ESB NETWORKS

Distribution Network Development Plan

Consultation Summary of Responses

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Contents

1. Executive Summary

In our Networks for Net Zero strategy, ESB Networks has committed to delivering a Net Zero Ready Distribution Network by 2040 to enable Ireland to achieve its legally binding net zero target by 2050. A key action in our Strategy is to publish a Ten-Year Distribution Network Development Plan (DNDP) every two years as required under the Clean Energy Package Directive (EU) 2019/944. The aim of this plan is to inform stakeholders about future investments and flexibility service needs for Ireland's electricity network.

On 8 August 2025, ESB Networks launched a public consultation on the draft DNDP, with the consultation period concluding on 24 September 2025. This consultation response document demonstrates how ESB Networks is incorporating stakeholder feedback into the development of the DNDP.

We are committed to ongoing, collaborative engagement with all stakeholders as we work together to achieve the transformation necessary for a sustainable, low-carbon future for Ireland.

Below, we provide a high-level summary of the main themes and topics raised during the consultation, along with ESB Networks' responses. We welcome further direct engagement with stakeholders who wish to discuss specific items in more detail.

2. Consultation Responses

Submissions to the DNDP consultation were received from the following organisations:

1. Meath County Council
2. Louth County Council
3. Department of Enterprise, Tourism and Employment (DETE)
4. Department of Transport, (DoT)

   DoT submission included responses from the following entities

   i. Zero Emissions Vehicles Ireland (ZEVI) (Division)
   ii. Climate Engagement and Governance (Division)
   iii. Emergency Planning (Division)
   iv. Marine Environment Protection (Division)
   v. Air Nav Ireland (Agency)
   vi. National Transport Authority (Agency)
   vii. Iarnród Éireann (Agency)

In general, the responses to the consultation were constructive and positive in terms of welcoming the publication of the DNDP and acknowledging ESB Networks' commitment to outlining the proposed investment requirements over the next 5-10 years. Respondents also noted the relevance of the DNDP to Ireland's wider policy objectives. A sample of these comments are included below:

"The Department's Emergency Planning Division notes and welcomes ESB Networks commitment to future-proofing the Irish electricity network, which is essential to the resilience of the transport sector and associated critical national infrastructure"

"We welcome ESB Networks' commitment to invest over €10 billion by 2030 to develop a smarter, more flexible and resilient electricity network. This investment is essential to meet Ireland's climate targets and to support the electrification of key sectors, including transport"

"The continued forward planning and strategic approach outlined in the consultation documents is welcomed. The focus on future electricity needs and network readiness is timely and essential in the context of the decarbonisation and the electrification of Ireland's transport systems, with particular regard to the ports and shipping sector."

"....welcomes the opportunity to comment on ESB Networks' Ten-Year Distribution Network Development Plan (DNDP).DETE recognises and supports the urgent transformative upgrade now required in Ireland's electricity networks, and substantially increased investment within PR6 during 2026-30 and beyond 2030"

"....welcomes the ESB NETWORKS's commitment to adopting a 'Build Once for 2040' approach to network development and investment and would welcome further engagement on the industrial demand modelling that might inform it."

3. Response Themes

3.1 Growth Assumptions and Network Planning

A number of submissions raised detailed queries about growth rate assumptions and scenarios.

ESB Networks response:
ESB Networks developed several scenarios for growth rates, with specific assumptions underpinned by the Climate Action Plan (CAP), Project Ireland 2040, ESRI housing scenarios, Alternative Fuels Infrastructure Regulation (AFIR) and CSO data. Each scenario has been modified to consider the pace of technology adoption (e.g. electrification of transport and heat). However, all scenarios are aligned with our strategic goal of a net zero distribution network by 2040.

This enables ESB Networks to plan and prioritise projects over the next 15 years. It is essential to understand that some of these projects can take 5-10 years from inception to electrical connection. While ESB Networks submits investment plans to the Commission for Regulation of Utilities (CRU) every five years, with PR6 commencing in 2026, projects for a longer horizon have already been identified. These projects, in conjunction with our commitment to develop a market for Flexibility, will meet projected electrical needs to 2040.

