# SONI TRANSMISSION DEVELOPMENT PLAN FOR NORTHERN IRELAND 2023-2032

## SEA Statement

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| Grace Glasgow |  | 27 January 2025 |



Prepared by:

**RPS**

Richard Bingham
RPS Consulting Engineers

Elmwood House
74 Boucher Road, Belfast
Co. Antrim BT12 6RZ

**T** +44 2890 667 914
**E** richard.bingham@rpsgroup.com

Prepared for:

**SONI**

Rónán Davison-Kernan

12 Manse Road
Belfast
BT6 9RT

**T**
**E** Ronan.Davison-Kernan@soni.ltd.uk

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# ABBREVIATIONS

| | |
|---|---|
| AONB | Area of Outstanding Natural Beauty |
| ASSI | Area of Special Scientific Interest |
| ASAI | Area of Significant Archaeological Interest |
| BAT | Best Available Techniques / Technology |
| CEMPs | Construction Environmental Management Plans |
| CMP | Construction Management Plan |
| DAERA | Department of Agriculture, Environment and Rural Affairs |
| DAFM | Department of Agriculture, Food and the Marine |
| DECC | Department of the Environment, Climate and Communications |
| DfI | Department for Infrastructure |
| DHLGH | Department of Housing, Local Government and Heritage |
| DSD | Department for Social Development |
| EAR | Environmental Appraisal Report |
| EcIA | Ecological Impact Assessment |
| ECoW | Ecological Clerk of Works |
| EIA | Environmental Impact Assessment |
| EMF | Electromagnetic Field |
| EMP | Environmental Management Plan |
| EPA | Environmental Protection Agency |
| ESB | Electricity Supply Board |
| ESCP | Erosion and Sedimentation Control Plan |
| FRMP | Flood Risk Management Plan |
| GES | Good Environmental Status |
| GHG | Greenhouse Gas |
| GSNI | Geological Survey of Northern Ireland |
| HED | Historic Environment Division |
| HRA | Habitats Regulations Assessment |
| LCA | Landscape Character Area |
| LPSNI | Land and Property Services Northern Ireland |
| MCZ | Marine Conservation Zone |
| MMO | Marine Mammal Observer |
| MSFD | Marine Strategy Framework Directive |
| NIE | Northern Ireland Electricity |
| NIEA | Northern Ireland Environment Agency |
| NIFRA | Northern Ireland Flood Risk Assessment |
| NILCA | Northern Ireland Landscape Character Assessment |
| NIO | Northern Ireland Office |

| | |
|---|---|
| NISRA | Northern Ireland Statistics and Research Agency |
| PPC | Pollution Prevention and Control |
| PPG | Pollution Prevention Guidance |
| RBMP | River Basin Management Plan |
| SAC | Special Area of Conservation |
| SEA | Strategic Environmental Assessment |
| SEO | Strategic Environmental Objective |
| SLNCI | Sites of Local Nature Conservation Importance |
| SONI | System Operator for Northern Ireland |
| SPA | Special Protection Area |
| TDP | Transmission Development Plan |
| TDPNI | Transmission Development Plan for Northern Ireland |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WFD | Water Framework Directive |

# 1 INTRODUCTION

## 1.1 Purpose of this Report

This Strategic Environmental Assessment (SEA) Statement has been prepared as part of the SEA for the Transmission Development Plan for Northern Ireland (TDPNI) 2023-2032. This document provides information on the decision-making process and further details the ways in which environmental considerations, the views of consultees, the recommendations of the SEA Environmental Report and the Habitats Regulations Assessment (HRA) carried out under Regulation 43 of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995, as amended (the 'Habitats Regulations') have influenced and been taken into account by the TDPNI.

The SEA of the TDPNI 2023-2032 has been developed on behalf of the System Operator for Northern Ireland (SONI). The TDPNI is a 10-year Transmission Development Plan. It uses the most up to date information on the current and projected future requirements for the operation of a secure, reliable grid, to compile and present the potential projects required in Northern Ireland over the next 10 years (2023-2032) to reinforce the electrical transmission grid and ensure the connection of generation and demand for Northern Ireland.

This SEA Statement has been prepared in accordance with the European Communities Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive) and in accordance with the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (S.R.280/2004) (the 'SEA Regulations').

As specified by Article 15(4) of the SEA Regulations, this SEA Statement summarises the following information:

- How environmental considerations have been integrated into the plan or programme (**Section 2**);
- How the environmental report has been taken into account (**Section 3**);
- How the opinions expressed in response to the invitations mentioned in regulation 12 have been taken into account (**Section 4**);
- How the results of any consultations entered into under regulation 13(4) have been taken into account (**Section 4**);
- The reasons for choosing the plan or programme, as adopted, in the light of the other reasonable alternatives dealt with (**Section 5**); and
- The measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme (**Section 6**).

# 2 HOW ENVIRONMENTAL CONSIDERATIONS HAVE BEEN INTEGRATED INTO THE PLAN

## 2.1 Introduction

The SEA Regulations require that certain Plans and Programmes, prepared by statutory bodies, which are likely to have a significant impact on the environment, are subject to the SEA process. SEA legislation and guidance recommends that Plan preparation, SEA and HRA should be integrated and prepared in an iterative manner, in order to facilitate the ongoing assessment and evaluation of environmental considerations during preparation of the Plan. The SEA process is broadly comprised of the stages shown in **Figure 2-1**, which are given a summary description in **Table 2-1**.

The SEA and HRA assessment processes have been developed and undertaken in integration with the development and assessment of the TDPNI process. This section presents a summary of how environmental considerations have informed the TDPNI preparation process.

**Table 2-1 Summary Description of the Main Stages in the SEA Process**

| Stage | Description | Status |
|---|---|---|
| Screening | Determines whether SEA is required for a Plan / Programme, in consultation with the designated statutory consultees. | Completed February - June 2023 |
| Scoping | Determines the scope and level of assessment detail for the SEA, in consultation with the designated statutory consultees. | Completed February - June 2023 |
| Environmental Assessment | Formal and transparent assessment of the likely significant impacts on the environment arising from implementation of the Plan / Programme, including all reasonable alternatives. The output from this is an Environmental Report which must go on public display along with the draft Plan. | Completed September 2023 |
| SEA Statement | Summarises the process undertaken and identifies the manner in which environmental considerations and consultations have been integrated into the final Plan / Programme. | Current Stage |

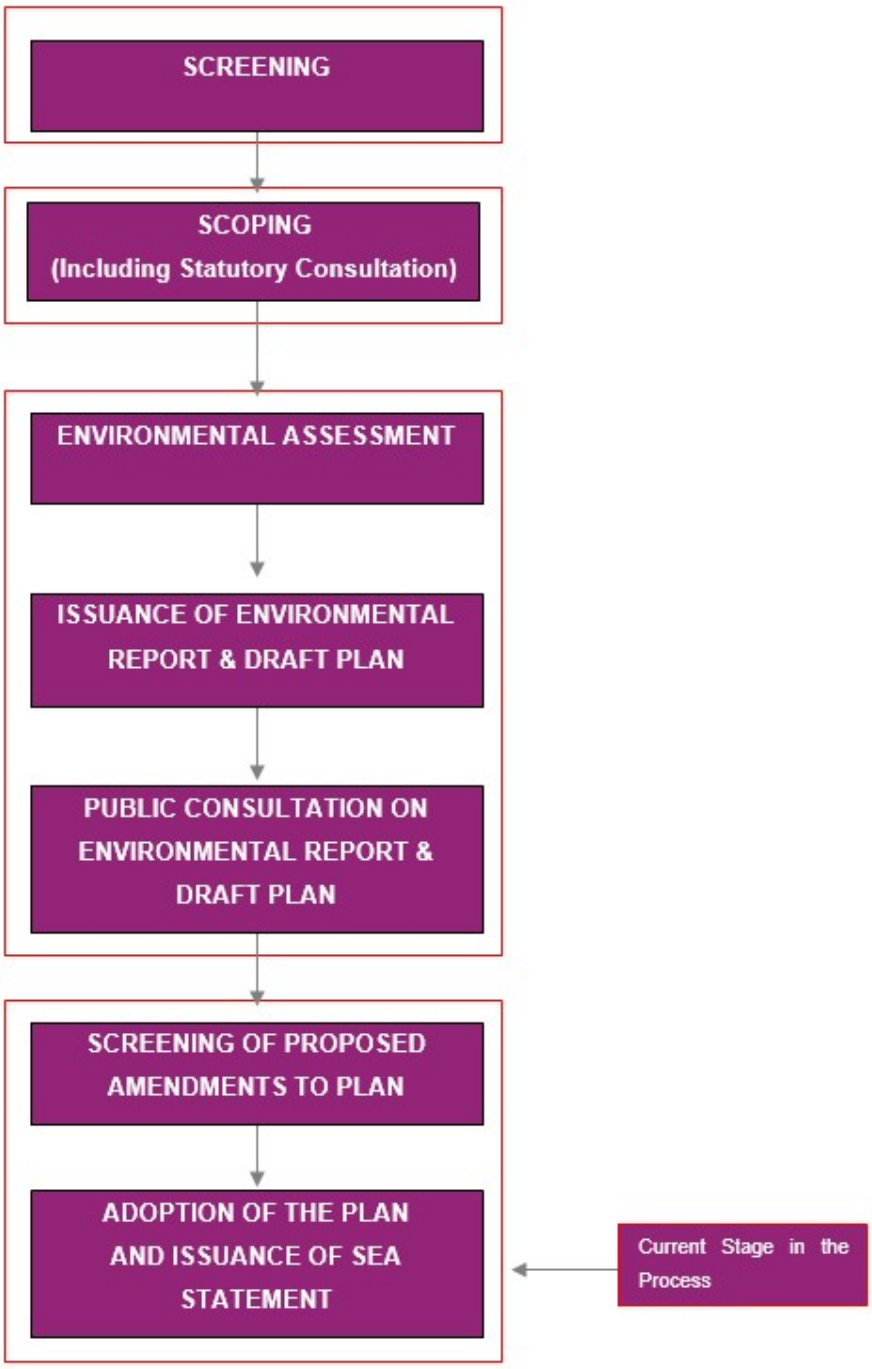


**Figure 2-1 Overview of SEA Process**

## 2.2 SEA Screening

Under Article 2 (2) of the SEA Directive, energy plans require mandatory SEA. The TDPNI 2018-2027 committed to a review and, if considered appropriate, an update of the SEA and HRA every five years following the first version of the Plan. SONI concluded that it was appropriate to update these assessments for the TDPNI 2023-2032.

## 2.3 SEA Scoping

The SEA Scoping for the draft TDPNI took place from February to June 2023. An SEA Scoping Report was produced as part of the scoping phase of the SEA for the draft TDPNI. The purpose of the Scoping Report was to provide sufficient information on the draft TDPNI to enable the consultees to form an opinion on the appropriateness of the scope, format, level of detail, methodology for assessment and the consultation period proposed for the Environmental Report. The SEA Scoping Report for the Plan was circulated to the statutory consultee, the Department of Agriculture, Environment and Rural Affairs (DAERA), in June 2023, as detailed further in **Section 2.5** of this SEA Statement.

## 2.4 SEA Environmental Report

An SEA Environmental Report was completed that detailed the environmental assessments undertaken on the draft TDPNI. The preparation of an Environmental Report on the likely significant effects on the environment of the Plan included consideration of:

- Baseline data relating to the current state of the environment;
- Links between the draft TDPNI and other relevant Strategies, Policies, Plans, Programmes and Environmental Protection Objectives;
- Key environmental issues in the area of the draft TDPNI;
- Alternatives available;
- The likely significant positive and negative effects of a number of reasonable alternatives on the environment;
- Measures envisaged for the prevention, reduction and mitigation of any significant adverse effects; and
- Monitoring measures to ensure that positive and negative environmental effects will be identified, allowing for appropriate remedial action to be taken if necessary.

## 2.5 Consultations

Environmental factors have been taken into account during the development of the draft TDPNI and the supporting environmental assessments. The SEA Scoping Report for the draft TDPNI was circulated in June 2023 to DAERA, as the statutory consultee for SEA in Northern Ireland, and was circulated within DAERA to the Drinking Water Inspectorate, Natural Environment Division, Climate Change Unit, Marine and Fisheries Division, Marine Plan Team, and Marine Conservation and Reporting section. The Historic Environment Division of the Department for Communities (DfC), as the government authority on heritage, was also consulted. Owing to the potential for transboundary effects on the environment to arise from implementation of the draft TDPNI, the statutory transboundary consultees in the Republic of Ireland were also provided with the SEA Screening Report, as follows:

- Environmental Protection Agency (EPA);
- Department of Housing, Local Government and Heritage (DHLGH);
- Department of Agriculture, Food and the Marine (DAFM); and
- Department of Environment, Climate and Communications (DECC).

Non-statutory consultees that may have an interest in the development of the TDPNI were also contacted with scoping information, and included:

- Utility Regulator (NI)
- Department for the Economy (NI)
- Northern Ireland Electricity (NIE) Networks
- EirGrid

- Electricity Supply Board (ESB) Networks

The Scoping Report, including contact details, were also published on the SONI website so that all interested parties, including the general public, could submit comments and feedback on the report. All responses received from the consultation process were incorporated into the environmental assessments, where feasible.

Consultations on the draft TDPNI, SEA Environmental Report and HRA commenced in September 2023 and ran for 12 weeks. The draft TDPNI, SEA Environmental Report and HRA were available digitally via the SONI website – https://www.soni.ltd.uk. All responses received during this consultation phase, and any subsequent action taken, are summarised in **Section 4** of this SEA Statement, and further detailed in **Appendix A** of this SEA Statement.

## 2.6 Habitats Regulations Assessment

In addition to the SEA process, and in accordance with The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995, as amended (the 'Habitats Regulations'), the potential for the draft TDPNI to impact negatively on European sites (previously referred to as Natura 2000 sites prior to the UK's exit from the European Union), including Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites, was assessed. Regulation 43 of the Habitats Regulations requires that:

"*A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which is likely to have a significant effect on a European site in Northern Ireland (either alone or in combination with other plans or projects), and is not directly connected with or necessary to the management of the site, shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives*".

A HRA of the draft TDPNI was undertaken in parallel with the SEA process, and the findings of the HRA report were integrated into the SEA Environmental Report.

## 2.7 SEA Statement

The main purpose of this SEA Statement is to provide information on the decision-making process for the TDPNI in order to illustrate how decisions were taken and used to make the development process more transparent. In doing so, the SEA Statement documents how the recommendations of both the SEA Environmental Report and the HRA, as well as the views of the statutory consultees and other submissions received during consultation, have influenced the preparation of the TDPNI. It further provides information on the arrangements put in place for monitoring the implementation of the TDPNI following its finalisation. The SEA Statement is available to the public, along with the adopted TDPNI.

## 2.8 Adoption of the TDPNI

Following the public and statutory consultation on the draft TDPNI and associated environmental reports, the final TDPNI was then provided to the Utility Regulator for approval. The final TDPNI was adopted on 22nd January 2025. This, along with the SEA Environmental Report and SEA Statement will be used for the purpose of informing further studies and the detailed design of the proposed options within the TDPNI.

# 3 HOW THE ENVIRONMENTAL REPORT HAS BEEN TAKEN INTO ACCOUNT IN THE PLAN

## 3.1 Environmental Assessment of the TDPNI

The potential options and project types of the draft TDPNI were assessed in terms of their potential positive and negative effects, and the significance of these effects on the environment, against the SEA objectives. The purpose of this was to predict and evaluate, as far as possible, the environmental effects of the TDPNI, highlighting any significant environmental problems and / or benefits that are likely to arise from its implementation.

