December 2024

Response to Ofgem APM Consultation

Who we are

BEAMA is the trade association for electricity infrastructure and systems, representing 200 manufacturers of electrical equipment and products across networks, flexibility and low carbon buildings:

- equipment and solutions for distribution networks and transmission networks;
- smart energy products such as smart meters, smart home devices, EV chargers;
- heating & ventilation products including heat pumps, thermal storage, and electric heaters; and
- building electrical infrastructure products such as switchgear and wiring accessories, including cutouts, feeder pillars and fuses.

BEAMA includes a dedicated group of companies supplying products and solutions to electricity distribution and transmission network companies (the Electricity Network Infrastructure (ENI) group)[1].

This response has been prepared with input from our members that supply equipment and services to transmission network owners in GB.

Contact: Laura Dye, BEAMA Head of Electricity Networks, laura.dye@beama.org.uk , 0748314 2997

[1] Demand for these products and services is driven by TOs and DNOs, but also to a considerable extent by renewable generation developers, interconnector developers, independent connection providers (ICPs); iDNOs; developers of battery storage, electric vehicle (EV) charging infrastructure developers; as well as by industrial users such as data centres.

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Summary

The supply chain welcomes the intent behind Ofgem introducing an Advanced Procurement Mechanism to provide Transmission Owners (TOs) with the ability to secure capacity from the supply chain earlier than would otherwise be the case.

However, without a fuller picture of the timelines at which Ofgem will approve projects (in principle, and, or in full) and relatedly, the timelines within which TOs will place firm orders against expected project delivery times, it is not possible to assess whether the APM as proposed will allow GB to catch up with other countries as an attractive location for the relevant multinational suppliers. TOs need to place *full firm orders with their supply chain at the earliest opportunity* to secure capacity. Ofgem's approval process needs to provide more confidence from the start for TOs, to enable this earlier commitment. Ofgem needs to ensure that it has 'moved regulatory approvals off the critical path' (in line with the Winser review) to a sufficient degree. The UIOLI allowance, alongside the rest of the funding approvals and procurement process, must be designed in a way to *avoid uncertainty or a funding gap* between APM and the full project approval, so that projects don't have to be delayed.

All aspects of transmission network infrastructure are constrained enough to justify much earlier commitment, so that the supply chain can grow its capacity in the face of significant future demand for products and services. The availability of skilled workforce especially is of significant concern. Attempting to draft a complete list of constrained solutions and components risks making the APM very complicated to run. Given the complexities and variance in the market, keeping the Governance Document, the list of what is in scope and the caps against each category up to date would be a very considerable regulatory effort for Ofgem that does not seem proportionate to the consumer risk, given how Ofgem propose to track spend in detail, and reconcile costs at the end. At a minimum, the scope of the APM needs to cover full packaged solutions, as equipment is not commonly purchased separately from associated services including design, commissioning and construction.

TO procurement behaviour will need to change radically from procuring projects to *procuring programmes of work in bulk*, committing to *firm orders much earlier*, and moving to a *strategic partnership approach* that is characterised by *longer-term relationships* and more collaboration with the supply chain. Without these changes, manufacturers will not be able to justify significantly increasing investment to grow capacity to serve the needs of the GB transmission system. The design of the APM and the suite of funding mechanisms must drive these changes in behaviour.

It is essential that TOs work on *harmonising what they procure*, so that they purchase fewer different variations of equipment. They should begin by harmonising system ratings as a matter of urgency.

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Consultation question responses

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 agree that TOs should have certainty over funds available so they can procure capacity with the supply chain years in advance of the exact project detail or need being certain.

Q2. Do you agree with our proposed framework for evaluating eligibility?

We assume, based on the consultation document, that Ofgem intends to evaluate the eligibility of use-cases for the APM once – early on in 2025 as part of its decision to allocate APM funding and the associated qualitative Impact Assessment. We assume that Ofgem are not proposing to on a recurring basis evaluate the eligibility of expenditure after the fact as part of the normal process, by asking TOs to provide regular updated evidence that the items they used APM allowance for are subject to constraints.

Any exercise to demonstrate eligibility should be kept as simple and minimal as possible to avoid undermining the intent of the APM, and should be the exception rather than part of the normal process.

The APM should not only be used to address defined constraints – it should be used to support supply chain investment to increase capacity (thereby reducing future constraints) by committing to programmes rather than projects. Focusing eligibility on listed constrained areas risks fragmenting procurement, if parts of programmes of work are missed from the list accidentally – given that everything is currently constrained.