It is important to note that the electrical system does not map directly to each county. For example, it is possible that a 110 kV and/or 38 kV station in one county may feed load in an adjacent county.

The growth rates outlined in the DNDP are based on demand growth at peak times, usually around 6pm on a winter evening. However, this is not always the case, as some substations see peak loading at lunchtime or other times during the day, depending on the type of load supplied from the substation. This allows ESB Networks' planners to plan based on maximum station loading. It is therefore possible to see variations between counties that are not necessarily intuitive.

3.2 Housing Growth Requirements

A number of submissions highlighted the new housing targets, published by the Department of Housing, Local Government and Heritage (DHLGH) in July 2025.

ESB Networks response:
On 29 July 2025, DHLGH published the document "National Planning Framework, Housing Growth Requirements". This document outlines an updated set of housing targets on a county by county basis. These guidelines replace the previous Section 28 guidelines published in 2020. The previous guidelines indicated a requirement of 33,059 housing units per annum and the revised targets indicate a requirement of 55,598 units per annum from 2025 to 2034, a significant increase.

The revised housing targets will support a plan-led approach to the National Planning Framework (NPF) implementation at regional and local level, allowing the NPF growth objectives to be incorporated into city and county development plans as they are reviewed.

From ESB Networks' perspective, the updated housing targets and the breakdown by county is a useful additional dataset. This information will be assessed by regional distribution network planners. Distribution network planning is particularly sensitive to local demand needs in terms of the location, scale and timing of new demands coming onto the system. In this respect ESB Networks looks forward to engaging with local authorities to understand the implications in terms of the location and timing of new housing developments on a county by county basis.

In terms of housing projections, the DNDP growth scenarios (conservative, base, best-view and aggressive) were developed to align with the ESRI's low, average, and high housing growth scenarios as outlined in Part 1:Summary Document and Methodology Statement.

In the context of the DNDP, there will be no material change to the projects identified in the plan despite the publication of the new housing targets, as the specific implications per county are not yet clear. However, as noted above, distribution network planners continually review and develop the network based on new information becoming available, so if new projects are required in specific locations as a result of the new targets, new solutions will be progressed and will be incorporated in future versions of the DNDP.

It is important to note that once a new high-voltage (HV) station is energised in an area, it provides a large step change in capacity. The demand load in the surrounding area can grow over the lifetime of the station for the next 50 years. This in effect means that the projects proposed can withstand changes to growth rates or housing targets. For example, we will be able to absorb a higher number of housing units in a local area than was originally planned.

ESB Networks will continue to monitor changes in Government policy and targets as they develop. Any changes in housing targets will be accounted for in subsequent revisions of growth scenarios.

3.3 Large Energy Users (LEU) Assumptions

One submission requested further clarity on the assumptions regarding the inclusion of projected data centre demands in the DNDP.

ESB Networks response:
In respect of demand growth arising from data centres, the assumptions in the growth scenarios were as follows:

- For the Base, Conservative and Best View Scenario, the assumption is that no new data centres will be connected by 2030.
- For the Aggressive scenario: No consideration of constrained areas. New data centres connections are based on the applications in the queue at the time of the CRU direction in 2021.
- Since 2021 ESB Networks has been applying "CRU Direction 21/124" when processing new Data Centre applications.

ESB Networks has also been engaging with the CRU and industry players in respect of the updated LEU connection policy "CRU/2025/04 Proposed Decision Paper."

3.4 Large Energy Users (LEU) Program for Government

A number of submissions made reference to the inclusion of a new data centre plan in the Programme for Government and planning for future sites where both generation and large demands are co-located.

ESB Networks response:
The new **Programme For Government 2025** published in Q1 2025 states that the Government will "Develop a comprehensive plan to accelerate energy generation, connectivity, and planning processes. The plan will emphasise renewable sources to provide certainty for industries making short- and medium term investments. This plan will also guide the development of data centre infrastructure in alignment with our decarbonisation objectives and growing Ireland's knowledge-based economy"

Since 2021 ESB Networks has been applying the CRU Direction CRU/21/124 when processing new data centre applications.