The approach used for assessing the TDPNI was a baseline-led assessment. This method involves an assessment of each option available in the enactment of the TDPNI against the following SEA topics and objectives:

- Biodiversity, Flora & Fauna (BFF)
- Population & Human Health (PHH)
- Geology, Soils and Land Use (GSL)
- Water (W)
- Air (A)
- Climatic Factors (CF)
- Material Assets & Infrastructure (MA)
- Cultural, Architectural & Archaeological Heritage (CH)
- Landscape & Visual Amenity (L)

To simplify the assessment process and avoid repetition during assessment of each potential option, the potential project types (e.g., overhead transmission lines, underground cables, substations) were first subject to a high-level assessment of their potential effects against a series of Strategic Environmental Objectives (SEOs).

Following this high-level assessment of generic project types, each potential option / project in the TDPNI was assessed in the short, medium and long term for likely effects, the significance of the effects, and whether they were positive or negative effects. Other impacts that were assessed for significance were secondary effects, cumulative effects, synergistic effects, temporary and permanent effects, and the inter-relationship of effects.

The proposed options for consideration were assessed in the SEA against a series of SEOs to examine the potential for likely significant environmental effects associated with the TDPNI. All potential positive and negative effects were presented individually, with a text description, and a summary table. The scores assigned for effects ranged from +3 to -3, as demonstrated in **Table 3-1**. The purpose of adding numerical scores was to assist in the ranking of options and for the potential incorporation of the environmental and social criteria into future decision making, as this can provide for a multi-criteria analysis of alternatives if desired. Options may have both positive and negative effects at the same time and hence were not conveyed in terms of net benefit or net loss, which can sometimes be misleading.

| Description | Score |
|---|---|
| Significant positive environmental effects | +3 |
| Moderate positive environmental effects | +2 |
| Slight positive environmental effects | +1 |
| No environmental effects | 0 |
| Slight negative environmental effects | -1 |
| Moderate negative environmental effects | -2 |
| Significant negative environmental effects | -3 |

**Table 3-1 Description of SEA Environmental Effect Scores**

### 3.1.1 SEA Objectives

The options available to the TDPNI were assessed against a set of strategic environmental objectives (SEOs) in order to examine the likely significant environmental effects of implementing the proposed options of the draft TDPNI, and how their implementation could contribute to achieving these SEOs. The SEOs, Sub-Objectives, Indicators and Targets used are given in **Table 3-2**.

**Table 3-2 Strategic Environmental Objectives, Indicators and Targets**

| SEA Topic | Objective | | Sub-Objectives | | Indicators | Targets |
|---|---|---|---|---|---|---|
| **Biodiversity, Flora & Fauna** | **1** | Avoid damage to, and where possible enhance, biodiversity, flora and fauna. | **A** | Preserve, protect, maintain and, where possible, enhance internationally protected species and habitats. | • Conservation condition of designated habitats and species within International / European sites (SACs, SPAs, Ramsar sites). | • No negative change, or a positive change, in the conservation status of designated habitats and species within International / European sites. |
| | | | **B** | Preserve, protect, maintain and, where possible, enhance national and local nature conservation sites, protected habitats and species and other known species of conservation concern. | • Status of designated habitats and species within national and local sites (Marine Conservation Zones (MCZs), Areas of Special Scientific Interest (ASSIs), Sites of Local Nature Conservation Importance (SLNCIs)).<br>• Status of protected and priority habitats and species. | • No negative change, or a positive change, in the conservation status of designated habitats and species within national and local sites.<br>• No negative change, or a positive change, in the status of protected or priority species and habitats outside of designated sites. |
| **Population & Human Health** | **2** | Minimise the risk to, and provide benefit for, the community and human health. | **A** | Minimise disruption and displacement to the local population, while providing robust transmission infrastructure. | • Population density within proximity to potential transmission system developments. | • Low population density within proximity to transmission system developments. |
| | | | **B** | Minimise risks to human health and social deprivation, while providing robust transmission infrastructure. | • Perceived health of the local population within proximity to potential transmission system developments.<br>• Socially sensitive areas within proximity to potential transmission system developments. | • No negative change, or a positive change, in the health of the population within proximity to transmission system developments.<br>• No socially sensitive areas within proximity to transmission system developments. |
| **Geology, Soils and Land use** | **3** | Minimise damage to the function and quality of the soil resource in the study area in construction and | **A** | Minimise damage to the function and quality of the soil resource in the study area in construction and operation of transmission infrastructure. | • Loss or damage to protected geological / geomorphological features within international or | • No effects on protected geological / geomorphological features within international or |

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|---|---|---|---|---|---|---|
| | | operation of transmission infrastructure. | | | national designated sites (UNESCO Geoparks, ASSIs).<br>• Loss or damage to sensitive soils and land uses, e.g., peatlands, ancient woodland, commercial forestry, cultivated lands.<br>• Interactions with potentially hazardous soils and activities, e.g., Pollution Prevention and Control (PPC) sites, mines, quarries, historically contaminated sites.<br>• Interactions with topographically difficult sites, e.g., steep slopes and uplands. | national designated sites (UNESCO Geoparks, ASSIs).<br>• No loss of, or damage to, sensitive soils and land uses.<br>• No interaction with hazardous sites and topographically unsuitable areas. |
| **Water** | **4** | Avoid impacts on the status or quality of water bodies and avoid interaction with areas of flood risk. | **A** | Support the objectives of the Water Framework Directive (WFD) and Marine Strategy by avoiding damage to or deterioration of water status, quality and resource. | • WFD status of surface, coastal, transitional and groundwater bodies within proximity to potential transmission system developments.<br>• Status of sensitive waterbodies, e.g., drinking and bathing waters within proximity to potential transmission system developments. | • No negative change, or a positive change, in the status of surface water and groundwater bodies, including sensitive water bodies, and potential to contribute to the achievement of water body objectives under the WFD.<br>• No deterioration in the status of NI seas, and potential to contribute to the achievement of Good Environmental Status (GES) under the Marine Strategy Framework Directive (MSFD). |
| | | | **B** | Support the objectives of the Floods Directive by avoiding interactions with coastal, pluvial or fluvial flood extents. | • Medium probability flood extents - Pluvial and fluvial 100-year and coastal 200-year flood extents. | • No interaction with areas of flood risk. |
| **Air** | **5** | Minimise risk to local air quality and contribute to improving regional emissions. | **A** | Minimise risk to local air quality and contribute to improving regional pollutant emissions. | • Development in air quality sensitive areas.<br>• Enable increased renewable energy connection to reduce requirements for fossil fuel burning. | • No transmission system developments within air quality sensitive areas.<br>• Number of transmission system developments that may facilitate increased renewable energy connection. |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Climatic Factors** | **6** | Adaption of infrastructure to potential climatic change and reduction of Greenhouse Gas (GHG) emissions from the energy supply sector in line with national commitments. | **A** | Adaption of infrastructure to potential climatic change. | • Medium probability climate change (cc) influenced flood extents - Pluvial and fluvial 100 year + cc and coastal 200 year +cc flood extents. | • No transmission system developments within areas of climate change flood risk, unless resilient to flooding. |
| | | | **B** | Contribute to a reduction in GHG emissions from the energy supply sector in line with national commitments. | • Enable increased renewable energy connection to reduce requirements for fossil fuel burning. | • Number of transmission system developments that may facilitate increased renewable energy connection. |
| **Material Assets & Infrastructure** | **7** | Provide new, robust electrical transmission infrastructure with minimal disruption to other assets and infrastructure. | **A** | Provide new, robust electrical transmission infrastructure with minimal disruption to other assets and infrastructure. | • Transmission infrastructure developed or upgraded.<br>• Potential for impacts on transport (road, rail, air) and energy infrastructure (gas).<br>• Potential for loss of or impacts to agricultural land assets. | • Number of transmission system developments developed or upgraded.<br>• No disruption to transport and energy infrastructure.<br>• No loss of agricultural land assets. |
| **Cultural, Architectural & Archaeological Heritage** | **8** | Protect, conserve, and enhance the historic environment and cultural heritage. | **A** | Protect International, National and Local Heritage Designations, and areas of heritage potential, and their settings. | • Potential for impacts on archaeological heritage features or their setting.<br>• Potential for impacts on architectural heritage features or their setting.<br>• Discovery of previously unknown archaeological heritage features. | • No negative change, or a positive change in the condition or setting of international, national and local heritage designations, in development and operation of infrastructure.<br>• All new archaeological discoveries are reported in line with legislative requirements. |
| **Landscape / Seascape & Visual Amenity** | **9** | Protect the character and quality of landscapes / seascapes or visual amenity. | **A** | Minimise the potential for negative impacts on the character and quality of landscapes / seascapes or visual amenity. | • Landscape / seascape sensitivity to infrastructure development.<br>• Potential for impacts on visually sensitive areas, such as Areas of Outstanding Natural Beauty (AONBs) and country parks. | • No negative change, or a positive change, in visual amenity or landscape / seascape character (LCAs, RSCAs), in development and operation of infrastructure. |

## 3.2 Recommended mitigation

Following the environmental assessment of the draft TDPNI, environmental mitigation measures were recommended in order to avoid or minimise any identified potential negative effects of implementing the TDPNI. The mitigation proposed was broken down into 'Environmental Appraisal Report', 'General Mitigation', 'Mitigation by Environmental Effect' and 'HRA Mitigation', as outlined below. These measures were detailed in Section 8 of the SEA Environmental Report.

The proposed plan-level mitigation measures by potential environmental effect and HRA-specific plan-level mitigation measures, were listed in Section 10 of the final TDPNI, which states that these measures should be implemented and further developed at the detailed design stage and project level study stage.

### 3.2.1 Environmental Appraisal Report

As the preparation of a TDPNI is an annual rolling process, each TDPNI prepared since the TDPNI 2018-2027 has been accompanied by an Environmental Appraisal Report (EAR) which assessed that version of the plan against the provisions of the adopted SEA statement. This process has ensured a consistency of approach in environmental issues of each TDPNI across the lifespan of the SEA. EARs will continue to be prepared annually to accompany revisions of the TDPNI.

### 3.2.2 SEA Mitigation

The principal mitigation recommendation is that the predicted negative effects should be considered further during the next stage of detailed planning and design, when the specifics of the development infrastructure options can be optimised through detailed feasibility studies and design in order to limit identified impacts on sensitive receptors.

Further environmental studies based on the more detailed designs and construction methodologies should be undertaken as appropriate. Sub-Environmental Impact Assessment (EIA) threshold new development projects will include a Preliminary Ecological Appraisal Report to identify ecological constraints and the need for any ecological surveys. These studies may involve, but are not limited to, marine, aquatic and terrestrial ecology surveys, ornithological and bat surveys, fish surveys, landscape and visual assessments, WFD assessments, geotechnical investigations and heritage surveys. Further Appropriate Assessment, to meet the requirements of the Habitats Directive, of the detailed designs and construction methodologies will be required at the project level, where potential impacts have been identified in the SEA and HRA for the TDPNI.

Before any works are carried out, detailed method statements and management plans (construction and environmental) should be prepared, including timing of works, information on the specific mitigation measures to be employed for each works area, and mechanisms for ensuring compliance with environmental legislation and statutory consents.

The timing of construction and maintenance works should be planned to avoid any potential for negative cumulative impacts or inter-relationships with other schemes, plans, or projects, yet look to optimise any potential positive cumulative impacts or inter-relationships.

Contractors should be required to prepare Construction Environmental Management Plans (CEMPs), which would include a requirement for related plans to be prepared, as appropriate, for project implementation, such as Erosion and Sediment Control, Invasive Species Management, Emergency Response, Traffic and Safety Management, Dust and Noise Minimisation, and Stakeholder Communication Plans. CEMPs should consider mitigation such as marine mammal observers (MMOs), adherence to standing advice to prevent pollution, marine litter and the potential for introduction and / or spread of invasive, non-native species.

Works should only be carried out once the method statements have been consulted on with competent authorities, such as the Northern Ireland Environment Agency (NIEA). At the project level it will not be sufficient to defer the production of construction method statements. These should be completed in the detailed design stage and may be subject to further Appropriate Assessment where potential impacts have been identified in this SEA and accompanying HRA for the TDPNI. Where there may be unavoidable impacts on protected habitats and / or species the necessary derogation licences should be applied for prior to seeking planning permission or approval for a scheme.

Marine construction and in-stream work have the greatest potential for negative impacts during spawning / breeding and early nursery periods for aquatic and marine protected species. No marine or instream works should occur during restricted periods for relevant species and consultation should be undertaken with the appropriate authorities in this regard. Depending on the presence of seal haul-outs, and the potential for disturbance to marine mammals, a Marine Mammal Observer (MMO) may be required for the duration of the works.

Monitoring of project-level mitigation measures should be undertaken during and after works, to ensure effectiveness.

All works and planning of works should be undertaken with regard to all relevant legislation, licensing and consent requirements, and recommended best practice guidelines. An ecological clerk of works should be appointed for environmental management of each infrastructure development, and where specific sensitive species may be impacted, an appropriate expert should also be appointed.

As established in Biodiversity Policy ENVP5* and Objective ENVO2*[1], biodiversity restoration and enhancement opportunities should be factored into the implementation of transmission development projects, wherever possible, and this should be monitored in order to ensure that the most appropriate and beneficial measures are being implemented.

#### 3.2.2.1 Mitigation by Environmental Effect

**Table 3-3** provides environmental effect specific mitigation measures that should be adopted within the project stage development of options from the TDPNI to minimise the potential for any negative effects on the wider environment. For transmission development options that are selected to be further investigated these mitigation measures should be implemented and further developed at the next stages of more detailed design / feasibility and project level study. These mitigation measures should not be considered as definitive, and should be reviewed, and current best practice measures applied, throughout the life of the TDPNI.

Note that mitigation is proposed that is of relevance to marine works, as there is potential for a TDP to include works in the marine area. However, in this iteration of the TDPNI, all potential projects identified by SONI are situated onshore and no marine works are proposed.

