Sustainability *first*

Maxine.frerk@sustainabilityfirst.org.uk

18 May 2023

FutureNetworkRegulation@ofgem.gov.uk

Dear Ofgem

Consultation on the Future of System and Network Regulation

Sustainability First is a charity and think tank focussed on social and environmental issues in the energy and water sectors. We have been closely involved in the RIIO2 process through participation in the Ofgem Challenge Group and company groups as well as participating in a number of the Ofgem working groups and responding to all key consultations. We are keen that as part of this exercise Ofgem reflects on what has worked well and what hasn't – as well as thinking about the significant challenges ahead. We have also been involved in the early stages of thinking on PR24 in the water sector which provides further opportunities for learning.

Key messages

Government, the CCC, the NIC and the BEIS Select Committee have each highlighted **the huge scale and pace of investment needed in the electricity networks** to meet our 2035 and 2050 net zero targets. Ofgem also now acknowledges the enormity of this challenge, which we welcome. We understand Ofgem's desire to ensure the regulatory framework is fit to meet this challenge but are concerned too that 2035 is probably too close and too important to run risks with a radically new model – both in terms of potential delays and also investor confidence. **Changes should only be made where it is clear that the current regime is not capable of delivering and must not create a hiatus in delivery.**

We agree the **FSO** has a valuable role to play in planning at a strategic level in transmission but – as set out in our response to the local governance consultation - are **not convinced that it should be playing more than an eventual "thin" co-ordination role at the regional or local level**. Certainly, in the timescales involved for the next price control, we cannot see the FSO developing the capabilities required and we cannot afford a hiatus.

We are concerned by **the risks of stranding in the gas sector** and the prospect that with declining volumes of gas the remaining customers (who are more likely to be lower income) will end up picking up an ever-growing share of the costs – noting that the **networks need to be kept safe as long as there is gas flowing through them**. There are also questions about the interplay with the regulation of future hydrogen networks and the how to encourage more use of low carbon gases in the interim. These strategic issue needs urgent consideration to ensure a Just Transition. Ofgem should take a light touch approach to the GD roll over (which now seems inevitable) and **use the time to open a dialogue on these bigger issues**, which the proposed archetypes do nothing to help resolve.

In terms of the regulatory approach, we maintain that **RIIO is a flexible tool** and continue to **see merit in a drumbeat of a 5 yearly price control cycle** even if more of the spend will increasingly be decided in period. The proposed "pick and mix" of archetypes on potentially different timelines for different activities would add to the complexity and undermine the ability to take a whole network (never mind whole system) view.

We support Ofgem's desire for **a simpler process** but do not believe that any of the models is inherently simpler – the issue is one of **proportionality** in terms of the levels of evidence required and the regulatory mechanisms that are put in place. It is essentially a question of **GEMA and Ofgem mindset**. In RIIO2 Ofgem introduced additional complexity to ensure networks delivered on what they had committed to and to limit the returns they could earn – in what might be seen as a "belt and braces" approach. Ofgem should **start with a review of RIIO2 – both the process for setting the price control and how it is now operating** – in order to identify how it could be simplified and improved. This will then allow an informed view on whether more radical reform is needed. We are aware that Ofgem is proposing doing this through the working groups it has put in place but would argue that a more **systematic** approach is needed.

It is also worth remembering that we are only two months into RIIO ED2. Ofgem recognises this in presenting a slightly longer timeframe for deciding on the framework for electricity distribution which makes sense. However, if there are learnings (or eg new analytical tools) that could make ED2 work better then Ofgem should consider applying them now.

Finally, we would stress the importance of **keeping customers' interests at the heart of the regulatory framework**. Aside from investment for net zero there needs to be a clear vision of the outcomes that Ofgem is looking to achieve for consumers and citizens. It should not just be about a secure network but a wider focus on resilience; not just cost efficiency and affordability but equity, fairness and wider social impacts as part of a just transition; not just net zero but a thriving environment, covering biodiversity and the companies' wider environmental impacts.

We have provided answers to the specific questions that Ofgem set out in its consultation but have also expanded below on some of our key themes where they are not covered by the questions.

Background

In our Regulation for the Future[1] report in 2021 we argued for a more adaptive approach to regulation and also endorsed a longer-term planning horizon as exists in water regulation for water resources. In RIIO2 we saw a more adaptive approach being adopted with more use being made of uncertainty mechanisms – but we suggested there was scope to do more. We also argued that regulators should take those parts of company business plans which are high on social content and relatively low on bill impacts out of the price review process – or more specifically that part of the process which is based around comparative competition and econometrics. Where done properly, customer/citizen engagement and local negotiated settlements would be a better and more legitimate solution for these kinds of issues.

In our response[2] to Ofgem's open letter last year we stressed the importance of a focus on investment in the electricity networks but made the point that RIIO is a flexible tool and that we would expect it to be able to evolve to accommodate changing strategic priorities across the sectors as Ofgem has done successfully with ASTI. We reiterated our support for a continued emphasis on customer and stakeholder engagement and a continuing role for the CEGs and user groups (as we have observed at first hand the value they bring to the process). We also highlighted a range of other

[11] https://www.sustainabilityfirst.org.uk/publications-project-research-reports/242-regulation-for-the-future

[2] https://www.sustainabilityfirst.org.uk/publications-consultation-submissions/436-ofgem-future-systems-and-regulation-submission

factors that need to be considered in any future price control process from the need for more focus on climate adaptation to the risks of stranding on the gas network. We reiterate a number of these messages in our response to this latest consultation.