The LEU connection policy CRU/2025/04 Proposed Decision Paper was issued for public consultation by the CRU on 4 April 2025. ESB Networks has completed a market intelligence exercise requested by the CRU and is awaiting the final decision paper which will define the future policy direction in respect of data centre connections. This will inform the next iteration of the DNDP.

ESB Networks will also continue to engage and collaborate with government departments, the CRU, industry, and local authorities in respect of the comprehensive plan referenced in the Programme for Government.

3.5 Industrial Heat

One submission questioned the extent to which the growth assumptions allow for an increase in the electrification of industrial heat.

ESB Networks response:
Industrial heat electrification scenarios are based on electrification and emissions targets outlined in CAP 2023. We note that these were not updated for CAP 2024 so we have relied on the CAP 2023 targets to inform our assumptions. These specify:

a. 2025: 35% of low-/medium-grade heat electrified (out of heat that is electrifiable), 64% of high-grade heat converted to direct/hybrid electrification technology (out of heat that is electrifiable), 0.4 MtCO2 emissions abatement.

b. 2030: 55% of low-/medium-grade heat electrified (out of heat that is electrifiable), 88% of high-grade heat to be converted to direct/hybrid electrification technology (out of heat that is electrifiable), 1.3 MtCO2 emissions abatement.

c. 2035+: 60-70% share of carbon neutral heating in total fuel demand of industry.

These targets have been adapted into the four scenarios described in Part 1 of DNDP.

3.6 Road and Bridge Infrastructure

One submission highlighted concerns regarding the extent of underground cabling that will be required in the roads infrastructure to enable the delivery of projects identified in the DNDP.

Concerns were also raised regarding the transportation of large High Voltage (HV) transformers (exceeding 180 tonnes), also known as Exceptional Abnormal Loads (EAL). Modern bridge structures have been designed to accommodate loading of 180 tonnes while a significant number of bridge structures in the State are legacy bridges, with the design loading unknown but significantly lower than 180 tonnes.

There was a request for increased consultation between ESB Networks and the relevant local authorities in respect of both issues.

ESB Networks response:
ESB Networks uses several standard transformer sizes on the HV distribution system which includes 5 MVA, 10 MVA and 15 MVA at the 38 kV/MV voltage level, 31.5 MVA and 63 MVA at the 110 kV voltage level and 250 MVA at the 220/110 kV level.

The weight of the 110 kV 63 MVA transformer is circa 83 tonnes, and the 38 kV transformers are much lighter and well below the 180 tonnes referenced in the submission regarding EAL.

Projects at 110 kV and 38 kV represent the majority (>97%) of the projects within the DNDP. Transformers weighing >180 tonnes and up to 300-400 tonnes would typically be required for Transmission system scale projects. Projects of this scale are generally not within the scope of the DNDP as the Transmission system is planned and operated by EirGrid in their role as Transmission System Operator.

Outside of the Dublin Region, EirGrid is responsible for planning and operating the 110 kV, 220 kV and 400 kV Transmission system. Within Dublin, ESB Networks in our role as Distribution System Operator (DSO), operates the 110 kV networks and a number of 220 kV transformers. As part of the DNDP, a number of new 220 kV transformers will be installed in the Dublin region. These transformers can be of the order of 180-200 tonnes and so are relevant to the point raised in the submission to the DNDP consultation.

ESB Networks and our delivery partners in ESB Engineering & Major Projects, will continue to engage with stakeholders on issues relating to roads infrastructure through the Joint Electricity Transport (JET) committee.

3.7 Connection Times

A number of submissions highlighted the need for faster connection times for new distribution customers.

ESB Networks response:
ESB Networks continually works to improve customer experience through faster connection times. One of the goals of the DNDP is to set out all the projects in the pipeline that will deliver additional capacity to accommodate Distribution connected customers. Delivery of these projects will result in a step change in the level of capacity available, which in turn will reduce network constraints and improve connection times. When network areas are constrained, it can lead to longer connection timelines due to the increased complexity of finding solutions, and the requirement for long lead-time capital projects to deliver additional capacity.

