

## Accelerating onshore electricity transmission investment

Consultation Response – OFG1162

Ofgem

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### Executive summary

The successful delivery of the Government's 50GW by 2030 (50/30) target is vital for the achievement of Net Zero and energy security. The investment required to deliver 50/30 is huge. Transmission Owners (TOs) now need to develop ambitious and innovative delivery plans which reflect the scale of the challenge. This will involve alternative approaches, adoption of major infrastructure best practice, adoption of modern delivery thinking<sup>1</sup>, expansion of their own capability and capacity, and reach-out for support from organisations who are expert in managing and delivering programmes of this scale and complexity. Business as usual thinking and business as usual delivery will not deliver the government's 50/30 target. There is a clear need to enhance visibility, commitment, and confidence to allow the TOs and their supply chain to respond to this challenge.

Following our review of the Consultation document we agree with the fundamentals of the accelerated delivery framework suggested. In view of the scale of the work to be delivered, and the additional risks that this creates, we recommend additional control measures which Ofgem should consider to safeguard consumers.

In developing their delivery plans, TOs must go beyond business as usual delivery mechanisms. They must consider different ways to deliver the work including different contractual and commercial models. Ofgem need to ensure that TOs explore how this new regulatory framework can stimulate change to include:

- Programme led delivery based on major infrastructure programme best practice and lessons learnt.
- Use of up-to-date delivery thinking<sup>1</sup>, e.g., enterprise delivery models, commercial incentivisation, digital transformation and Modern Methods of Construction.
- Enabling the domestic electricity transmission (ET) market to rapidly invest in growth, innovation and continuous improvement — without which the government's target will not be achieved.
- Appointing experts with the capability and capacity to manage and control the scale and complexity of the projects.

This new framework is an opportunity to influence change beyond business as usual contractual mechanisms to encourage positive behavioural change in the ET industry, embrace delivery value, reduce the costs for consumers, and deliver social value and enhanced sustainability.

As a global provider of programme management services on multi-billion-pound programmes, we understand how major programmes of this scale should be set up, and how creating collaborative partnerships between the TOs and their supply chain are essential for successful delivery.

In summary, we recognise that the successful delivery of the Government's 50/30 target is vital for the achievement of Net Zero and energy security. We believe the accelerated delivery framework proposed is needed to enable TOs to achieve the 50/30 objective and we recommend additional safeguards to protect consumers.

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<sup>1</sup> Institution of Civil Engineers Project 13, the Government's Construction Playbook, and the IPA Transforming Infrastructure: Roadmap to 2030.

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### 1. STRATEGIC ONSHORE ELECTRICITY TRANSMISSION PROJECTS

#### Q1. DO YOU AGREE WITH OUR CRITERIA FOR IDENTIFYING PROJECTS IN SCOPE FOR THE APPLICATION OF THE PROPOSED ACCELERATED DELIVERY FRAMEWORK?

Yes, the criteria appears reasonable. We agree with the Transmission Owners (TOs) that the mammoth scale of the investment now required means that business-as-usual (BAU) thinking and BAU delivery will not deliver the government's 50GW by 2030 (50/30) commitment.

To accelerate the delivery of this vitally important infrastructure, Ofgem's accelerated delivery framework needs to:

- Acknowledge the scale of the investment now planned.
- Enable the TOs to develop delivery plans based on major infrastructure programme best practice and lessons learnt, and up to date delivery thinking<sup>1</sup>, e.g., enterprise delivery models, commercial incentivisation, digital transformation and Modern Methods of Construction.
- Ensure that TOs delivery plans are robust, implemented, and that they do not fall back on BAU thinking once the current constraints are removed.
- Enable the domestic electricity transmission (ET) market to rapidly invest in growth, innovation and continuous improvement through the TOs delivery plans — without which the government's target will not be achieved.
- Enable advanced design, specification and procurement of long lead items.

The response required to meet the scale and challenge of Net Zero, 50/30, and achieving energy security is directly comparable to the challenge presented by the Covid pandemic. In the same way that the Vaccine Task Force enabled a whole system approach; bringing together physicians, academia, and industry to work together to deliver vaccines years faster than normally possible; BEIS and Ofgem now need to work with generators, TOs, Distribution Network Operators (DNOs) and the ET supply market to expedite delivery of this vital infrastructure.

To further calibrate the scale of the challenge, the combined value of these 26 projects compare with the largest UK infrastructure programmes recently delivered or currently being delivered. The investment is directly comparable to Crossrail and Hinkley C New Nuclear Power Station, it is twice the size of the 2012 Olympics and 3 times the size of Thames Tideway and the proposed Lower Thames Crossing.