**Table 3-3 Proposed general SEA Mitigation for projects.**

| Potential Impact | Proposed Mitigation |
|---|---|
| 1 - Construction phase disturbance, such as noise and habitat degradation, to International, National or locally designated sites and species that are within close proximity to developments. | Good planning and timing of works, and good construction and management practices to keep impacts to a minimum. Environmental Management Plan (EMP) and Construction Management Plan (CMP) to be developed and agreed with relevant authorities and consultees prior to commencement of works. Adhere to SONI / EirGrid / best practice guidelines. Scoping of relevant specialist ecological surveys during the detailed planning stage and prior to any construction works.<br><br>Where applicable, prior to any vegetation clearance an ecologist should be contracted to undertake a 'pre-vegetation clearance' survey for signs of nesting birds and important species. Should important species be found during surveys the sequential approach of avoid, reduce or mitigate should be adopted to prevent significant impacts. Vegetation clearance should only occur outside the main breeding bird season - September to March.<br><br>Following construction, replanting, landscaping, natural revegetating and habitat enhancement, should be undertaken in line with appropriate guidelines that aim to improve local biodiversity and wildlife. This is likely to provide for medium- and long-term benefits to the biodiversity, flora and fauna near the working areas. Where |

[1] ENVP5* To go beyond nature protection and seek funding, or other mechanisms to deliver site-specific, measurable and lasting biodiversity restoration and enhancement on suitable projects to fulfil the 'Biodiversity Duty' attaching by law to public authorities in Northern Ireland. ENVO2* To regularly monitor, document, and report specific actions taken for biodiversity restoration and enhancement under ENVP5.

| | |
|---|---|
| | possible, original sediment / soil should be reinstated to original levels to facilitate natural restoration and recolonisation of habitat.<br><br>Restricted working areas should be imposed to ensure minimal disturbance to sensitive habitats.<br><br>Where applicable, depending on the presence of seal haul-outs, and the potential for disturbance to marine mammals, a MMO may be required for the duration of the works. |
| 2 - Construction phase sedimentation impacts on International, National or locally designated sites and species that are within close proximity to developments and where pathways are evident, as constructions works may mobilise sediments into watercourses. | Consultation with environmental bodies on construction methodology and appropriate timing of works to provide the least potential for sediment mobilisation to watercourses.<br><br>Good planning and timing of works, and good construction and management practices to keep the potential for impacts to a minimum. Minimise requirement for near or in-stream works through good planning. During construction and site establishment operations, silt fencing should be used to prevent disturbed soil reaching the aquatic zone. Any in-stream works should be carried out during low flow conditions and should cease during heavy rainfall and flood conditions, to reduce suspended solids in the river.<br><br>Buffer zones along waterways can provide mitigation during construction activities. Buffer zones must be of adequate dimensions and impede all free flow to waterways. Heavy machinery and site traffic should be excluded from these areas. |
| 3 - Increased risk of direct physical disturbance to International, National or locally designated sites and species that are within close proximity to developments, including hazards to birds through collision and electrocution. | To avoid or minimise the potential for bird collision with overhead conductors, bird flight deflectors or bird warning spheres should be installed in areas identified as being of high risk or having bird species vulnerable to such impacts. Ornithological surveys should be undertaken during the detailed design stage to identify these sensitive areas and species. Where applicable, should cables be in the marine environment, the potential impact of Electromagnetic Field (EMF) on marine species should be considered. Any mitigation measures require monitoring programmes to ensure that they are effective. |
| 4 - Increased rate of spread of invasive species during restring or line development works, including, where applicable, the potential for introducing and / or spreading of marine invasive non-native species during marine cabling works. Mobile construction equipment traversing through areas of invasive species, potentially carrying these species into new areas. | Cleaning of equipment and machinery along with strict management protocols to combat the spread of invasive species. Pre and post construction surveys for invasive species may be recommended in areas of known invasive species risk.<br><br>If invasive species are found to be present, an Invasive Species Management Plan should be prepared to outline control and or removal measures to ensure such species are not spread during construction or operation of any future projects. |
| 5 - Creation of a new vector for mobile invasive species in the development of new transmission lines. Corridor clearing may act as a pathway for invasive species. | A biosecurity protocol should be created and implemented to prevent the introduction and / or spread of invasive non-native species.<br><br>Cleaning of equipment and machinery along with strict management protocols to combat the spread of invasive species. Pre and post construction surveys for invasive species may be recommended in areas of known invasive species risk.<br><br>If invasive species are found to be present, an Invasive Species Management Plan should be prepared to outline control and or removal measures to ensure such species are not spread during construction or operation of any future projects. |
| 6 - Construction phase disturbance impacts to marine or aquatic nursery and spawning grounds, such as noise / vibration pollution and physical habitat disturbance. | Consultation with DAERA Inland Fisheries and DAERA Marine and Fisheries Division at the detailed feasibility stage. Known marine spawning and nursery grounds should be avoided where possible, or invasive works minimised in these areas.<br><br>All works involving open cut crossings should be carried out during the period May to September to avoid interruption of salmonid spawning runs, spawning, incubation of eggs and the early developmental stages. |

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| 7 - Construction phase sedimentation impacts to marine or aquatic nursery and spawning grounds, as construction works may cause sediment displacement and blanketing / smothering. | The planning of developments should aim to avoid known marine or aquatic nursery or spawning grounds. Where this cannot be avoided, construction timing should be well planned and works duration and invasive workings should be kept to a minimum in these areas. |
| 8 – Where applicable, construction phase disturbance impacts, such as noise pollution (e.g., cable laying or excavation), to mobile marine and aquatic species (e.g., cetaceans) that are known to frequent the study area. | The planning of developments should aim to avoid known hotspot areas for mobile marine and aquatic species. Where this cannot be avoided, construction times should be kept to a minimum in these areas. Where applicable, employing MMOs on board construction works vessels can help ensure that impacts of coastal works are minimised. Consultation with DAERA Inland Fisheries and DAERA Marine and Fisheries Division at the detailed feasibility stage.<br><br>Where applicable, statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise (JNCC, 2010[2]) should be followed for marine based cable laying activities.<br><br>For SACs which have seals as a site selection feature, the following ranges should be used for when screening for marine mammals, where applicable for marine works:<br>• All SACs within 100km of the project should be screening for Grey Seals (*Halichoerus grypus*)<br>• All SACs within 50km should be screened for Harbour Seals (*Phoca vitulina*)<br>• All SACs within 100km should be screened for Harbour Porpoise (*Phocoena phocoena*) |
| 9 - Construction phase noise pollution disturbance impacts to people in close proximity to developments. | Disturbances can be kept to a minimum with good working practices, planning and timing. Adoption of Construction Best Practice. Noise-producing activities such as excavation and piling should only take place during daylight hours and monitoring of these activities should be ongoing. Continued liaison with local communities is advised with regard to complaints concerning noise and vibration emissions resulting from construction works. |
| 10 - Construction phase dust and sediment releases in close proximity to the developments, causing disturbance and negative health impacts to local people. | Disturbances can be kept to a minimum with good working practices, planning and timing. Adoption of Construction Best Practice. Development of dust minimisation plans in advance of works. Dust suppression measures in place during construction, for example establishing appropriate speed limits over unmade surfaces and establishing wheel washing facilities on construction sites. Continued liaison with local communities is advised with regard to complaints concerning dust releases resulting from construction works. |
| 11 - Construction / maintenance phase compaction or destabilisation of peat and other sensitive soils, from heavy equipment traversing an area. | The development of transmission infrastructure across areas of significant soil sensitivity should be avoided where possible at the design stage (e.g., areas of deep and active peat should be avoided where possible). Where areas of sensitive habitat need to be crossed during construction / maintenance works, measures to reduce the impact of vehicles on wetland or bog should be considered including the use, for example, of low-pressure vehicles, wide wheel / tracks and the laying of protective geotextile on the vegetation to be crossed. Construction machinery should also be restricted to site roads and designated access routes. Machinery should not be allowed to access, park or travel over areas outside development construction zones. Where impacts cannot be avoided or reduced, further works should be carried out to compensate for these impacts, or to restore some aspect of the natural environment to an approximation of its previous condition (e.g., where disturbance of peat soils cannot be avoided, there should be some consideration given to possible re-seeding with native species to stabilise the peat and accelerate recovery of the vegetation). |
| 12 - Temporary or permanent loss of crops and / or agricultural land due to the disturbance of construction | Good site management practices and construction management plans and consultation with the competent and statutory authorities prior to any works should enable all impacts to be kept to a minimum over a short timescale. Adoption of Construction Best Practice. Consultation with landowners and / or tenants to identify |

[2] JNCC, 2010. Handbook for Phase 1 habitat survey – a technique for environmental audit.

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| works required for the uprating of existing or development of new transmission infrastructure over agricultural areas. | speciality agricultural crops or lands that may require protection during construction. Consultation with landowners to develop compensation for lost crop value caused by construction works.<br><br>Land within the working area should be reinstated as near as practical to its former condition. |
| 13 - Construction phase disruption to current land uses, such as noise pollution and dust release from construction works. | Good site management practices and construction management plans and consultation with the competent and statutory authorities prior to any works should enable all impacts to be kept to a minimum over a short timescale. Adoption of Construction Best Practice. Noise and vibration producing activities such as piling and excavation should only take place during daylight hours and monitoring of these activities should be ongoing in sensitive areas. Development of dust minimisation plans. Dust suppression measures in place during construction, for example establishing appropriate speed limits over unmade surfaces and establishing wheel washing facilities on larger construction sites. Continued liaison with local communities is advised with regard to complaints concerning noise pollutions and dust release resulting from construction works. |
| 14 - Construction phase potential for contaminated materials to be mobilised and tracked through the study area from historically contaminated sites or hazardous soils and activities, impacting on nearby soils and land uses. | Identification of historically contaminated areas and sites and careful route planning during the design stage to avoid these sites where possible, to prevent further contamination. Good management, planning and working practices to minimise contamination of nearby soils and land uses if works crossing historically contaminated sites or hazardous soils cannot be avoided. Good working practices may include installation of wheel wash and plant washing facilities. Strict management and regulation of construction activities. Sampling and analysis of sites prior to construction works in potentially hazardous areas, to establish potential risk. |
| 15 - Access difficulties in topographically unsuitable areas, such as upland and steep slope areas or historic mine sites, and where transport of construction equipment across these areas may be problematic. | Careful route planning during the design stage to avoid topographically unsuitable areas where possible. In some cases, where access for machinery is particularly difficult due to the sensitive nature of habitats or difficult terrain, the aerial transport of materials and machinery by helicopter may be considered. |
| 16 - Construction phase sedimentation impacts to water bodies e.g., construction works may destabilise soil materials, river banks and shorelines. | Good management and planning to keep water quality disturbance to a minimum. Precautions should be put into place to avoid or minimise the generation and release of sediments into any watercourses. Any potential water quality issues from construction should be contained and treated to ensure no damage to natural waterbodies. Construction will have to be planned appropriately, using Best Available Techniques / Technology (BAT) at all times, to ensure water quality issues are kept to a minimum, with no significant adverse effects.<br><br>Develop, implement and enforce an Erosion and Sedimentation Control Plan (ESCP) where risks are identified to downstream European sites. |
| 17 - Construction phase pollution impacts to water bodies, e.g., construction works may accidentally release pollutants, such as fuels, oils and lubricants. | Pollution prevention guidance notes (PPGs) should be consulted, which provide detailed guidance and appropriate mitigation measures to avoid or reduce the impact on the water environment.<br><br>Develop, implement and enforce a Water Pollution Prevention and Environmental Emergency Response Plan for all work sites. This should include good site practices as described in the Good Practice Guidance notes proposed by EA/SEPA/NIEA.<br><br>All protective coatings used would be suitable for use in the aquatic environment and used in accordance with best environmental practice.<br><br>Storage facilities would contain and prevent the release of fuels, oils and chemicals associated with plant, refuelling and construction equipment into the environment.<br><br>Emergency and spill response equipment should be kept on hand during construction. |
| 18 - Difficult working conditions during construction and maintenance works due to | Individual developments to be subject to detailed Flood Risk Assessment at the detailed planning stage, where risk has been identified. Avoid flood extents where possible or provide infrastructure that is both resilient to the potential flood risk and provides no transfer of flood risk once developed. Critical infrastructure should not be |

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| interactions with coastal, pluvial or fluvial flood extents. | placed in floodplains where it may be impacted, or where it may be inaccessible during flood events. |
| 19 - Increases in local air emissions and reductions in local air quality from construction plant emissions, in areas of the proposed developments. | Development of dust minimisation plans. Dust suppression measures in place during construction to include regular dampening down of stockpiles, establishing appropriate speed limits over unmade surfaces and establishing wheel washing facilities on construction sites. Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.<br>Consideration should be given to construction and traffic related activities during project implementation, and whether these could trigger a significant air quality effect on nearby sensitive habitats or species; activities within 200m of sensitive habitats to air pollution should be assessed for potential effects from NOx and dust, and assessment outcomes should inform appropriate mitigation measures. |
| 20 - Increases in local GHG emissions from construction plant emissions, in areas of the proposed developments. | Plan construction scheduling to minimise vehicle trips.<br>Limit idling of heavy equipment unless needed for the safe operation of the equipment and verify through unscheduled inspections. |
| 21 - Difficult working conditions during construction and maintenance works due to interactions with climate change exacerbated coastal, pluvial or fluvial flood extents. | Individual developments to be subject to detailed Flood Risk Assessment at the detailed planning stage, where risk has been identified, including for climate change scenarios. Avoid climate change flood extents where possible or provide infrastructure that is both resilient to the potential flood risk and provides no transfer of flood risk once developed. Critical infrastructure should not be placed in floodplains where it may be impacted, or where it may be inaccessible during flood events. |
| 22 - Temporary loss of GHG sequestering vegetation in clearance of development area, during and following the construction of new transmission lines, prior to re-establishment. | Good planning and timing of works to minimise construction footprint impacts. Following construction, replanting, landscaping, and natural revegetating, should be undertaken in line with appropriate guidelines that aim to improve local GHG sequestering vegetation cover. |
| 23 - Construction phase disturbance impacts to existing material assets and infrastructure such as transport networks, agricultural, aquaculture, fisheries, and recreation and amenity areas as construction works may interfere with the functioning of these assets, e.g., road closure or temporary loss of agricultural lands. | Development of good site management practices, traffic and construction management plans and consultation with the competent and statutory authorities prior to any works should enable all impacts to be kept to a minimum over a short timescale. Minimise the frequency and duration of road closures. Adoption of Construction Best Practice. |
| 24 - Planning and construction constraints due to the presence of existing infrastructure or other planned developments. | Constraints should be identified and described in as much detail as possible during the early stages of a project, so that awareness of them and their potential impact can be managed. Incorporation of potential impacts and risks associated with other planned developments at the detailed planning stage. Consultation with other asset owners to establish the best possible working arrangements with the least disturbance. |
| 25 - Permanent, direct loss of existing material assets, such as agricultural land, in the development footprint of new transmission infrastructure, e.g., new substations. | Good spatial planning to minimise the potential for such impacts. Consultation with landowners to develop compensation for loss of assets, such as agricultural land, caused by development of new infrastructure. Good site management practices and construction management plans, and consultation with the competent and statutory authorities prior to any works should enable all impacts to be kept to a minimum over a short timescale. Adoption of Construction Best Practice. |
| 26 - Construction phase impacts on the setting of heritage sites and features in | The historic environment evidence bases should be utilised to help inform how potential effects can be avoided or where, following consideration of alternative options they cannot be avoided, are appropriately mitigated against. |

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| close proximity to transmission infrastructure, during uprating and construction works. | Where necessary a heritage impact assessment should be prepared in respect of any works to architectural or archaeological features in advance of any works being carried out to feed into detailed design. Consultation and agreement with the Department for Communities, Historic Environment Division, in advance of any works taking place in respect of protected archaeological or architectural features. Construction supervision by qualified project archaeologists, combined with sensitive construction methods and restoration to minimise potential for damages, in potentially sensitive areas. Heritage features damaged could be restored / preserved. Statutory consents and notices may be required prior to works taking place. |
| 27 - Permanent impacts on the setting of heritage sites and features in close proximity to transmission infrastructure. | The historic environment evidence bases should be utilised to help inform how potential effects can be avoided or where, following consideration of alternative options they cannot be avoided, are appropriately mitigated against.<br>Impacts could be kept to a minimum through sensitive design and planning. Planning and design advice from qualified archaeologists. Statutory consents may be required prior to works. |
| 28 - Potential for loss of or damage to known and unknown heritage features in the development of transmission infrastructure. | Impacts could be kept to a minimum through sensitive design and planning. Planning and design advice from qualified archaeologists. Construction supervision by qualified project archaeologists, combined with sensitive construction methods and restoration to minimise potential for damages, in potentially sensitive areas (including consideration of previously unidentified below ground remains through groundworks, particularly for cabling). Statutory consents may be required prior to works.<br>All new archaeological discoveries are reported in line with legislative requirements.<br>Site-specific surveys may need to be undertaken to prevent any loss to the marine archaeological resource. |
| 29 - Construction phase impacts on the local landscape and local visual amenity from construction equipment and works. | Impacts could be kept to a minimum through good site practice and planning (e.g., screened laydown areas and traffic management). Adoption of Construction Best Practice.<br>Landscape, Seascape and Visual Assessment of options at the detailed feasibility and detailed planning stages to minimise the potential for impacts and provide site specific mitigation measures. |
| 30 - Permanent impacts on landscape and visual amenity from the development of new transmission infrastructure. | Impacts could be kept to a minimum through sensitive design and planning (e.g., vegetative screening and landscape management planning). Landscape, Seascape and visual assessment and advice during detailed design. Public consultation on draft designs. Landscape and Visual Assessment of options at the detailed feasibility and detailed planning stages to minimise the potential for impacts and provide site specific mitigation measures. |

### 3.2.3 HRA mitigation

Appropriate Assessment of individual projects will include timely consultation with relevant planning and environmental authorities, the evaluation of up to date mapping, designations and development plans, policies, and a consideration of any relevant sectoral guidance, such as EC Guidance on Energy Transmission Infrastructure and EU nature legislation (EC, 2018) and updated Ecology Guidelines for Electricity Transmission Project when published by EirGrid.