Q3. Do you agree with how we have defined supply chain constraints?

We propose broader definition of supply chain constraint. We would argue that a supply chain that needs to grow so significantly in a short period of time[2], as is the case for the transmission network infrastructure supply chain, is by definition constrained because large investment is required to enable capacity to serve the projected demand for workforce and equipment. It is clear that current capacity does not meet future demand, so the supply chain is constrained until these investments are made. Forward visibility and earlier commitment will help reduce constraints by allowing supply chain to invest in increasing capacity, but in the period of rapid expansion over the next decade and beyond, the supply chain is always going to be catching up with global demand rising. It's true that some components have longer lead-times than others, but

[2] The rate of transmission build will need to grow four-fold, according to the NESO Clean Power by 2030 report.

all items and service elements (design, procurement, construction, commissioning etc) of projects are seeing higher significantly higher demand globally and in the UK and pose real risks for timely project delivery if they are not procured early enough.

At the more granular level that Ofgem are applying, indicators of constraint are as noted extended lead-times and increased cost, but also when there are fewer bidders in a TO procurement exercise. From the TO perspective, there is a constraint if the players in the market are not interested to bid, including because there is so much demand to serve elsewhere. In several cases, suppliers have recently chosen not to bid because the offer is not interesting enough as compared to the effort required to bid and compared to what is on offer from customers abroad. For instance, suppliers may choose not to bid because

- TOs are not tendering a large enough programme of work in bulk,
- the resulting contracts are short-term and small in value, and in practice imply repeated tendering of small tranches rather than being part of a strategic partnership over a longer time-period,
- TOs are not offering suitably firm commitment to volumes and are rather asking for bids against zero-volume frameworks,
- TOs are proposing projects with niche specifications rather than aligning with market-wide standards.

In terms of specific constraints, the availability of an appropriately trained workforce for the sector is the biggest concern for our membership, and Ofgem has a crucial role in addressing this constraint. By enabling TOs to commit to full, firm orders from the start, and allowing TOs to allocate sufficient funding for training across projects and the required training hubs, Ofgem must help the industry to start growing the workforce now. Investing in growing the workforce as soon as possible is imperative, so that all the infrastructure build required during T3 and beyond can be delivered on time, enabling the UK to meet its Clean Power Mission and Net Zero targets.

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 understand why Ofgem want to limit the risk taken on behalf of consumers to constrained areas. This is a means by which Ofgem are seeking to protect consumers. Drafting a detailed list of these constrained areas and keeping this up to date however is probably neither proportionate nor necessary, given that all areas are constrained. Creating an accurate list and keeping it updated makes the APM more complex than it needs to be, introduces jeopardy and risks that it is out of date quickly, so Ofgem could simplify the APM by including all procurement as constrained.

To explain in more detail:

- All elements of projects and programmes in question are currently constrained. TOs are struggling to secure capacity and suppliers are struggling to justify to invest in new capacity for manufacturing and workforce abroad and locally for the GB market - to the timescales required to deliver Clean Power by 2030, and Net Zero targets beyond. Given the four-fold increase of the rate of investment in transmission infrastructure required in GB, and similar increases globally, the supply chain will continue to be constrained for the foreseeable future. A supply chain that needs to grow so significantly in a short timescale is by definition constantly constrained, because of the required ramp-up in what the supply chain needs to deliver.
- It is therefore proportionate to remove the defined table of constrained areas in scope and acknowledge that what TOs are procuring is constrained.
- This approach will ensure that changes in the market can be responded to quickly by TOs, and that the APM can operate more smoothly and simply.
- Having to keep a list that is at all times complete introduces risks:
    - the need to keep it updated – while market conditions can shift very quickly;
    - misunderstandings and differences in interpretation and hence jeopardy for TOs – leading potentially to reduced engagement with the supply chain;
    - and growing regulatory effort on behalf of Ofgem, having to monitor the market situation closely and issue amendments, to ensure its Governance Document does not become outdated. Ofgem would need to consult on amendments to the document each time which would mean that TOs cannot respond quickly enough.

The one-off exercise to assess the eligibility of areas in Jan/ Feb 2025 – based on evidence the TOs are collating now - will help Ofgem make a decision on the size of the UIOLI.

If Ofgem is concerned about the risk to consumers, it could keep open the option to review, as part of its general review of the APM, what should be in scope in future iterations. However, Ofgem must be aware that excluding elements risks fragmenting programmes of work – if TOs are not sure that all elements of projects are in scope, they

would need to procure them separately, hindering the overall aim of procuring programmes of work in bulk. This would mean the APM does not achieve its aims.