The strategic context

Overall we support and agree with the broad priorities that Ofgem sees for the sectors but do not always agree with what Ofgem then sees as the consequences in terms of regulatory approach.

We welcome the acknowledgment of the scale and pace of investment required in electricity networks – at transmission and distribution levels – in order to support delivery of net zero, decarbonising the grid by 2035 and electrifying heat and transport by 2050 (or 2045 in Scotland). This reflects the recent recommendations from the BEIS Select Committee which made clear that the delays currently being faced by renewable generators looking to connect, are unacceptable. The DESNZ consultation on the Strategy and Policy Statement[3] reiterates the importance of investment, including the links to economic growth and jobs, as highlighted also in Chris Skidmore's Mission Zero report. We welcome Ofgem's support for more strategic investment / investment ahead of need and the move to an "invest and connect" approach, given the direction of travel is clear and hence the risk of stranding is low. The challenge for Ofgem is to ensure that this emphasis drives Ofgem's overall approach to network regulation which has historically been focussed on placing a high evidentiary bar around the need for investment and on minimising costs. This mindset shift – which needs to permeate the whole process - is more important than the choice of archetype.

On gas we welcome the acknowledgment of the challenges around potential asset stranding but would reiterate that the **gas networks need to be kept safe** even as customers start to shift across to alternative heating. As such the projected decline of 40-60% in gas use by 2035 will have little impact on network costs, in particular if driven primarily by declining gas generation. This raises complex questions (including the prospect of a "death spiral" where an increasingly small number of customers – typically less well off – are left bearing the sunk costs of the network). **We would like to see a proper debate** on how these issues are addressed – ie **what a "just transition" looks like for gas** - as a part of the work for the next price control, alongside thinking on the treatment of RABs for hydrogen networks and the potential for other low carbon gases and blending in the interim. In our view Ofgem's presentation of theoretical archetypes feels disconnected from these essential challenges around the regulation of the gas networks.

We agree that **the establishment of the FSO creates an opportunity** to take a different approach to price controls. However, as we set out in our response on local governance[4], Ofgem needs to recognise that **it will take time for the FSO to become established** and to develop the capabilities to look fully whole system and cross vector. It also remains **unclear whether it is best placed to actually lead on regional area planning** and the detailed dialogue with local authorities and other stakeholders that is inherent to the geographic / place-based roles of gas and electricity distribution

---

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1155717/strategy-policy-statement-energy-gb-consultation.pdf

[4] https://www.sustainabilityfirst.org.uk/publications-consultation-submissions/462-energy-institutions-and-governance

networks[5]. Local authorities, who have the democratic mandate, have to lead on planning the net zero transition in their areas and making the societal trade-offs involved. Energy networks then need to work with them in reflecting what that means for technical planning of the networks. Research by Regen[6] found that local authorities are concerned that regional system planning becomes a black box process but rather want it to be a collaborative partnership.

Certainly, as we set out in our response to the consultation, it is hard to envisage the FSO having the capabilities to take this on in the timeframes needed for the next round of price controls. Resourcing and senior management bandwidth are real issues. This point was also made by the BEIS Select Committee on Decarbonisation which emphasised the need to be realistic about how many new workstreams the FSO can take on. While there may be an eventual 'thin' coordination role for the FSO, we would like Ofgem to send a stronger message to gas and electricity distribution networks today around the importance of looking whole system and working across vectors in developing regional energy plans. Given the importance of pace we cannot afford to wait for the FSO to become fully established before we start taking a more whole systems approach, including providing much-needed technical support to democratically elected local authorities in developing their net zero transition plans.

While we strongly support the emphasis being placed on getting the required investment delivered as rapidly and efficiently as possible, we do have a concern that Ofgem is viewing this as the only purpose of network regulation. Through RIIO, Ofgem has placed an emphasis on **the wider social and environmental outputs that the companies are expected to deliver for customers** as well as on **resilience and the increasingly important issue of climate adaptation**. These latter two have been highlighted again recently in the joint letter from the Chairs of the National Infrastructure Commission and the Committee on Climate Change[7], including emphasising the need to take a cross sector view. Ofgem does say that "traditional outcomes for consumers that we have always sought to ensure from the networks will continue to be important". However, these outputs get little or no mention in Ofgem's consultation and it is not clear how they would be dealt with in the alternative archetypes (1 and 3) and indeed Ofgem actually suggests that competing incentives are a distraction from the big task in hand. We would reiterate the importance of these broader outcomes:

- With many households in desperate situations and with the cost of energy unlikely to return to historic levels any time soon, Ofgem will need to maintain a focus on value for money. However there also needs to be a continued emphasis on – and wider debate on – the role the networks can play in **supporting vulnerable households**, including a potential DNO role in energy efficiency which we have highlighted previously, and which is also now highlighted in the draft Strategy and Policy Statement.
- There also needs to be a continued emphasis on the companies' **environmental performance** as a part of the package of outputs they are required to deliver. Electrical losses and SF6 leakage on the electricity networks and methane leakage on the gas networks were neglected areas in RIIO2, despite accounting for over 90% of the companies' carbon footprints and being priority issues on the international stage.

