

Octopus Response: RIIO ED3 Sector Specific Methodology Consultation**December 3rd**

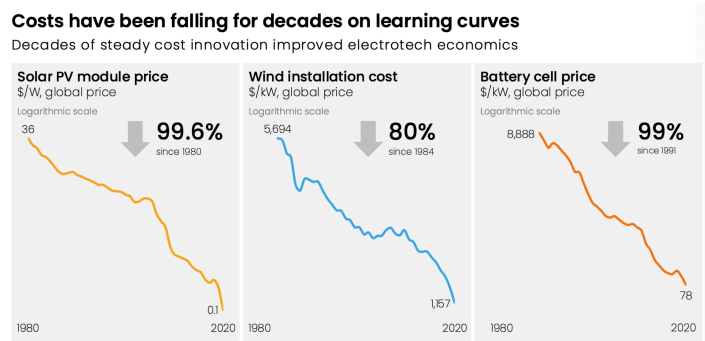
Many thanks for the opportunity to respond to the RIIO ED3 Sector Specific Methodology Consultation (SSMC). We are looking forward to being very engaged in the ED3 process and would welcome opportunities for suppliers, flexibility providers and others close to customers to engage further. The most recent DSO: Smarter Networks working group covering flexibility had very little representation from the flex sector, indicating the meetings are not reaching a wide enough audience beyond DNOs. Wider engagement opportunities should include challenge sessions with DNO CEOs and workshops on issues such as the value of flexibility and its use in network deferral and reduction. Below are our key reactions, followed by our response to questions.

RIIO ED3 represents a crucial, sliding doors moment for net zero and electrification:

As it stands, ED3 is at risk of incentivising overbuilding and saddling customers with the cost of £bns of upgrades that were not needed or could have been delayed. Ofgem must adopt a plan and adapt approach.

- Rising electricity bills are threatening electrification. For many, energy bills are already unaffordable. The amount of money owed to energy suppliers by customers has increased to a new record high of [£4.4bn](#). Three-quarters of Britons are concerned about their energy bills this winter, and 60% don't think energy bills will ever become more affordable ([More in Common, 2025](#)). People are more likely to report being worried about paying for their bills (52%) than not (40%) ([DESNZ, 2025](#)). Forecasts show that even after the measures announced in the budget, the bill trajectory is currently on track to rise by 2030, in part driven by significant increases to transmission investment costs. All of this indicates that high energy costs, a wide spark gap and affordability issues could slow the uptake of the electricity-intensive technologies like heat pumps and EVs. There is a substantial risk that the cost of building the grid to accommodate 2-3x more electricity demand is the very thing that prevents people from switching from gas to electric heating or buying an EV.
- Demand forecasters are often wrong. ED3's focus on proactive investment and moving away from using flexibility to reduce network investment is predicated on demand growth. However, FES consistently predicted demand increasing, when in reality demand fell until 2024 and still lags behind pre-pandemic levels. In the EU, electrification has remained at 22-23% of final energy use for over 5 years. Recent Ember analysis highlights that there are no high electricity price, high electrification countries. Even more important than total demand is peak demand, which is even harder to forecast. For instance, overall demand could be falling whilst the maximum peak across substations rises in response to peakier loads. Yet simply extrapolating peaks from today's total demand volumes into peaks for a 2-3x increase in demand will almost certainly result in an overbuild.

- Demand is steerable. Not only is the shape of demand changing, but also its ability to be harnessed. New demand is predominantly steerable and shiftable and will increasingly be bidirectional. There is now substantial evidence on customer behaviour and flexibility from all types, demographics, and capabilities (automated and manual). Using publicly available information, it is possible to estimate the average network utilisation in the UK. UKPN sits at around 25% and a plausible range across the UK is between 15-26%. This level of utilisation, at a time when demand forecasts are uncertain, should provide sufficient cause for pause to significantly expand the grid. There is huge potential to improve utilisation by sculpting demand, and DSOs should be refocused on optimising utilisation ahead of network reinforcement. Put simply, a x2-3 fold increase in demand does not necessitate a x2-3 increase in grid capacity. Harnessing flexibility is key to reducing and delaying the need for DNO investment and providing **optionality** in the face of uncertainty. Flex will also provide active support to the distribution grids for voltage, congestion, losses, connections and much more.
- Technology costs are falling: costs for technologies such as batteries and solar panels are rapidly falling and could profoundly change what grid infrastructure is required. Lithium-ion battery cells have seen impressive price reductions - since 1991, prices have fallen by around 97%, with costs expected to continue to fall. Na-Ion battery prices have been touted as \$10/kWh - a 5x decrease on Li-ion (CATL, and Hithium). Batteries are a direct alternative to increasing capacity through network reinforcement. Analysis of London's Cockfosters substation shows that 500 4kW domestic BESS could be used instead of network upgrades to manage congestion. If this approach were taken (or a mix of domestic, community and larger batteries), there would be additional benefits to customer bills, connections, curtailment, outages, voltage, losses, and system flex. V2G will also have a significant impact by offering ~80kWh of flex, compared to a standard battery install in the UK of 10-15kWh, providing ~x6 more flex capability than what is typically provided by today's BESS. Such changes have significantly impacted other countries' grids, such as Pakistan.