In addition to building physical infrastructure, ESB Networks is progressing a number of smart, non-wires solutions to accelerate connection times in limited capacity areas. This includes measures to stimulate the flexible service market, while additional capacity is being delivered.

In addition to the 'Demand Flexibility Product' – which may be suitable for parties investing in generation technologies or storage –ESB Networks is progressing 'Local Business Flex' which aims to reduce pressure on the distribution network in certain areas of Ireland.

ESB Networks' customer flexibility pilot 'Is This A Good Time' now has over 36,000 domestic participants and access to SMART meter data – expected in late 2026 – will introduce more options for how this initiative can be enhanced in the future.

Initiatives due to launch in 2026 include 'EV Flex', which incentivises EV owners to charge their cars at a time which suits the local network; and 'SME Flex' – as a follow on from 'Beat The Peak Business' which pays business customers for shifting their load to non-peak times – an offering targeting SME customers.

ESB Networks has been engaging with customers in relation to timed and flexible connections. These would facilitate shorter connection times for customers in limited capacity areas where they are willing to flex their energy usage to meet the needs of the network or limit their consumption at specific times. This type of connection may be suitable for existing customers looking to transition to eHeat.

3.8 Detailed Project Status

A number of submissions requested more granular details on the status of the delivery of HV projects.

"While the DNDP provides some high-level of detail on proposed projects, we would welcome if a more specific level of detail within the 'Delivery' category could be provided"

ESB Networks response:
The purpose of the DNDP is to provide a high level, medium to long-term plan for the development of the HV distribution network. Each project in the plan has one of three project statuses assigned to it: Pipeline, Development or Delivery.

ESB Networks manage a wide portfolio of projects at multiple voltage levels that move through multiple discrete stages in the project life cycle. In order to strike a balance between providing more information to the public but not increasing the complexity of the plan, it is not planned to break the project status down further into more granular steps.

3.9 Portlaoise Area Reinforcements

One submission raised a clarification in respect of projects underway in the Laois area:

"We are aware that certain improvements are planned within Laois – in particular in Portlaoise and Portarlington, some of which are underway currently. However the DNDP does not contain reference to some projects that are underway or close to implementation".

ESB Networks response:
Table 57 in the Distribution Network Development Report highlights the following projects planned for Portarlington (Bracklone 110 kV station) and Portlaoise (West Portlaoise 110 kV Station). In 2025, after the initial development phase of the DNDP, an additional interim capacity project was identified to uprate the existing Portlaoise 110 kV substation to 2 x 63 MVA transformers. This project has now been energised and will be added to the final version of the DNDP report for publication in December.

In general, there is a constant pipeline of new projects being identified to meet specific local needs as they arise due to local demand increases. The DNDP is intended as a high-level, medium to long-term plan, and will be updated every two years to capture all projects as they arise and develop.

3.10 Capacity Workbooks and Capacity Heatmap

A number of submissions requested updates to the Availability Capacity Heatmaps and the Capacity Workbooks, and the inclusion of new planned projects.

ESB Networks response:
A new and updated version 2.0 of the Network Scenario Headroom Report (Capacity Workbooks) are being prepared and will be released in Q4 2025. This new version will include projected capacity increases arising from the delivery of HV reinforcement projects planned for the PR6 period (2026-2030).

A new and updated Availability Capacity Heatmap was published on our website in October 2025.

3.11 HV Project Robustness

A number of submissions made reference to new or updated policies or targets for example the new DHLGH housing requirements released in July 2025.

ESB Networks response:
ESB Networks regularly updates growth forecasts and scenarios with new data that has become available. The scenarios used in the DNDP were prepared in 2024. Any new data that has become available since then will be taken into consideration in the next revision of DNDP.

There may be a time-lag between the data analysis and preparation of growth rates and scenarios based on data available at the time, and the process of preparation and publishing of the DNDP. This may mean that recent economic and policy changes or updated targets may not be included in the latest iteration of the DNDP.