BAU thinking and delivery will not achieve the government's 50/30 target. TOs need to re-think their approach, adopt major infrastructure best practice and lessons learnt, expand their capability and capacity, reach out for support from organisations who are expert in managing and delivering programmes of this scale and complexity, and support the domestic ET supply market to grow and to be ready to deliver the circa 4 times greater annual volume of work to be delivered between 2025 and 2030.

#### Q2. ARE THE 26 PROJECTS IDENTIFIED THE CORRECT ONES TO INITIALLY FOCUS ON?

Yes, the 26 projects identified appear to be the correct ones to initially focus on. However, the achievement of 50/30 is predicated on the delivery of the 94 projects identified in the Network Options Assessment (NOA) refresh and many of these are interconnected. As we believe 50/30 would be best achieved through the adoption of a programme approach, we suggest Ofgem should consider all 94 projects within the accelerated

delivery framework. If related projects are regulated through different frameworks there is an opportunity of unnecessary bureaucracy, confusion and at worst gaming for financial advantage.

### 2. THE ROLE OF COMPETITION AND EXEMPTING PROJECTS

#### Q3. DO YOU AGREE THAT IT IS IN THE CONSUMER INTEREST TO CONSIDER EXEMPTING PROJECTS FROM COMPETITION?

Yes. The uncertainty that is created by the possibility of competition, and the impact this has on the behaviours of TOs, is impacting on delivery of the Governments 50/30 ambition — to the detriment of consumers. It prevents early challenge and development of projects, where greatest value can be identified. However, these exemptions should be subject to strict caveats based on TOs demonstrating genuine step change in the way large onshore transmission projects are delivered such that *"delays are avoided and delivery is expedited"* (2.10, Consultation document).

If the TOs have not demonstrated genuine progress towards this step change by the time the enabling legislation for competition is passed, the decision to exempt projects from competition should be reviewed.

#### Q4. WHICH OF OUR OPTIONS FOR EXEMPTING PROJECTS FROM COMPETITION DO YOU FAVOUR?

We favour Option 1 — all 26 projects. Exempting all 26 projects will enable greater benefit to consumers by:

- Enabling TOs to maximise the efficiency of delivery;
- Enabling TOs to develop their delivery plans with confidence;
- Enabling efficient procurement of the supplier capability and the capacity required to deliver the whole programme of works;
- Enabling suppliers to invest in growth, innovation and continuous improvement; and
- Enabling the early development of integrated designs and construction plans, thereby aiding the earlier creation of reliable estimates of cost and schedule.

It is our view that all impediments to expediting delivery of 50/30, both real and perceived, should be removed. In addition, TOs should be expected to implement delivery of these projects based on major infrastructure programme best practice and lessons learnt, and up to date delivery thinking<sup>1</sup>, e.g., enterprise delivery models, commercial incentivisation, digital transformation and Modern Methods of Construction. However, if the TOs have not demonstrated genuine progress towards this step change by the time the enabling legislation for competition is passed, the decision to exempt projects from competition should be reviewed.

#### Q5. DO YOU AGREE THAT WITHOUT UPFRONT CERTAINTY THAT THEY WILL BE DELIVERING ENOUGH OF THE INVESTMENT NEEDED FOR 2030, TOs WILL FACE SIGNIFICANT DIFFICULTIES MOBILISING THE SUPPLY CHAIN TO DELIVERY THE WORKS ON TIME?

We agree that early mobilisation of the supply chain (done well) is beneficial for several reasons:

- At a time of high global demand, it enables supplier capability and capacity to be secured.
- It enables suppliers to invest in growth, innovation and continuous improvement.
- It enables the early development of detailed designs and construction plans which feed into robust and reliable construction schedules and cost estimates.
- It aligns with current thinking on how to improve the delivery of large infrastructure projects.



- Early appointment creates time for new entrants to the market to develop their capability and/or grow their capacity.
- Early appointment done well will allow resource balancing between suppliers and between projects, enabling optimal use of critical and/or constrained resources.

However, early appointment of suppliers is not a panacea and does involve risks which could be harmful to consumers. Before allowing early appointment of suppliers Ofgem should ensure that TOs have:

- Carefully thought about how to procure and organise the capability and capacity required to deliver their programme of projects. This includes explaining how resources and capability will be balanced across all TO works, not just the programme under review.
- Carefully thought through how to reward and incentivise suppliers.
- Put in place effective governance arrangements which create and maintain a requirement on suppliers for high performance and continuous improvement.

