

ENA Consultation Response

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Question 1 – Laying the RESP foundations

Question 1: What are your views on the principles (listed below) to guide NESO's approach to developing the RESP methodology? Please provide your reasoning.

ENA members are broadly supportive of the proposed principles that will guide the NESO's approach to developing the RESP Methodology. We believe however the following additional principles should also be considered in guiding NESO's approach:

'Be transparent/collaborative' – The methodology development itself cannot be done in isolation of industry and stakeholders and must be developed collaboratively for the RESP to deliver on Ofgem's vision.

'Be consistent with entities own accountabilities' – The NESO must be cognisant of local actors' core accountabilities, powers and responsibilities when developing the RESP methodology. Accountabilities must be clear between all parties. For example, local authorities are responsible for local area energy plans (LAEPs) as a core output. The RESP role should ensure local authorities have support and can build the capability to develop and maintain a LAEP. Devolved authorities have different accountabilities and responsibilities based on their specific devolution agreements, and these must be recognised within the methodology development. In addition, DNOs and GDNs have legal and security obligations under the Act and their licences.

We have the following specific comments on each of the principles:

'Be whole system' – This is the key fundamental principle as it is where RESP offers the most additionality to existing processes and is therefore an area where NESO can convene different actors in the energy system. Central to this principle is how this will work in practice, but if successfully implemented the RESP should increase whole system coordination to ensure consistency across vectors.

'Be place-based' – We agree the RESP should be place based, reflective of local plans helping empower regions to realise their decarbonisation ambitions. The geographic areas of strategic growth, such as industrial clusters and economic development, should be fully defined in the RESP.

'Be Vision-led' – We agree on the long-term objectives for energy system developments to support the transition to a net zero energy system in a cost-effective manner. To achieve this design, the RESP methodology will need to embed strong foundations such that bottom up and top down are both considered to appropriately align local, regional and national policies and objectives.

'Be proactive' – We agree that the RESP can help to drive investment in energy networks, helping them to ensure they do not become barriers to the decarbonisation needs of customers.

Questions 2-9 – Key building blocks of the RESP

Question 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.

We agree that the RESP should include a long-term regional vision, alongside a series of short-term and long-term directive net zero pathways. We welcome further clarity on the detail of these outputs.

The inclusion of a long-term regional vision in the RESP can usefully provide a strategic level of certainty of direction which can be used by DNOs to inform their network development plans and associated investment. Central to its inclusion and design is for it to provide greater confidence to the identification and timely delivery of longer-term investments that networks will need to make to facilitate the country achieving net zero.

In respect of the proposed long-term pathway there is a need for flexibility on the time horizon. The proposed 25-year horizon is only applicable to the UK Government's 2050 net zero target. Across GB other legally binding targets are in place which will require a faster transition. For example, the Scottish Government has set a legally binding net zero target of 2045. Further, the long-term vision will need to reflect place-based targets, which will likely not be consistent, even within a given RESP region.

We agree the RESP should include a short-term pathway. However, such short-term pathways should align to an 'investment' period where go/no-go decisions are valuable when you combine substantive lead times with resource planning.

The move towards pathways aligns to the direction of travel of the Future Energy Pathways and Strategic Spatial Energy Plan (SSEP) which inform the Centralised Strategic Network Plan (CSNP). As pathways (a set of assumptions defining the direction to be followed in a regional plan) are not forecasts (forecasting scenarios), however, a clear definition will be required (e.g. minimum whole system cost pathways and/or pathways to accelerate decarbonisation) to allow network companies to inform their investment plans (where extra capacity is added) to differentiate between them and the actual and forecasted changes of load within a region (where extra capacity is needed).

Question 3: Do you agree there should be an annual data refresh with a full RESP update every three years? Please provide your reasoning.

There are a number of publications and activities that are undertaken by different actors within the energy system that will be reliant upon the RESP as a key input. The following table, whilst not exhaustive, provides a summary of these. To more fully answer the question regarding the appropriateness of the proposed frequency of RESP updates it would be helpful to map out the interactions between the various iterations of these datasets and the RESP.