[5] Similar issues may arise on regional planning at transmission level especially in Scotland where 132kV is transmission

[6] https://www.regen.co.uk/local-authorities-call-for-collaborative-partnerships-to-create-regional-energy-system-plans/

[7] https://nic.org.uk/news/nic-and-ccc-call-for-urgent-action-to-protect-infrastructure-from-climate-risks/

Implications for regulation

We agree with Ofgem that "RIIO has evolved into a very flexible collection of mechanisms". We would like to see Ofgem build on this flexibility where it can – making bold but incremental changes, focussed on elements which are clearly not working or fit for the future, which we see as in the spirit of an "adaptive" approach.

We would therefore have expected Ofgem to have started this process with **a proper assessment of what worked well in RIIO2 and what didn't** - as Ofwat did in the lead up to PR24 (and indeed Ofgem did for RIIO2). Ofgem has now said that this "lessons learned" exercise will be carried out through the working groups that it has established but this feels rather late in the process and a rather informal approach.

In particular one of the key challenges across all sectors is how to handle the uncertainty that exists about the level of investment required. **A systematic review of the various uncertainty mechanisms** used in RIIO2 and how effective they are in practice should be a priority.

In our view, there is also a need for **new analytical tools** such as adaptive planning or real options appraisal – recognising that the conventional CBA techniques on which Ofgem has historically relied do not cope well with multi-dimensional uncertainty. A recent paper by Associate Maxine Frerk with Oxford University highlights the issues and the tools available and the need for a shift in mindset[8]. We have also worked with Ofwat on the adaptive planning approach now encapsulated in PR24 and which we have shared previously with Ofgem.

While we can see merit in presenting the archetypes to describe the toolkit that is available to a regulator, as we and others have highlighted, these tools are already being used to a greater or lesser extent within RIIO as it stands. The question is not therefore "which archetype is best" but – as Ofgem acknowledge – what approach to use for different cost elements in different sectors. Positioning this as combinations of archetypes (potentially with different timelines) risks creating a more complex structure at a time when one of Ofgem's goals is simplification. Positioning this as all being **under the RIIO umbrella** would have the advantage of familiarity to investors, which should help facilitate the significant investment required.

One implicit question Ofgem is asking is whether there is still a benefit in having fixed periods for price controls. We recognise that the value of information gathered in one price control period will be less relevant to future controls than it has been historically – but believe there is still a value in that information. **Overall we still see significant value in a 5 yearly "check point"** where an overall plan is agreed, where expectations are set and financial parameters calibrated – but with scope for significant in period adaptation. Ofgem raises questions about whether price controls should be aligned across sectors to encourage whole system thinking. Absent a regular drumbeat of the controls this whole systems thinking would be even harder to achieve.

Ofgem also rightly flag the benefits of a fixed period in terms of being able to take account of linkages between different parts of the business. We see this as important – and see **the move to "totex" as one of the positive features of RIIO** which risks being undermined by a more fragmented approach with effectively separate price controls for different activities.

We agree that there would be value in longer term certainty for the companies and their supply chains. This was the reason that in RIIO1 the controls were extended to 8 years (which proved to be

[8] https://www.oxfordmartin.ox.ac.uk/downloads/academic/Oxford-strategic-investment-150321.pdf

too long in a fast-changing environment). **In our view what is needed is a longer-term rolling plan against which the shorter (5 year) price controls are set**. The networks have to produce ten-year Network Development Plans but there does not currently seem to be any connection between these and the price control process. We would encourage Ofgem to explore potential synergies between these two processes.

We hope that these reflections are helpful and we would be happy to discuss them further. We appreciate the opportunity to engage through the range of working groups but given our limited resources as a small charity and the time commitment required, we do not expect to be able to participate substantively in that process. We encourage Ofgem to think about how best to ensure that the voices of a wide group of stakeholders can, in practice, participate effectively in this process.

Yours faithfully

Maxine Frerk

Associate Sustainability First

Cc Judith Ward, Associate Sustainability First

Annex 1– Response to Questions

Q.1. What should the role of the 'consumer voice' be and through what institutions and processes should it be channelled?

Sustainability First has consistently advocated for a strong consumer voice feeding into price controls (and other policy decisions such as network charging that are often treated as technical debates but can have significant consumer impacts).

In particular we are strong advocates of the CEG and user group model, having seen it working at close quarters. In our view the involvement of these groups led to significantly improved business plans and also scrutiny of the company approaches to engagement at a level that Ofgem is not well placed to do. The CEG and user group voice is strengthened within the companies if it is a mandatory part of the price control process and if it is clearly listened to by Ofgem.

At the start of RIIO2 we contributed to the Citizens Advice report[9] on the role of the consumer voice and the messages in that report still stand including encouraging companies to co-create solutions with their customers and stakeholders, in particular in areas where they are directly impacted. We have also produced a discussion paper on how engagement can increase public value in essential services[10] which looked at a tiered approach and the roles of different parties (including government and the regulator) in engagement on these issues.

We are aware that in water Ofwat has moved to seeking more of the consumer research to be done centrally (jointly with CCW). In our response to the Ofwat consultation[11] we said that we saw a role for collaborative research but argued it should be part of a tiered approach with companies still needing to understand the views of their customers and communities.

As an example, we have commented previously (eg in our response on ED2 Draft Determinations) that Ofgem should commission research itself to better understand the Value of Lost Load (VoLL) which is a critical element in the design of incentives around interruptions (and more widely in energy market regulation). In ED2 ENWL did its own research showing how this varied by customer group which Ofgem felt it could not rely on. However the VoLL which Ofgem uses is based on research from 2013 simply updated for inflation – despite the huge increase in our dependency on power in the intervening years.