Early supplier engagement without these changes may result in poor delivery performance and value for consumers.

### 3. CHANGES TO THE ASSESSMENT PROCESS THAT COULD SUPPORT ACCELERATED INVESTMENT DELIVERY

#### Q6. DO YOU AGREE THAT IT IS IN CONSUMER INTEREST TO CONSIDER STREAMLINING OUR REGULATORY PROCESSES?

Yes, we agree that streamlining current regulatory processes is in the best interest of consumers. Whilst the Large Onshore Transmission Investment (LOTI) process provides a level of assurance of value for money for consumers, at the same time it prevents expeditious delivery.

#### Q7. WHICH OF OUR OPTIONS FOR STREAMLINING OUR REGULATORY PROCESSES DO YOU FAVOUR?

We have carefully considered the 4 approaches you have outlined and believe that a balance between approaches 1, 2 and 3 may be more favourable, as represented in Figure 1 below. The key features of this are:

- Early acceptance of strategic project needs on a programmatic basis for all qualifying projects (without endorsing particular design choices or costs). Acceptance of project needs will provide an early signal for the TOs to proceed with pre-construction work for these projects (Approach 1).
- Approval of allowances for qualifying projects in stages; one stage for early construction funding in advance of any planning permission, and a second stage for a full project cost assessment once detailed designs, detailed construction plans, schedule and cost estimates have been developed. On the basis that suppliers are appointed early we would anticipate this point should be reached before achieving planning permission or DCO Consent. In the event that conditions imposed by planning or DCO have a significant impact on schedule and cost TOs may, by exception, ask Ofgem to review the full project cost assessment at that time (Combining modified elements of Approach 2 and Approach 3).

We believe this approach provides an optimal balance between assuring value for money for consumers whilst not impacting the timely delivery of essential infrastructure.



## Accelerating onshore electricity transmission investment

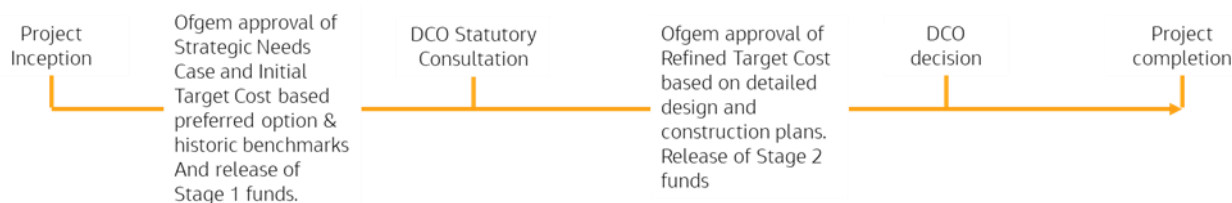


Figure 1: Alternative approach to streamlined regulatory processes

In addition to these changes to LOTI we would also recommend that once the strategic need of a project has been agreed, then any subsequent changes to status projects resulting from the annual NOA is subject to a formal change management process, and the authority to formalise the change is vested in a Strategic Programme Board chaired by BEIS. See our response to Q11, '**Ongoing Monitoring and Reporting Obligations**' for further information.

### 4. COST BENEFIT ANALYSIS

Q8. DO YOU AGREE WITH THE COSTS AND BENEFITS METHODOLOGY WE HAVE ESTABLISHED?

We have no specific views on the Costs and Benefits methodology.

Q9. DO YOU AGREE WITH THE CONCLUSIONS OF OUR COST AND BENEFITS ANALYSIS?

We agree with the conclusions you have reached.

### 5. POTENTIAL MEASURES TO PROTECT CONSUMERS

Q10. WHAT ARE YOUR VIEWS ON INTRODUCING A PACKAGE OF REGULATORY MEASURES WHICH OFGEM MAY APPLY TO PROTECT CONSUMERS?

As indicated in our response to Q3, we strongly agree that Ofgem should balance the proposed exemption from competition of some projects and relaxation of some measures with a package of new regulatory measures to protect consumers.

This new framework is an opportunity to influence change beyond BAU contractual mechanisms to encourage positive behavioural change in the ET industry, embrace delivery value, reduce the costs for consumers, and deliver social value and enhanced sustainability.

Q11. WHAT ARE YOUR VIEWS ON THE DESIGN OF EACH OF REGULATORY MEASURE?

### SETTING CLEAR OUTPUTS AND DELIVERY DATES IN LICENCES

We agree with your view that Licence Obligations potentially combined with Price Control Deliverables is reasonable.