Where avoidance is not possible adverse effects on site integrity will be avoided through project specific mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation. Mitigation measures shall aim to ensure that no adverse effect on the integrity of a European site occurs.

Where impacts are identified at project level, appropriate mitigation will be developed to ensure the resulting impacts of the construction and operation of a project do not adversely affect the integrity of a European site

in view of the site's conservation objectives. Best practice measures identified in EirGrid's benchmarking Evidence-Based Environmental Studies[3].

In addition to the proposed SEA mitigation, **Table 3-4** presents the HRA mitigation measures that will be incorporated into future project specific HRAs and Ecological Impact Assessment (EcIAs), where appropriate. This list of mitigation measures is not designed to be exhaustive and shall be supplemented by project and site-specific mitigation developed by project level Appropriate Assessment and Environmental Impact Assessment.

**Table 3-4 Proposed HRA Mitigation Measures**

| Potential Impact | Proposed Mitigation |
|---|---|
| 1 - Habitat loss - General | Any and all works in or in proximity to a European site will be supervised by an experienced ecologist acting as an Ecological Clerk of Works (ECoW).<br>Direct habitat loss within European sites will be avoided for new-build infrastructure and avoided where reasonably practicable for refurbishment of infrastructure within European sites.<br>When construction occurs within a designated site, sensitive construction techniques will be used such as the use of bog mats for machinery access, particularly if underground cables are proposed or in remote peatland areas.<br>Ecological monitoring will be undertaken at sensitive sites during construction as appropriate. Such sites will be identified on a case by case basis.<br>Restricted working areas will be imposed to ensure minimal disturbance to sensitive habitats.<br>Biosecurity protocols shall be created and adhered to during construction.<br>Re-distribute vegetation and soil stripped from the construction areas to provide a seedbank and do not re-seed with Perennial Ryegrass.<br>Land within the working area will be reinstated to its former condition or as near as is reasonably practicable. |
| 2 - Habitat loss – Invasive Species | There is the potential for non-native invasive species to be present in proximity to a future project. The introduction of invasive species into a European site can affect the conservation objectives for qualifying habitats or species, potentially adversely affecting the integrity of the European site (e.g., affecting species distribution and abundance and / or out competing native species). Invasive species survey will be undertaken as part of the suite of ecology surveys for projects arising from the TDPNI if appropriate and in accordance with EirGrid (2012). If invasive species are found to be present, an Invasive Species Management Plan will be prepared to outline control and or removal measures to ensure such species are not spread during construction or operation of any future projects. |
| 3 - Habitat loss – Peatland Sites | Areas of deep and active peat shall be avoided, where possible.<br>Detailed peat slip risk assessments shall be carried out as determined on a case by case basis for proposed developments in areas where peat substrates occur on sloped ground.<br>Construction machinery shall be restricted to site roads and designated access routes. Machinery shall not be allowed to access, park or travel over areas outside development construction zones.<br>Peat excavated during construction activity should not be stored (temporarily or otherwise) on areas of adjacent mire habitats or near flushes or drains. Temporary storage of spoil material excavated during the construction phase developments should be stored at suitable locations away from surface watercourses. |

[3] http://www.eirgrid.ie/about/in-the-community/environment/

| Potential Impact | Proposed Mitigation |
|---|---|
| | All spoil material excavated during the construction phase should be reinstated following the completion of the construction phase of a proposed development.<br><br>Where disturbance of peat soils cannot be avoided, there should be some consideration given to re-seeding with an appropriate range of native species of native or, wherever possible, local provenance to stabilise the peat and accelerate recovery of vegetation. |
| 4 – Water Quality and Habitat Deterioration | In all cases where works have the potential to impact on protected surface water or riparian habitats within or upstream of a European site, measures must be put in place to manage and minimise the risk of escape of elevated levels of suspended solids or polluting substances into watercourses.<br><br>Develop, implement, and enforce an Erosion and Sedimentation Control Plan (ESCP) where risks are identified to downstream European sites.<br><br>The ESCP must include sufficient pollution control measures to prevent run-off, silt, hydrocarbons or any other harmful substances or substrates from entering any surrounding surface waters.<br><br>Storage facilities would contain and prevent the release of fuels, oils and chemicals associated with plant, refuelling and construction equipment into the environment.<br><br>All protective coatings used would be suitable for use in the aquatic environment and used in accordance with best environmental practice.<br><br>Develop, implement and enforce a Water Pollution Prevention and Environmental Emergency Response Plan for all work sites. This should include good site practices as described in DAERA standing advice for development that may have an effect on the water environment (including groundwater and fisheries), NIEA Pollution Prevention Guidance (DAERA, 2022) and applicable CIRIA Technical Guidance (CIRIA, 2001; CIRIA, 2006) including methods and procedures to deal with any spills and the timely reporting of incidents.<br><br>There shall be no in-stream crossing by machinery.<br><br>Silty water will be collected in settlement ponds prior to discharge to watercourses.<br><br>Buffering strips will be provided near watercourses.<br><br>All works involving open cut crossings shall be carried out during the period of May to September to avoid interruption of salmonid spawning runs, spawning, incubation of eggs and the early developmental stages.<br><br>Where appropriate and practical, bank vegetation and bed material which has been removed shall be stored to facilitate its replacement when channel works in the vicinity of a watercourse have been completed.<br><br>Works in the vicinity of a watercourse shall be carried out with reference to a water quality protection or surface water management plan for each site which shall ensure that:<br><br>All necessary measures shall be taken to minimise the generation and release of sediments into all watercourses.<br><br>Levels of suspended solids in the river shall be monitored during the course of the works.<br><br>Precautions shall be put in place to avoid spillages of diesel, oil or other polluting substances. |
| 5 – Disturbance and Displacement - Birds | Where feasible, site clearance involving the cutting or destruction of vegetation and hedgerows shall not take place in the bird breeding season between March 1st and August 31st inclusive.<br><br>Mitigation measures to reduce disturbance effects on feature species birds may include but not be limited to: |

| Potential Impact | Proposed Mitigation |
|---|---|
| | Timing of works (e.g., avoiding works in or close to SPAs during the bird breeding season [March to August inclusive] or avoiding works in the vicinity of SPAs with over wintering birds between the months of November and March inclusive)<br><br>Avoid working simultaneously with other projects which could also cause disturbance.<br><br>Screening of works to reduce disturbance impacts.<br><br>On the advice of relevant ornithological experts and agencies, conduct surveys where the risk of collision on migratory routes cannot be excluded at screening stage. Bird warning devices shall be put in place where crossings of sensitive flight corridors cannot be avoided and where a collision risk occurs.<br><br>Surveys focusing on feature species which can move outside the confines of a European site shall be conducted to ensure any significant flight lines (e.g. regular flight lines for feature species birds related to, but outside of an SPA) or areas of supporting habitat (e.g. foraging areas for feature species birds in close proximity to, but out with an SPA; or otter holts out with an SAC, etc.) would be identified and avoided or appropriate mitigation measure put in place. |
| 6 – Disturbance and Displacement – Otters | Works shall avoid active otter holts. In the event that an otter holt cannot be avoided by the works, it will be necessary to seek a derogation licence from NIEA to exclude otters from the holt. No works shall be undertaken within 150m of any holts at which breeding females or cubs are present.<br><br>No wheeled or tracked vehicles (of any kind) shall be used within 30m of non-breeding otter holts. Light work, such as digging by hand or scrub clearance shall also not take place within 30m of such holts, except as agreed with NIEA under licence. |
| 7 – Disturbance and Displacement – Marine Mammals | Whilst there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, freshwater system cable crossings may occur. Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise (JNCC, 2010) and appropriate legislation (i.e., The Habitats Regulations (as amended) and Wildlife (NI) Order 1985 (as amended)) will be followed for any proposed freshwater crossing cable laying activities. |

# 4 HOW CONSULTATIONS HAVE BEEN TAKEN INTO ACCOUNT IN THE PLAN

## 4.1 Introduction

Throughout the development of the draft TDPNI, consultation has been undertaken at key points in the process. Consultation regarding the SEA Scoping report has been discussed in **Section 2** of this SEA Statement. The SEA Regulations require the SEA Statement to summarise how consultations under Article 12 and Article 13(4) have been taken into account in the Plan. This Section summarises key points regarding these consultations, and how they were addressed during the SEA process and preparation of the final TDPNI.

## 4.2 Public consultation on the draft TDPNI and associated SEA Environmental Report and HRA report

Article 12 of the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004, requires that environmental authorities and the public must be given an opportunity to make submissions on a draft Plan and accompanying SEA Environmental Report prior to any final decision regarding the Plan.

SONI engaged in public consultation on the draft TDPNI 2023-2032, including the SEA Environmental Report and HRA report over a 15-week period from 29th September 2023 until 12th January 2024. Public consultation comprised the following:

- The consultation was sent to the SONI customer notification mailing list;
- A Press Release was published on the SONI website[4] as well as circulated to media outlets on 29th September 2023;
- The draft TDPNI, SEA Environmental Report and HRA were made available digitally via the SONI website –https://consult.soni.ltd.uk/consultation/draft-transmission-development-plan-northern-ireland-and-sea-2023-2032. Consultees were invited to make a digital submission, to email consultation responses to info@soni.ltd.uk or via post to TDPNI Consultation 2023, SONI Ltd, 12 Manse Road, Belfast, BT6 9RT.

The public consultation invited responses and comments from stakeholders to the TDPNI and associated SEA Environmental Report and HRA report. During the public consultation period, a total of 3 responses were received, as follows:

- DAERA SEA Team
    - Natural Environment Division (NED)
    - Landscape Team
    - Water Management Unit
    - Drinking Water Inspectorate
    - Air Quality and Biodiversity Unit
    - Marine Conservation Branch
    - Marine Historic Environment Team
    - Marine Planning Team
- DfC Historic Environment Division (HED)

[4] https://www.soni.ltd.uk/newsroom/press-releases/tdpni/index.xml

- Causeway Coast & Glens Borough Council

## 4.3 Consultation regarding transboundary environmental effects

Article 13 of the SEA Regulations require that, where a Member State considers that implementation of a Plan is likely to have significant effects on the environment within another Member State, or where another Member State likely to be significantly affected so requests, the Member State in whose territory the Plan is being prepared must, prior to Plan adoption, forward a copy of the draft Plan and SEA Environmental Report to the other Member State, who may indicate whether they wish to enter into consultation regarding the likely transboundary environmental effects of implementing the Plan.

Owing to the potential for transboundary effects on the environment to arise from implementation of the draft TDPNI 2023-2032, the statutory transboundary consultees in the Republic of Ireland were provided with the SEA Scoping Report in June 2023. The statutory transboundary consultees established within the Republic of Ireland's national legislation are:

- Environmental Protection Agency (EPA)
- Department of Housing, Local Government and Heritage (DHLGH)
- Department of Agriculture, Food and the Marine (DAFM)
- Department of Environment, Climate and Communications (DECC)

A submission was received from the EPA, which included general comments to be considered in the Plan and SEA processes. Recommendations provided within this response were considered during preparation of the SEA Environmental Report. No additional responses were received from transboundary consultees regarding the draft TDPNI and environmental reports during the Public Consultation stage.

## 4.4 Utility Regulator Consultation

The Utility Regulator NI launched a public consultation on 2nd July 2024, which closed on 2nd August 2024. This was published on the Utility Regulator's website[5]. The Utility Regulator received ten responses to the consultation. There were no actions or changes to the TDPNI arising from these responses.

## 4.5 How consultation feedback has influenced the final TDPNI

All submissions relating to the draft TDPNI and associated SEA and HRA reports received during the public consultation period have been addressed as comprehensively as possible. SONI have developed a response to the public consultation, entitled 'Report on Public Consultation on Transmission Development Plan Northern Ireland 2023-2032'[6]. This report summarises the public consultation responses received, providing a broad synopsis of the key issues raised by respondents.

### 4.5.1 Amendments to the Plan as a result of Public Consultation

The following changes were made to the final TDPNI 2023-2032 on foot of comments received from stakeholders during Public Consultation, as detailed in the consultation response and summarised in **Appendix A** of this SEA Statement:

- SONI have amended Environmental Policy 2 (ENVP2) in Section 4 of the TDPNI to include reference to the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) and The Wildlife (Northern Ireland) Order 1985 (as amended).

[5] https://www.uregni.gov.uk/news-centre/launch-consultation-sonis-draft-2023-2032-transmission-development-plan

[6] https://www.soni.ltd.uk/the-grid/projects/tdpni/related-documents/Report-on-Draft-TDPNI-2023-2032-SONI-Consultation.pdf

- SONI have amended Environmental Policy 3 (ENVP3) in Section 4 of the TDPNI to include reference to MCZs, where appropriate.
- SONI have amended Environmental Objective 4 (ENVO2) in Section 4 of the TDPNI to include reference to noise sensitive receptors, including marine mammals.
- SONI have amended Environmental Objective 4 (ENVO4) in Section 4 of the TDPNI to include reference to Areas of Significant Archaeological Interest (ASAIs) and non-designated heritage assets, as well as to Regional Seascape Character Areas, where appropriate.
- SONI have amended Environmental Policy 8 (ENVP8) in Section 4 of the TDPNI to make reference to 'appropriate measures' (replacing 'reasonable measures') with regard to protected heritage sites and structures.
- SONI have amended Environmental Policy 9 (ENVP9) in Section 4 of the TDPNI to include reference to the setting of archaeological remains.
- SONI have updated Section 10 of the TDPNI to include the minor amendments made to the Mitigation and Monitoring in Section 8 of the SEA ER.

### 4.5.2 Amendments to the Environmental Reports as a result of Public Consultation

During public consultation, consultees were invited to respond to the SEA Environmental Report and HRA report in addition to the draft TDPNI. Responses to the environment reports were received from the following consultees:

- DAERA SEA Team
  - Natural Environment Division (NED)
  - Landscape Team
  - Water Management Unit
  - Drinking Water Inspectorate
  - Air Quality and Biodiversity Unit
  - Marine Conservation Branch
  - Marine Historic Environment Team
  - Marine Planning Team
- DfC Historic Environment Division (HED)
- Causeway Coast & Glens Borough Council

Issues raised by these consultees regarding the environmental reports during public consultation, and how these were responded to, are detailed in **Appendix A** of this SEA Statement, and are summarised in **Table 4-1**.