We would also like to see a wider public dialogue on decarbonisation (and in particular around heat). While the consumer voice is crucial in this area, it is not clear that individual company led research to help address these more strategic questions is the best way forward.

That said, more generally we are very supportive of the companies continuing to have a strong programme of consumer engagement, including co-creation of solutions, which we see as one of the

---

9 https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Strengthening%20Consumer%20Voice%20in%20Energy%20Network%20Price%20Control_2018.pdf

10 https://www.sustainabilityfirst.org.uk/images/publications/other/How_engagement_can_maximise_public_value_in_the_essential_services_of_water_and_energy.pdf.pdf

11 https://www.sustainabilityfirst.org.uk/images/publications/consultations/PR24_and_beyond_-_Reflecting_customer_preferences_in_future_price_reviews.pdf

drivers of a cultural shift to them becoming more customer centred organisations. As a part of this there needs to be focus on people as citizens (not just consumers) and on communities given that the transition will be happening, as Ofgem say, street-by-street and town-by-town. All companies work with local and national partners to help reach vulnerable customers and again these voices are important as companies develop their plans.

Ofgem positions negotiated settlement as a process that could be used to deal with particular elements of the price control rather than as an archetype in its own right. We would agree with this and have previously argued that social and environmental actions with an essentially local focus and limited bill impact could best be taken forward through this sort of model. Indeed, arguably, the use-it-or-lose-it allowance that GDNs were given for vulnerability and carbon monoxide initiatives contains the beginnings of that approach (assuming that GDNs engage on how best to use those funds). However, as we argued in RIIO2, technically complex issues like SF6 or losses still need to be driven by Ofgem.

Q.2. How detailed could an independent, cross vector view become to determine future plans for periods beyond RIIO-2 and support effective use of the 'Plan and Deliver' model?

We are unconvinced that in the timescales for the next price control that the FSO would have the capabilities to develop a proper cross vector view that would allow "Plan and Deliver" to be used beyond a strategic level at electricity transmission (where we see the ASTI approach as an example of this working in practice) and possibly gas transmission.

In particular we see it as implausible that an independent FSO acting as a Regional System Planner (as Ofgem propose) would have the capability to produce a plan at the level of granularity needed to apply "Plan and Deliver" for the gas and electricity distribution networks. Indeed, we are sceptical as to whether this would ever be a sensible approach given the heavy dependence of any such plan on local knowledge and close working with local stakeholders (in particular through the now well established DFES process) which it seems wasteful to duplicate.

Q.3. Under what circumstances would competition, or other procurement models such as open book contracting, have benefits over ex ante incentives as a cost control mechanism?

We remain to be persuaded of the merits of competition as a cost control mechanism. As Associate Maxine Frerk set out in an article for Utility Week - attached as Annex 2 - the networks already tender for the work to be done but under the current model retain clear responsibility for delivery and risks cannot simply be passed on to consumers (as we consider has happened with OFTOs for example). There are also questions around the delays that competition would introduce when the focus should be on the pace of investment needed (as was accepted for ASTI). Learning the lessons of the recent problems with the retail market, it is important that the risks from competition in networks are thought through in advance. Looking at the experience of customers on independent networks operators Citizens Advice have expressed concerns that customers are not seeing any benefit[12].

[12] https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/independent-energy-networks-what-are-they-and-what-do-we-know-about-them/

Q.4. What is your view on the options identified for simplification of incentive regulation? What would be the benefits and costs by comparison to the approaches used in RIIO-2?

We would note that simplification was identified as one of the goals at the start of RIIO-2 and our sense is that this was not achieved because Ofgem was particularly concerned about the companies exploiting the incentive regime to their advantage and was under political pressure to ensure that returns were constrained. This led to Ofgem taking a very prescriptive approach. For example, we commented in our report on the ED2 Business Plans on the length and complexity of the plans but noted that this was a reflection of the level of detail required through the Business Plan Guidance which itself ran to 107 pages of requirements on topics the companies had to address.

There is no magic trick as to how to simplify incentive regulation. If simplification is the goal then that needs to be championed at a senior level throughout the process. By trying to tighten up on what the companies have to deliver – or to ensure that there are no loop holes the companies might exploit – Ofgem will inevitably increase complexity. Equally the companies faced with a tight control will want to ensure that they are protected from unexpected additional costs. Simplification means accepting more risk.

Working out where the benefits are going to be greatest from simplification is part of the systematic lessons learned exercise that we would argue needs to happen. This should consider both the efficiency of the process for developing the price control (Which parts of the process took most time? Where were the business plans more detailed than really needed? How much impact did subsequent data requests have on the end results? etc) and the workability of the final price control (Are there too many ODIs / UMs? Which mechanisms are most onerous to apply?).

For example, the significant number of PCDs included in RIIO2 reflects a concern that otherwise companies might not deliver on commitments made in their business plans and might take the benefits as “efficiency savings” through the Totex Incentive Mechanism (TIM). This was a conscious shift in RIIO2 aimed at addressing one of the problems identified in the CEPA review of RIIO1 but one that made the regime more complex.

Reducing the number of bespoke mechanisms in favour of more holistic approaches (which still incentivise the right behaviours) would seem the right approach.

Ofgem refers to RPI-X as a possible simplification. Old-style RPI-X drives efficiency by allowing companies to keep any savings with the reward for customers coming as the regulator can use the revealed lower costs as the basis for setting future controls. However historically this led to concerns about out-performance by the companies and the sharing factors introduced in RIIO would seem to provide more balance in enabling customers to share in short term savings, while still providing an incentive for companies to become more efficient. Moreover, as Ofgem says, in a changing environment cost information from one period is less relevant to the next, limiting the benefits from old style RPI-X. The other key feature of RIIO as a development of RPI-X is the focus on incentives to drive outcomes such as improved customer service. As highlighted in our cover letter, to drop these output incentives would be a retrograde step.

