *Utilities*

comparatively little funding has gone into making rail freight more competitive.

3.2.4 Liberal Democrats are committed to converting the rail network to ultra-low-emission technology by 2035. This will involve a rolling programme of electrification, which will require substantial investment, along with considerable innovation.

3.2.5 Telecommunications accounts for around 5% of the global consumption of electricity, with both the networks and the terminal devices connected to them making a substantial contribution. Fibre networks consume substantially less energy than legacy copper networks, which makes the case compelling for deployment of full fibre networks.

3.2.6 The climate emergency has major implications for utilities and consumers. Research commissioned by the Committee of Climate Change estimated the demand for water in England will exceed supply by between 1.1 billion and 3.1 billion litres per day by the 2050s, depending on the extent of climate change and population growth. The NAO recently warned that if more concerted action is not taken now, parts of the south and south-east of England will run out of water within the next 20 years.<sup>41</sup>

3.2.7 The NIC estimated that on average £930 million will be required each year between 2020 and 2050 to increase drought resilience. It also noted that the current system of regulation has successfully supported £4-5 billion of investment in water over the past decade.<sup>42</sup>

3,2,8 The Environment Agency has described the water and sewerage companies' environmental performance – pollution and sewerage incidents - as “simply unacceptable”. In 2018, only one company achieved the highest 4-star rating (the level the environment needs) under the Environmental Performance Assessment (EPA). The number of 2-star companies (requiring improvement) increased compared with 2017. Serious pollution incidents which damage the local environment, threaten wildlife and in the worst cases put the

public at risk, also increased<sup>43</sup>. The UK still lags behind other European countries on measures such as bathing water quality.<sup>44</sup>

3.2.8 In 2019, water companies in England discharged raw sewage into rivers on more than 200,000 occasions; untreated human waste was released into streams and rivers for more than 1.5m hours.<sup>45</sup>

3.2.9 In considering how regulation can help to address these challenges, we need to consider:

- How government and sector regulators can provide a strategic framework to deliver the UK's long-term investment needs and address the climate and environmental emergency (section 3.3)/
- Whether regulators' roles and duties need to be reformed, to support the net zero target (section 3.4).
- The respective roles of competition and regulation in driving innovation (section 3.5).

### **3.3 Delivering strategic investment**

3.3.1 In its 2019 study of energy, water and telecoms regulation,<sup>46</sup> the NIC concluded: "[The] current regulatory system has generated investment and improved performance. But [it] was not set up to provide strategic direction for investment to tackle issues such as achieving net zero greenhouse gas emissions by 2050, transitioning to full fibre digital networks, and managing the increasing risks of floods and drought."

3.3.2 The NIC argued that the current system leaves strategy primarily to infrastructure owners and providers, but they may not be best placed to assess the coming challenges, and do not have the right incentives to build the right infrastructure to address them. In energy and water, regulators are required to be sceptical towards new investment proposals, the benefits of which are often difficult to prove against cheaper, short-term solutions. And there is a potential risk of building unnecessary infrastructure which the consumer will ultimately pay for.

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3.3.3 The Commission contended that “the whole system does not need to be redesigned. But it needs to be updated to achieve a well-regulated market economy which can respond to the coming challenges”. Strategic leadership was needed, it argued, both from independent regulators and from government. The NIC identified general areas where an overarching strategy could support the regulators with major transformational changes. These included: addressing coordination challenges; setting national standards; promoting the interests of the public; and overcoming excessive caution.

3.3.4 There are already mechanisms in place to facilitate such strategic leadership. As discussed in section 2.4, ministers can issue strategic statements to regulators. The statement for Ofwat emphasises the need for securing long-term resilience in the sector and the statement for the telecoms sector sets out government aspirations for the sector based on the Future Telecoms Infrastructure Review and 5G vision. As noted above, however, the Government has chosen not to issue such a statement for the energy sector.

3.3.5 The NIC concluded, however, that the existing mechanisms were not sufficient and made two recommendations to provide a clearer strategic framework for long-term investment needs:

- Regulators should be required by legislation to have regard to endorsed recommendations from the NIC.
- The government should set out a long-term strategic vision for each of the regulated sectors, through strategic policy statements, issued within the first year of each Parliament, to support lasting plans and stable funding.