Publication/activity	Undertaken by	Cadence	Time taken to prepare
Electricity Distribution business plan submission	DNOs (TO networks influence the regional network)	Every 5 years 2023-2028 2028-2033	2.5-3 years before start of price control
Electricity Transmission business plan submission	TOs (DNOs and regional needs influence the national network)	Every 5 years 2026-2031	2.5-3 years before start of price control
Gas Distribution business plan submission	GDNs	Every 5 years 2021-2026 2026-2031	2.5-3 years before start of price control
Load related reopeners within price control	DNOs; potentially TOs	For DNOs, currently two windows in RIIO-ED2, January 2025 and January 2027	6 months prior to submission
Network Development Plan (licence condition 25B)	DNOs	Every 2 years, first publication in 2022	9 months prior to publication
Centralised Strategic Network Plan	NESO/TOs, but could impact DNOs	Every 3 years (major update), starting in 2027, otherwise annual minor refresh	Unknown, as methodology still being developed
Strategic Spatial Energy Plan	NESO/TOs, but could impact DNOs	Every 3 years	Unknown, as methodology still being developed

The timing of each RESP refresh will depend on their intended purpose and the extent to which DNOs will be required to react to them. RESP refreshes should align with the timing of price control submissions and importantly reopener windows to ensure there are no delays when additional funding is required. In addition, the frequency that RESPs are updated should consider the requirement for a stable strategic pathway which isn't sensitive to minor shifts and the yet unknown update frequency of local decarbonisation plans which form a significant input to the RESP.

Question 4: Do you agree the RESP should inform the identification of system need in the three areas proposed? Please provide your reasoning, referring to each area in turn.

Taking each area in turn:

1. Providing consistent assumptions

ENA members are broadly supportive of the RESP developing a set of common assumptions that can be used across all regions, such as the contribution to peak load from different types of low carbon technology (LCT). These assumptions should contain an acceptable range of variation recognising how certain LCT technologies affect networks in different geographies in very different ways and, where appropriate, propose different profiles for different geographies. For example, in considering how domestic solar affects the network it will be essential to recognise fundamental differences in the north and south of the country which would necessitate a different profile being applied when calculating the impact on peak or minimum demand.

There are other areas where consideration should be given to legitimate differences across the country. These include flexibility provision where there are sound reasons for variations in the level of actual flexibility use/take-up across the country.

We propose the NESOs' immediate short-term focus should be on aligning the methodology to define profiles and consumer behaviour changes, rather than dictating the profiles to be used. We would highlight the recent piece of work undertaken collectively by DNOs to develop a common approach (methodology) for calculating secondary transformer utilisation, which could be used as a starting point.

Additionally, it is worthy of note that DNOs collect a lot of data regarding consumer usage patterns and measured data. We would encourage NESO to engage with DNOs who have already made progress in this area.

Finally, we believe there should be a forum to discuss updates to methodologies and new data sources as and when these are made available so that consistent assumptions are updated as appropriate.

2. Setting out the spatial context for capacity needs

ENA members are supportive of RESP helping to inform when and where constraints may occur, through forecasts of customer needs. In this regard we believe the RESP can usefully inform, rather than directly identify network capacity needs. DNOs will account for customer diversity and network connectivity in translating RESP outputs to the network demands needed to assess the impact on networks and determine requirements for additional capacity.

DNOs currently prepare heat maps and network headroom capacity reports as part of their Network Development Plans. These should be considered as a source of the RESPs' spatial views of demand and

generation growth projections against network conditions. We believe there may be benefit in the RESP developing a cross-vector tool or dataset in addition to what DNOs are currently providing. DNOs produce map visualisations of Distribution Future Energy Scenarios (DFES) forecasts of customers' uptake of electric vehicles and other low carbon technologies. The NESO could helpfully provide nationwide versions of these uptake maps on a cross-vector basis.

3. Informing strategic network investment

ENA members believe RESP can help inform DNO investment decisions by providing insights on regional forecasts of generation and demand growth that in turn may help evidence DNO plans for strategic investment. Consistent with DNO accountabilities, the RESP should not prescribe actions or network investment solutions.