**Table 4-1 Issues raised regarding the environmental reports during Public Consultation**

| Consultee | | Issue raised |
|---|---|---|
| **DAERA** | Natural Environment Division (NED) | • Generally, in agreement, noting that further environmental assessments are completed such as EIA with further environmental studies and detailed mitigation options specific to proposal issues, and further screening for and / or appropriate assessment. |
| | Landscape Team | • Generally, content with assessment outcomes. |
| | Water Management Unit (WMU) | • Generally in agreement, with suggestions of minor amendments to the mitigation and monitoring outlined in the SEA Environmental Report. |

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| | Drinking Water Inspectorate (DWI) | • Believe the SEA Environmental Report lacks detail or awareness of private water supplies across Northern Ireland; maintaining good working practices during the restring and cabling works should avoid risks to drinking water sources. |
| | Air Quality and Biodiversity Unit | • Suggest consideration of construction and traffic related activities associated with project delivery and effects on sensitive habitats and species. |
| | Marine Conservation Branch | • Minor updates and amendments to the SEA Environmental Report, for baseline, mitigation and SEOs.<br>• Minor updates and amendments to the HRA report.<br>• For assessments where habitat loss is envisaged, likely to be long-term negative impacts to BFF and landscape & visual amenity.<br>• Consideration of Regional Seascape Character Areas (RSCAs) in the SEA Environmental Report.<br>• Consideration of revised marine mammal screening distances in the HRA and SEA Environmental Report. |
| | Marine Historic Environment Team | • Minor updates to the baseline for the SEA Environmental Report. |
| | Marine Planning Team | • Seek clarity as to consideration of Marine Strategy in the assessment of impacts on water. |
| **DfC** | Historic Environment Division (HED) | • Minor updates and amendments to the SEA Environmental Report, for baseline, mitigation and objectives.<br>• Suggested amendments to the scoring of heritage features in the constraints modelling. |
| **Causeway Coast & Glens Borough Council** | | • Concern at the plan level that the strategic direction will lead to a disproportionate level of renewable energy development in the northwest planning area.<br>• Suggest that the plan and associated SEA Environmental Report and HRA report should also consider the direct and indirect effects (including cumulative landscape effects) of renewable energy projects that would be facilitated by the plan's implementation. |

The following amendments and additions have been made to the SEA Environmental Report and HRA Report on foot of comments and recommendations received during public consultation, as detailed in **Appendix A** of this SEA Statement:

- Where SONI have updated the wording of Policies and Objectives of the TDPNI, these changes have been carried across to the SEA ER and HRA.
- Minor additions have been made to the mitigation in Section 8.2 of the SEA ER to reference air quality effects on sensitive habitats or species, marine cabling, screening distances for marine mammals, marine mammal observers, standing advice for the marine environment, and seascape, where applicable. Text has been added to Section 8.2 to clarify that mitigation has been proposed that is of relevance to marine works, as there is potential for a TDP to include works in the marine area. However, in this iteration of the TDPNI, all potential projects identified by SONI are situated onshore and no marine works are proposed.
- Additional text has been added to the monitoring in Section 8.3 of the SEA ER to describe project-level monitoring, and consideration of positive impacts.
- The SEO (1B) for BFF has been amended in Table 5-2 to specify MCZs, ASSIs, and SLNCIs under reference to indicators for national designated sites.
- The SEO (9) for Landscape/Seascape and Visual Amenity has been amended in Table 5-2 to include reference to LCAs and RSCAs under targets.

- Additional standing advice has been added to Section 2.5 of the SEA ER.
- Regional Seascape Character Areas have been referenced, where relevant, in the project assessments. Note that this has not changed the assessment outcomes.
- Marine Strategy water bodies have been referenced, where relevant, in the project assessments. Note that this has not changed the assessment outcomes.
- A table of interrelationships between SEA topics has been added to the SEA ER, as Table 5-5. Note that this table was included in the SEA Scoping report and has been republished in the post-consultation SEA ER.
- The potential for cumulative effects on landscape for new renewable integration projects with existing or future renewable energy developments within these areas was reviewed. For potential projects that facilitate renewable energy and consist of a new substation or transmission line, the potential for cumulative effects has been referenced in the project assessment under 'Additional impacts' - this relates to the following potential projects in the North and West planning area: Cam Cluster; Mid Antrim Upgrade; North Sperrin Substation; Northwest 110kV Reinforcement; and Mid Tyrone Upgrade. In addition, the potential for cumulative effects on the landscape has been discussed within Section 7.3 Cumulative / In-Combination Effects, and as an added Section 7.3.12 (for the North and West planning area), and 7.3.13 (for the South-East planning area) of the SEA ER.
- For assessments where habitat loss is envisaged, the potential for medium and long-term adverse effects on BFF, in addition to short-term effects has been recognised. This relates to the following projects and relevant sections of the SEA ER: Armagh and Drumnakelly Reinforcement (Section 7.2.2., Appendix D F2, and Non-Technical Summary); East Tyrone Reinforcement (Section 7.2.3., Appendix D F3, and Non-Technical Summary); Newry Reinforcement (Section 7.2.4., Appendix D F4, and Non-Technical Summary); New NW 110 kV Switching Station (Section 7.2.8., Appendix D F8, and Non-Technical Summary); Coolkeeragh 110 kV Extension (Section 7.2.9., Appendix D F9, and Non-Technical Summary); Northwest 110 kV Reinforcement (Section 7.2.15., Appendix D F15, and Non-Technical Summary); Mid Tyrone Upgrade (Section 7.2.17., Appendix D F17, and Non-Technical Summary); North Sperrin Generation Substation (Section 7.2.18., Appendix D F18, and Non-Technical Summary); Cam Cluster (Section 7.2.19., Appendix D F19, and Non-Technical Summary); Castlereagh 275 kV Redevelopment (Section 7.2.20., Appendix D F20, and Non-Technical Summary); Coolkeeragh 275 kV Redevelopment (Section 7.2.21., Appendix D F21, and Non-Technical Summary); Kells 275 kV Redevelopment (Section 7.2.22., Appendix D F22, and Non-Technical Summary); Magherafelt 275 kV Redevelopment (Section 7.2.23., Appendix D F23, and Non-Technical Summary); and Tandragee 275 kV Redevelopment (Section 7.2.24., Appendix D 24, and Non-Technical Summary). For all projects where the potential for long-term habitat loss has been recognised, the assessment for landscape is already scored as at least a slight long-term adverse effect, therefore no amendments were considered necessary.
- Table 4.1 of the HRA has been updated to make reference to additional Qualifying Interest features for the North Antrim Coast SAC and Strangford Lough SAC.
- A minor amendment has been made to the text in Section 5.1.1.3 of the HRA to include the possibility of the spread of invasive species by sea.
- A minor amendment has been made to the text in Section 5.1.2.1 of the HRA to include the potential for impacts due to changes in sedimentation along the coast.
- Minor additions have been made to the Mitigation in Section 6.2 of the HRA to reference a biosecurity protocol regardless of whether invasive non-native species have been recorded on site, and to reference the Habitats Regulations for any proposed freshwater crossing cable laying activities.
- Minor text amendments, additions and updates have been made to the Baseline in Section 3, Plans and Programmes in Section 4, and High-level Assessment in Section 7.1 of the SEA Environmental Report, as recommended by consultees, and as detailed in **Appendix A** of this SEA Statement.

# 5 REASONS FOR CHOOSING THE PLAN IN LIGHT OF OTHER REASONABLE ALTERNATIVES

## 5.1 Introduction

The SEA process must include an evaluation of the likely environmental consequences of a range of alternative scenarios, which in this case are alternatives to the draft TDPNI. The purpose of this section is to outline the reasons for choosing the TDPNI, as adopted, as the preferred alternative in light of other reasonable alternatives considered.

## 5.2 Alternative scenarios assessed in the SEA Environmental Report

### 5.2.1 Strategic-level Alternatives

The following strategic-level alternatives were considered in the SEA process for the draft TDPNI 2023-2032:

- Alternative 1 – No Plan option: strategic development occurs in an ad hoc manner (essentially a 'Do-Nothing' scenario from a plan making and SEA perspective).
- Alternative 2 – Strategy option: no new Plan for the period 2023-2032 but reference to provisions of the existing TDPNI 2018-2027. Note that while this can be considered by the SEA process as a potential strategic alternative, in practice it would be complicated by the commencement of projects since the existing plan was published in addition to changes in likely project costs, etc.
- Alternative 3 – Preparation and adherence to the specific policies and objectives for development as set out in the TDPNI 2023-2032.

Section 6.2 of the SEA Environmental Report provided a comparative evaluation of the likely environmental effects of implementing these strategic level alternatives and determined the likely positive or negative effects in comparison to the SEOs.

#### 5.2.1.1 Strategic Alternative 1

If there is no TDP for Northern Ireland, individual projects may be progressed without strategic level planning. There is the potential for neutral to significant negative impacts on the SEOs for Biodiversity, Flora, and Fauna, depending on the individual projects that are progressed and their connectivity with protected and priority sites and species. These are likely to be short-term for the most part but may be long-term or permanent where direct loss of, or damage to, protected sites, habitats or species occurs. In the absence of the plan, there would be legislative safeguards in place for the protection of certain sites and species at the project level; however, there would be an absence of strategic-level policies and objectives for the development of transmission infrastructure that ensure that biodiversity is factored into decision making.

In the absence of the plan, construction and maintenance works to the electricity transmission infrastructure in Northern Ireland would be ad hoc. There is the potential for neutral to significant negative impacts to the SEOs for Population and Human Health in the short- to long-term, depending on the individual projects that are progressed and their connection to settlement areas and socially sensitive areas. With projected population growth, in the medium- and long-term this ad hoc approach may result in an unreliable supply of electricity in some areas due to lack of planning and insufficient development of infrastructure. Disruptions of supply could result in detrimental impacts upon the delivery of essential services, which in turn could have economic and social consequences. There is the potential for an ongoing reliance upon fossil fuels due to a lack of collaborative planning, reducing the connection of renewable energy sources to the supply network. In the medium- and long-term this is likely to result in ongoing detrimental impacts on human health (and negative impacts on SEOs for Population and Human Health), which will worsen going forward from the medium- to the long-term.

Without a TDP for Northern Ireland, there is the potential for neutral to moderate effects on the SEO for Geology, Soils and Land use owing to construction-phase loss of, and compaction of, soils, loss of land uses, and interaction with potentially hazardous sites. Impacts would primarily be short-term in nature during construction, but long-term or permanent impacts are possible in the footprint of transmission developments.

In the absence of the plan, individual projects that are progressed have the potential for slight to moderate negative impacts on the SEOs for Water. There is the potential for slight to moderate impacts on river sections and WFD status, primarily short-term construction phase direct or indirect sedimentation or pollution impacts. Individual projects may still require a flood risk assessment to be undertaken; however, without the plan there would be no overarching strategic planning for selecting projects to achieve connectivity while avoiding areas of flood risk.

In the absence of the plan, there is the potential for short-term, construction-phase impacts on local air quality, including within air quality sensitive areas and the SEO for Air. There is also the potential for medium- and long-term detrimental impacts upon air quality within Northern Ireland and the SEO for Air, because an ad hoc approach may result in less connection of renewable energy sources to the electricity supply network. This is likely to result in the continued reliance upon finite fossil fuels and thus the ongoing, long-term emissions of pollutants into the atmosphere. With population growth and therefore increased electricity demand expected into the future, the severity of these impacts is likely to increase with time, in the absence of the Plan.

Without the plan, there is the potential for short-term, construction-phase impacts on GHG emissions and the SEO for Climatic Factors, and minor to moderate loss of GHG sequestering vegetation in the footprint of the developments. Individual projects may still require a flood risk assessment to be undertaken, including consideration of climate change flood risk; however, without the plan there would be no overarching strategic planning for selecting projects to achieve connectivity while avoiding areas of flood risk. There is also the potential for medium- and long-term detrimental impacts upon climatic factors within Northern Ireland and the SEO for Climatic Factors, as an ad hoc approach may result in less connection of renewable energy sources to the electricity supply network. The continued reliance upon fossil fuels to provide electricity in the medium- and long-term will contribute to the further acceleration of climate change and the exacerbation of the impacts of climate change. Impacts of climate change would worsen going forward from the medium- to the long-term as the volume of GHG in the atmosphere would continue to rise.

There are unlikely to be any short-term impacts on the Material Assets SEO in the absence of the Plan, as the current supply of electricity is likely to meet current demand. In the medium- to long-term, however, there is the potential for an ad hoc approach to result in electricity supply shortages in parts of Northern Ireland. A lack of strategic and collaborative planning of the future electricity transmission network may leave some areas unable to meet increased demand resulting from economic and population growth. There is also the potential for secondary impacts on other material assets such as rail and road, and also gas and water supply networks by way of disruption to services. These impacts have the potential to worsen going forward from the medium- to the long-term if demand continues to surpass supply in some underdeveloped areas.

If there is no TDP for Northern Ireland, individual projects may be progressed without strategic level planning. There is the potential for neutral to significant negative impacts on the SEO for Cultural Heritage, depending on the individual projects that are progressed and their connectivity with cultural heritage features. These are likely to be short-term for the most part but may be long-term or permanent where direct loss of, or damage to, protected features, or their setting, occurs. In the absence of the plan, there would be legislative safeguards in place for the protection of certain features at the project level; however, there would be an absence of strategic-level policies and objectives for the development of transmission infrastructure that ensure that cultural heritage protection is factored into decision making.

Without the plan, there is the potential for short-term construction phase, to permanent impacts in the case of new transmission infrastructure, on the SEO for Landscape and Visual Amenity. There would be an absence of strategic-level policies and objectives for the development of transmission infrastructure that ensure that landscape protection is factored into decision making.

In comparison to the draft TDPNI 2023-2032, there is likely to be the potential for slight, short- to long-term negative impacts on Biodiversity, Flora and Fauna, slight short-term negative impacts on Geology, Soils and Land use, and slight short- to long-term negative impacts on Cultural Heritage and Landscape and Visual Amenity. There is also the potential for slight to moderate, negative impacts on Population and Human Health, Air, Climatic Factors and Material Assets in the short- to long-term from this strategic alternative.

#### 5.2.1.2 Strategic Alternative 2

In the absence of a new TPDNI for the period 2023-2032, the existing TDPNI for the period 2018-2027 would remain in place. Some projects may still progress to development, that were included in this iteration of the plan, with the potential for positive and negative impacts on SEOs as established in the SEA Environmental Report that was published to accompany that plan. Any new, ad hoc projects that arise would be subject to the policies and objectives that were set out in that plan, providing overarching safeguards to environmental topics and SEOs.

Without an updated plan for 2023-2032, there is the potential for medium- and long-term negative impacts on the SEOs for Air, Climatic Factors and Material Assets.

There is the potential for detrimental impacts upon Air quality and Climatic Factors within Northern Ireland and the SEOs for these, because an ad hoc approach moving forward may result in less connection of renewable energy sources to the electricity supply network. This is likely to result in the continued reliance upon finite fossil fuels and thus the ongoing, long-term emissions of pollutants into the atmosphere. With population growth and therefore increased electricity demand expected into the future, the severity of these impacts is likely to increase with time. The continued reliance upon fossil fuels to provide electricity in the medium- and long-term will contribute to the further acceleration of climate change and the exacerbation of the impacts of climate change. Impacts of climate change would worsen going forward from the medium- to the long-term as the volume of GHG in the atmosphere would continue to rise.

There is the potential for negative effects on Material Assets in the medium- to long-term, as an ad hoc approach moving forwards may result in electricity supply shortages in parts of Northern Ireland. A lack of strategic and collaborative planning of the future electricity transmission network may leave some areas unable to meet increased demand resulting from economic and population growth.

In comparison to the draft TDPNI 2023-2032, there is likely to be the potential for slight to moderate negative impacts on Air, Climatic Factors and Material Assets in the medium- to long-term from this strategic alternative.

#### 5.2.1.3 Strategic Alternative 3

The assessment of implementing the draft TDPNI for 2023-2032, i.e., Strategic Alternative No.3 was undertaken in detail in Section 7 of the SEA Environmental Report. In this scenario, some or all of the potential projects, as outlined in Section 7, will be progressed, under the overarching Policies and Objectives as set out in the draft TDPNI for 2023-2032.