See also our response to question 7.

Q5. What are your views on our intention to exclude strategic procurement from the APM, and the potential benefits of later expanding the APM to include it?

As outlined above, we don't think that the distinction is useful at this stage because all components of transmission network infrastructure are constrained to a sufficient extent to warrant earlier commitment, given the four-fold increase of the rate of transmission network build that is required.

Furthermore, limiting the APM to certain products and services risks that TOs don't use it to procure programmes of work in bulk because programmes are fragmented into different funding mechanisms. Programmatic bulk procurement, and earlier than is the case under the current regulatory regime, is key to enable the supply chain to invest in growing capacity, and for GB to be competitive with other countries who are buying up the available capacity. We are of the view that including all procurement in the scope of the APM will therefore be beneficial.

Procuring programmes of work is especially valuable in enabling suppliers to grow the workforce. For a one-off project suppliers will find temporary resources and disband the team at the end of the project (which comes at an increased cost). For a programme of work, suppliers can commit to longer-term recruitment and training, the same team can be used for successive projects, saving cost, and increasing the mutual learning and benefits that come from longer term relationships.

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 in part.

On 'bespoke' procurement, we agree that for instance Gas-insulated-switchgear requires a higher level of certainty about specifications up front. However, if TOs commit to purchasing a whole programme of work in bulk, there could be flexibility if there has been a degree of harmonisation, so that projects are more similar to one another.

In terms of the treatment of bespoke procurement, we do not agree that this should be subject to different criteria and funding, as it's essential that TOs procure programmes of work that bundle different projects together in bulk. If breaking out 'bespoke

procurement' into separate funding would result in fragmentation and prevent such programmatic bulk procurement, the APM will not deliver on its objectives.

We agree with the intent behind using the 'flexibility approach'. However, there is a risk that TOs interpret and use this in the wrong way:

- The preferable approach will be that TOs make firm orders for programmes of work across several projects and several years, while harmonising requirements across the programme, and ultimately also across TOs. Contracts that commit to buy something would normally include a cancellation fee and associated clauses, but these would be negotiated under the assumption for both parties that there is a low likelihood of cancellation. Across a portfolio of firmly procured bundled projects, manufacturers and TOs would be able to reallocate capacity flexibly to other projects. Harmonising requirements across projects (and TOs), so that TOs purchase fewer different permutations of things, will enable this flexible transfer, and eliminate the need for novation.
- The risk however is that TOs interpret Ofgem's requirement to ensure 'flexibility' such that they focus on negotiating capacity reservation agreements, and 'novation', 'limited notices to proceed', and cancellations become the norm. As a result, suppliers will be reluctant to bid at all, and if they do, at least price in this extra risk. The TOs interpretation in this vein of Ofgem's ask to protect consumer money is already borne out of the communications suppliers have had from their GB TO customers with regards to how the APM will be used. This does not give confidence to the supply chain and their investors.

Instead of interpreting Ofgem's ask for 'flexibility' as placing partial commitments, TOs should be placing firm orders, and work with urgency on harmonising requirements. It is important that suppliers have confidence that they are contracting for actual projects that will be delivered, so that they can be sure of their return on investment in increasing capacity and growing operations. This confidence is lacking if there is a realistic chance that what suppliers can expect to receive is a cancellation fee rather than a real project.

Without firm orders, APM consumer funds are at risk of being wasted because they are being used, rather than as the first tranche of funding for projects that will actually be committed and happen, instead for reserving idle capacity, and to pay for the cancellation fee.

Overall, it is important that TOs work on harmonising their requirements, as this will make flexibly re-allocating capacity to other projects and customers possible. We have provided more details on how TOs and the ENA should take a strategic, high-level approach initially across all procurement areas in our paper for the Electricity Products

Supply Chain Council Networks Forum from November 2024 (attached to this submission).

Ofgem needs to ensure that TOs are not disincentivised from pursuing harmonisation because of how Ofgem sets cost allowances. Ofgem may need to adjust its benchmarking, and request TOs to resubmit elements of their T3 business plans, having taken account of the harmonisation of system ratings (as the minimum element/ highest-level dimension that needs to be harmonised at this stage). If harmonising what TOs procure implies for instance uprating an asset, or slightly over-engineering it to meet more than just one use-case, this may add cost at the level of an individual project – while saving cost across the wider programme of work, improving lead-times and increasing flexibility of assets and manufacturing slots. We assume that because TOs have not embarked in earnest on aligning their requirements (with some exceptions perhaps on HVDC where the supply chain has pushed alignment towards solutions procured by European TOs), harmonisation may not currently be reflected in their business plan submissions. Alternatively, Ofgem could adjust cost allowances at a later date through uncertainty mechanisms.