Ofgem also talks about a move to more use of ex post close out mechanisms as a simplification. While it would simplify the process of setting the price control it adds significantly to the effort required on monitoring and at the end of the price control. For example, the effort involved in the close out for even a small number of items in DPCR5 where mechanisms had not been agreed in advance, demonstrates that this is not necessarily an easy way out.

One reflection on RIIO2 that might be helpful in thinking about simplification is that Ofgem's concerns about company out-performance (prompted by the NAO report) led to it applying very much a "belt and braces" approach with more PCDs, higher sharing factors and the novel – but in our view very sensible – Returns Adjustment Mechanism (RAM). It is not clear that all these mechanisms are needed. Indeed, if the RAM is working in the way that was intended – to limit the overall returns that the company can make – then it feels as if Ofgem should be able to take a more relaxed approach to individual elements. Again, looking at how the RAM is working in practice, should be a priority for the lessons learned exercise.

Overall if Ofgem is to simplify it needs to be clear what it is prepared to sacrifice or to take risks on. In particular how much importance does Ofgem attach to wider social and environmental outputs (including resilience); the level of cost efficiency; delivery of what has been committed to (and avoiding over delivery / over investment); or preventing what might be deemed excessive returns? RIIO has evolved over the years to address all of these – and to try to do so in a proportionate way.

Q.5. What are the network activities where there would be benefits for a move to an ex post monitoring regime, and what would be the associated costs?

In principle, there may be a case for moving to an ex post regime where, for example:

- there is little scope for efficiency gains through an ex ante regime (and / or Ofgem is willing to take the risk that customers may be over-paying eg as a result of "gold plating")
- it is difficult to set allowances in advance even using uncertainty mechanisms. In terms of the current suite of uncertainty mechanisms, volume drivers can be used when the unit costs are known but volumes are uncertain. Where both volumes and costs are uncertain under RIIO Ofgem has tended to use reopeners or cost pass throughs (which are currently used in particular where the company has little or no control over the costs such as with business rates). Ex ante monitoring could be an alternative to a reopener and indeed this sort of "logging up" approach has been a part of price controls historically – but then carries risks around cost escalation.

Whether ex post monitoring is more or less resource intensive than an ex ante approach or a reopener depends on the level of scrutiny that the regulator chooses to apply (rather than one being inherently simpler than another). Smart DCC which, as Ofgem notes, is subject to an ex post regime has historically raised concerns about the level of detail it has to provide (as well as the risks that it faces in terms of costs subsequently being disallowed). It is not clear whether Ofgem has sought to learn from its own experience of applying ex post price controls to Smart DCC / the ESO but that could usefully form part of the systematic lessons learned exercise we are advocating.

In particular Ofgem say that a high bar would be needed for disallowing costs to address investor concerns about asymmetric risk. This is right. However, there are several references in the consultation to the potential for disallowing costs (as providing the incentive for efficiency) which suggests there is still a real risk for investors in this approach. In particular there are valid concerns around investments being judged with the benefit of hindsight which is a known risk with ex post regulation.

Returns and financial incentives under an ex post regime

Ofgem's interest in an ex post approach also appears to be motivated in part at least by a desire to limit the returns that companies make (which politically are more visible than inefficiency). This was an understandable concern in RIIO1 (following the NAO report) and in response, for RIIO2 Ofgem

introduced the Returns Adjustment Mechanism. This is a good mechanism (which builds on a similar approach in water) that maintains some incentives for efficiency while recognising that the larger the savings the more likely it is that these were the result of an over generous allowance / gaming by the companies. As such the sharing factor tapers off as the "efficiency" savings increase. Absent a proper review of whether this new mechanism is working as intended it is unclear why the level of returns per se should still be a worry for Ofgem.

The other reason that returns can be high is because of the output delivery incentive (ODI) mechanisms where companies are rewarded for improving elements of service that customers value. This focus on outputs has been a defining feature of RIIO (ie it's in the name!) and "performance based regulation" is highly regarded internationally. It is unclear how output delivery incentives would sit with an ex post regime as it would seem as if companies could recoup the higher costs of delivering higher performance (where under an ex ante regime the service improvements would be, at least in part, funded by the rewards).

Sustainability First recognises the value of financial incentives in driving company behaviour. We would not want to see these dropped in future controls and are concerned that there is no discussion of how output incentives fit with the Plan and Deliver or Freedom and Accountability archetypes.

Data and digitalisation

We agree with Ofgem that increasing digitalisation of the energy sector presents opportunities for Ofgem's regulatory approach (although we see it as relevant not just in relation to Freedom and Accountability but all archetypes). That said we would caution against relying too heavily on this in the near term given the current state of progress. We also flagged through our PIAG work[13] - on public interest uses of smart meter data - the need for Ofgem to have a more granular understanding of demand patterns (given that eg investment needs are dependent on peak demand not annual consumption and these patterns are changing significantly).

Q.6. What are the benefits and costs of this approach for Electricity Transmission by comparison to an evolution of the approach in RIIO-2, and what are the implementation barriers?