There is the potential for short- to long-term impacts across all SEOs from the implementation of the TDPNI for 2023-2032. However, the overarching policies and objectives set out in the plan would continue to provide protection to the environment at a strategic level. The policy and objective for biodiversity that are new to this iteration of the plan would also apply[7], with the potential for long-term positive effects on the SEOs for Biodiversity, Flora and Fauna.

Furthermore, the future implementation of projects arising from the TDPNI would have regard for the assessment outcomes from the SEA process, and the mitigation measures outlined, in ensuring that the environment is protected during project level planning and development.

[7] ENVP5* To go beyond nature protection and seek funding, or other mechanisms to deliver site-specific, measurable and lasting biodiversity restoration and enhancement on suitable projects to fulfil the 'Biodiversity Duty' attaching by law to public authorities in Northern Ireland. ENVO2* To regularly monitor, document, and report specific actions taken for biodiversity restoration and enhancement under ENVP5.

### 5.2.2 Consideration of Alternative Options during Development of the TDPNI

In addition to consideration of the TDPNI 2023-2032 as a strategic-level alternative, each potential project was considered as an alternative option available to the TDPNI 2023-2032 to reinforce the electrical transmission grid and meet the needs of generation and capacity for Northern Ireland. The various options / projects available to the TDPNI were all assessed in terms of their potential effects, and the significance of these effects, on the environment against the SEOs in **Section 7** and **Appendix D** of the SEA Environmental Report. This can allow for a comparison between the relative merits and drawbacks of the projects proposed by the TDPNI 2023-2032 during the future implementation of the plan.

# 6 MEASURES TO MONITOR SIGNIFICANT ENVIRONMENTAL EFFECTS OF IMPLEMENTING THE PLAN

## 6.1 Monitoring

The SEA Regulations require that significant environmental effects arising from implementation of the TDPNI are monitored in order to identify, at an early stage, any unforeseen adverse effects, and in order to undertake appropriate remedial action. A recommended environmental monitoring programme is provided in Section 8.3 of the SEA Environmental Report, as shown in **Much of** the environmental monitoring proposed can be collated from ongoing environmental monitoring and reviews undertaken by bodies such as DAERA, Northern Ireland Statistics and Research Agency (NISRA) and the Department for Infrastructure (DfI). The indicators and data proposed for the monitoring of TDPNI implementation are at a strategic level, to match the SEO objectives. The suggested data sources for monitoring of effects are mostly at a strategic level, are nationally consistent and are freely available. Monitoring will also be undertaken at the project level, which will be project and study area specific; monitored parameters will be based on the specifics of the project and study area and will include consultation with relevant environmental authorities including DAERA Water Management Unit to establish an agreed approach for each project.

Table 6-1 below. This is based on the Targets and Indicators established in the SEOs. It is the intention of SONI that every five years the relevant TDPNI will be reviewed for the purpose of undertaking a new SEA, if required. On that basis, the next TDPNI to be subject to a full SEA review, if required, will be for the period 2028-2037. SEA monitoring should be undertaken in conjunction with the next review of the TDPNI, in advance of an update, to enable monitoring outcomes (including identification of any positive impacts, such as on the aquatic environment) to influence the TDPNI development. Environmental monitoring is referenced in Section 10 of the final TDPNI.

Much of the environmental monitoring proposed can be collated from ongoing environmental monitoring and reviews undertaken by bodies such as DAERA, Northern Ireland Statistics and Research Agency (NISRA) and the Department for Infrastructure (DfI). The indicators and data proposed for the monitoring of TDPNI implementation are at a strategic level, to match the SEO objectives. The suggested data sources for monitoring of effects are mostly at a strategic level, are nationally consistent and are freely available. Monitoring will also be undertaken at the project level, which will be project and study area specific; monitored parameters will be based on the specifics of the project and study area and will include consultation with relevant environmental authorities including DAERA Water Management Unit to establish an agreed approach for each project.

**Table 6-1 Proposed Environmental Monitoring of the TDPNI**

| SEO | Indicator | Target | Proposed Data Source(s) |
|---|---|---|---|
| **Objective 1 – Biodiversity, Flora and Fauna**<br>Avoid damage to, and where possible enhance, biodiversity, flora and fauna.<br><br>**Sub-Objectives**<br>1A - Preserve, protect, maintain and, where possible, enhance internationally protected species and habitats. | • Conservation condition of designated habitats and species within International / European sites (SACs, SPAs, Ramsar sites).<br>• Status of designated habitats and species within national and local sites.<br>• Status of protected and priority habitats and species. | • No negative change, or a positive change, in the conservation status of designated habitats and species within International / European sites.<br>• No negative change, or a positive change, in the conservation status of designated habitats and species within national and local sites. | • DAERA National Site Network reporting (every 6 years) for European sites / Article 17 Habitats Directive reporting and Article 12 Birds Directive reporting for RoI.<br>• DAERA Condition Assessment reporting for ASSIs.<br>• Local Authority – Local Area Plans |

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| 1B - Preserve, protect, maintain and, where possible, enhance national and local nature conservation sites, protected habitats and species and other known species of conservation concern. | | • No negative change, or a positive change, in the status of protected or priority species and habitats outside of designated sites. | • DAERA reporting of protected and priority species. |
| **Objective 2 – Population and Human Health**<br>Minimise the risk to, and provide benefit for, the community and human health.<br><br>**Sub-Objectives**<br>2A - Minimise disruption and displacement to the local population, while providing robust transmission infrastructure.<br><br>2B - Minimise risks to human health and social deprivation, while providing robust transmission infrastructure. | • Population density within proximity to potential transmission system developments.<br>• Perceived health of the local population within proximity to potential transmission system developments.<br>• Socially sensitive areas within proximity to potential transmission system developments. | • Low population density within proximity to transmission system developments.<br>• No negative change, or a positive change, in the health of the population within proximity to transmission system developments.<br>• No socially sensitive areas within proximity to transmission system developments. | • NISRA census data.<br>• NISRA statistics on population health.<br>• Northern Ireland Office (NIO) data on NI Peace Lines<br>• Department for Social Development (DSD) data on Neighbourhood Renewal Areas |
| **Objective 3 – Geology, Soils and Landuse**<br>Minimise damage to the function and quality of the soil resource in the study area in construction and operation of transmission infrastructure. | • Loss or damage to protected geological / geomorphological features within international or national designated sites (UNESCO Geoparks, ASSIs).<br>• Loss or damage to sensitive soils and land uses, e.g., peatlands, ancient woodland, commercial forestry, cultivated lands.<br>• Interactions with potentially hazardous soils and activities, e.g., PPC sites, mines, quarries, historically contaminated sites.<br>• Interactions with topographically difficult sites, e.g., steep slopes and uplands. | • No effects on protected geological / geomorphological features within international or national designated sites (UNESCO Geoparks, ASSIs).<br>• No loss of, or damage to, sensitive soils and land uses.<br>• No interaction with hazardous sites and topographically unsuitable areas. | • DAERA Condition Assessment reporting for ASSIs<br>• Geological Survey of Northern Ireland (GSNI) / NIEA data<br>• Woodland Trust, Land and Property Services Northern Ireland (LPSNI), NIEA, GSNI, and Forest Service data<br>• Local Area Plans |
| **Objective 4 – Water**<br>Avoid impacts on the status or quality of water bodies and avoid interaction with areas of flood risk.<br><br>**Sub-Objectives**<br>4A - Support the objectives of the WFD and Marine Strategy by | • WFD status of surface, coastal, transitional and groundwater bodies within proximity to potential transmission system developments.<br>• Status of sensitive waterbodies, e.g., drinking and bathing waters within proximity | • No negative change, or a positive change, in the status of surface water and groundwater bodies, including sensitive water bodies, and potential to contribute to the achievement of water | • WFD reporting of water body status in River Basin Management Plans (RBMPs) by DAERA / EPA reporting in RoI.<br>• Monitoring undertaken by DAERA Marine and Fisheries Division under the Marine |

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| avoiding damage to or deterioration of water status, quality and resource.<br><br>4B - Support the objectives of the Floods Directive by avoiding interactions with coastal, pluvial or fluvial flood extents. | to potential transmission system developments.<br>• Medium probability flood extents - Pluvial and fluvial 100-year and coastal 200-year flood extents. | body objectives under the WFD.<br>• No deterioration in the status of NI seas, and potential to contribute to the achievement of Good Environmental Status (GES) under the MSFD.<br>• No interaction with areas of flood risk. | Strategy / by the EPA under the MSFD in RoI.<br>• DfI data for the Northern Ireland Flood Risk Assessment (NIFRA) and Flood Risk Management Plan (FRMP). |
| **Objective 5 - Air Quality**<br>Minimise risk to local air quality and contribute to improving regional emissions. | • Development in air quality sensitive areas.<br>• Enable increased renewable energy connection to reduce requirements for fossil fuel burning. | • No transmission system developments within air quality sensitive areas.<br>• Number of transmission system developments that may facilitate increased renewable energy connection. | • Local Authority, DAERA data – Annual air quality monitoring summaries and Continuous air quality monitoring. |
| **Objective 6 - Climatic Factors**<br>Adaption of infrastructure to potential climatic change and reduction of GHG emissions from the energy supply sector in line with national commitments.<br><br>**Sub-Objectives**<br>**6A -** Adaption of infrastructure to potential climatic change.<br><br>**6B -** Contribute to a reduction in GHG emissions from the energy supply sector in line with national commitments. | • Medium probability climate change (cc) influenced flood extents - Pluvial and fluvial 100 year + cc and coastal 200 year +cc flood extents.<br>• Enable increased renewable energy connection to reduce requirements for fossil fuel burning. | • No transmission system developments within areas of climate change flood risk, unless resilient to flooding.<br>• Number of transmission system developments that may facilitate increased renewable energy connection. | • DfI data for the NIFRA and FRMP.<br>• Met Office regional information.<br>• SONI / NIE – Annual Reporting and Plans. |
| **Objective 7 - Material Assets**<br>Provide new, robust electrical transmission infrastructure with minimal disruption to other assets and infrastructure. | • Transmission infrastructure developed or upgraded.<br>• Potential for impacts on transport (road, rail, air) and energy infrastructure (gas).<br>• Potential for loss of or impacts to agricultural land assets. | • Number of transmission system developments developed or upgraded.<br>• No disruption to transport and energy infrastructure.<br>• No loss of agricultural land assets. | • SONI / NIE – Annual Reporting and Plans.<br>• SGN data, Transport NI and Translink data<br>• LPSNI data, CORINE Landcover, DAERA Agricultural Census data. |
| **Objective 8 - Cultural Heritage**<br>Protect International, National and Local Heritage Designations, and areas of heritage potential, and their settings. | • Potential for impacts on archaeological heritage features or their setting.<br>• Potential for impacts on architectural heritage features or their setting.<br>• Discovery of previously unknown | • No negative change, or a positive change in the condition or setting of international, national and local heritage designations, in development and | • SONI / NIE – Annual Reporting and Plans.<br>• Statistics on recorded breaches in relation to historic sites.<br>• Heritage at Risk NI (HARNI) Register, with regard to |

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| | archaeological heritage features. | operation of infrastructure.<br>• All new archaeological discoveries are reported in line with legislative requirements. | holdings in the rural landscape. |
| **Objective 9 - Landscape and Visual Amenity**<br>Minimise the potential for negative impacts on the character and quality of landscapes / seascapes or visual amenity. | • Landscape / seascape sensitivity to infrastructure development.<br>• Potential for impacts on visually sensitive areas, such as AONBs and country parks. | • No negative change, or a positive change, in visual amenity or landscape / seascape character, in development and operation of infrastructure. | • Landscape / Seascape Character Assessments or update to the NI Countryside Survey.<br>• SONI / NIE – Annual Reporting and Plans.<br>• Local Development Plans. |

# Appendix A Detailed summary of comments received from environmental consultees and actions taken

| Respondent | Comment | Action Taken |
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| DAERA - SEA Team | The layout and content of the Environmental Report is well laid out and easy to follow. DAERA SEA Team is content that the environmental report and the process of consultation follow the SEA Directive. | Comment noted. No action needed. |
| | A description of the current state of the environment and how this relates to the proposed Framework is included within the environmental report. Appropriate environmental objectives / targets / indicators for each of the likely environmental receptors is addressed including consideration of alternatives, an assessment of significant impact and complemented with mitigation measures and monitoring programme. | Comment noted. No action needed. |
| | We note the mitigation measures that are proposed to ensure that environmental effects are minimised by any development occurring from the plan. We also note that 21 specific projects have been identified that may be progressed as part of the plan and that these have not been finalised, at time of writing. The mitigation measures proposed within the ER are quite detailed and may carry over in part to project level assessment which may be included as part of environmental impact assessment (EIA) or other environmental assessments. | Comment noted. No action needed. |
| | We note the mitigation section includes the following: 'The principal mitigation recommendation is that the predicted negative effects should be considered further during the next stage of detailed planning and design, when the specifics of the development infrastructure options can be optimised through detailed feasibility studies and design in order to limit identified impacts on sensitive receptors (p273). While we welcome further environmental consideration during the next phase of development, we would assume that appropriate further environmental assessments are completed such as EIA for projects that are taken forward from the plan. EIA would encompass further environmental studies in conjunction with detailed plans of proposed development and would offer detailed mitigation options based on the specific issues arising from any proposal. Provided that appropriate environmental assessment is carried out on any project arising from the plan we are content with the mitigation and monitoring contained within the ER. Engagement with appropriate authorities should be undertaken at the earliest time during these assessments to ensure robust assessment and mitigation is undertaken. | RPS note the planning and environmental considerations as set out in Section 3-5 of the draft TDPNI, and the requirement for EIA for certain projects, including sub-threshold developments where the planning authority has identified likely significant effects on the environment. Text has been added to p.277 of the SEA ER to reflect the following feedback from SONI: Sub-EIA threshold new development projects will include a Preliminary Ecological Appraisal Report to identify ecological constraints and the need for any ecological surveys. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| DAERA – NED | NED notes and welcomes that our comments provided at the scoping stage have been taken into account during the preparation of the environmental report. We note that the baseline assessment is a general assessment for the entire country, the geographical scope of the plan, and are in agreement with the ER regarding the | Comment noted. No action needed. |

| Respondent | Comment | Action Taken |
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| | pressures faced by biodiversity and the potential effects that the plan may have. We are also in agreement with the baselines as reported for the specific projects that have been screened into the SEA and note that not all projects have yet been agreed or progressed to the next stage. We would expect at the next stage that projects arising should be screened for EIA as appropriate to ensure that mitigation measures can be specific to each project. NED welcomes the mitigation measures contained within the ER and notes that they are highly detailed measures. Should these measures be used for the appropriate project, as defined by further environmental assessment (such as EIA) then we are content that harms to the environment should be minimised. NED welcomes the objective of no loss of biodiversity and promotion of gains in biodiversity as a result of implementation of the plan. | |
| | NED notes that there are a number of projects arising from the plan which may impact upon designated sites, through habitat loss, water quality and habitat deterioration or disturbance and displacement if they are to proceed to the project phase. NED notes from p108, that the TDPNI is strategic and does not define the precise location or route of any potential project that may arise from it and that mitigation measures, such as avoidance, will be incorporated and carried out at the earliest opportunity. NED welcomes the statement 'In developing future projects SONI will seek to find options that avoid impacts on European sites' and that Constraints Studies and Route or Site Selection Studies will also be carried out. NED also welcomes that screening for and / or appropriate assessment will be carried out on all relevant projects to identify the environmental effects that a project may have on designated sites which will include mitigation measures designed to deal with these effects. | Comment noted. No action needed. |
| DAERA – Landscape Team | The Landscape Team welcomes Landscape and Visual objectives have been included within the SEA and the comments provided at the scoping stage have been considered. The landscape team is content with the Landscape/Visual outcomes of the assessment. Project specific impacts will have to be examined at EIA depending on the transmission development type and the potential for cumulative impacts assessed at this stage. The Landscape Team have no further comments to add to the SEA Environmental Report. | Comment noted. No action needed. |
| DAERA – Water Management Unit | Water Management Unit welcomes that our comments made in response to the scoping exercise have been considered and where appropriate, incorporated into the SEA report. Water Management Unit notes and welcomes the contents of the Environmental Report relating to the potential for impacts to the aquatic environment that may arise from implementation of SONI Transmission Development Plan for Northern Ireland 2023-2032 (TDPNI). | Comment noted. No action needed. |
| | Water Management Unit considers the baseline information provided in relation to the topic of the water environment appropriate. Water Management Unit also concurs | Comment noted. No action needed. |