3.3.6 The following subsections discuss strategic investment issues in specific sectors.

### *Promoting a digital economy for everyone*

3.3.7 Unlike other utilities, there is genuine competition in the access network for mobile telecoms, and for most customers for broadband - and the capabilities of telecoms networks and the expectations of customers are evolving rapidly.

3.3.8 The four UK mobile network operators (MNOs) are private companies that have developed their networks with private funding - though with coverage obligations in spectrum licences. This is beginning to change. In March 2020, the Government and MNOs agreed to make a joint investment of £1 billion in a shared rural network, which will take 4G coverage to 95 per cent of the UK landmass by end of 2025. However, this means that there is no competition on coverage in these areas.

3.3.9 The market for broadband is more uneven. Delivering broadband with true 'gigabit' speed requires fibre-to-the-premise. Most customers receive superfast broadband using either BT's legacy phone lines or the cable TV network of Virgin Media - both of which can provide superfast broadband in urban and suburban areas.

3.3.10 Fibre-to-the-premise can provide gigabit speeds but is expensive to deploy. The deployment of fibre is substantially lower in UK than some other countries and is mainly in urban areas where it is economic and in rural areas where it has been subsidised by Government because acceptable broadband would not otherwise be available. Most customers currently receive superfast broadband using either BT's legacy phone lines or the cable TV network of Virgin Media - both of which can provide superfast broadband in urban and suburban areas.

3.3.11 The size of the economic or consumer benefit of 'gigabit' speed over 'superfast' is still uncertain.

3.2.12 The question is, therefore, what services should be considered when defining universal service obligations. As most network operators generally only deploy one or two technologies, this decision has a

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significant impact on the competitive landscape for consumer broadband services.

### *Ensuring adequate supplies of water*

3.3.13 The March 2020 NAO report, *Water Supply and Demand Management*<sup>47</sup>, contended that water companies are running out of low-cost options for increasing water supply and that reducing demand is, therefore, essential to prevent water shortages.

3.3.14 The NAO said that Defra has left it to water companies to promote the need to reduce household water consumption, and yet it continues to increase. The department has failed to announce a personal water consumption target that was promised by the end of 2018. Further, the introduction of the business retail market has not led to the expected reductions in non-household water usage, and water companies' long-term progress on tackling leakage and reducing water consumption has stalled over the past five years.

3.3.15 The NAO called on Defra to make sure that its new national framework and Ofwat's new funding for companies develop strategic solutions produce the collaboration and prompt action from water companies that is now needed. Specific recommendations included:

- Considering ways of promoting the need for water efficiency more coherently to ensure there is a coordinated and credible message.
- Review the business retail market to identify barriers to achieving improvements in water efficiency and how to overcome them.
- Provide a stronger steer to Ofwat and the water companies on the expected levels of investment by water companies, informed by better and more consistent evidence on customers' willingness to pay, commissioning new research, if necessary.

Other options include:

- Setting a national water saving target based on 'distribution input' (the water taken from the environment) which will involve the whole economy, not just household consumers.

- Setting stronger leakage targets.
- Introducing a mandatory national water efficiency label and minimum standards for all water using products.
- Establishing a national minimum water efficiency standard for new buildings.
- Introducing smart metering for water.

### *Investing in rail*

3.3.16 For too long, the UK has lacked a comprehensive and coherent long-term strategy for investing in rail infrastructure. With little consensus over what investment should be prioritised, or even what the criteria should be for such decisions, there is a risk that less beneficial projects are chosen, which are then subjected to inadequate scrutiny.

3.3.17 Investment in rail infrastructure has suffered from a 'feast and famine' syndrome in recent years. The industry was hit heavily by the 2008 financial crash but benefitted from a surge in projects and funding under the Coalition government. These primarily focused on electrifying and upgrading major lines such as the Great Western main line, the Transpennine routes and the Midland main line.

