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# Response to Ofgem RESP Consultation

## Introduction

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 for distribution networks and transmission networks<sup>1</sup>;
- 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.

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<sup>1</sup> BEAMA includes a dedicated group of companies supplying products and services to electricity distribution and transmission network companies (the Electricity Network Infrastructure (ENI) group) which covers companies that produce core components of electricity networks such as power transformers, switchgear, protection devices, control and relay panels, as well as a number of digital technologies relevant to network infrastructure. Some members also provide services to utilities, such as turn-key solutions, refurbishment, integration of components, assembly and installation. Demand for these products and services is driven by DNOs, but also to a considerable extent by independent connection providers (ICPs); iDNOs; developers of battery storage, renewable energy and electric vehicle (EV) charging infrastructure developers; as well as by industrial users such as data centres.

## Summary

As part of developing the framework for regional energy system planning, it is important that Ofgem and NESO recognise the benefit that strategic planning and the associated greater certainty about future network development can bring to DNOs' supply chain, and consider what needs to be put in place to leverage these benefits. There is a considerable opportunity to improve the line of sight for network companies' supply chain, i.e. equipment manufacturers and service providers to invest. The industry needs greater clarity and long-term visibility of demand for network equipment and services, and strategic planning can support this through providing greater clarity on trajectory and timing of network reinforcement and wider energy system development. Greater confidence in the trajectory of network development should hopefully support Ofgem in, for RIIOD3, putting in place a regulatory framework that supports more strategic investment ahead of need and enables DNOs to make firm commitments to their suppliers about a longer-term purchasing pipeline that can span price control periods. Greater visibility about when utilities plan to purchase how many units of equipment in combination with firm contractual commitments will enable manufacturers to reserve capacity for GB networks in their global factories and justify the business case to invest in growing capacity, including by building new factories. Increasing manufacturing capacity is necessary to ensure that the availability of key network components does not become a blocker to growth and decarbonisation.

More widely, it is important that Government, and where relevant Ofgem, empower local actors with significant resources, to enable them to inform strategic energy planning, but importantly also to implement these strategic plans.

To enable accurate data to be used for strategic energy and network planning, DNOs should make more and better use of smart metering data and increase efforts to promote their visibility of LCT connections to their networks. Government reviews of EPC data, and other initiatives to understand the status of the built environment, should ensure regional energy strategic planning can be based on accurate assumptions about housing stock.

Ofgem's policy framework for the Regional Energy System Plan (RESP), alongside the Centralised Strategic Network Plan (CSNP) and Strategic Spatial Energy Plan (SSEP), is

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relevant to the BEAMA ENI group specifically because the hope is that more strategic energy system and network planning will lead to greater clarity and long-term visibility about the trajectory and timing of future network reinforcement and by extension demand for network equipment and services. The RESP framework is also relevant to the transport and buildings sectors as a strategically planned, net-zero ready network is a critical enabler to decarbonisation via deployment of electrification technologies.

## Consultation question responses

### **1. What are your views on the principles (in paragraph 2.8) to guide NESO's approach to developing the RESP methodology? Please provide your reasoning.**

BEAMA agree with the principles. It is right that the RESP should provide a clear long-term objective for energy system development, alongside shorter-term milestones, and should enable proactive network investment that is anticipatory and strategic in nature.

These principles can support investment in a resilient network supply chain, if implemented in a way that will make available the indicative volumes of equipment required, and link this to RIIO encouraging electricity network companies to provide appropriate certainty to suppliers via commitments or risk-sharing. It is also important that regional planning should cover transport, heat and industry and be cross-vector, and developments here should be included in making available the projections of volumes of equipment required.

More widely, with the view of how to promote the electrification of heat and transport effectively, BEAMA are very supportive of empowering local levels of government and local actors, while making available appropriate resources to implement programmes. We encourage Ofgem to stress to Government that without the appropriate resources, lower tiers of government will not be able to deliver their part within Ofgem's vision. For effective delivery of decarbonisation of buildings specifically, government must enable local authorities to convene a substructure of delivery partners (Kirklees and Bristol are places that have trialled this). Such a consortium must include actors in the whole value chain – e.g. training providers, manufacturers for downstream products.

### **2. Do you agree that the RESP should include a long-term regional vision, alongside a series of short-term and long-term directive net zero pathways? Please provide your reasoning.**

Yes. It is crucial that a combination of short- and long-term pathways are published, tied to anticipatory network investment. The overriding message from BEAMA (and echoed by many other stakeholders) is that clarity, consistency and commitment from

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Government and public bodies is the main factor that determines the attractiveness of investment in the UK. We hear regularly from our members in the electricity networks sector that a lack of clarity on the long-term pipeline of work makes it difficult for them to plan for manufacturing capacity and recruitment. In the buildings sector, some innovative companies are struggling to justify investing in the UK, and incumbents are looking elsewhere to invest, because longer-term ambition to meet Net Zero has not been matched by regulatory development or delivery plans that would drive the demand for electrification technologies. This is exacerbated by concerns about grid capacity and the likely scale of energy flexibility. While the RESP will not solve all these issues alone, it is critical that it works together with plans from central Government and devolved administrations as an important contributor to the increased clarity and coherence that manufacturers urgently need.

**6. What are your views on the three building blocks which come together to form the RESP in line with our vision? Are there any key components missing?**

The framework seems to address some key gaps in the current landscape in terms of enabling network and energy system planning to be informed by local requirements, and thereby hopefully enabling some regions that can provide certainty for their routes to decarbonise to move ahead at pace, rather than having to wait for decisions from central government.