[Ember \(2025\) Electrotech Revolution](#)

Consequently, there is a risk that the gap between expectations and reality is wider than at any time in recent history. Some network upgrades and load investment are needed,

and this must be delivered at the least cost. However, once Ofgem has decided to authorise a significant network upgrade, customers will be required to pay for it for decades to come, whether it was needed or not. Distribution networks benefit from comparatively quicker investment timeframes than transmission networks, meaning that significant investment does not need to be locked in in the face of uncertainty. As such, the DNO/DSOs need to be highly adaptive and able to reprioritise and respond to changing requirements. **It is vital that Ofgem takes a fresh look at its SSMC before proceeding, and incorporates a plan and adapt approach. Ofgem has the opportunity to build a flexible, efficient and smart distribution system that drives down costs, accelerates connections and manages demand growth.**

What needs to change in ED3? We recommend the following key changes:

1. Set an affordability envelope: to date, the impact on customer bills has always been a product of the price control review, with no understanding of what an affordable bill increase is. Instead, Ofgem must set expectations at the outset, outlining that whilst an increase to distribution costs is likely necessary, this comes within a context of wider pressures on customer bills. This must then inform how DSOs set out their ED3 plans, influence decisions such as the phasing of costs and timing of fast money, and ensure that low-cost options are incorporated (such as using uncertainty mechanisms for investment needs that are not certain). If there is still a large increase to customer bills, further ideas to mitigate the impact should be explored (e.g. back-end loading costs through a more sophisticated depreciation profile or, if not, a private finance-backed securitisation). The process should include a bill projection (in the context of other cost pressures, such as T3) when business plans are submitted. The ~10-year projection should model a variety of demand pathways and provide a clear percentage price rise per DNO.

2. Empower DSOs: Despite progress, the RIIO framework is subject to complex incentives across network planning. For instance, conflicts of interest between non-wire and capex decisions remain, due to legacy skills, processes and expertise, plus comparatively nascent flex opportunities and DSO incentive. Furthermore, in a period of higher-capex build, there may be merit in reviewing the TIM and its link to driving underinvestment. RIIO ED3 should reduce complexity and streamline the financial outcome incentives, most of which should sit with the DSOs.

DSOs should be empowered to deliver the least-cost pathway, through being funded with a small number of sharp, targeted incentives to plan, operate and manage an efficiently sized, flexible grid. Comparative performance metrics and reputational incentives are critical for the DSO role. The DSO should improve network utilisation; outline additional capacity requirements and where non-wire solutions can meet these or where reinforcement is appropriate; and set out what network build is necessary. Voltage, losses and resilience should be reported on and balanced alongside utilisation; DSOs must provide leading data and digitalisation services; and coordination with NESO should be improved across flex and congestion management, data sharing, connections and network planning (e.g. see [recommendations](#)). DNOs should deliver the critical

infrastructure upgrades on time, as set out by the DSOs, as well as deliver maintenance and connections (some connection policies and targets could sit at the DSO level, which should be discussed further). To further reduce the complexity across the framework, removing the SIF and NARM could be considered. At a minimum, Ofgem must improve the accountability and transparency of DNO performance and network investment decisions. Ofgem should publish at least the following information annually, as required in [Australia by the AER](#), and average network utilisation figures (see [here](#)).

3. Centre flexibility at the heart of ED3: we estimate there is ~13GW of flexible consumer demand on the system today¹. At the same time, DNO network utilisation is estimated to sit between 15-26%. Octopus is actively promoting the connection of more assets over the next 5-10 years as people switch to electric heating and EVs. These assets are flexible load, the shape of which is increasingly steerable, especially with the evolution of customer facing products such as Intelligent Octopus, and as people invest in domestic batteries as their prices fall [see: [Technology costs are falling](#)]. This means ED3 needs to encourage DSOs to explore and learn how to use this flexibility to improve network utilisation, building out new capacity only when it is really needed, and demand flex is not possible, has been exhausted or is too expensive. An ED3 approach that predetermines a certain amount of grid reinforcements on an ex-ante basis removes the potential to use flex. Flex needs various revenue streams to grow as an asset class, and CP30 is relying on consumer flex growing to reduce network costs, wholesale costs and system balancing costs. If the DSO flex revenue stream is significantly reduced, this risks holding up the CP30 ambitions for flex. ED3 represents a significant move away from the status quo. Currently, distribution flex is used and valued in line with network deferral, with the other cited use cases (outages, curtailment, connections) at a much earlier stage of development. Whilst we agree with the use of flexibility for wider value cases, this stance puts at risk DNO flex.

Furthermore, the [Centre for Net Zero](#) modelling estimates that from 2030, flexibility from domestic heat and transport alone (i.e not including the flex from domestic batteries or V2G) could reduce the need for dispatchable generation and distribution network capacity by 25%, with a cost reduction of around £5bn yearly. The NIC also conservatively estimates total savings of £6.7- £7.9 billion from 2024 to 2050 from network deferral and avoided generation build-out. The ED3 settlement must encourage DSOs to explore how best to use demand flex, reduce capex, and its value in providing optionality in the face of uncertainty. This should include tools such as 1) Implicit Flex - Dynamic Overlays, 2) Explicit Flex - DSO Markets, 3) Flex/Alternative Investments - DSOs providing funding for alternatives to network capex, such as battery assets or energy efficiency, in partnership with third parties like suppliers. DSOs should develop flexibility capabilities to develop commercial services for voltage and losses from DER.