Growth rates and scenarios are just one of many inputs to the planning process. They give a useful set of possible future network demand needs. However, many other factors are considered when preparing the DNDP and identifying the projects that are required, including the existing demand load on the station, station Load Index (LI), the need for future 10 kV to 20 kV voltage conversion, existing HV station age/vintage, local operational requirements and local customer needs.

Once a project to energise a new HV substation is completed it provides a step change in local capacity and so the solution is robust for multiple growth scenarios at that location.

3.12 Bus and Rail Electrification Projects

A number of submissions made reference to the significant plans for the electrification of bus and rail projects and the need for DNDP to take this into consideration.

ESB Networks response:
In recent years, ESB Networks has engaged extensively with State bodies in respect of planning for new bus and rail electrification projects. By their nature, these demand load requirements are bespoke, with the MIC requirements, connection voltage and timing being specific for each location and project. This means that these connections are planned as spot (point) loads with specific solutions for each.

Metrolink: This project is not called out specifically in the DNDP as this is a spot load in a specific location. However, ESB Networks has been planning for this project with the customer and there are plans to expand both the DSO and TSO 220/110 kV Bulks Supply Points in North Dublin to accommodate this large demand. Work has also been progressing to provide the capacity required at an existing 110 kV/MV substation for temporary Tunnel Boring Machines (TBM) and temporary builders supplies for various construction sites along the route.

DART+: Similarly ESB Networks has been planning for these projects. Specific projects included in the DNDP will support DART+ including a new 110/38 kV station in West Dublin which will provide new 38 kV network capacity for DART 38 kV connections.

Rail Projects: The submission also made reference to further planned expansions of the LUAS (2031/2032) and further electrification of Cork Commuter Rail, Cork-Dublin Intercity (2035), Drogheda-Belfast (post 2035) and Portarlington-Galway (post 2035).

Electrification of Bus Fleets. The electrification of the bus fleet was included in the growth assumptions, with all scenarios assuming that the bus fleet was electrified by 2035. However, similar to planning for the rail projects, the MIC requirements and timing at each bus depot are required in order to determine the specific connection method and local reinforcements required.

The DNDP is a macro high level plan for the entire country, and to enable detailed planning for the specific point loads, customers should engage directly with ESB Networks via the new connections application process.

ESB Networks welcomes continued detailed engagement with relevant stakeholders to ensure adequate information is provided to enable future network planning so these rail and bus electrification projects can be supported.

3.13 EV Charging Assumptions

A number of submissions raised queries in respect of various assumptions around EV chargers.

ESB Networks response:
To determine the base level of demand per EV the following steps were taken into account:

- Existing vehicle registration per county and number of new registrations of both battery EVs (BEV) and plug-in hybrid EVs (PHEV)
- Consumption per vehicle number (kwh/km)
- Difference in housing types in Ireland (per county, with terraces and apartments assumed to have no driveway and therefore no home charging options)
- Average mileage
- CAP mileage reduction
- Existing charging infrastructure
- Alternative Fuel Infrastructure Regulation(AFIR) charger requirements
- Charger infrastructure based on IEA (International Energy Agency)
- Different proportions of BEVs and PHEVs
- Temperature differences
- Smart charging scenarios (these follow the expected penetration of Time of Use tariffs based on historical trends and uptake)
- In all scenarios after 2030, all new car sales are expected to be EVs due to the planned Internal Combustion Engine (ICE) ban. These are assumed to be 75% BEV and 25% PHEV.

For a given year and electrical planning area, the peak demand from public, private and workplace charging was determined.

ESB Networks will continually monitor any changes to rollout of EV purchases on a county basis and EV charging required. This will ensure that large EV charging load needs will be addressed, once site specific information is available. Until that time, forecasted growth rates will apply as outlined in DNDP.

3.14 Demand Side Flexibility

A submission from DETE made detailed reference to demand side flexibility, the National Energy Demand Strategy (NEDS) and the developing market for industrial "eheat".

