

Response to Ofgem consultation on Electricity Transmission Advanced Procurement Mechanism

December 2024

Summary

Balfour Beatty supports the introduction of the Advanced Procurement Mechanism (APM) to address supply chain constraints. A well-designed mechanism will help secure the necessary equipment and supply chain resources needed to de-risk critical investments in the electricity transmission network. However, we believe that, in addition to the proposed measures, advanced funding for workforce development and skills must also be prioritised to ensure a workforce that is ready and competent to carry out the work. Solely focusing on equipment procurement will not fully address the supply chain challenges. Investing in workforce development is vital to ensure the industry has the capacity to meet demand, reduce delays, and maintain a sustainable labour force, all of which are critical to the successful transition to clean energy.

Furthermore, Balfour Beatty recommends integrating project-specific procurement within the APM framework to ensure the timely delivery of critical infrastructure, aligned with industry practices. These measures will help build a resilient supply chain and maximise consumer benefits during the transition to clean energy.

We have tailored our response to focus on the areas where we have direct expertise and input.

Q1. Do you agree with our proposal to introduce the Advanced Procurement Mechanism to address supply chain constraints faced by the transmission owners?

Yes, we strongly support the proposal to introduce the Advanced Procurement Mechanism (APM) to address supply chain constraints faced by transmission owners. However, we also want to emphasise that another critical factor impacting success is the availability of skills, labour and services, which will be just as significant to address as constraints in equipment availability. This is particularly true for specialist skills and services that require years to develop or scale up.

The UK simply does not have the skills base that other countries have in this area. There has been a lack of projects in recent years, so the industry is gearing up from an almost standing start. There is therefore a large gap between the number of people in these roles now and the people the industry needs for the future.

As with equipment, we operate in a global market for both skills and services and a mechanism allowing funding for early investment in their development would demonstrably reduce constraint costs. Early procurement of services, including contracts for critical tasks such as overhead line wiring and specialised engineering roles, will allow the industry to scale up capacity and meet demand. These investments are essential to ensuring that project timelines are met and that critical infrastructure is delivered efficiently. It takes 3-5 years for new entrants to the sector to become competent depending on their role. Supporting early investment in skills should therefore be prioritised as early as possible.

Including workforce development and services procurement within the APM framework aligns with its principles of minimising stranded costs. Services contracts, like fungible equipment, can be deployed flexibly across projects. This approach will enable more significant long-term investments in training centres, facilities, and capacity-building initiatives, ensuring that both human and material resources required are in place.

Ultimately, this strategy will reduce costs for consumers by avoiding delays, lowering reliance on overseas labour and managing wage inflation in the domestic workforce. Early procurement of services must, therefore, be a core element of the APM.

Unaddressed, the existing skills gap will significantly slow down critical grid upgrades, making the 2030 and 2031 ASTI dates very hard to achieve and compromising the target to decarbonise the Grid by 2030. Ongoing work to improve and maintain the existing Network would also be impacted as it uses the same pool of people. Although there is significant investment being made in these skills, many more people will be needed than can be met by domestic upskilling – all options need to be exploited. This means that the UK will need to import skilled workers from abroad to fill the shortfall. Although some of the required workers can be brought in to the UK already, one-by-one under the Skilled Worker Visa scheme, this is a circa 6-month process given the need to advertise for 30 days to prove that the skills are not available in the UK and the visa application and processing itself. A more pragmatic approach is therefore needed. However, the demand for labour in this field is and will increasingly be a global one. Therefore, this option may not be as accessible as it may have been in the past, again necessitating that advance funding for domestic skills investment is prioritised.

Finally, while we strongly support the introduction of the APM, we recommend that its design be adapted to allow project-specific applications, particularly where equipment is procured by principal contractors on behalf of transmission owners as a single package bundled with services. This would align with existing industry practices and ensure that critical project-specific procurement packages are not delayed. The ASTI mechanism provides a useful precedent for enabling such targeted funding while maintaining robust oversight.

Q4. What are your views on which equipment types are most constrained, which are at risk of future constraint, and which are less of a concern, and what are your views on the items we should include within the scope of the APM?

We believe that both services and workforce constraints should be explicitly recognised as critical supply chain issues and recommend their inclusion as eligible expenditure categories within the APM framework. Addressing these factors alongside equipment procurement is essential for building a resilient supply chain capable of meeting demand without significant delays.

Securing early contracts for services such as design, engineering, and construction work will enable transmission owners (TOs) to meet demand more effectively. Workforce constraints, particularly in areas requiring highly specialised skills, must also be addressed through targeted funding for training and development. Including these elements within the APM scope ensures that capacity-building efforts align with equipment procurement strategies, creating a holistic approach to supply chain resilience.

As we bring large numbers of new people into the industry, productivity in the short term will be affected to ensure these people can safely learn and develop (for example, an apprentice will take longer to do something, and will also use the capacity of more experienced resource to be taught). This may lead to further short-term constraints and/or some additional resource. Although the medium to long term benefit of the UK having the skilled capacity needed to deliver the long-term pipeline of clean energy projects outweigh these impacts, this should be allowed for in funding assessments.