Answer to Questions

Q1.What are your views on our regulatory guiding principles that will inform the development of accountable investment planning and delivery?

¹ Sources: Zapmap, MCS, NESO CP30, Octopus uptake projections based on CCC

- **“Consumer value** - *Infrastructure funded through ED3 must be delivered in full and on time, ensuring consumers receive the outcomes they are paying for.*” This should be updated to reflect the overall value to consumers, not only infrastructure delivery, which represents one aspect of the framework. Wider consumer value should include overall bill impacts, whether DSOs opted for the most cost-effective solutions, whether infrastructure was delivered at least cost, and outcomes such as speedy connections and digitalisation.
- **“Strategic alignment** - *Investment plans must align with the tRESP, national decarbonisation goals, and long-term system needs*”. This value must include electrification and affordability as strategic goals. Network growth is predicated on electrification, and if costs disincentivise electrification, then there is a heightened risk of stranded assets.
- **“Transparency and accountability** - *Plans and delivery must be traceable, with clear metrics and reporting to hold DNOs to account*”. The reporting requirements should be [updated](#). Annual public reporting must be available as soon as possible in the price control period.

Q2.Are the proposed objectives for the long-term integrated network development plans appropriate?

We agree there is value in network development plans not being limited by a 5-year price control timeframe, and plans are aligned across sectors and local ambitions. However, any long-term view of network needs must include assumptions and projections for a variety of demand and generation pathways, with the regulatory framework allowing and encouraging adaptation. Network development plans should be holistic and should incorporate alternatives to traditional reinforcement solutions, such as flex. DSOs should explore options such as funding third parties to install and operate batteries when they are a cost-effective solution, recognising the wider value batteries provide. For instance, analysis of London’s Cockfosters substation shows that 500 domestic BESS at 4kW would be required to manage congestion. This approach (or a mix of domestic, community and larger batteries) would provide direct bill reduction and grid services such as voltage, losses, system flex, connections, and outages. Key to improving network planning and decision-making is improving visibility of the existing status, including network operations and management, age and asset conditions, utilisation and headroom capacity, voltage and losses, connection timings and curtailment, and extent of demand response to signals such as network tariffs of flex contracts. Transparency and accountability for investment decisions are also important.

Q3.What are your views on the proposed structure and contents of the plan?

The proposed structure seems broadly sensible:

- Demand analysis: forecasts should include the link between network build, costs and the impact on demand growth. It should also include what assumptions it has made and what uncertainty there is in these forecasts.
- The plan must be holistic and include an analysis of alternative investment options, such as flex or batteries and the cost assumptions included for the analysis.

- Transparency on what is driving investment: age, load growth, programmatic approach, and lack of flexibility in the area
- Transparency on decision-making: e.g. network reinforcement planned at HV level due to 4-year lead time required.

Q4. Do you agree with the proposed use of tRESP outputs in DNOs' network impact assessments?

No. It is difficult to agree as the tRESP is not yet available and its remit has been significantly limited (including excluding wider datasets, lacking bottom-up community engagement and blunt inclusion of flex). As it stands, this will be a barrier to delivering a smart, flexible energy system. DSOs should be responsible for network planning, operation and management, determining what balance of implicit vs explicit flex, flex investment vs traditional reinforcement is required (and to be delivered by the DNO). Consequently, DSOs should continue to work in tight coordination with local actors (gas networks, local authorities and governments, businesses, communities) on their panels/boards.

Q5. What are your views on the guidelines for proactive investment decision-making across all DNOs?

We do not agree that long-term proactive investment is necessarily required in all situations, especially given the comparatively shorter lead times for DNO investments. The emphasis that ED3 has placed on proactive investment risks overbuilding, in anticipation of demand growth that remains uncertain, will add to high customer bills at a time when many are struggling to pay their bills. Whilst guidelines are useful and there is value in moving towards consistency in network planning, DSOs should be empowered to deliver the least-cost pathway through being funded with a small number of sharp, targeted incentives to plan, operate and manage an efficiently sized, flexible grid. The DSO should improve network utilisation; outline additional capacity requirements and where non-wire solutions can meet these or where reinforcement is appropriate; and set out what network build is necessary. DNOs should deliver the critical infrastructure upgrades on time, as set out by the DSOs, as well as deliver maintenance and connections.

Q6. Do you agree that LV network reinforcement and unlooping of legacy service connections are suitable areas for a programmatic, area-based approach in ED3? Why or why not?

Unlooping remains a barrier to LCT deployment and adds a significant amount of time to customer installs when required. Improvements have occurred - for instance, UKPN has outlined that it will install 3-phase to avoid complications with looped properties, such as a neighbour's refusal. However, proactive approaches are not consistent across DNOs, and significant customer delays and issues remain. A programmatic approach to unlooping may therefore be appropriate to ensure homes are ready for LCTs.

For LV network reinforcement, there may be situations where a programmatic approach is suitable. However, greater transparency and accountability of decisions should be ensured, including for any programmatic LV network reinforcement. DSOs should be

empowered to deliver the least-cost pathway through being funded with a small number of sharp, targeted incentives to plan, operate and manage an efficiently sized, flexible grid. The DSO should improve network utilisation; outline additional capacity requirements and where non-wire solutions can meet these or where reinforcement is appropriate; and set out what network build is necessary. DNOs should deliver the critical infrastructure upgrades on time, as set out by the DSOs, as well as deliver maintenance and connections.