We see opportunities for the RESP in the coordination/optimisation at a strategic level across the transmission/distribution boundary, using CSNP/Holistic Network Design (HND) and SSEP inputs and in other nationally significant strategic whole system projects, such as UK freeports at the upper end of distribution voltage levels, i.e. 33kV to 132kV. We do not foresee RESP's role in this regard extending to lower voltage levels and associated network development projects such as proactive unlooping. These are better left managed by DNOs who have the in-depth local knowledge and expertise at this granular level.

We welcome Ofgem's confirmation that network companies will remain responsible for load forecasting down to street level (e.g. mapping generation and demand loads to half-hourly profiles and mapping granular network assets), optioneering, and developing load related investment plans.

Finally, we would note the assistance RESP can provide in supporting DNO investment plans; facilitating more streamlined processes that unlock the efficiency benefits of being strategic, e.g. providing the confidence to Ofgem in strategic programmes of work that allows early mobilisation of supply chains.

Question 5: Do you agree technical coordination should support the resolution of inconsistencies between the RESP and network company plans? Please provide your reasoning.

ENA members are supportive of NESO acting as a facilitator, helping to ensure alignment between the whole system energy plans and network company plans, ensuring alignment and integration across local and national strategies as a result.

The definition of a net zero pathway within the RESP, with inputs from regional stakeholders and networks will help inform the development of network company plans. Agreement of the application of the RESP pathway in business planning could avoid the issues with inconsistencies in the basis of DNO plans encountered when preparing for RIIO-ED2.

The principles of technical coordination should be developed cognisant of the different institutional roles of the key actors at the local level:

- NESO/RESP: setting the single short or long-term pathways for decarbonisation for a region based on gained insight from local authorities, GDNs, DNOs & national Government
- TOs/DNOs and GT/GDNs: demonstrating that an effective blend of network solutions have been assessed and either included in ex-ante plans or can be delivered through uncertainty mechanisms
- Local authorities: spatial plan alignment and timely decision making for distribution energy resources across the whole system
- Ofgem: efficiency of network investment and administration of price controls and uncertainty mechanisms

It is important that NESO's focus does not extend to the setting of strategic directions on specific solutions like demand reduction, as this strays into optioneering. DNOs must retain accountability for network optioneering for their respective electricity networks. Further, NESO's technical coordination role should not extend to a technical assessment of DNO plans nor should it override their investment plans. The technical assessment of business plans should remain the role of the Ofgem engineering hub and should not be outsourced to NESO.

ENA members would be supportive of working with Ofgem to help develop the detail of how technical coordination can work towards enhancing existing structures and processes as well as developing new pathways.

Question 6: What are your views on the three building blocks (modelling supply and demand, identifying system need and technical coordination) which come together to form the RESP in line with our vision? Are there any key components missing?

The three building blocks (i) supply and demand modelling (ii) identifying system need and (iii) technical coordination, can work together if details are developed with a clear objective of the RESP informing potential strategic network development requirements for DNOs to consider including in their business planning. This is likely to be a low regret position as short-term network development at the upper end of distribution voltage levels is unlikely to lead to stranded assets due to the anticipated electrification of heat and transport.

Taking each area in turn:

Modelling Supply and Demand:

ENA members are supportive of the RESP modelling supply and demand down to a local authority level. Given their obligations, DNOs will continue to leverage their extensive expertise to generate their DFES forecasts which should act as an input into the RESP and also be used to allocate RESP pathways to granular network assets. ENA members are not supportive of the pathway being presented at LSOA level. The RESPs' focus should be at a macro level, providing holistic solutions which benefit wider areas of the network.

Identifying System Need:

ENA members are broadly supportive of the RESP developing a set of relevant assumptions (with appropriate allowances for regional variations) to aid consistency of network impacts.

Under this second building block, the consultation proposes that “*the RESP take a more directive role in identifying the location for strategic investments in line with the long-term vision for the region*”. We have concerns with the principle of the RESP’s role extending to directing, rather than informing, DNOs to undertake specific strategic investment or where DNOs should install additional capacity. RESP can help inform DNO investment decisions by providing insights on regional forecasts of generation and demand growth.