As indicated in our covering letter we see the ASTI programme as having been a positive step forward. There is an urgent need for significant strategic investment in the electricity transmission network to support net zero and the ESO today (and the FSO in future) has the skills and expertise to develop a strategic plan to scope out that investment, albeit with questions about the FSO's role in some of the regional network planning at lower voltages. As such we see Plan and Deliver as an evolution of RIIO and ASTI.

However, we are not persuaded of the case for using competition to drive cost efficiency (see Q3). As Ofgem note there are costs and risks of delays in introducing competition, which we are unconvinced would be justified by the likely cost savings. We also see risks of unintended consequences or poor co-ordination.

We also have concerns about the simple categorisation of expenditure into Replacement, Reinforcement and New Build. For example, if part of the network is being replaced, we would

[1313] https://www.smartenergydatapiag.org.uk/ - in particular the report on Regulation

expect it to be future proofed at that point and we would want transmission companies to be looking holistically at how they develop their networks.

As set out in our cover letter we also still see value in a 5 yearly checkpoint, providing an opportunity to take a holistic view of the parameters and issues such as financeability, which have to be looked at in the round.

Given the scale of infrastructure investment that transmission companies will be delivering and the extensive construction work involved, there needs to continue to be a focus on the environmental impacts in terms of embodied carbon, biodiversity, SF6 and the implications for communities. Resilience (including network reliability, climate adaptation and cyber security) also remains crucial as we become increasingly dependent on electricity. Within ASTI there are also now incentives for timely delivery of the infrastructure. As highlighted in our covering letter, the "incentives" that exist within RIIO for delivery of key outputs are an important part of ensuring the framework delivers for customers and should be maintained.

A whole system approach is important in understanding the interdependencies between transmission and distribution, ensuring that there is adequate capacity at Grid Supply Points so that connections at distribution level are not delayed by lack of transmission capacity. The FSO could have a facilitation role in this process but given the urgency of the issue, Ofgem should be pressing for greater co-ordination now (as it does in its latest open letter on connections) rather than waiting on the FSO to deal with it.

Q.7. What is the potential for Electricity Distribution planning and commissioning to move to an alternative model by the end of RIIO-2, and what might be the benefits and costs of doing so?

Significant investment is needed in the electricity distribution networks to support the electrification of local heat and transport and the connection of distributed generation and storage. As on transmission there is a need for strategic investment to avoid delays when customers want to connect but the challenge is the uncertainty around when and where the additional capacity will be needed. Flexibility can be used to help manage that uncertainty but is not ultimately an alternative to infrastructure investment. Taking a strategic approach to investment in distribution will be more efficient in the long term than an incremental approach but requires Ofgem to change how it judges efficiency, moving away from a focus on short term costs.

In evidence to the BEIS Select Committee on Decarbonisation of the Power Sector[14], Professor Sir Dieter Helm argued that "the consequences of too few networks are much, much worse than having too many". He highlighted that if networks are not adequately upgraded, they will block net zero from being achieved, but if they "are slightly over-invested, the costs across the whole customer base are small, and in any event the assets will in due course probably be needed". We endorse that view.

We cannot conceive of "Plan and Deliver" being an effective option for ED by the end of RIIO-2 - or more pertinently 2 years before the end of RIIO2, which is when the Business Plan process for ED3 would need to start. The FSO would, at best, need time to develop the capabilities to develop local plans. However, we have concerns as to whether the FSO should ever take on more than a 'thin' co-ordination role. For regional energy planning, local engagement is key in supporting local government net-zero transition plans, and it does not make sense to duplicate this engagement and

[14] https://committees.parliament.uk/publications/39325/documents/193081/default/

the skills required in the FSO. It is also important to be clear about where risks sit – if the FSO does not propose or agree to an upgrade where does ultimate responsibility sit for issues with reliability or connections performance?

Moreover, with a significant proportion of the investment required being at LV level (with a high volume of relatively low cost interventions) it is not clear that a top down plan would ever be the right approach. New analytical tools are needed for planning under uncertainty – for example using real options concepts to identify trigger points for upgrades. Decisions to upgrade secondary sub-stations, for example, do not necessarily need to be planned out 5 years in advance but with better monitoring and visibility of the LV networks (as demanded in ED2) the networks can evolve their LV networks on a more agile basis. While there may be elements of a more planned approach at higher voltages (or to coordinate works in a local area) it is hard to translate "Plan and Deliver" into a distribution context.

While there are not the same practical barriers in moving to "Freedom and Accountability" it is also unclear what the benefits of so doing would be and simply allowing cost pass through without an efficiency driver (and without any limits on the levels of investment to be undertaken) does not seem to be in consumers' interest.

There are also costs associated with a fragmented approach, applying different archetypes to different cost categories in electricity distribution. One of the merits of the totex approach under RIIO is that it recognises the trade-offs that exist between different categories of costs. Indeed, the totex approach combined with the efficiency incentive was one of the factors driving DNOs to look at flexibility as an alternative to traditional investment in ED1. Equally DNOs need to be thinking about how to manage synergies between their load and non-load related work, for example.

The output delivery incentives framework in RIIO is seen as world leading and has driven a focus on customer service, reliability, and support for vulnerable customers – all of which are as important as ever. In ED2 we were disappointed that more focus was not put on environmental issues like SF6 and losses which remain crucial going forward. It is unclear how this output delivery incentive regime would sit with the alternative archetypes.

Q.8. What is your view on the most effective approach to regulation of Gas Distribution and Transmission beyond RIIO-2? What would be the benefits and costs of moving to a simpler approach to regulation of the ongoing costs of operating and maintaining the network?