Q7. What are your views on the need for national consistency in the delivery of proactive unlooping programmes?

A proactive unlooping programme should be consistent, data-driven and standardised. It could also be combined with efforts to improve homes which are already being disrupted, such as with energy efficiency measures or LCT installations delivered by third parties. We do not agree that DNOs should have a role in the delivery of ECO (or a similar scheme); however, the area-based approach to disruption could be used to drive cost-reduction opportunities from bulk purchasing or installation works.

Strengthening Delivery Accountability

Q8. What are your views on high-level delivery accountability options and their respective strengths and limitations?

We see adaptability as central to ED3 and empowering DSOs to balance network investments and alternative options, such as flex. We do not see merit in delivering network investment that is no longer needed by tying deliverables to specific upgrades. Instead, we propose that the framework focuses on holding DNO/DSOs accountable for outcomes such as delivering connections quickly and improving utilisation. We note the TANCI metric proposed by UKPN and NPG appears to align with some of these principles.

Q9. Should delivery accountability mechanisms prioritise certainty over flexibility when funding low-regret, proactive investments aligned with strategic value decarbonisation and growth goals?

We see adaptability as central to ED3 and empowering DSOs to balance network investments and alternative options.

Q10. Are additional delivery incentives needed, or can a combination of accountability mechanisms and output-based incentives sufficiently ensure delivery performance?

We see adaptability as central to ED3 and empowering DSOs to balance network investments and alternative options. We do not see merit in delivering network investment that is no longer needed by tying deliverables to specific upgrades.

We propose that the framework focuses on delivering and holds DNO/DSOs accountable for an agreed set of outcomes, such as delivering connections quickly; improving utilisation in balance with voltage and losses.

Adapting for additional investment needs during the ED3 period

Q11. What are your views on the assessment of the adaptability mechanisms, and should additional criteria be included?

Q12. How could the adaptability options be refined or combined to better support timely and strategic investment during ED3?

Q13. How can adaptability mechanisms be designed to ensure DNOs respond quickly to new network needs while maintaining transparency, accountability and value for money?

The DNOs/DSOs need to be able to adapt and reprioritise in response to new developments, trends and growth, with the ED3 framework encouraging and allowing this. Any adaptability mechanisms should cover all investment options, such as battery investments or flex, as well as network investments.

Conceptual Models for ED3 Delivery

Q15. What are your views on the combination of mechanisms presented in the two conceptual models? Do they effectively illustrate how different regulatory tools could be packaged to support strategic delivery in ED3?

Q16. In the context of ED3, do you consider that we should put more emphasis on Plan and Adapt or Plan and Deliver — to be more appropriate for achieving the guiding principles set out in Paragraph 3.5? Please explain your reasoning.

The DNOs/DSOs need to be able to adapt and reprioritise in response to new developments, trends and growth, with the ED3 framework encouraging and allowing this. We see adaptability as central to ED3 and empowering DSOs to balance network investments and alternative options.

Q17. Are there additional mechanisms or combinations of mechanisms that should be considered to better support strategic, accountable, and adaptable delivery in ED3? If so, how might they complement or improve upon the models presented?

As outlined above, a model more akin to plan and adapt is suitable for ED3. This allows for uncertainty, reprioritisation and efficient investment spend and delivery. We disagree with Ofgem's emphasis that *"Our current position is that we should put more emphasis on plan-led delivery and ensuring that consumers receive what they pay for. While this may reduce some in-period efficiencies in procurement and delivery, we consider these trade-offs to be proportionate."* We agree that customers should receive what they pay for. However, consumer value means driving the right network outcomes overall - not just ensuring that an ex ante view of new network capacity is delivered, regardless of whether it is needed or not.

Connections

Q18. Do you agree that the connection types of 'minor' and 'major' should be redefined? If so, do you have thoughts on how they should be redefined, via voltage works required, customer type, a blend of the two, or a split not considered here?

Yes, the connection types should be redefined. Redefining based on voltage is likely the simplest option, as defining customer types and segmentation poses challenges.

Q19. Do you have views or suggestions on how redefining connection types, with potentially more types being introduced, will be able to be operationalised at this level of granularity? See Paragraph 4.18.

Option 1: Option 1 - splitting connections by voltage work required: for example, 'minor' category for all LV works including LV generation, 'medium' category for LV-HV works up to 11kV, and 'Major' category for everything above or requiring a transmission impact assessment. Preference for option 1, which will need to be supported by industry-agreed solutions to the issues identified, such as if an LV customer triggers HV works, it will be defined as a HV connection.

Incentives for smaller connections

Q20. Do you agree with our proposal for LCT connections and their associated enabling works to be brought into the connections scope and incentivised, with the potential to set varying working day targets for different connection activities? Why?

Yes, we strongly agree. Timeframes, connection policies and customer experience for LCT connections vary significantly and are a barrier to installation. There has been resistance from some DNOs to voluntarily improving reporting, publishing policies and processes (such as auto approval policies in Connect Direct) or implementing standardised approval policies (such as all using load limiters to connect EVs faster). Incorporating the LCT connections as an incentive for the DSO is the best way to ensure a change or improvement in outcomes. We published data and recommendations on this issue earlier in the year: <https://octopus.energy/blog/dno-leaderboard/>.