3.3.18 Periods of increased investment have frequently experienced cost and schedule overruns, which have resulted in scope reduction and the cancellation of projects later in the pipeline. This syndrome is exacerbated by the cyclical nature of both funding and planning of Network Rail's Infrastructure Projects section, which is determined according to five-year Control Periods. As a result, long-term planning regarding infrastructure, especially large, costly investments, is extremely difficult to undertake. Also, Network Rail, the Department for Transport (DfT) and the ORR have all received criticism for their roles in developing the programme and funding for Control Periods and for monitoring performance.

3.3.19 The hybrid bill process used for approving the very largest rail (major infrastructure) projects, such as HS2, can take many years, even

decades. As projects cannot progress far until the hybrid bill is approved, they are unlikely to provide the degree of certainty as to scope and cost that parliament demands as the hybrid bill passes proceeds. The rigidity of the process and its adversarial nature make it difficult to set accurate budgets and lack flexibility to respond to challenges in implementation. The Development Consent Order and Transport and Works Act Order process for other projects can also take years to reach approval and suffers from many of the same problems as the hybrid bill process.

3.3.20 The system of rail franchising has failed completely, combining the worst features of a 'beauty contest' with the worst features of a sealed-bid auction. The winner is generally the company that most over-estimates the growth in passenger numbers and revenue. But the rail operations of devolved regions are awarded using concessions. A number of franchises have faced problems caused by overbidding for the contracts, delays in infrastructure upgrades and the delivery of new rolling stock and industrial action.

3.3.21 As fares have continued to rise and costly infrastructure work has gone ahead, the ownership of train operators has become a hotly debated topic. By the end of 2019, acquisitions and changes to the West and East Coast franchises left almost all of Britain's rail operators back in state (but not UK state) ownership.<sup>48</sup>

3.3.22 In February 2020, the Government suspended the Northern Rail franchise after a year of chaos for passengers. In March, it suspended the entire rail franchise system and effectively nationalised any losses by railway companies for the six months in the wake of the COVID19 pandemic. Operators will continue to run services day to day for a small management fee under an "emergency measures agreement.

3.3.23 We await the findings of the Williams Review, which has been charged with analysing all aspects of the industry, alongside the country's changing travel and work patterns. It is considering all parts of the rail industry, from the current franchising system and industry

structures, accountability, and value for money for passengers and taxpayers.

3.3.24 In 2019, the Rail Industry Decarbonisation Taskforce<sup>49</sup> called on the Williams Review to enable, incentivise, monitor and regulate the route to net zero carbon also highlighted the role of government in setting out clear, consistent and enabling policies to facilitate the achievement of a net zero target. It also recommended that each key constituent of the industry should publish a long-term plan to achieve interim and long-term targets towards rail decarbonisation.

3.3.25 The National Infrastructure Commission (NIC) was established in 2015 to advise the government on infrastructure development and investment. Existing Liberal Democrat policy is to establish a Railway Agency to take on the responsibilities of the ORR and some of those of the DfT. Both the NIC and the proposed Railway Agency could take on the roles of determining investment programmes and monitoring project performance.

### *Questions*

17. *How can the regulatory system be reformed to allow for clearer long-term strategic direction from government and regulators regarding future investment? Is the current balance of responsibility between the regulators and Government optimal?*
18. *To what extent should decision making and oversight be devolved to nations, regions or local government?*
19. *What should be the targets for universal service, in terms of capability and coverage, and what should be the balance between completing national coverage for existing targets (superfast broadband & 4G) and rolling out new technologies (gigabit-capable broadband & 5G)?*
20. *What scope and powers should be granted to Liberal Democrats' proposed Railway Agency?*
21. *What reforms are needed to the governance of Network Rail?*

## *Utilities*

22. *What policies and changes to the structure and regulation of the rail sector are needed to deliver our commitments to a zero-carbon rail network?*
23. *How can the process for planning and parliamentary approval of major projects be streamlined without compromising the involvement of local people in the decisions?*
24. *What should replace the current system of rail franchises?*
25. *How quickly could the UK rail network become fully digital (ECTS3 or equivalent)? What would it take to achieve this?*
26. *What new measures are needed to reduce water demand on the necessary scale? How can we ensure that such measures are the most cost-effective available? How should vulnerable customers be protected against any significant increases in water bills that might result from such measures (for instance, the introduction of smart water meters)?*
27. *How can water regulation address the shortcomings in water companies' environmental performance?*