We cannot see any case for moving away from a RIIO style incentive regulation for gas distribution for the next price control at least. While there may be a case for a different approach for significant hydrogen infrastructure or possibly for large scale decommissioning, there is a need to better understand what is involved in those activities and how they might best be delivered before deciding on a new regulatory approach. There is flexibility in RIIO to accommodate small levels of costs in these areas to aid learning.

An early assessment of a realistic timeframe for decommissioning or repurposing of the gas grid is urgently needed. GDNs cannot decommission or repurpose the network until all customers on that part of the network have moved to heat pumps or have hydrogen ready equipment in their homes. It is hard to see this happening beyond pilots / demonstrators in the next decade. This all needs to be better understood to inform decisions being taken now (eg on levels of replacement investment) but it does not feel as if we yet need a distinct regulatory framework to deal with decommissioning.

As noted above, the question of what makes for a "simpler" approach is not inherently about the archetypes that Ofgem presented but about the level of scrutiny applied. For example, in RIIO2 Ofgem introduced significant additional complexity into its regulation of the repex programme (eg with separate targets for different pipe diameters) because of concerns flagged in the CEPA report on lessons from RIIO1 about the risk of companies gaming the previous incentive and focussing on cheaper smaller pipes to meet their volume targets. These sorts of issues persist whether the model used is ex post or ex ante. The question for Ofgem at this point is whether the perceived risk justifies the additional complexity.

With the Iron Mains Risk Reduction programme nearing its end there may well be less scope for companies to pick and choose what they deliver making a simpler approach to that strand of the control more appropriate. However, we would caution against simply treating these costs as a pass through given the risks of escalating costs as the programme nears its completion.

On gas transmission there is more prospect of the FSO being able to produce a strategic network plan. However, Ofgem is still only "proposing to consult" on the FSO taking on that role. Developing a genuinely whole systems view requires an understanding of trade-offs that will take time, and significant engagement, to develop, with a number of key policy questions still unanswered.

Q.9. Should there be a shorter-term price control in gas distribution and/or gas transmission, and how could this work in practice?

We are not convinced of the arguments that Ofgem has presented for deferring the gas distribution / transmission price controls. In particular we are not confident that the promised hydrogen for heat "decision" in 2026 will provide the level of certainty or geographic specificity to justify delaying two years – or that there will be significantly greater clarity on the approach to hydrogen infrastructure. As noted above we are not persuaded that the FSO will be in a position to contribute materially to a cross vector plan in that timeframe (especially down at the local level). Indeed, it is not clear that the gas-electricity interactions will be that significant for this next price control period unless there is a huge increase in the rate of installation of heat pumps on a geographically clustered basis.

Finally, we also have concerns about the resource implications for Ofgem of aligning the distribution price controls and whether this will result in the complex issues around the future of gas networks not being given the attention they need. Electricity distribution is the most demanding of the price controls which Ofgem gave as a reason at the start of RIIO2 for not aligning electricity transmission and distribution. Overall therefore we are not persuaded of the case for a two year interim control.

That said, given where we are in the process it is hard to see that any other option is viable. Our experience of GD2 and T2 was that the compressed timetable impacted negatively on the quality of the plans and the companies' engagement (with eg the decision on Sector Specific Methodology only being available a month before draft plans had to be submitted and with further changes to the Business Plan Guidance after that). The ED2 process went much more smoothly as a result of more of the parameters having been clarified earlier in the process. We are significantly further behind in the process than we were at this point in RIIO2 when there was a full review of learnings from RIIO1 (by CEPA) and a comprehensive draft Framework. As such it is hard to see how Ofgem could actually move ahead now with a full price control for GD / T even if it wanted to. For Electricity Transmission the ASTI programme means that more has already been settled in terms of the major investment needed over the period but the compressed timeframes will still create a challenge.

If there is to be a shorter term price control then this needs to be signalled as quickly as possible to avoid wasted effort by the companies and stakeholders who they are already looking to engage. We would also argue strongly for this being "a simplified roll forward" rather than a full mini price control. This is important in terms of the resource pressures on all parties. In particular we would argue that the time should be used instead to consider properly some of the more strategic issues around the future of the gas network, the risks of stranded assets and a "death spiral" with a smaller number of (typically lower income) households picking up an ever greater share of costs – but with safety needing to remain a priority while there are still customers connected to the network. There is little understanding of how decommissioning might work – or of alternative uses of the gas network (beyond repurposing for hydrogen) – which are all important questions that provide important context for a future price control.

Building a more geographically granular picture of likely hydrogen uptake by region is also important to inform any price control decisions. Some GDNs have been exploring this, building on their local knowledge of industry aspirations in their regions, but there is a need for an agreed approach that Ofgem would accept as underpinning any plans. Agreeing this will take time and discussions should start now, not wait for the FSO.

A comparison with water highlights the compressed timetable that Ofgem has adopted. For PR24 which comes into effect in April 2024 ie one year ahead of (what would be) RIIO3, Ofwat started the process in December 2020 with PR24 and beyond: Future challenges and opportunities for the water sector, then set out principles and subsequently a draft Methodology with their Final Methodology published in December 2022, ten months ahead of when the companies had to submit their plans.

While an extended process can be demanding on resources and may create its own challenges in a fast-changing sector like energy, we would encourage Ofgem to reflect more generally on the timelines associated with its processes – and the implications for companies and wider stakeholders - rather than simply the timing for the start of any new control.