Q21. Do you agree the incentive should be reward and penalty (as per the RIIO-ED2 minor connections incentive)? Why?

See above. Yes - reward and penalty. It is important that this is balanced and reflects the customer experience. We also agree with setting varying working day targets for different connection activities. Supported by Time to Connect/Time to Quote/Time to approve principles of the incentive, against minimum standards and/or service commitments.

Q22. Do you think any LCT connection incentive should be for domestic, non-domestic, or both? Why?

Both.

Q23. Notwithstanding the proposals we have set out under 'Redefining Connections Types', do you have alternative proposals for what DNOs need to do to speed up connection times for LCTs, and what incentives (other than those we have discussed in this chapter, obligations and/or funding may be required to support this? (chapter 4)

Transparent and comparable reporting by DSOs. Auto approval targets should be set, e.g. 80% of connections should be auto-approved. Connections not able to be auto-approved should be limited to where unavoidable works are required, with set deadlines for completing works. DSOs should publish transparent, easily understandable and comparable policies and auto approval conditions, alongside reporting and timeframe

expectations. A move towards standardised connection policies across DSOs would be useful.

Incentive for larger connections

Q24. Do you agree changes should be made to the MCCSS to increase participation and better reflect the customer journey? If so, what changes do you think are required and why?

Broadly, yes. As the MCCSS outcome tends to be positive for DNOs, it does not reflect the experience of many connecting to the distribution level, with long wait times and poor customer experience. To try and address the apparent disconnect here we propose that Ofgem consider the following adjustments to the survey approach for ED3:

- Streamline the ask on developers by requiring only one annual survey per market participant, covering all interactions with DNO/DSO. This is preferable to multiple survey requests and will help promote quality responses. There is a risk that feedback quality and response rates degrade the more that developers are approached for surveys.
- Given the increasing overlap, consider combining surveys on customer service, DSO performance and connections performance. This is particularly important given how crucial data transparency /self-service tools are to effectively processing connections at scale.
- Use a web-based survey rather than a telephone call.
- Ask all market participants as standard, to help drive up sample sizes and strip out complexity currently built into the process, based on market segmentation.

Whilst the survey could be improved, this should be done alongside other measures to improve the connections incentive, as alone a customer survey is not sufficient to drive change. The TTQ and TTC are only reputational, not financial, incentives, and so the MCAR does not sufficiently incentivise the right outcomes either. Given the need for an incentive for DNOs to strive for outstanding customer service and continued innovation, we also recommend Ofgem structure the new MCI as a symmetrical upside/downside financial incentive with a larger magnitude of both upside and downside than currently available, as well as minimum standards licence conditions and/or service level agreements (SLAs) to standardise service across DNO regions.

Q25. Do you agree with the proposals we have set out for changing the incentives for the RMS for the MCCSS for the purposes of encouraging faster and more transparent connections and improving the quality of offers and post-offer services provided by DNOs? If not, what other proposals do you suggest?

See above

Q26. Do you think we should financially incentivise the TTC metric in order to accelerate connections and achieve the right outcomes? Are there other changes we should consider? How would any change sit alongside the current incentives?

KPIs on connection performance should be routinely disclosed by network companies, e.g. GW connected by technology, Average curtailment % for non-firm renewable connections, Average time gap between requested and offered connection date, Average

time gap between application and offer. We strongly support codified 'Service Level Agreements' or standards that DNOs and NESO should meet throughout the connection journey, namely: Deadline for initial indicative offer following Gate 1 application, Deadline for Gate 2 readiness criteria initial checks, Deadline for submission of information to NESO (from DNOs), Deadline for NESO/TO Gate 2 assessment (e.g. a fixed number of days after each application window), Obligation to meet delivery milestones towards completion and energisation as set out in connection agreement. These should be viewed as minimum standards to provide a backstop on time taken for key milestones in the customer service journey, coupled with scope for financial redress when minimum standards are not met. This will allow developers to better plan their pipeline development and allocate development expenditure more efficiently. Improvements to data transparency and portals are also important. Where data is available, there is limited assurance on data quality. We have had several instances where connection transparency portals have been inaccurate. Accuracy issues have to be addressed for the market to make the best use of these tools.

Currently, DNOs maintain a passive, neutral position when working with customers and usually make limited efforts to influence towards a more effective/efficient connection solution, despite having lots of talented engineers and system planners who have insights on how connections can be delivered more effectively. This has resulted in, for example, lots of demand connections being over-provisioned and excessive use of point-to-point connections to individual projects when shared infrastructure could save cost. Network companies have rarely taken a portfolio view of connection delivery, which has missed possibilities to co-optimize projects and make better use of network infrastructure (e.g. sharing export capacity between solar and BESS can be a win-win, but instead projects are connected separately, nearby, with network assessment studies modelling a cumulative, rather than complementary, network impact). More transparency is needed.

Q27. Do you see value in incentivising SLAs/minimum standards? How should it be done and are there any associated risks or impacts?

See the above answer. We support a penalty/reward incentive for larger connections combined with as well as minimum standards licence conditions and/or service level agreements (SLAs) to standardise service across DNO regions.

Q28. Do you agree that we should not pursue the options we have set out that we would not consider further, ie incentivising flexibility and the SO:TO incentive? Why?