Technical coordination:

RESP should function as a facilitator, helping to resolve differences between whole system energy plans and network company plans, ensuring alignment and integration across local and national strategies.

While RESP should focus on cross-vector optimisation and decarbonisation, our members believe they should avoid setting strategic directions on specific solutions like demand reduction, as this strays into optioneering. NESO’s technical coordination role should not override DNO investment plans, as DNOs must retain the ability to deviate from the RESP, with justification, with Ofgem ultimately the authority that signs-off plans.

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

ENA members agree that both top-down and bottom-up data inputs should be developed and reconciled. DNOs and RESPs should work collaboratively to ensure data inputs align. There should be no set assumption that one data input should have priority over the other. Any review should ensure equality of assessment of inputs.

The energy networks are well placed to be the primary source of bottom-up data given they already obtain much of this through established relationships with local actors, including:

- LAEPs and local heat and energy efficiency strategies (LHEES) led by local authorities.
- Data and forecasts from DNOs (DFES) and GDNs, including relevant data such as planning permission status and other information which can indicate the likelihood of connections.
- Input from local stakeholders including community groups, businesses, and regional organisations.
- Existing electrical vehicle ownership and heat pump ownership data as included in regulatory submissions.
- Collaborative workshops and consultations with stakeholders.
- Data sharing agreements with local authorities and energy companies.
- Utilisation of existing data platforms and models to gather and analyse relevant information

To avoid duplication and ensure suitability to underpin DNOs’ security of supply obligations and provide the most holistic view of energy needs, the RESP should utilise DNOs’ bottom-up DFES. The practice of RESP

informing DFES and DFES informing RESP should become an iterative process, systematically repeating the informative loop, improving outputs as a result.

By their nature, input data sources will be subject to continual updates. There may as a result be areas where the RESP is making use of soon-to-be out of date information. This may in certain circumstances risk inefficient investment decisions being made. This reality should be recognised as part of the data inputs process and not be allowed to introduce delays, which are caused by waiting for 'perfect' information to be available. The disadvantages of doing so would far outweigh the potential benefits.

One area in which we believe the RESP's contribution should be focused is on improving existing processes which require the translation of a myriad of input data sources into a single usable format. This is an area that DNOs have found to be challenging as part of the DFES process. Addressing this will require RESP engagement with external parties outside of the energy system (such as the Department for Levelling Up, Housing & Communities) to embed a standardised format to collect data. The ENA Open Networks project previously identified potential benefit in creating common data sharing templates for input data to DFES (see report [here](#)).

Question 8: Do you have any suggestions for criteria to assess the credibility of the inputs to the RESP?

NESO should draw upon established methods for assessing maturity of plans when developing criteria for assessing the credibility of the input. DNOs have considerable expertise in assessing the credibility of inputs into network planning – DFES, regional engagement, connections, industrial development registers and devolved government plans. The DNOs also possess extensive historic data on connections, which is invaluable in incorporating the connections pipeline into DFES.

A transparent methodology will need to be developed to assess the credibility/maturity of inputs to the RESP, which must also indicate how the bottom-up and top-down approaches to modelling supply and demand are adjusted to ensure alignment. Inputs with no or limited credible support will be insufficient to base network investment decisions on. Certain inputs will have a statutory status and therefore we suggest this should be used to weight them appropriately.

The credibility of assumptions should be informed by historical accuracy assessments of the various input data sources, generated using top-down or bottom-up approaches. Using domestic customer connections as an example, comparison of the historic numbers of houses built against Local Plan information and how this aligns to top-down assumptions which would be based on population growth statistics would help inform the methodology.

Question 9: Do you agree with the framework for local actor support? Please provide your reasoning.

ENA members are supportive of a framework that includes local actor support and engagement. Such local actor support can become a key input to modelling future supply and demand, and in developing the framework, care must be taken to avoid duplication of effort and activity between RESPs and DNOs.