Q.10. Would there need to be any changes to maintain a stable and consistent financial framework if we were to make greater use of different regulatory archetypes, and if so, what would those changes need to be?

Clearly major changes to the price control approach and the risks faced by investors would have implications for the financial framework and in particular the cost of capital.

The risks around asset stranding in gas point to the need for a review of asset lives – as highlighted in the debates at the CMA appeal on GD2 (which the companies sought to argue justified a higher cost of capital). However as cautioned in the Grid Edge Policy report submitted in response to ED2[15] this is not simply about determining the relevant economic lives but understanding the impact that the transition from one asset life to another has – which is not obvious.

Clearly if an ex post approach carries risks of costs being disallowed without any potential upside from outperformance that will create financeability issues with implications for the cost of capital. Some similar issues were explored in the SONI appeal to the CMA of NIAUR's price control decision in 2017.

[15] https://www.ofgem.gov.uk/publications/call-evidence-electricity-distribution-business-plans-riio-2

Finally, if the “mix and match” approach leads to different activities being subject to different controls on different cycles it is unclear how Ofgem would judge financeability which inherently has to be judged on a company wide basis.

Q.11. Do you have any views on our proposed analytical approach?

While the consumer interest framework is a useful tool it is hard to see how it will be used in practice to deal with such a complex issue as price controls. That said the approach outlined of comparing proposals against an evolution of RIIO as the counterfactual and considering the impacts on company behaviour of different regulatory approaches makes sense.

Annex 2: Network competition - the answer to yesterday's question? (Utility Week May 2022)

In her latest column for Utility Week, Maxine Frerk challenges the rationale for introducing competition in onshore networks.

Out of the long list of things promised in the upcoming Energy Bill, one stands out for me as being of questionable value and that is the introduction of competition in onshore networks.

The idea of competition in networks is one that Ofgem has championed for over a decade but the world has moved on and with net zero and energy security now top priorities is this still really the right path to go down? …If indeed it ever was.

Back at the start of this year energy secretary Kwasi Kwarteng in an open letter to the sector regulators reiterated the importance of the role of competition in infrastructure delivery across energy, telecoms and water.

However, in the Energy Security Strategy, government talked about the importance of having the network infrastructure to deliver on the huge increase in renewable generation being promised. It set an explicit goal of halving the time it takes to approve new network infrastructure including by streamlining the regulatory decision-making process. Introducing an additional competitive tendering step in the process is not the way to achieve that and the strategy said that certain infrastructure covered by the ESO's new central plans would be exempt from the introduction of network competition.

There would seem to be real tensions between the government's broader market philosophy and its ambitions for more home-grown green energy fast.

Moreover – even absent those tensions - I am sceptical about the benefits of network competition.

The enthusiasm for network competition over the past decade has been driven by reports such as one produced in 2016 by CEPA (commissioned by Ofgem), which highlight the cost savings achieved in the offshore (OFTO) regime. However, the CEPA report and an earlier NAO report both acknowledge the lower risk that these companies are taking on, with, for example, a 20-year framework and guaranteed return. Under the OFTO regime the assets are only tendered once they are built so there is no construction risk and Ofgem's regime of "income adjusting events" was expected to protect OFTOs against construction faults that were outside their reasonable control.

However, since 2016 the operation of these networks has not been plain sailing with the Gwynt y Mor cable in particular suffering a number of faults. The resulting legal battles aimed at establishing where liability sits highlight a need for an updated review of the OFTO regime, if that is the example being relied on to support competition onshore.

Once account is taken of the allocation of risks, and Ofgem's recent tougher stance on the cost of capital under RIIO, it is not clear how far competition in the OFTO regime is really delivering a lower cost of capital.

And in terms of the wider benefits of competition in driving down costs and finding new solutions it must be remembered that the network companies already take advantage of this. Although they are monopoly providers they make use of contractors, appointed through competitive tender, to deliver a large majority of the work.

The benefit of this in-house competition model over what is proposed is that the networks still retain responsibility for, and the licence obligations around, the quality of service that is delivered, helping mitigate the unintended consequences of competition that can be hard to manage otherwise.

Following the debacle that we have seen over the past year in the retail market, policy makers should be in no doubt that there can be unintended consequences of competition that need to be thought about. The recent Oxera report on lessons learned concluded that defining the risks was key, that the success criteria should be set in terms of outcomes that should be monitored and that qualitative and quantitative evidence is needed to make the trade-off between competition and resilience. However, worryingly, the Oxera report also noted concerns that Ofgem was "galvanised into action to fix yesterday's problems rather than seeking to understand tomorrow's." Has anyone actually done the exercise of thinking through what the unintended consequences of network competition might be? It seems unlikely.

Indeed, it is worth remembering that we already have competition in networks onshore through the independent networks serving close to 3 million customers. In 2019 Citizens Advice raised concerns about whether that regime delivered any benefits for customers but Ofgem has not responded.

Competition has its place. We need it to deliver innovative new flexibility services and to support the wider delivery of our net zero ambitions. But I remain unpersuaded that it is the right way forward for networks.

Having been mentioned in the Queens Speech and with draft legislation ready to go I think it's unlikely the idea will be dropped. However, I hope that during the passage of the Bill Parliament will have a chance to debate whether this really is the right approach for today's world. It may be a useful additional tool for Ofgem to have in its toolkit but it should only be used if is clear that it will not create delays in building the infrastructure we need, that consumers will actually benefit and that any unintended consequences have been fully thought through. That case has not yet been made.