The BEAMA view in terms of ensuring DNOs' suppliers can invest in scaling up their capacity, is that the RESP could have a key role to play in providing visibility that DNOs have so far not provided, and that the NESO's public interest remit could support this. It seems however that the RESPs are not intended to identify projected volumes of network reinforcement required to meet targets, as network planning remains with DNOs<sup>2</sup>. We encourage Ofgem, NESO and DNOs to consider how projected volumes, or ranges projected, can be made available in the future, if the RESP will not include such information. Such a 'national workbook' that aggregates projected reinforcement and equipment volumes across all DNOs would ideally also cover expected numbers of distribution-network connected new housing developments, battery storage systems, EV charging infrastructure, renewable energy generation, and significant new

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<sup>2</sup> From the consultation document, it seems that Ofgem's intention is to leave planning of network development to network companies, with the RESP only providing guiding assumptions. An exception will be that the NESO may propose specific investments or network developments if they have cross-vector 'whole system' benefits, and are strategic in nature, i.e. ahead of need (if we have misinterpreted Ofgem's intention in this regard, we welcome clarification and hope to feed into further policy development as appropriate).

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connections and demand for network capacity driven by industrial and commercial consumers (e.g. data centres which have recently demanded significant amounts of distribution network capacity).

The following section explains why such clarity on future volumes purchased is needed, to ensure GB can meet its ambitious Net Zero targets. The issue in the past has been that manufacturers of network equipment have not had clear line of sight from DNOs in GB about what they plan to purchase in future, and contracts do not make firm commitments to volumes of equipment DNOs will purchase. The hope is that the strategic regional energy system and network planning processes, a public-interest remit of the NESO, and more support for investment ahead of need in RIIOED3 and beyond can improve this situation. An aggregated list of projected equipment needs (or ranges if not too broad), based on the NESO's pathways, would enable manufacturers to prepare investment cases to grow the supply chain. These could then be hopefully signed off, once firmer purchase commitments are made (which RIIO needs to promote). In addition to DNOs' equipment needs, it would be helpful if such an aggregated 'workbook' could cover also equipment needs driven by expected growth of battery storage, renewable energy, EV charging infrastructure, industrial electrification, asset replacement and wider connections because these developers require the same network equipment.

Based on insights from the transmission sector, it is possible that the NESO is well placed to make available such clarity and line of sight, based on the data it will hold in combination with its public interest remit. By contrast, transmission network owners (TOs) have not been forthcoming with greater visibility of future planned purchases with their supply chain, and securing sufficient capacity in their supply chain for key components such as transformers poses serious delivery risks to TOs' projects. It is imperative that a similar situation is avoided in the distribution network sector<sup>3</sup>. Conversations with NESO about their transitional CSNP outputs (Pathway to 2030 Beyond 2030 report)<sup>4</sup> suggest that NESO hold data, provided to them by TOs for the purposes of strategic network planning, that include high-level projections of numbers of substations, km of cable required, and so forth. Ofgem of course also hold such information for the purposes of price control setting. If Ofgem determine that it is not the NESO who should make such information available, we encourage Ofgem, NESO and DNOs to consider which process can be put in place instead to provide more long-

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<sup>3</sup> BEAMA have been engaging separately with the RIIOED3 team on this topic.

<sup>4</sup> The NESO's transitional CSNP outputs ("Pathway to 2030"; "Beyond 2030" report) did not in their published versions include projected 'bills of materials', but we are aware that the NESO does, based on Transmission Owners' data inputs, have such high-level estimates of equipment needs (not to detailed design specification, but at the level of system ratings).

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term supply chain visibility. If the RESPs will not provide visibility of future equipment needs, it is important that an alternative aggregated ‘workbook’ is available elsewhere (perhaps as part of a separate publication, as an annex, or as part of the CSNP or other output) that informs funding decisions under RIIIO. The aim would be to provide visibility and commitment to the supply chain that enables building the business case to invest. The public interest remit of the NESO should certainly include making available data that supports building resilient supply chains.

**7. Do you agree with the framework of standard data inputs for the RESP?  
Please provide your reasoning.**

It is important that as accurate as possible data on housing stock and energy consumption is used, so the role of EPC and smart metering data should be considered. However, we are aware Government (and many other stakeholders) have identified shortcoming with the existing format of EPCs. We would recommend input from Ofgem into central government on Ofgem’s and NESO’s aims for using data in the RESP, to help ensure that outcomes of the Government’s EPC review ensure certificates and underlying data have a purpose for wider energy system planning.

On the framework of standard data inputs for the RESP, this would be beneficial in supporting a consistent method for DNOs to access and utilize smart metering data. Smart metering data can help network companies understand demand peaks, as well as real-time insights into voltage and load conditions that can improve network reliability. However, several challenges need to be addressed. DNOs are not currently making sufficient use of smart metering data, with reasons for this including:

- Lack of engagement with the smart metering supply chain on opportunities to use data
- Data privacy regulations mean explicit consent to use smart meter data is often required, resulting in limited detail being available to DNOs
- Uncertainty on ownership of data making access by DNOs more difficult with technical challenges on collating data from a variety of sources

These need to be overcome and this can be achieved with enhanced collaboration with the smart metering supply chain, clearer guidelines on data ownership and privacy and the development of better infrastructure for data processing.

More widely, DNOs will need to continue working on better data on the connections of Low Carbon Technologies (LCTs) to their networks, as an important enabler for strategic planning and realistic assumptions. BEAMA fully supports the ongoing initiatives to address data gaps in LCT grid connections. However, to ensure these efforts deliver successful outcomes, greater urgency and focus are needed. Accelerating the development, implementation and integration of these projects will be critical in overcoming existing challenges, enabling timely infrastructure planning and ensuring the manufacturing sector is prepared to meet the demands of a low-carbon future.