### **3.4 Meeting the net zero target: the roles and duties of regulators**

3.4.1 Within its statutory framework Ofgem, as the energy regulator, can provide the frameworks that encourage companies and consumers to behave more consistently with the net zero target. Similarly, the role of Ofwat, as the economic regulator of the water sector, is to establish and operate a regulatory framework which encourages companies to adapt to the risks of climate change in an effective, efficient and equitable way.

3.4.2 In its 2019 review of economic regulation<sup>50</sup>, the NIC concluded, however, that as a result of the way their statutory duties have evolved, the default is for energy, water and telecoms regulators to be sceptical of new investment, and so addressing long-term challenges such as climate change is insufficiently prioritised. The regulators' duties also vary considerably, and they do not have consistent duties on resilience

or security of supply, or sustainable development. None of them has a direct duty to consider the UK's binding statutory targets to reduce greenhouse gases by 2050.

3.4.3 The Commission recommended legislating to ensure that, where they are currently missing, Ofwat, Ofgem and Ofcom have duties to require them to seek to ensure their decisions promote the resilience of infrastructure systems and that their decisions are consistent with, and promote the achievement of, the government's legislated greenhouse gas emissions targets. It also recommended requiring each one to seek to collaborate with other regulators, where relevant, to avoid contradictory regulation and promote efficient outcomes for consumers on cross-sectoral issues

3.4.4 Such a change may not, however, be the best way to ensure that regulators' decisions align with the net zero target. Successive parliamentary committees and government reviews have emphasised the importance of regulators being assigned a clear statutory remit, given a clear steer on prioritising their duties; and protected from deciding political issues. Giving regulators additional and more complex duties, as has already happened many times since energy and water privatisation, raises the potential for conflicts and ambiguities around how regulators should prioritise them. It may also give the regulators more latitude to balance the different objectives. A proliferation of duties may make it more difficult for regulators to pursue any one of them successfully.

3.4.5 An alternative approach, drawing on the 2007 Lords report into economic regulators<sup>51</sup> and the 2011 Principles for Economic Regulation<sup>52</sup>, would be to simplify the regulators' duties, so as to reduce the potential for potential conflicts between duties; provide greater consistency and predictability in the regulatory process and recast the duties so that better reflect the challenges faced by government, society consumers and markets.

#### *Question*

28. *What changes should be made to the regulatory system to ensure that decisions by Ofwat, Ofgem and Ofcom are consistent with meeting Liberal Democrats' targets for reducing UK greenhouse gas emissions?*

### **3.5 Driving innovation**

3.5.1 Building a twenty-first century infrastructure and delivering the net zero transition will most likely need many innovative projects. There is a case for opening these up to a wide range of potential providers. The economic literature shows a strong link between competition and innovation. A Competition and Markets Authority study from 2015 found that competition is the strongest incentive for firms to innovate, citing research showing that markets with greater levels of competition tend to have higher numbers of patent applications for new products and technologies<sup>53</sup>. In the telecoms, energy and water sectors, competition has been critical to improving the reliability and quality of service for consumers and keeping prices low. Ofcom has been able to use competition to drive major strategic investments, such as 5G and full fibre coverage.

3.5.2 However, price controls remain the principal mechanism through which many new investments are proposed and decided upon in monopoly water and energy networks. In its 2019 review of economic regulation<sup>54</sup>, the NIC recommended removing major strategic investments, particularly to build major new infrastructure, from price control processes, where appropriate, and opening them up for competition to deliver the most innovative solutions.

3.5.3 The Commission argued that allowing investors and infrastructure providers to bid to deliver the project would also give regulators more information on the real cost of capital. The regulators, or the system operator, would agree a set of criteria for how to determine whether an investment counts as strategic and should be opened to 'for the market' competition, and a bespoke price control agreement set. Major projects would then only fall to the incumbent

provider where they demonstrably have the best bid, or where integration risks would rule out using competition.