We agree with not introducing a SO: TO incentive. We support the use of flexibility and incentivising DSOs to improve network utilisation and quick connection timings, which should encourage DSOs to use flexibility in connection offerings. Market-based flexibility solutions must be used ahead of flexible connections (or non-market-based options).

Q29. Notwithstanding the proposals we have set out under 'Redefining Connection Types', do you have alternative proposals for how to incentivise timely connections and improve the quality of service for larger connections?

Our preference would be to have enforceable terms introduced into connection agreements that impose clear milestones on the networks as well as on developers. This would give developers legal standing to challenge bad practice, rather than relying on Ofgem to intervene via the licence framework. Milestone terms for networks should have damages attached (e.g. lost revenue due to delays). These should be in line with commercial terms in other agreements used by market participants across the sector (e.g. with EPC, O&M or other delivery partners throughout the renewable project lifecycle). We think it is appropriate that Ofgem creates a backstop standard on offer quality to minimise the risk of effective gaming of any speed of service-related SLAs created in relation to Q2. This should mandate the basic, key terms and supporting information that would be expected in an acceptable quality connection offer. If any offers are found to be inaccurate and need to be revised, this should be reflected in the 'clock stop' date used to assess compliance with SLAs on timing. Key terms we would like to see covered in this minimum standard include: Point of connection and high-level connection design, Itemised costing, in line with industry methodologies, Timelines and milestones, Specification and scope for contestability, Details on any constraints, with underlying methodologies and assumptions provided to reach these conclusions. Details on any curtailment expected, with underlying methodologies and assumptions provided to reach these conclusions. Transparency of status with respect to access/planning rights to actually reach the point of connection, so developers understand if an additional planning survey or consents are required for the proposed connection design.

Energy efficiency

Q41. Do you have any views on our proposal for DNOs to play a bigger role in the delivery of energy efficiency and low-carbon measures?

We do not agree that DNOs should have a role in the delivery of an energy efficiency scheme, similar to ECO. Retailers and other providers closer to the customers should retain this role, as they have a better understanding of end-users and the interface between low-carbon measures (such as a heat pump) and how the customer operates and pays for it.

Digitalisation and data

Q51. Do you agree with our proposed approach on all five themes? Why?

1. strategic outcomes and internal capability; 2. Data Sharing Infrastructure (DSI) participation; 3. interoperability and coordination; 4. ethical and proportional use of AI; and 5. asset visibility and dynamic asset data. Yes, broadly agree.

Q52. Do you agree with the need and role of the independent expert panel on interoperability? Why?

Yes, broadly agree.

Q53. Do you agree that DSAPs should include outcome-linked digital spend? Why?

CIM-level network data that third parties can build tools and services off the back of should be made available. This allows for data quality testing for the DSOs.

Distribution system operator

Q60. Do you agree with our proposed scope for the DSO's role in network planning for ED3, including leading long-term integrated development planning and enhancing forecasting? How should DSOs ensure that future iterations of these plans align with emerging strategic inputs such as the Regional Energy Strategic Plan (RESP) and Strategic Spatial Energy Plan (SSEP) when they become available?

Yes, we agree that the DSO role should include network planning, including leading the long-term integrated development planning. DSOs should be responsible for network planning, operation and management, plus what solutions are cost-effective across non-wire vs traditional wire reinforcement, and what tools are suitable to use across implicit vs explicit flex.

Q61. How should DSOs best coordinate with other parties (eg NESO, local authorities, IDNOs, gas networks) to deliver whole-system outcomes through network planning? Are there specific governance or data-sharing arrangements that should be strengthened?

DSOs should work in tight coordination with local actors (gas networks, local authorities and governments, businesses, and communities). These actors should have a place on the DSOs board and directly feed into and shape plans. Currently, DSOs have built up engagement and relationships with their areas that NESO, directing the RESPs, will struggle to replicate in sufficient time or with their current resources. Furthermore, there is a risk of parallel engagement - wasting time and resources. Coordination with NESO must be improved across flex markets, congestion management, data sharing, connections and network planning (e.g. see [recommendations](#)). Workstreams for market coordination under the market facilitator only are due years down the line; this workstream should be expedited now to contribute to ED3 discussions.

Q62. What additional data, digital tools, or visibility improvements are needed to enable DSOs to deliver proactive, spatially targeted network planning in ED3? Please provide examples of gaps or best practices.

CIM-level network data that third parties can build tools and services off the back of, which also allows for data quality testing for the DSOs. DSOs should be tracking and reporting a variety of metrics that should drive better data-driven decisions in network planning. This includes average network utilisation, average voltage, losses, connection speed, cost and use of flexibility, curtailment. This will provide critical data and information on the state of the network, including when flexibility is no longer sufficient to shift demand to be within network capacity limits, and so inform when network reinforcement is required.

Q63. How should DSOs incorporate flexibility services and connection process improvements into their network planning approach to ensure timely, efficient, and predictable connections? Should this be incentivised, and if so, how?