### ACCELERATED DELIVERY OUTPUT DELIVERY INCENTIVE (ODI)

We endorse your proposal to introduce an Output Delivery Incentive (ODI) with rewards for early delivery and penalties for delay.

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### INCENTIVE DESIGN PRINCIPLES

We endorse your incentive design principles. With reference to design principle 4, *"The project-specific financial parameters of the incentive should be fixed in advance and known to the TOs at an early stage of the project timetable. This would allow the TOs to take account of these parameters when engaging with potential suppliers"*, we would extend this to require TOs to demonstrate to Ofgem how they intend the ODI to flow down to Delivery Partners and suppliers.

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### SETTING DELIVERY DEADLINES

We do not agree with your view that the delivery deadline for the purpose of the ODI should be the year in which the Electricity System Operator (ESO) has required the project to be delivered so that the 2030 targets are met. This should be one input when setting the delivery deadline, but the more important input should be the estimated in-service date of the new generating capacity the project is supporting. If this date is beyond 2030 no reward should be paid for delivery on or before the generating capacity comes online, but penalties for late delivery beyond the generating in-service date will still apply. It would be unfortunate if consumers were to pay a premium for infrastructure which stands idle because the generating in-service date is delayed.

As we set out in our response to Q1 we believe it is imperative that Ofgem and BEIS adopt a whole system approach to the challenge of Net Zero, 50/30 and energy security in a similar way to the approach adopted by the Vaccine Task Force. The government target of 50/30 is unlikely be achieved through a fragmented approach.

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### CALIBRATION AND APPLICATION OF PENALTIES AND REWARDS

We broadly agree with your proposals for setting and applying penalties and rewards. However, we recommend that further criteria should be applied to moderate them. For example, if project costs exceed the agreed target then any reward should be accordingly reduced. But more importantly, in view of the very large scale of investment, we would expect to see TOs make a proportionate investment in associated socio-economic and sustainability agendas in the areas where new infrastructure is located. Failure to invest in or achieve these wider benefits should correspondingly reduce any reward payment.

In making these recommendations we would point out that our experience is that by reducing the time it takes to deliver infrastructure projects, it almost always results in lower cost. There is a significant risk that consumers end up paying a premium (through the payment of excessive rewards) due to TOs applying modern delivery, contracting and procurement thinking, which in our view they should already be doing.

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### ANALYSIS TO SUPPORT THE SETTING OF REWARDS AND PENALTIES

We agree there is a need to better understand the potential costs and benefits associated with accelerating delivery compared to BAU performance. As stated immediately above, our experience is that faster delivery invariably results in lower cost. Therefore, we recommend that as well as working with TOs and the ESO, Ofgem should appoint independent experts to benchmark global delivery performance before setting the levels of rewards and penalties.

We contend that to a large extent TOs could achieve the 2030 target simply by delivering with a globally competitive schedule and cost benchmarks.

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### RISK OF EXCESSIVE FINANCIAL EXPOSURE TO THE TOS

For the reasons set out above, we contend there is no risk of excessive financial exposure to the TOs.

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### REDUCED INCENTIVE RATES UNDER THE TOTEX INCENTIVE MECHANISM (TIM)

We do not agree with your thinking in this section. We set out in our response to Q7 our recommended amendments to the LOTI process. This approach seeks to balance protection of consumers whilst enabling accelerated delivery. By adopting this approach (and other major programme best practices — see our response under ‘**Ongoing Monitoring and Reporting Obligations**’ and to Q13) we believe that target costs can be set with high levels of confidence. Therefore, the need to reduce the incentive rates through the Totex Incentive Mechanism (TIM) may not be necessary or beneficial.

We recommend that this be further explored by an independent expert (aligned with the analysis of setting of rewards and penalties above).

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### ONGOING MONITORING AND REPORTING OBLIGATIONS

We endorse your view that the relaxation of the regulatory framework should be balanced by enhanced on-going monitoring and reporting obligations. However, we would go further. The level of investment and the scale of the works required to deliver the 2030 target is massive, comparable to the largest infrastructure Programmes ever delivered in the UK. Although not directly paid for from the public purse, ultimately the public will pay for a large percentage of this investment. Therefore, we strongly recommend that BEIS, Ofgem and the TOs should adopt major programme best practice as set out by the Government’s Infrastructure and Projects Authority (IPA). This would include:

1. The creation of a strategic programme board, chaired by BEIS and supported by the IPA.
2. The requirement for TOs to report monthly to the strategic programme board.
3. The appointment of an independent scrutineer (for example on the lines of the Crossrail Project Representative, or the Heathrow Expansion Programme Independent Fund Surveyor) with full and open access into all TO activities and documentation (both financial and non-financial) associated with delivering 50/30 and freedom to report on any matter to the Strategic Governance Board.
4. Application of best practice 3 levels of assurance.