ESB Networks response:
ESB Networks has actively collaborated with the Department of Enterprise, Tourism and Employment (DETE) and other relevant stakeholders under the National Energy Demand Strategy (NEDS) framework, as well as through additional forums, including those dedicated to advancing industrial electrification initiatives such as eHeat. ESB Networks remains committed to accommodating a design for larger connections as part of the next phase of our flexible connections pilot and will continue to work closely with external stakeholders. ESB Networks notes that a revision of NEDS is being considered which may introduce increased focus on some areas while delivery on other areas may be deferred. ESB Networks is of the view that such a review is essential to ensure that efforts to be progressed in the next phase of the NEDS are prioritised in areas which are expected to deliver maximum return.

ESB Networks has several initiatives underway to stimulate the flexible service market. In addition to the Demand Flexibility Product, which may be very suitable for parties investing in generation technologies and/or storage, ESB Networks is progressing 'Local Business Flex' which aims to reduce pressure on the distribution network in certain areas of Ireland. ESB Networks' pilot 'Is This A Good Time' now has over 36,000 domestic participants and access to SMART meter data, expected in late 2026, will introduce more options for how this initiative can be enhanced in the future. Initiatives due to launch in 2026 include: EV Flex, which incentivises EV owners to charge their cars at a time which suits the local network; and SME Flex – as a follow on from Beat The Peak Business which paid business customers for shifting their load to non-peak times – an offering targeting SME customer.

ESB Networks has been engaging with customers to discuss the possibility of having flexible connections. Flexible connections will facilitate shorter connection times for customers where they are proposing to connect in congested areas, and as such may be suitable for existing customers looking to transition to eHeat. Any such customers will, however, be required to reduce their demand on instruction from ESB Networks. The introduction of flexible connections at scale will require the transposition of the relevant provisions regarding flexible connections contained in EU Directive 2024/1711, the relevant regulatory framework to be put in place by the CRU, and implementation by ESB Networks including enabling new automated systems. It should further be noted that, per the EU Directive, flexible connections should be temporary in nature unless it is deemed that the reinforcement required to deliver the same is inefficient.

ESB Networks and EirGrid established a Joint System Operator Programme (JSOP) in 2021, and considerable effort has been expended to work in partnership to meet Ireland's targets for renewable electricity and support the path to decarbonisation. The programmes extends from renewable generation from rooftop solar to large commercial developments, flexible markets and whole of system co-ordination in general. The programme remains effective, with a Transmission System Operator/Distribution System Operator (TSO/DSO) operating model based on a 'whole of systems approach' currently undergoing approval. This model will continue to develop in order to address the requirements of customers, regulatory authorities, and network operators.

3.15 Network Costs

One submission highlighted the need to consider the potential impacts of increased network costs to end users:

"***...considers that network investments that ultimately deliver the greatest energy efficiencies and lower electricity unit costs for final customers should be given the highest priority over the coming years***"

ESB Networks response:
Ireland is going through a process of fundamentally recalibrating our energy system away from high carbon fossil fuels for heating and transport towards clean, sustainable electricity. This will result in significant societal benefits, including greater energy independence, air quality improvements, carbon reduction, and ultimately cost savings. However, substantial and sustained investment in the electricity network out to 2040 is needed to enable this transition.

ESB Networks is an active member of the National Energy Affordability Taskforce working with the various Government departments and industry participants to identify the cost drivers for energy and make recommendations to tackle these both in the short term and in the medium / long term.

The taskforce has published an interim report that is focused on policy options to support households in the near term. Following on from this ESB Networks will be working with the taskforce to develop the Energy Affordability Action Plan and continue to contribute to the various programmes of work initiated by the taskforce.

ESB Networks remains committed to maximising efficiencies by organising the business to deliver more quickly and cost-effectively, leveraging cost savings from data and digitalisation initiatives, and utilising flexibility wherever possible.

3.16 AFIR and Port Electrification

One submission made reference for the need to plan for the provision of Onshore Power Supplies (OPS) at major Ports under the Alternative Fuels Infrastructure Regulation (AFIR). OPS refers to the supply of land-based electrical power to ships while at berth in the port.