We agree with the ADE position: "DSOs should embed flexibility services and improved connection processes directly into their network planning by treating flexibility as a core

accompaniment to reinforcement rather than an optional add-on, or avoiding it. This means systematically assessing how demand-side flexibility, storage, and on-site generation can release or preserve headroom, shorten connection timelines, and avoid unnecessary network build, particularly for industrial sites. To do this effectively, DSOs must work from high-quality, locally grounded data and incorporate transparent, standardised processes for forecasting, queue management, and capacity allocation. A dedicated connections incentive would drive DSOs to use flexibility proactively and deliver predictable, efficient, and well-explained connections. This incentive should require: publication of granular connection and headroom data; standardised timelines and methodologies for offers; clear justification of costs and dates; and improved NESO–DNO coordination.”

Flexibility

Q64. Do you agree that changes are required to the CEM tool to implement our proposed approach in ED3? Are any other changes needed?

The CEM tool or a different methodology and tool should be adopted to value flexibility and its grid services more widely. The CEM tool is limited just to network deferral (which remains important) but does not fully capture the wider benefits of accelerated connections, outages, curtailment minimisation and network delivery support. As it stands, we are at risk of seeing each of the DSOs develop their own methodologies or tools for flex, which would result in complex and varying valuations of flex. This effort should be led by the market facilitator to drive forward this piece of work in a standardised manner.

Q65. How can we best ensure that flexible connections aren't deployed at the expense of network reinforcement?

We do not agree with this. If flexible connections can support faster connections without the need for reinforcement, then this should be utilised and encouraged. Market-based flexibility solutions must be used ahead of flexible connections.

Q66. How can we best ensure that DER/CER are not prevented from accessing wider flexibility markets due to the use of ANM or lack of NESO-DSO coordination?

Non-exclusivity clauses across services. The market facilitator's market coordination workstreams should take place now in the context of ED3.

Q67. Are further incentives required to incentive and encourage the use of flexibility in line with our approach for ED3?

There should be a small number of sharp, targeted outcome incentives. Network utilisation plus keeping costs down to deliver outcomes such as a flexible, efficient and smart distribution system.

Network utilisation: Whilst there have been improvements to grid monitoring and data transparency, data on average network utilisation remains limited. Ofgem should require that all DNOs publicly report at least their average network utilisation, using an agreed

methodology/calculation and with underlying data available. [See here](#) for more information.

Total electricity distributed on the LV network in 2024

Total LV capacity in 2024*

*Where total capacity during the year is equal to the sum of the capacity of each transformer at the LV/MV boundary * 8760 (the number of hours in the year). This first step must be taken to move towards more sophisticated reporting on network utilisation that better reflects the CER (consumer energy resource) energy system we are moving towards, for instance, by using the [TETU methodology as set out here](#).

DSOs should be enabled and have funding to use flexibility for all value streams (e.g. reducing or delaying network build, outages, delivery, curtailment reduction, accelerating connections, voltage, and losses).

Voltage management

Q68. Do you agree with the proposed voltage management responsibilities, for DSOs? Are there any aspects you disagree with, or any additional responsibilities we should consider?

Voltage is currently sitting at around 243V, although in some areas, meter points are outside statutory limits for extended periods of the year. We agree that the DSO role should include voltage; however, at this point, we recommend that Ofgem is not overly prescriptive. The DSO's responsibilities should explore the ability for market-based flexibility services to help optimise voltage (instead of a CLASS-based service to NESO). CVR should be explored, as the NPG BEET trial demonstrated that bills could be reduced by 3-5% on average by reducing voltage using smart meter data. The DSO responsibility needs to consider the complex interaction across utilisation, losses, voltage, congestion, bill impacts and interaction with the transmission system. Key to this is better reporting across all these areas, including for average voltage. Any DSO responsibility, strategy or incentive should reflect this context.

Q69. In your view what would be appropriate metrics or KPIs by which the success of delivery of these responsibilities could be measured? For each of these metrics or KPIs, should this target be codified in a licence condition or otherwise incentivised?

DSOs should, at a minimum, keep voltage within statutory limits. We do not consider a financial incentive to be appropriate to achieve this. At this point, we recommend that Ofgem is not overly prescriptive due to the complex interaction across utilisation, losses, voltage, congestion, bill impacts and interaction with the transmission system.

Better reporting across all these areas, including for average voltage, is critical. We propose that in ED3 DSOs are incentivised to balance network utilisation and that they develop a suite of tools and metrics to improve this in alignment with their ability to optimise voltage and losses.

Q70. How can we support DSOs in getting access to useful 3rd party voltage data from assets such as EV chargers?

DSOs already have access to smart meter data, can receive alerts and get 20-minute RMS values for voltage. They should be using this data as a priority. Once this has been done, other data sources could be considered - for instance, some DNOs outlined that they are not able to use the voltage data from mini-CADs.

Q72. For each of the options outlined for Providing Flexibility what are the advantages and disadvantages, and which would be your preferred option, including any that we have not considered?

We disagree with the proposal. Flexibility offered to NESO should be done on the basis of a commercial service open to and available to FSPs. We disagree with the implementation of this CLASS-based service, which could impact flex markets, headroom for other priorities, such as connections and result in DNOs artificially increasing voltage so it can be reduced, impacting other areas such as losses. DSOs should explore the ability for flex services to be used to help with voltage control. If the CLASS-based service is to be introduced, it must be in a limited way, with explicit priority given to connections or market-based flexibility services. "Option 2 - NESO is permitted to call on the service on a more limited basis, such as when the system capacity falls below a set threshold, or when the cost of balancing services rises above a set threshold."

Q73. Do you have any comments on the proposal for the creation of a new incentive for the provision of flexibility through demand reduction?