For example, RIIO-ED2 has established requirements on DNOs to support local planning, and there are real, tangible benefits to stakeholders in maintaining DNOs' engagement with local authorities, including DNOs being embedded in their local communities and making good progress with LAEPs. For continuity and in the interest of customers, it is important that this and other engagement avenues are retained within the proposed structure.

Whilst we acknowledge Ofgem's clarification that it is not within its powers to determine which duties local authorities should hold regarding local energy planning or to provide funding to local authorities or personnel to develop local aspirations, we believe this position will be viewed with disappointment by some regional stakeholders. We would encourage Ofgem and NESO to discuss this issue with relevant policy makers, including the Department for Energy Security and Net Zero and the Ministry of Housing, Communities and Local Government. In the detailed design workshops, some stakeholders (local authorities) vocally supported RESPs providing personnel and/or financial support to projects. Without this support, this will remain as a gap as LAEP activities are not mandatory.

Finally, we would note that the effectiveness of RESP will be linked to the quality of local input. RESP needs to go further in supporting this, including identifying their limitations. If this can't be supported directly, we suggest that NESO should advocate for change. NESO/Ofgem should strive to understand the capabilities of local authorities in terms of funding, structure and ability to deliver the outputs RESP needs.

Questions 10-12 – Regional governance

Question 10: Do you agree with the purpose of the Strategic Board? Please provide your reasoning.

A key area for the RESP to add value will be the introduction of a formalised, consistent path reflecting the regional plans set by local authorities to provide a view of potential future capacity requirements, which the energy networks will use to undertake detailed planning to determine which investments are needed. In this regard, the Strategic Board should help set a strategic direction/objective for a particular region.

ENA members agree that the purpose of the Strategic Board should be to:

- strengthen engagement with and between local actors
- have responsibility for oversight of the development of RESP
- provide a forum for collaboration, navigation of trade-offs and support for whole system regional planning

- provide a steer on key decisions
- provide NESO with the opportunity to show how they have incorporated regional aspirations into regional plans and pathways.

Autonomy should be a key governance principle for the Strategic Board. Ofgem's proposal that "*NESO will be required to evidence the Strategic Board's steers in publishing a RESP and should provide reasons for any divergence from the Strategic Board's recommendation*" is a step in the right direction and this requirement should be codified in a licence condition. However, there are no mechanisms for stakeholders to challenge the RESP output. NESO will be making decisions from a whole system perspective which will necessarily involve trade-offs between intra- and inter-regional interests. It is important for regional stakeholders to have avenues for reviewing/scrutinising the RESP output with an escalation route where any party has a major issue with RESP/NESO decisions. This is especially important if the Strategic Board does not have a role in 'signing-off' the RESP.

Question 11: Do you agree that the Strategic Board should include representation from relevant democratic actors, network companies and wider cross-sector actors in each region?

The Strategic Boards should be representative of the democratically elected authorities in each RESP area.

We welcome and support the inclusion of relevant energy networks on the Strategic Board, including for example if a RESP region crosses more than one DNO network, then all DNOs should be represented. This is necessary to fulfil DNO accountabilities and can also aid consistency of approach and shared learning across RESP boundaries.

We welcome and fully support other key relevant stakeholders being represented, beyond those with a clear democratic mandate, with consideration given to ensuring that the composition of Strategic Boards does not become too large, making them operationally less effective as a result.

The composition of Strategic Boards is likely to differ from one region to the next. Care will need to be taken to ensure there is fair representation and balance, avoiding the potential for, for example, the voice of wider cross sector actors or very vocal connected customer(s) detracting from those with a democratic mandate. There is also a danger that only proactive and well-resourced local authorities participate in Strategic Boards, leaving the RESP susceptible to future conflict around non-democratic decisions.

Members sitting at the Strategic Boards should have the required level of knowledge/seniority within their organisation.

Trialling of Strategic Board structures will be an important step as we transition towards this model to find what make-up works effectively, as well as developing the right terms of reference and accountabilities. We recommend that Ofgem looks at good practice where similar boards have been created elsewhere (such as Wales).