*Engaging energy consumers in the net zero transition*

3.5.4 Some market changes will require a review of the content and role of specific areas of regulation. Digitalisation and technological changes mean that the energy retail market is expected to evolve rapidly. Consumers will require attractive new products and services, including car batteries, smart charging, and home energy systems as well as grid scale storage.

3.5.5 The 'supplier hub' model is the basis of existing regulation of the energy retail market. Ofgem and BEIS have found that it may prevent consumers from benefiting from innovation and is slowing down decarbonisation.<sup>55</sup>

3.5.6 One approach is to reform specific regulations, such as supply licences, to ensure that users of new energy services are protected adequately, whilst promoting innovation and encouraging decarbonisation. Another is to identify at a more fundamental level which objectives can be furthered by competitive markets, and which would require regulatory measures.

*A market for low carbon heat*

3.5.7 One area where considerable innovation will be vital is the decarbonisation of heat. Liberal Democrats' net zero target implies that heating in this country must be decarbonised by the mid-2030s. Currently, heating in the UK is dominated by fossil fuels, with 85% or about 24.5 million homes (and over two million businesses) supplied directly by the mains gas grid.

3.5.8 Heat is currently regulated through the electricity and natural gas market. New heat systems and services that do not use traditional infrastructure or business models - including heat networks, 'heat as a service' models and hydrogen trials - are currently unregulated.

## *Utilities*

3.5.9 In 2018, a market study by the Competition and Markets Authority (CMA)<sup>56</sup> recommended that Ofgem should be given powers to regulate domestic heat networks, to ensure that consumers are protected.

3.5.10 The government is currently consulting on a market framework for heat, including a regulatory model.<sup>57</sup> The observation in section 3.5.1 about the current energy retail market design is also relevant in this context.

## *Innovation in telecommunications*

3.5.11 The UK is seen as a particularly competitive market for telecoms, leading to low margins for operators and therefore potentially less investment in new technologies and improving coverage. Openreach (a functionally separate division of BT) is required to offer access to other service providers, but this results in unequal competition. Much of the innovation in telecoms is led by US-based 'over-the-top' providers (Google, Amazon, Facebook etc.), whose margins are far higher. They are increasingly moving into the market sectors of telecoms operators but are generally not subject to the same regulation or caps on market share.

## *Questions*

29. *What changes to utility regulation would encourage more innovation?*
30. *Should major strategic investments, particularly to build major new infrastructure, be removed from price control processes and opened to competition?*
31. *How should energy regulation promote innovation and competition in new energy service models, while ensuring sufficient protections are in place for consumers?*
32. *How can regulation support the growth of an innovative low-carbon heat market in which consumers are engaged and protected?*

## 4. Ownership Models

4.0.1 When UK utilities first started being moved into the private sector, proponents of privatisation argued that, whilst some were natural monopolies and had public service obligations and public policy objectives, consumers could be protected, and public policy objectives achieved through regulation. As a result, they contended, introduction of the profit motive and competition in some cases where there were not natural monopolies would lead to greater efficiency and, in the long term, lower prices. In addition, removal of the utilities from the public sector and associated expenditure constraints would enable much needed investment to take place.

4.0.2 There have undoubtedly been benefits of privatisation and regulation but as the previous sections have outlined there have also been some significant problems. These include:

- Companies being able to make very significant profits as a result of gaming the regulatory system, including over-claiming and underdelivering on investment.
- Loyal customers being penalised whilst those willing and able to switch supplier are able to make significant cost savings.
- Regulators being slow to respond to evolving policy aims, particularly in relation to dealing with the climate emergency (often as a result of inadequate powers to do so).
- Where the industry is still reliant on public subsidy (notably rail) a continued heavy dependence on government decision making, with the result that risks are still borne by the public but that profits are still taken by the private sector.

4.0.3 Despite all these problems, returning utilities to government ownership would not necessarily outweigh the disbenefits. It may cost the government as much as £60bn to buy the water industry, with a similar amount for National Grid. But public ownership in the past was characterised by chronic underinvestment and

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inefficiency. International evidence on the impact of private sector involvement on water operator efficiency reveals a mixed set of results regarding whether efficiency is increased or not.