See Q72 answer.

Q74. Do you support the requirement for a published voltage management strategy from each DSO, with an annual reporting requirement?

Yes - standardised metrics should be set for DSOs across their roles, including for voltage. DSOs should explore voltage management and optimisation through flexibility services, as well as through innovative approaches such as the NPGs BEET trial. The DSO responsibility needs to consider the complex interaction across utilisation, losses, voltage, congestion, bill impacts and interaction with the transmission system.

Losses**Q75. Do you agree with the proposed working-level definition of loss optimisation as a cost-based, system-wide approach to managing distribution losses?****Q76. Do you support Ofgem's focus on loss optimisation over loss reduction in ED3? Why?**

DSOs should focus more on losses (which are likely around 10%) in their role, and use consumer flex to minimise them through commercial flex services, particularly as V2G comes online. We agree that the approach of loss optimisation is a data-driven approach that considers system-wide impacts of managing electricity distribution losses, both technical and non-technical, across planning, operational, and investment activities. Loss optimisation recognises that informed trade-offs will need to be made across wider

system efficiency, affordability, and decarbonisation. DSOs must be able to balance their activities across network planning, flex, voltage and losses holistically in this context.

Q77. How should we embed loss optimisation into ED3 and what are some of the challenges with this?

Standardised reporting should be set for DSOs across their roles, including for losses. Transparent and public recording for each of these areas should be used in coordination with a DSO strategy to drive improvements and develop tools to manage, such as flexibility, peak demand reduction or other measures. Efforts to move towards standardised and average measuring and monitoring of each of these areas could start over the remainder of ED2, and an incentive for network utilisation put in place for the beginning of ED3.

Q78. What mechanisms should be used to monitor and assess DNOs' impact on network losses, and how can loss optimisation be embedded into planning, operational, and investment decisions under ED3?

See above responses.

Q79. Do you believe there is a case for introducing financial or discretionary incentives to encourage active loss optimisation by DSOs? If so, what form should these incentives take (eg direct financial, reputational, discretionary rewards), and what risks or complexities should be considered?

See above.

DSO Incentive Framework

Q81. Do you agree that the proposed aims for the DSO incentive framework appropriately reflect the core functional areas for ED3 (flexibility services, network planning, voltage and loss management)? Are there any additional priority areas that should be included, and how should these be measured?

No. The DSO incentive should reflect the role and responsibilities that include using smart, flexible solutions as a cost-effective option to reduce capex spend. The **DSO incentive** should be empowered and funded with a small number of sharp, targeted incentives to plan, operate and manage an efficiently sized, flexible grid. Comparative performance metrics and reputational incentives are critical for the DSO role.

The DSO should ensure connections can be delivered at pace; improve network utilisation; deliver additional capacity requirements (deciding where non-wire solutions can meet these or where reinforcement is appropriate); and determine what network build is necessary. Voltage, losses and resilience should be reported on and balanced alongside network utilisation. For instance, this could include DSOs targeting areas of high average voltage by reducing these areas through flex services or CVR, in alignment with the data on utilisation, bill impact, losses or other trade-offs. DSOs must provide leading data and digitalisation services, and coordination with NESO should be improved across flex and congestion management, data sharing, connections and network planning (e.g. see [recommendations](#)).

In addition to financial rewards/penalties, we support the evolution of baseline expectations for DSO activities. These should outline minimum expectations for the above, set metrics/KPIs to be reported, and include requirements such as for DSOs to use a variety of tools, such as dynamic overlay tariffs. It should also strengthen the coordination across the NESO/DSO interface for markets, such as by reporting when DER access is prevented from providing system flex and enhancing understanding of distribution and system flex coordination, alignment or when it is sending different signals.

Q82. How should the incentive framework evolve to reflect the DSO's more proactive role in network planning, operational use of flexibility, flexibility market development, and whole-system coordination?

See the above answer.

Q83. Are the current parameters (Stakeholder Satisfaction Survey and Performance Panel) an effective way of measuring DSO performance? How do you view the role of Regularly Reported Evidence (RRE) in complementing these assessments?

No. Stakeholder satisfaction and surveys are both qualitative and general approaches to assessment. It means that due to the wide variety of activities, the positive and negative progress in these activities is generalised out to an average score that does not necessarily reflect the true differences in DSO performance. Furthermore, the panel depends on the information provided by the DSO, which may not reflect the true status - e.g. networks are less likely to reveal areas where they have underperformed. Notably, no DSO has received less than an average score in the DSO incentive, despite there being significant and wide variations in ambition and delivery. Furthermore, Octopus sat on the panel as the ADE representative this year, which was a very time-consuming process. It was disappointing that there was not sufficient engagement and commitment from Ofgem in the panel process, which limited the quality of the result.

DSOs should be first and foremost quantitative and metric-based, supported by the DSO performance panel and survey. The DSO incentive framework should be based on metrics and include sharp incentives.

Q129. Do you agree with our proposed approach to setting TIM sharing factors? To simplify and reduce the complexity and costs associated with RIIO, we propose removing SIF, NARM and reviewing the suitability of the TIM for a higher build scenario. For instance, the SIF does not deliver value for money, and was recently reported as lacking transparency by Citizens Advice: "only half of completed [SIF] projects report on outcomes, largely because the reporting template doesn't require them to compare results against original goals".