**Question 12: How should actors (democratic, network, cross-sector) be best represented on the board?
Please provide your reasoning, referring to each in turn.**

ENA members agree there is a trade-off between maximising stakeholder participation in the Strategic Board, whilst ensuring it remains lean and efficient. Striking the right balance will be highly region-specific (e.g. some regions may have industrial clusters, some regions may be part of devolved governments etc). As stated in our response to the previous question, trialling of Strategic Board structures will be important to find what make-up works most effectively. We would note however the importance of getting the 'right' representatives on to the Strategic Board, with the necessary relevant knowledge and capacity to represent relevant parties, rather than ensuring that all parties are individually represented.

Taking each category in turn:

Democratic actors: The interaction between Strategic Boards and working groups needs further development. In particular we would note the importance of ensuring the views of the hyper-local level across the RESP area are able to be effectively communicated to the upper tiers of local government, appointed to the Strategic Board, to ensure their views are understood and able to be acted upon.

We agree that local authority representation should be a higher tier level (combined authorities) or an equivalent geography. It is important to carefully consider the right size for the Strategic Boards to ensure effective strategic oversight. Key stakeholder and functional representatives must be incorporated to deliver diverse perspectives whilst ensuring the breadth of technical expertise. It will be important to balance the need for coverage of local authorities with the smaller number of network companies, ensuring DNO positions are not marginalised in Strategic Board decisions/outputs.

Networks: this may be a category where common rules can be established as there are fewer region-specific differences to consider (compared to the other two categories of actors) and a small number of DNOs and GDNs operational in each RESP region. Ofgem's proposal that network companies be represented on the Strategic Board to "*provide technical oversight and review the implications of the RESP, especially in how it will impact network planning*", is sensible.

As network companies must take the RESP outputs into consideration in their detailed network planning, they should have the ability to formally raise their concerns with any recommendation that is fundamentally unimplementable, or risks network operator accountabilities, e.g. safety/security of supply.

In this category, we also believe the inclusion of IDNOs and IGTs should be considered. We would welcome further consideration of the inclusion of these actors in the general context of RESP and the interactions, impacts and involvement they should have in RESP development and outputs.

Cross-sector: arrangements for this category of actors is likely to be highly region-specific, for example due to the prevalence of local heat networks. It will be important that Strategic Board membership is representative of the cross-sector actors that will have the most relevant input in a given RESP region. Where possible,

consideration should be given to representation through relevant association groups, cognisant of the need to ensure the Strategic Board does not become unwieldy.

Questions 13-15 - Boundaries

Question 13: Do agree with the adaptations proposed for Option 1? Please provide your reasoning.

ENA members support the adaptations proposed for Option 1.

Regardless of which option is taken forward, network companies will often have to engage with multiple RESPs in the same licence area. For this reason, it will be crucial to have streamlined and efficient processes for engagement and data/information sharing to minimise as much as possible the administrative burden and duplication of efforts.

Once the primary boundaries are confirmed it may be a useful exercise to assess where network infrastructure (at a GSP level) crosses these boundaries and set out a process for cross-RESP interaction.

Question 14: Do you agree with our assessment that Option 1 is a better solution than Option 2? Please provide your reasoning.

ENA members support and agree with Ofgem's assessment that Option 1 is a better solution than Option 2.

Question 15: Do you agree a single region for Scotland is optimal? If you think a two region solution is better, do you agree the split should occur at the SSEN and SPEN DNO boundary? If not, please provide your reasoning and alternative option(s)

ENA members with DNO networks in Scotland favour a two-region solution. Further, that this split in Scottish RESP regions aligns with the existing SPEN and SSEN DNO boundaries. The rationale for this is as follows:

- the diversity and scale of Scotland's distribution network, particular challenges at the transmission/distribution boundary and associated natural and economic geographies and scale, more naturally lend themselves to a two-region approach.
- the number of stakeholders involved in a single region approach would be significant, including involvement of 32 local authorities. This could prove difficult to manage and coordinate and is likely to add unnecessary complexity.
- Should a one RESP model be adopted for Scotland, the rationale above could necessitate consideration of the single RESP operating two sub-groups, within the Scotland-wide structure, allowing appropriate assessment and input at a sub-regional level.