The equipment types that will be most constrained are those that are most specialist to our market such as cables, cable accessories, overhead line conductors, insulators & fittings, steel towers and

substation primary and secondary equipment. Balfour Beatty wholly owns Painter Brothers, the UK's leading manufacturer of steel towers, and whilst we are confident that we are able to meet the expected demand in the market this is only possible with advanced procurement and early orders to enable us to invest in the necessary plant and equipment in good time. Therefore, we are strongly of the view that specialist steelwork also needs to be included as a constrained equipment type.

Many constrained equipment types, such as cables and switchgear, are typically procured as part of project-specific packages managed by principal contractors. These procurement processes often bundle equipment, services, and workforce mobilisation into a single contract. To address these real-world constraints effectively, the APM should explicitly allow for early funding of project-specific procurement packages as has been done on ASTI.

Q6. Do you agree with how we have characterised fungible, flexible and bespoke procurement, and our proposed treatments of each of these? Do these definitions reflect real world contracting and engineering realities?

We agree with Ofgem's characterisation of fungible, flexible, and bespoke procurement and propose that services and workforce development initiatives be classified under fungible and flexible categories. Services contracts, particularly for specialist labour and engineering, are broadly applicable across projects and can adapt to evolving needs, making them suitable for these categories.

Additionally, workforce skills development is inherently non-project specific and can address broad industry needs, ensuring that labour resources are available when and where they are required. Including these elements as flexible investments aligns with the APM's objectives of minimising risk and ensuring supply chain resilience.

Additionally, we recommend that bespoke project-specific procurement, particularly for high-value specialised equipment, also be included within the APM framework. Principal contractors, acting on behalf of transmission owners, often manage procurement for such equipment and services, and early funding through the APM would ensure timely delivery and reduce risk.

Q7. Do you agree with our proposed approach to funding services contracts through the APM?

We strongly support the inclusion of services contracts within the APM and recommend expanding this approach to enable early procurement of critical services. This would allow the supply chain to make earlier and more significant investments in developing capacity, such as hiring and training skilled labour, ensuring readiness to meet demand.

Direct procurement should also be included to ensure that services are secured efficiently, and mechanisms should be established to provide transparency and accountability. For example, TOs could work with skills bodies and the supply chain to track how investments in training and service contracts translate into project delivery, labour market improvements and reduced constraints.

While we recognise the complexity of monitoring services procurement compared to equipment, this should not preclude its inclusion in the APM. Transparent reporting and collaborative oversight mechanisms can address these challenges while ensuring that constrained services do not become a bottleneck for the UK's clean energy transition.

Q12. What are your views on how we should approach in-period updates to the APM?

We recommend that in-period updates include provisions for addressing emerging constraints in services and workforce development. For example, if specific services or skills become highly constrained, they should be appropriately considered for inclusion within the APM framework. To ensure the APM remains adaptable, we suggest that Ofgem establishes criteria or triggers for updating it, such as evidence of increasing lead times, workforce shortages in critical roles, or regional disparities in capacity. These updates would ensure that the APM remains responsive to evolving market conditions and continues to address the most pressing supply chain challenges.

Conclusion

The introduction of the APM is a significant step forward in addressing supply chain constraints and supporting the UK's transition to a clean energy future. However, in our view, its scope should be broadened to include proactive investments in workforce skills development. By doing so, Ofgem can ensure that both the physical and human infrastructure required for the energy transition are in place, minimising delays and maximising consumer benefits.

We also strongly recommend that the APM framework allows project-specific applications for equipment and services procured by the supply chain, as with ASTI. This would align with industry practices and provide the flexibility needed to deliver critical infrastructure efficiently.

We would be delighted to discuss these recommendations further and work with Ofgem to develop a robust framework for incorporating workforce development into the APM.

About Balfour Beatty

Balfour Beatty is the UK's largest infrastructure provider and one of the 40 strategic suppliers to the Government. Founded and headquartered in the UK, we are proud to be a British business with 13,000 employees working across the UK (26,000 employees worldwide, largely focused in the US and Hong Kong) on construction sites and in offices across the country. We finance, develop, build, and maintain the critical national infrastructure that we all depend on, as well as projects at the heart of local communities - such as Hinkley Point C, Sizewell C, HS2 and supporting Rolls-Royce in the delivery of its Submarines site to facilitate the strategic requirements of the Ministry of Defence and the AUKUS programmes. Our Investments business also has a market-leading portfolio in the design, build, finance, and operation of infrastructure assets, with proven credentials in Public-Private Partnership and PFI schools and hospitals, and building and financing the M25.

Balfour Beatty has over a century of experience in energy generation and employs approximately 3,000 people in the energy sector alone. We are involved in the UK's most ambitious power transmission and distribution projects, including Hinkley Point C and future projects such as Sizewell C. Our capabilities align with the Government's ambitious plans for Carbon Capture Utilisation and Storage, offshore wind, nuclear power, hydrogen, and power grid upgrades, all of which we have interests in.