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

Yes, we agree that services that are procured as part of a packaged solution attached to equipment delivered need to be in scope of the APM. This means that solutions and projects delivered as packages must be in scope, including the associated services – everything that forms part of a contract including (not limited to) design services, manufacture, commissioning and installation.

Q8. Do you agree with our rationale for using a UIOLI mechanism for the majority of APM expenditure, rather than other regulatory tools?

Yes, we agree with the proposed mechanism, as this carries no incentive for TOs to underspend the allowance, as is the case with Totex with the Totex Incentive Mechanism (TIM) applied. Incentives to underspend would risk that TOs do not engage sufficiently with the supply chain.

It is important that the Governance Document defines the rules and scope clearly, so that TOs do not fear the funds being disallowed at a future date.

Q9. Do you agree with our proposal for the APM allowance to be capped at 20% of the estimated equipment cost?

No, the allowance should not be capped at 20% of the estimated cost of the procurement because TOs need to be able to place firm orders for projects at the very start.

Depending on how Ofgem design the overall funding approval process across the timeline between initial needs-case and final funding decision, capping the UIOLI at a certain percentage might inhibit TOs from placing full firm orders. If this is the outcome, the APM would not fulfil its intended aim of driving investment in supply chain capacity reliably, and ensuring project delivery on time. It may be beneficial to allow another (the next) intermediary stages of funding to be committed upfront as well. This could allow for the next stage(s) of projects to have funding certainty to move ahead, between APM UIOLI percentage being exhausted, and full project cost having been signed off. Typical commercial arrangements for securing capacity agree a range of milestone payments to fit design and manufacturing stages. The payment profile and timing of the milestones varies greatly for solution types, but the APM and wider funding mechanism design must allow the TOs to support this commercial approach.

While we are not aware yet of the precise proposals Ofgem are working on with the TOs in respect of the end-to-end Ofgem approval and resulting TO procurement timelines, it is key that TOs can place firm orders at the start, and later on don't have to delay the next phase of a project (by novating a contract, delaying the next downpayment, delaying determining specifications, etc.) because they do not have full confidence in the funding they will receive, or full Ofgem approval on a project being outstanding. Providing full orders from the offset is essential, so that GB TOs can be competitive with TOs abroad.

Defining a cap, or caps for different solutions accurately is also difficult because the decision would need to take account of variance in the required cost to secure capacity early. The variance is great between types of equipment and solutions, and may also change over time. Again, keeping the rules up to date seems would be disproportionately burdensome for Ofgem and stakeholders, to ensure that the mechanism adequately reflects the complex realities in the market and significant variation. The effort for Ofgem seems unlikely justified as compared to the risk, given that Ofgem are proposing to closely monitor spend and reconcile costs at the end.

In terms of Ofgem's design of the overall process under LOTI and CSNP-F, as well as the wider RIIO T3 Determinations process, it is key to stress that the principles of the ASTI programme apparently do not go far enough in changing all TOs' procurement behaviour by 'moving regulatory approval off the critical path'. NGET in particular, as compared to SSEN Transmission, did not make use of the flexibility apparently provided by ASTI to tender and place orders at the earliest opportunity. Procurement under ASTI for NGET started several years after Ofgem's ASTI decision. It is not clear whether this is due to capacity constraints within the TO, or due to limited confidence in Ofgem's approvals or what the reason is. In any case, TOs seem to have different interpretations and

responded differently to Ofgem's framework. If there is uncertainty for TOs within the design of the ASTI framework, it is imperative that Ofgem in evolving the rules for future price controls and funding mechanisms eliminates this uncertainty to give TOs the required clarity to proceed with placing firm orders at the earliest opportunity.

Q10.Do you agree with the use of a re-opener to update the APM in-period?

In principle, it is good for Ofgem to retain flexibility to review the APM in-period. However, this reopener should adjust the APM only upward, not downward, as downward adjustment would introduce jeopardy, and hence would likely lead to hesitation on behalf of TOs to engage with their supply chain. Moreover, the timing of re-opening would need to be well in advance of TOs needing to use the funds, so that the supply chain can have the necessary early commitment at the right time, and so that - once again – regulatory approval is not on the critical path to procurement.