ESB Networks response:
The Alternative Fuels Infrastructure Regulation (AFIR) sets targets for the provision of Onshore Power Supplies (OPS) at the major Ports by 2030. As the targets are for 2030, the DNDP demand forecasts do not include any provision in the growth rates for additional impact on peak demand by 2030.

However, ESB Networks has been engaging with the port authorities and will continue to engage in respect of the specific demand requirements at each port location. In this context ESB Networks welcomes the additional MIC requirement details provided in response to the DNDP submission. The requirements at each port in terms of connection voltage and MIC requirements are different, as the needs are dependent on the scale and type of shipping and other activities in the port, as well as on the distribution network topology at each location and the capacity availability.

While the demand requirements are not included in the growth rates to 2030, ESB Networks has been carrying out planning for the future by engaging with the ports and including new projects in the DNDP such as a new 110/20 kV substation near Rosslare port and the Dublin Central 220 kV BSP which will provide capacity injections to enable connection of OPS at the port.

In order to expedite projects, it is imperative for the port authorities to make a formal application to ESB Networks for a network connection via the formal New Connections process.

3.17 Purpose of Distribution Scenarios

A number of submissions made reference to the forecast growth scenarios and their purpose.

ESB Networks response:
The purpose of forecasting demand growth on the distribution system and developing different scenarios is to inform distribution system planners of possible future demand requirements and the pace of growth in a local area of the distribution network.

The growth rates and scenarios are not developed with the intention to inform Transmission system requirements or the adequacy of the total system generation to support demand.

Distribution system planning addresses granular localised problems, and each Distribution system area could follow a different demand growth scenario. Transmission system planning considers issues such as the balance of supply and demand and the macro development plans of the national Transmission system, so many different factors have to be considered.

ESB Networks' distribution planning is aligned with ESB Networks' strategy to deliver a Net Zero Ready Distribution Network by 2040 and our Build Once for 2040 approach as explained in more detail in Networks for Net Zero Strategy.

When planning a reinforcement for the Distribution network, network planners are concerned with multiple local factors but less concerned with the macro issues of the Transmission system. The growth scenarios enable planners to ensure that the solution planned locally can accommodate many future growth scenarios. With our Build Once for 2040 approach, solution are chosen which will provide sufficient capacity to meet long-term needs. This reduces the likelihood that a second reinforcement will be needed within a shorter timeframe, as might be the case if a more conservative approach was taken in terms of future demand forecast.

The growth forecasts however are just one of multiple factors informing the planning.

4. Conclusion and Next Steps

The responses received to the consultation reinforce the importance of the DNDP, and demonstrate the value it provides to customers and stakeholders in terms of increasing transparency regarding ESB Networks' plans to develop the distribution network to enable Ireland's transition to net zero.

ESB Networks welcomes the feedback submitted on the DNDP and is committed to working to continually improve and adapt our plans to meet both statutory requirements and customer and stakeholder needs.

The next revision of the DNDP is scheduled for publication by the end of 2027, following the stakeholder consultation process and submission to the CRU.

5. Glossary of Terms

Abbreviation	Meaning
AFIR	Alternative Fuels Infrastructure Regulation
BEV	Battery Electric Vehicle
BSP	Bulk Supply Point
CAP	Climate Action Plan
CRU	Commission for Regulation of Utilities
DETE	Department of Enterprise Trade and Employment
DHLGH	Department of Housing, Local Government and Heritage
DOT	Department of Transport
DNDP	Distribution Network Development Plan
DSO	Distribution System Operator
EAL	EAL Exceptional Abnormal Loads
HV	High Voltage
ICE	Internal Combustion Engine
JSOP	Joint System Operator Programme
kV	Kilovolt
MIC	Maximum Import Capacity
MVA	Mega Volt Ampere
NEDS	National Energy Demand Strategy
NPF	National Planning Framework
OPS	Onshore Power Supplies
PHEV	Plug-in Hybrid Electric Vehicle
TSO	Transmission System Operator

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