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### REOPENERS TO ADJUST OUTPUTS AND ALLOWANCES

We endorse your view that there is significant consumer value in ensuring that the proposed accelerated delivery framework is sufficiently flexible to allow necessary changes to outputs and price control allowances to be made in a timely manner. Having this flexibility reduces risk for consumers and TOs by ensuring the project design and funding is up to date and reflects the most recent available information.

Broadly we agree with your suggestions regarding a reopener mechanism based on the Cost and Output Adjustment Event (COAE) mechanism included in the current LOTI process. We believe that the LOTI

modifications we suggest in our response to Q7 would minimise the frequency of use of such a mechanism. However, we also recognise that on a programme of this scale and extent, large and unexpected changes are inevitable and having a reopener mechanism is sensible. We would anticipate the authority to initiate the reopener mechanism would be delegated to the strategic programme board (see response above).

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### EX POST EFFICIENCY REVIEW

We agree that the funding approaches proposed in this consultation involve a higher level of risk that consumers are exposed to excessive and inefficient levels of cost compared to the current LOTI arrangements, and therefore it is wise to protect consumers by retaining the ability to undertake an ex post review of expenditure incurred by TOs.

However, we believe that applying major-programme best practices (see our comments regarding on-going monitoring above) would minimise the likelihood of resorting to this mechanism.

## 6. FINANCEABILITY AND FINANCIAL RISK TO THE TRANSMISSION OWNERS

Q12. DO YOU THINK OUR PROPOSALS RAISE ANY FINANCEABILITY CONCERNS OR CREATE EXCESSIVE FINANCIAL RISK FOR THE NETWORK COMPANIES? IF SO, HOW COULD THEY BE ADDRESSED?

We do not believe your proposals raise any financeability concerns or create excessive financial risk for Network Companies over or above the financeability risk of any programme of this magnitude.

## 7. NEXT STEPS

Q13. IS ANY FURTHER GUIDANCE, OR ADDITIONAL SPECIFIC INFORMATION, NEEDED AS PART OF THE TOs' PROJECT DELIVERY PLANS?

As indicated in our response to Q3, Q4, and Q5 we believe it is imperative that TOs provide specific details in their delivery plans prior to Ofgem implementing any of the changes set out in this consultation. TOs should as a minimum set out:

- How they intend to organise, operate and control their whole programme of projects (their programme execution strategy). This includes explaining how resources and capability will be balanced across all TO works, not just the programme under review.
- What governance framework they intend to put in place to oversee the programme of projects.
- What assurance framework they intend to put in place around the programme of projects.
- How they intend to procure, manage, reward, and incentivise their suppliers.
- How they intend to organise their suppliers into efficient delivery units.
- How they intend to encourage and enable suppliers to invest in growth and innovation.
- How they intend to drive high performance and continuous improvement.
- How they will deal with poor performance.
- How they intend to create socio-economic and sustainability benefits and legacy in the areas where new infrastructure is to be installed.
- Specific KPIs and targets which the TO propose should be used to moderate any rewards or penalties awarded under the ODI.

We suggest that these plans be scrutinised and approved by the IPA in the same way that any other publicly funded major investment would be scrutinised.

In addition, and as set out in our comments regarding '**Ongoing Monitoring and Reporting Obligations**' we recommend these plans and the ongoing performance against plan should be monitored and regularly reviewed by the strategic programme board. This board should have the authority to require TOs to address poor performance and non-conformities.

### Q14. ARE THERE ANY ADDITIONAL TIMETABLE ISSUES THAT NEED TO BE CONSIDERED?

Except for the below items, we have no additional input which would affect the timetable leading up to 2030:

- In our response to Q3, Q4 and Q5 we recommend that Ofgem do not implement the changes set out in this consultation until TOs have submitted detailed delivery plans, which include as a minimum, the information we set out in our response to Q13.
- In our response to Q3 and Q4 we recommend that once the enabling legislation for competition is completed, Ofgem review TO progress towards a step change in delivery performance. If sufficient change is not evidenced, then the decision to exempt projects from competition is reviewed.
- In our response to Q7 we propose an alternate modification to LOTI (based on elements of Approaches 1, 2 and 3, outlined in paragraph 5.16 of the Consultation).