4.0.4 If the current ownership model is not appropriate what are the alternatives? The main ownership options are:

- Full private sector ownership through a traditional company limited by shares.
- Full government ownership. In addition to conventional nationalised industry approaches, this could include options based on regional ownership with Board members appointed by local authorities or regional government.
- Part government ownership, so that government (and hence the public) share in any upside of trading and have the opportunity to influence company policies. It should be noted, however, that the directors of the company (whether nominated by the government or not) would have a primary responsibility to act in the best interests of the company and hence the extent to which they would be able to take other factors into account would be limited.
- Either full or part employee ownership. Whilst it is unlikely that full employee ownership would be feasible for capital intensive network industry, part employee ownership might be, and full employee ownership might be achievable for less capital-intensive parts of the sector such as train operating companies.
- Some kind of hybrid model, where the objectives of the company are broader than simply profit. One current example is Glas Cymru, the Welsh water provider, which is a company limited by guarantee, with no shareholders and any profits used for the benefit of Welsh water consumers. A possible proposed alternative is a public benefit company (see attached box). One of the potential disadvantages of such models is potentially greater

difficulty raising finance for investment and/or lack of financial resilience in the face of a trading downturn.

### **A public benefit company**

would write into their founding articles of association that their organisational purpose is to pursue environmental, social or public objectives. In the case of utilities the regulator of each sector would oblige the utility as part of the regular price review to incorporate as a public benefit company (PBC), declaring its purpose is to promote the public good while seeking to make no more than a reasonable surplus necessary to support its ongoing operations. The purpose could be, say, 'to deliver the best water possible at the cheapest price', or to borrow variants like the BBC's purpose 'to inform, educate and entertain'. Additional requirements could be placed upon the public benefit company – for example, to be domiciled and to pay tax in the UK.

4.0.5 In deciding which model is most appropriate for which industry, or part of the industry, the following factors might be taken into account:

- a) Whether the industry or part of the industry is subject to direct competition. For example, in the energy sector where generation of electricity and supply of gas and electricity are competitive markets, they may be suitable for full, or part private, ownership.
- b) Whether there is a natural monopoly, for example, water, gas and electricity distribution: Regulation is clearly needed where there is a natural monopoly, but as has been noted earlier in this paper, there have been a number of problems with the current system of regulation. Hence regulation on its own may be insufficient to ensure fair outcomes for the public, or to meet policy aims such as

## *Utilities*

addressing the climate emergency, and some of the alternatives to full private ownership should therefore be considered,

- c) Whether the industry concerned is reliant on public subsidy (for example, rail). In this case, it might be judged that government will be so inextricably linked to decision making that it should be the owner. This is one of the problems which faced Railtrack when it was originally privatised, and which subsequently led to it returning the public sector as Network Rail.
- d) Whether there would be merit in introducing more regional/local democratic accountability and, if so, how this might best be done. For example, in the case of rail, could services be run by regional government/consortium of local authorities. In the case of water and electricity distribution, where there are already regionally based companies, would there be benefit in greater accountability to local people and if so, how should this best be organised.

## *Questions*

- 33. *Are there any other generic ownership forms which we should be considering?*
- 34. *Would there be benefits in greater democratic accountability of the utilities and if so, how might this be structured?*
- 35. *What are the advantages and disadvantages of each?*
- 36. *Are there any other factors which should be taken into account when deciding which ownership models are applicable to which industry (or part of the industry)?*
- 37. *Which ownership model is most applicable to which industry or part of an industry?*

## Endnotes

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<sup>50</sup> <https://www.nic.org.uk/wp-content/uploads/NIC-Strategic-Investment-Public-Confidence-October-2019.pdf>

<sup>51</sup> <https://publications.parliament.uk/pa/ld200607/ldselect/ldrgltrs/189/189i.pdf>

<sup>52</sup> <https://www.gov.uk/government/publications/principles-for-economic-regulation>

<sup>53</sup> <https://www.gov.uk/government/publications/productivity-and-competition-a-summary-of-the-evidence>

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