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| | with the identification of current pressures to that environment and the identification of potential impacts that may arise from implementation of the plan. | |
| | Water Management welcomes that the SEA report has considered, and subsequently explored the potential for transboundary impacts to the Republic of Ireland aquatic environment that could arise from implementation of the plan. | Comment noted. No action needed. |
| | Water Management Unit notes and welcomes the inclusion of mitigation measures where the potential for adverse impacts on the aquatic environment have been identified. Water Management Unit is supportive of these measures and consider it essential that all of those identified are fully implemented. It should be noted that the mitigation measures identified should not be considered as definitive but should be reviewed throughout the life of the TDPNI and considering the data obtained from the monitoring proposed to ensure the effectiveness of those measures. | RPS have noted in Section 8.1.3 of the SEA ER 'These mitigation measures should not be considered as definitive, and should be reviewed, and current best practice measures applied, throughout the life of the TDPNI. SONI have updated the mitigation in Section 10.2 of the TDPNI to reflect this amendment. |
| | Water Management Unit notes and is broadly supportive of the monitoring regimes proposed in relation to the aquatic environment. Monitoring must be subject to review at each reporting stage to reflect new data obtained. It essential that interventions (including additional mitigation measures or plan revisions where required) are undertaken if any unforeseen or adverse environmental effects to the aquatic environment are identified during the monitoring regime. | RPS note that the SEA monitoring regime, as set out in the SEA Environmental Report, is considered prior to the next cycle i.e., the TDPNI for 2028-2037. RPS have added further information on monitoring to p.288 of the SEA ER. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | Water Management Unit would be supportive of the identification of any positive impacts to the aquatic environment identified as a result monitoring also being reported as this will assist in determining successful environmental actions and therefore may be of use informing future iterations of this or other similar plans. | RPS have added specific reference to the identification of positive impacts through monitoring to p. 288, Section 8.3 of the SEA ER. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| DAERA - Drinking Water Inspectorate | Thank you for consulting with the Drinking Water Inspectorate (DWI) on the Transmission Development Plan for Northern Ireland - SEA & HRA reports. Upon review, DWI welcome the acknowledgement of Drinking Water Protected Areas and associated legislation. We note the minor discussion on private water supplies (Appendix B) including the statement that the draft TDPNI should have regard for the environmental protection objectives included in the Private Water Supplies Regulations (Northern Ireland) 2017. Development and operation of electrical transmission infrastructure should not negatively impact on designated drinking water. DWI believe the report lacks detail or awareness of private water supplies across Northern Ireland | RPS have added further information on public and private water supplies to the baseline, Section 3.3.4.1 of the SEA ER. |
| | It is noted that maintaining good working practices during the restring and cabling works should avoid risks to drinking water sources | Comment noted. No action needed. |
| DAERA - Air Quality and | AQBU suggests that consideration should be given to construction and traffic related activities associated with the delivery of projects within the Draft Transmission | RPS have referenced the potential for air quality effects on sensitive habitats or species within the mitigation Section 8, Table |

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| Biodiversity Unit | Development Plan and if they might trigger a significant air quality effect on nearby sensitive habitats or species. Activities within 200m of sensitive habitats to air pollution should be assessed for potential effects from NOx and dust. For further information on the impacts of aerial pollutants on sensitive habitats, please contact AQBU@daera-ni.gov.uk | 8-1, no. 19 for further consideration during project implementation. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| DAERA - Marine Conservation Branch | In Section 4.1.4 for ENVP2 we recommend also including the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) and The Wildlife (Northern Ireland) Order 1985 (as amended). | SONI has amended ENVP2 as suggested by the consultee. RPS has updated the SEA ER and HRA to reflect this amendment. |
| | In section 4.1.4, for ENVP3, where relevant we also advise considering MCZs. | SONI has amended ENVP3 as suggested by the consultee. RPS has updated the SEA ER and HRA to reflect this amendment. |
| | In section 10.1, regarding CEMPS, we recommend that mitigation such as marine mammal observers should be considered as well as standing advice to prevent pollution, marine litter and the potential for introduction and/or spread of invasive non-native species. | Although no marine works are proposed in this iteration, they are possible within the TDP framework. RPS have added this information to Section 8 of the SEA ER, noting that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | Table 10-1 for point 3, we advise where cables will be in the marine environment to consider the potential impact of EM on marine species. | Although no marine works are proposed in this iteration, they are possible within the TDP framework. RPS have added this information to Section 8 of the SEA ER, noting that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | Table 10-1 for point 8 we advise the updated screening distances for marine mammals:- all SACs within 100km of the project should be screened for Grey seals (Halichoerus grypus) - all SACs within 50km should be screened for Harbour seals (Phoca vitulina) - all SACs within 100km should be screened for Harbour porpoise (Phocoena phocoena) | Although no marine works are proposed in this iteration, they are possible within the TDP framework. RPS have added this information to Section 8 of the SEA ER, noting that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | Table 10-1, for point 29 and 30, we advise considering seascape. | Although no marine works are proposed in this iteration, they are possible within the TDP framework. RPS have added this information to Section 8 of the SEA ER, noting that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have |

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| | | updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | Table 10-1, in general we recommend considering any potential impacts to coastal processes and the subsequent potential impact to associated habitats and species. | No action needed. RPS note that there are no proposed projects within the TDPNI that identify any requirement for marine cabling. All projects are situated onshore, and no potential impacts have been identified for coastal processes, therefore no mitigation is currently proposed for this iteration of the plan. |
| | On Page xi under Environmental Baseline, we advise there are 18 not 16 SPAs as the East Coast Marine pSPA and the Carlingford Marine pSPA need to be considered. | RPS have amended this figure in the non-technical summary and the baseline for Biodiversity, Flora & Fauna in the SEA ER. |
| | In Table 0-2 for BFF we recommend also considering MCZs and ASSIs. | RPS note that national designated sites in the SEOs include these designations. RPS have amended Table 0-2 and Table 5-2 of the SEA ER to include specific reference to MCZs, ASSIs and SLNCIs. |
| | In Table 0-2 for Landscape/Seascape and visual amenity we advise reference to the Regional Seascape Character Areas: Northern Ireland Regional Seascape Character Assessment | RPS have amended Table 0-2 and Table 5-2 to include reference to LCAs and RSCAs. RPS note that seascape character is referenced in the SEOs, however there is no sensitivity assessment for Regional SCAs. |
| | For Plan Proposal Assessment where habitat loss is envisaged, we advise that there is likely to be long term negative impacts to BFF and to landscape/visual amenity. | RPS has reviewed the assessment text to ensure that habitat loss is identified as a long-term effect for any new developments, excluding urban areas. |
| | For Coolkeeragh 110kV extension we advise considering priority species and protected species outside of designated sites as well. | RPS have amended the SEA assessment of this project to reference the potential for disturbance effects on protected species. |
| | Table 1-2 for BFF we advise also considering the potential for introduction and/or spread of invasive non-native species and the potential impacts of EM from cables. | RPS note that invasive, non-native species are already included in this table. RPS have added information on EMF impacts to Table 1-2 of the SEA ER. |
| | In Table 2-1 for ENVP2 we recommend also including the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) and The Wildlife (Northern Ireland) Order 1985 (as amended). | Note that these are Plan Objectives and Policies. SONI have amended this policy. RPS have included this amendment in the SEA ER. |
| | In Table 2-1 for ENVP3, where relevant we also advise considering MCZs. | Note that these are Plan Objectives and Policies. SONI have amended this policy. RPS have included this amendment in the SEA ER. |

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| | In Table 2-1 for ENVO4 we advise including Regional Seascape Character Areas. | Note that these are Plan Objectives and Policies. SONI have amended this objective. RPS have included this amendment in the SEA ER. |
| | In Table 2-1 under Noise we recommend considering construction noise for marine mammals and to consider the impacts of EMF on species. | Note that these are Plan Objectives and Policies. SONI have amended ENVO2. |
| | In Section 2.5.1.2.2, we recommend that marine mammal disturbance needs to be taken into consideration as seal species are protected by the Wildlife (Northern Ireland) Order 1985 (as amended). Please see the below screening distances: - all SACs within 100km of the project should be screened for Grey seals (Halichoerus grypus) - all SACs within 50km should be screened for Harbour seals (Phoca vitulina) - all SACs within 100km should be screened for Harbour porpoise (Phocoena phocoena) | RPS have added this information to Section 2.5.1.2.2 of the SEA ER. |
| | Furthermore, we recommend considering pollution standing advice (Standing advice for development that may have an effect on the water environment (including groundwater and fisheries)) as well as invasive non-native species biosecurity measures (Marine Non Native Species) | RPS have added this information to Section 2.5.1.2.2 of the SEA ER. |
| | In Table 3-1 we recommend the Landscape section also considers the 24 Regional Seascape Character Areas. | Note that Table 3-1 is a summary of the information available in the State of the Environment report for NI, however RSCAs have been described in the baseline characteristics for the area in Section 3.3.9 of the SEA ER. RPS have added a note to Table 3-1 to highlight that RSCAs are not referred to in the current SoE report for NI, but are described in Section 3.3.9. |
| | In Section 3.3.1.1.1, we advise there are 18 not 16 SPAs as the East Coast Marine pSPA and the Carlingford Marine pSPA need to be considered. | RPS have amended this figure in the baseline of the SEA ER. |
| | In Section 3.3.1.1.1, please note that SPAs and SACs are designated under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended). | RPS have added reference to this legislation in the baseline of the SEA ER. |
| | In section 3.3.1.3, we recommend considering marine invasive non-native species where relevant. | RPS have added information relevant to marine invasive non-native species to Section 3.3.1.3 of the baseline of the SEA ER. |
| | In section 3.3.1.3, we advise considering the potential impacts of EM from cables on marine species, where relevant. | RPS have added information on EMF to Section 3.3.1.2 of the baseline of the SEA ER as, although no marine works are proposed in this iteration, they are possible within the TDP framework. |

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| | In Table 5-2, for BFF we advise considering MCZs and ASSIs. | RPS have amended Table 0-2 and Table 5-2 of the SEA ER to include specific reference to MCZs, ASSIs and SLNCIs. |
| | In Table 5-4, ENVP3 we advise considering MCZs. | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have amended this policy. RPS have included this amendment in the SEA ER. |
| | In Table 5-4, for ENV02, we advise also considering sensitive receptors to EM from cables. | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have amended ENVO2. RPS have included this amendment in the SEA ER. |
| | In table 5-4 for ENVP2 we recommend also including the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) and The Wildlife (Northern Ireland) Order 1985 (as amended). | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have amended ENVP2. RPS have included this amendment in the SEA ER. |
| | Table 5-5, we advise that SACs and SPAs are designated under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) | RPS have amended Table 5-5 of the SEA ER, as recommended. |
| | In Table 7-1, consideration of the potential marine mammal disturbance for infrastructure near or in the marine environment. Furthermore, we advise considering the potential impacts of EM from cables on marine species. | RPS have added the suggested information to Table 7.1 of the SEA ER. |
| | For Section 7.2.1, due to the marine mammal screening distances provided above, the following MPAs will also need to be considered in the HRA: North Channel SAC, The Maidens SAC and The Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.2.1, Larne Lough Regional Seascape Character Area needs to be considered. | The SEA ER has been amended to reference potential temporary impacts on Larne Lough RSCA in Section 7.2.1 and Appendix D F1. Note that this has not changed the assessment outcome. |
| | For Section 7.2.1, as the HRA has identified that habitat loss is a potential negative impact we advise the bar graph needs to show long-term negative impacts. | Text in Section 5.2.1 of HRA (under 'Area 2 (Larne)' has been edited as the habitat loss in-combination pathway was included in error. Only in-combination water quality deterioration impact pathway remains. |

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| | For Section 7.2.5, due to the marine mammal screening distances provided above the following MPA will also need to be considered in the HRA: the Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.2.5, the following Regional Seascape Character Areas need to be considered: Foyle Estuary and Lough Foyle. | The SEA ER has been amended to reference potential temporary impacts on Foyle Estuary and Lough Foyle SCAs in Section 7.2.5 and Appendix D F5. Note that this has not changed the assessment outcome. |
| | For Section 7.2.7, the East Coast Marine pSPA also needs to be considered. In addition, due to the marine mammal screening distances provided above the following MPAs will also need to be considered in the HRA: The Maidens SAC and The Skerries and Causeway SAC. | East Coast (Northern Irelands) Marine SPA considered in HRA. As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | In Section 7.2.7, Larne Lough Regional Seascape Character Area needs to be considered. | The SEA ER has been amended to reference potential temporary impacts on Larne Lough SCA in Section 7.2.7 and Appendix D F7. |
| | For Section 7.2.9, due to the marine mammal screening distances provided above the following MPA will also need to be considered in the HRA: The Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.2.9, the following Regional Seascape Character Areas need to be considered: Foyle Estuary and Lough Foyle | The SEA ER has been amended to reference potential impacts on Foyle Estuary and Lough Foyle SCAs in Section 7.2.9 and Appendix D F9. |

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| | For Section 7.2.10, due to the marine mammal screening distances provided above the following MPAs will also need to be considered in the HRA: North Channel SAC, The Maidens SAC and The Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.2.10, the following Regional Seascape Character Areas need to be considered: Belfast Harbour and Belfast Lough. | The SEA ER has been amended to reference potential impacts on Belfast Harbour and Lough SCAs in Section 7.2.10 and Appendix D F10. |
| | For Section 7.2.12, due to the marine mammal screening distances provided above the following MPAs will also need to be considered in the HRA: The Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.1.12, the following Regional Seascape Character Areas need to be considered: Foyle Estuary and Lough Foyle. | The SEA ER has been amended to reference potential impacts on Foyle Estuary and Lough Foyle SCAs in Section 7.2.9 and Appendix D F9. |
| | For Section 7.2.21, due to the marine mammal screening distances provided above the following MPA will also need to be considered in the HRA: The Skerries and Causeway SAC. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | For Section 7.2.21, the following Regional Seascape Character Areas need to be considered: Foyle Estuary and Lough Foyle | The SEA ER has been amended to reference potential impacts on Foyle Estuary and Lough Foyle SCAs in Section 7.2.21 and Appendix D F21. |
| | In Section 8.1.2, we advise that depending on the presence of seal haul-outs, and the potential for disturbance to marine mammals, a marine mammal observer may be required. | RPS have amended Section 8.1.2, as recommended, in the SEA ER. Note that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine |

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| | | mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | In Table 8-1, For 1, we advise that depending on the presence of seal haul-outs, and the potential for disturbance to marine mammals, a marine mammal observer might be required. | RPS have amended Table 8-1, as recommended, in the SEA ER. Note that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | In Table 8-1, For 4, we advise also considering the potential for introducing and/or spreading of marine invasive non-native species. | RPS have amended Table 8-1, as recommended, in the SEA ER. Note that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | In Table 8-1, For 5, we advise irrelevant of whether invasive non-native species are present on site a biosecurity protocol should be created and implement to prevent the introduction and/or spread of invasive non-native species. | RPS have amended Table 8-1, as recommended, in the SEA ER. Note that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | In Table 8-1, For 8, we advise the following updated screening distances: - all SACs within 100km of the project should be screened for Grey seals (Halichoerus grypus) - all SACs within 50km should be screened for Harbour seals (Phoca vitulina) - all SACs within 100km should be screened for Harbour porpoise (Phocoena phocoena) | RPS have amended Table 8-1, as recommended, in the SEA ER. Note that no marine works are proposed in this TDP and a caveat of 'where applicable' has been added to any marine mitigation in Table 8.1. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| | In Section 2.3, we recommend also using the DAERA Marine Map Viewer as a source. | Comment noted. No action required. |
| | In Section 3.2, for ENVP2 we recommend also including the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) and The Wildlife (Northern Ireland) Order 1985 (as amended) | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have amended this policy. RPS have included this amendment in the SEA ER. |
| | In Section 3.2, for ENVP3, where relevant we also advise considering MCZs | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have amended this policy. RPS have included this amendment in the SEA ER. |
| | In Section 3.2, for ENVO4 we advise including Regional Seascape Character Areas. | Note that these are Plan Objectives and Policies, and the SEA is considering their compatibility with the SEOs. SONI have |

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| | | amended this objective. RPS have included this amendment in the SEA ER. |
| | In Section 3.2 under Noise, we recommend considering construction noise for marine mammals and also consider the impacts of EM on species. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | In table 4-1, the East Coast Marine pSPA and Carlingford Marine pSPA should be considered. | East Coast Marine pSPA and Carlingford Marine pSPA already considered and shown with correct boundaries in HRA |
| | Section 4.4.3, we advise that disturbance could potentially be caused to some species of elasmobranch from the EM cables while in operation | Elasmobranchs not relevant to HRA |
| | Table 4.4, for the North Antrim Coast SAC, the qualifying interest feature Vegetated sea cliffs of the Atlantic and Baltic coasts should be included. | Table 4.1 of HRA updated |
| | In Table 4.4, for Strangford Lough SAC we advise the consideration of the following qualifying interest needs to be considered: Annual vegetation of drift lines, Perennial vegetation of stony banks, Salicornia and other annuals colonizing mud and sand and Atlantic salt meadows (Glauco-Puccinellietalia maritime). | Table 4.1 of HRA updated |
| | In Table 4.4, we advise that the North Channel cSAC needs to be updated to its full conservation status of North Channel SAC. | HRA amended to refer to SAC and not cSAC |
| | In Table 4.4, the East Coast Marine SPA is still a pSPA | HRA amended to refer to SPA and not pSPA |
| | In Table 4.6 we refer back to the aforementioned screening ranges for marine mammals and that consequently the following should be amended: | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |

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| | Ballylumford – Eden circuit update, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Coolkeeragh-Magherafelt also needs to consider the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | RP6 110kV tower, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Castlereagh – Rosebank Tower line also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Coolkeeragh-Strabane also needs to consider the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The |

| Respondent | Comment | Action Taken |
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| | | Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Coolkeeragh-Limavady also needs to consider the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Ballylumford- Ballyvallagh, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | New North West 110kv also needs to consider the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Energising Belfast, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Carnmoney Eden Reinforcement, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is |

| Respondent | Comment | Action Taken |
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| | | not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | Moyle Interconnector, also needs to consider the North Channel SAC, the Maidens SAC and the Skerries and Causeway SAC for disturbance to marine mammals. | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | In Section 5.1.1.3, we advise also considering the introduction of marine invasive non-native species, where relevant | Section 5.1.1.3 of HRA tweaked to include possibility of spread of invasive species by sea. |
| | In Section 5.1.2.1, we advise that changes in sedimentation along the coast could have potential impacts on Annex I habitats through smothering such as 'Reefs' as well as have the potential to impact coastal processes and therefore affect the associated habitats and species such as 'sandbanks' | Section 5.1.2.1 of HRA tweaked to include this possibility. |
| | In Section 5.1.2.2, we advise pollution standing advise is adhered to: standing advice for development that may have an effect on the water environment (including groundwater and fisheries) | HRA includes this in mitigation section |
| | In Section 5.1.3, where relevant we advise the potential impact of construction disturbance is considered for marine mammals. In addition, we advise the potential impact of EM from cables is considered | As there are no marine projects proposed by the Plan and as there are no intended or reasonably foreseeable marine works, the potential impact pathway of underwater (subsea) noise capable of causing injury or disturbance to marine mammals is not considered further. As such, marine mammal qualifying interests of the Strangford Lough SAC, North Channel SAC, The Maidens SAC, Murlough SAC and Skerries and Causeway SAC are not considered further in the HRA |
| | In table 5-1, we recommend also considering the Climate Change Act (Northern Ireland) 2022. | In combination effects of legislation not part of scope of HRA or settled case law relating to HRA. |
| | In Table 5.3, we recommend considering: o Local development plans o The All Ireland Rail Review o Living with Water Programme o Strategic Planning Policy Statement 2015 | We are content with the broad scope of the in combination assessment of plans already included in HRA |

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| | In Section 6.2.1.1, we advise that a biosecurity protocol should be created and adhered to regardless of whether invasive non-native species have been recorded on site | Section 6.2.1 of HRA amended to include this |
| | In Section 6.2.3.3, we welcome the adhered to the JNCC protocol. In addition, advise that the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 should be considered | Section 6.2.3.3 amended to reflect this. |
| DAERA – Marine Historic Environment Team | Page xiii - Cultural, Architectural & Archaeological Heritage – The historic wreck numbers have recently been updated (August of this year); there are 382 identified aircraft wrecks and shipwrecks. There are also 12 protected wrecks; 3 shipwrecks which are scheduled under the HMAOO NI 1995 (HMS Drake, Lochgarry and Devereux), 1 Shipwreck (La Girona) which is protected under the Protection of Wrecks Act 1973 and 8 military aircraft protected under the Protection of Military Remains Act. This section should be amended accordingly and the current GIS datasets obtained from the Department for Communities Historic Environment Division - heroni@communities-ni.gov.uk | RPS have amended this in the Non-technical Summary and Section 3.3.8.1 of the baseline in the SEA ER. |
| | The plans presented have limited interaction with the marine area and as such the SEA is sufficiently robust in respect of marine cultural heritage assets. Please refer to the DfC Historic Environment Divisions detailed response in respect of terrestrial Cultural Heritage. | Comment noted. No action needed |
| DAERA – Marine Planning Team | Many of the projects indicate 'there are unlikely to be any impacts on water status'. It is unclear if this assessment conclusion includes coastal and marine waters from a UK Marine Strategy perspective and the achievement of good environmental status; as often the corresponding baseline only refers to WFD status with regard to transitional and coastal waters. This highlights a disconnect between the environmental baseline and conclusions of the assessment, with the Strategic Environmental Objectives, sub-objectives and targets (which the various projects within the Draft Transmission Development Plan are being assessed against in the Environmental Report) and the monitoring outlined in relation to the Water theme. Whilst there is overlap between WFD and the UK Marine Strategy, not all elements of the UK Marine Strategy are covered by WFD. | RPS have referenced MS status in the assessments, where relevant. |
| DfC - Historic Environment Division | HED welcomes where our comments provided at the scoping stage have been taken into account and considers the report provides a thorough assessment of the potential effects of the plan on the historic environment, including transboundary considerations. We defer comment on the project specific impacts outlined in the appendices, for consideration through the EIA process at the project specific stage but offer the following advice to further inform the strategic environmental assessment in relation to cultural heritage. | Comment noted. No action needed |

| Respondent | Comment | Action Taken |
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| | Table 3.1 - Statistics in relation to heritage assets continue to evolve as new designations are taken forward and as new records are added or as existing records are augmented. HED therefore highlights the importance utilizing our historic environment evidence bases to provide an accurate assessment of potential effects of the plan on the historic environment. Our digital datasets which include recorded designated and non-designated heritage assets, are available to download at: https://www.communities-ni.gov.uk/publications/historic-environment-digitaldatasets. This data can also be accessed via our Historic Environment Map Viewer https://www.communities-ni.gov.uk/services/historic-environment-map-viewer. We would highlight the value of our excavations layers going forward to project specific stage as further indicators of locations where there is a high potential to encounter previously unidentified archaeological remains -e.g. along Island Magee. We also highlight that the number of Areas of Significant Archaeological Interest now sits at 11, and there is a high likelihood of further designations of these assets or extensions to existing designations as the Local Development Plan process progresses. These assets will normally have bespoke local policies to protect their historic characteristics. | RPS note that this is a summary of the State of the Environment report for NI. Further, more up to date, information has been provided in Section 3.3.8. RPS have updated the ASAI to 11 in the baseline Section 3.3.8. |
| | Table 3.2 HED consider it would be useful to have cultural heritage or landscape in this table, both of which would have transboundary relevance with respect to the Transmission Development Plan, as is well articulated in 3.3.8. | RPS note that Table 3.2 is a summary taken from the State of the Environment report for RoI. RPS have reviewed this report - there is some information available on landscape, which RPS have added to Table 3.2 of the SEA ER. There is no reference to cultural heritage in this report. |
| | Para 3.3.8 The key issues table should be updated to reflect the potential effects of the plan on cultural heritage, whilst also acknowledging the interrelationship between the historic environment and landscape and the potential for shared impacts. At present these appear to iterate the key issues specific to landscape alone. | RPS have amended this text in the baseline section of the SEA ER. |
| | 3.3.8.1 HED highlights that Gracehill is currently on the WHS tentative list as part of a transnational bid of Moravian Church Settlements. If the nomination is successful, Gracehill would be Northern Ireland's first cultural heritage World Heritage Site and therefore potential impacts of the plan on the site would require review in accordance with planning policy requirements | RPS have referenced this site in the baseline Section 3.3.8.1 and in the assessment for project 14 Mid Antrim Upgrade of the SEA ER. |
| | 3.3.8.1 We welcome the consideration of the potential of impact on previously unidentified below ground remains through groundworks, particularly for cabling. HED reiterate the importance of considering this potential at project specific stage. Assets such as historic graveyards with early origins are often physically defined by relatively late boundary walls which may not encompass their full extent, and HED have at various times in the past had to attend to circumstances where remains have been uncovered in the environs or streetscapes of such sites. | RPS have added specific reference to this in Table 8-1, mitigation 28 of the SEA ER. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |

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| | Table 5.3 This table helpfully sets out the compatibility between the SEA Objectives and the Transmission Development Plan NI (TDPNI) objectives. It would however also be beneficial to illustrate by way of a table, the interrelationships between the SEA topics, outlining the common natural and historic environment synergies, for example in relation to biodiversity and landscape character, which should be duly reflected in the assessment of potential effects of the plan. | RPS have added the table of interrelationships between SEA topics to the SEA ER, as Table 5-5. RPS note that this table was included in the SEA Scoping report. |
| | Table 5.4 Sets out the TDPNI objectives aligned to Cultural Heritage SEA Objectives, though HED considers that the cited ENVP8 test of 'reasonable measures' will not provide appropriate protection for listed assets against potential effects of the plan. HED therefore advise that ENVP8 should be revised to outline that '…appropriate measures..' will be taken to ensure the protection of assets of special architectural and historic interest when considering site or route options. We also advise that the word sites should be included after protected as well (i.e. "protected sites and structures" so that due cognizance is afforded to scheduled or state care monuments which may not always have above ground elements. | SONI have amended this policy. RPS have included this amendment in the SEA ER. |
| | Table 5.4 We further advise that account should also be taken of the setting of archaeological remains under the wording of ENVP9 in this table. (**NB. HED consider that correction is required to this table - the cultural heritage ENVP nos. in Table 5.4 (EVNP 8 & 9) do not appear to align with the numbers afforded in Table 2-1 where the wording for cultural heritage objectives is outlined under ENVP 9 and 10) | SONI have amended this policy. RPS have included this amendment in the SEA ER. RPS have amended the numbering in Table 5.4 of the SEA ER. |
| | Table 5.4 HED considers ENVO4 in respect of historic landscape character, particularly in relation to ASAI's and the setting of heritage assets, will also be relevant in relation to cultural heritage. HED also considers that the environmental objectives of the plan should demonstrate appropriate consideration of impacts for non-designated heritage assets aligned with the hierarchy of planning policy protection. | SONI have amended this objective. RPS have included this amendment in the SEA ER. RPS have included ENVO4 in the discussion for cultural heritage in Table 5.4 of the SEA ER. |
| | Table 5-5 - HED requests that Conservation Areas of special architectural and historic interest are included in the constraints model with a score reflective of the statutory designation. As previously advised in our scoping comments, HED consider that the constraint scoring for scheduled monuments and listed buildings as statutorily designated assets with specific consenting regimes (in the case of scheduled monuments wholly separate to planning approvals) should be higher and the modelling should consider the tiered policy approaches to assets as articulated in regional planning policy within the SPPS, PPS6 and Council Plan Strategies, where these have been adopted. ASAI should also be scored appropriately given the policy weight afforded to these specific designations. | RPS have searched for available data on Conservation Areas. This data does not exist currently as a nationally available dataset. RPS have included as a recommendation for future working in Section 5.4 Difficulties and Data Gaps, as LAPs are out of date / not available digitally. |

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| | Table 7-1 HED considers that the potential negative effects for Cultural Heritage during the Operational Phase should recognize the potential for long term effects on 'heritage assets' in line with cultural heritage monitoring indictors in Table 8.3. The term 'local' infers impacts relate to assets of local interest, when the implementation of the plan has the potential to effect, assets of national, regional and local significance | RPS have amended the text in Table 7-1 of the SEA ER, as suggested. |
| | Table 8-1 In respect of mitigation measures for potential effects No. 26 and No. 27, utilization of the historic environment evidence bases will help inform how the potential effects can be avoided, or where following consideration of alternative options they cannot be avoided, are appropriately mitigated against as outlined in the report. | RPS have amended the text in the mitigation section of the SEA ER, as suggested. SONI have updated Section 10 of the TDPNI to reflect amendments to Section 8 of the SEA ER. |
| Causeway Coast & Glens Borough Council | We would have some concern that the strategic direction of the Plan will result in a disproportionate level of development being focused within the northwest Planning Area. The projects outlined in the Plan will support and promote significant growth in the renewables sector, with most of the renewable infrastructure located within the northwest planning area. Section 7 of the Plan describes the northwest planning area as "characterised by a significant amount of wind generation, with more generation than demand". It goes on to state: "Significant further generation is expected in this area over the coming years, most, if not all, of which is expected to be renewable in order to meet the 80% target. To cater for the high levels of generation described above network reinforcement is necessary. This will enable the efficient export of generation from this area towards areas with high load, such as the South-East". There is no evidence to support the assumption that significant further generation is expected in this area over the coming years. Yet justification for the projects outlined in the plan are repeatedly described as, "As a result of increasing growth in renewable generation in the northwest of NI there will be a need to....". Given that the area has more generation than demand, it is highly unlikely that the area will see increased generation without the infrastructure projects outlined in the dTDPNI. | SONI is seeking to facilitate the NI Executive's target of up to 80% renewable energy by 2030. The Transmission Development Plan (TDP) does seek to facilitate the connection of more renewable energy to the grid, as well as strengthening supply to all areas in Northern Ireland, and helping to lower electricity prices. The locating and approval of new generation projects are outside of SONI's area of responsibility and will be subject to normal planning requirements and should be prepared in-line with Regional Strategies, Local Area Plans, and other requirements. The TDP will not be directly responsible for the development of more generation in the area. The TDP has been prepare to take account of existing areas of generation and those that are planned, as well as other technical issue (e.g. strengthening supply). SONI recognises that a coordinated approach is required and will be happy to continue to discuss this matter further with the Council. |
| | This is critical to our concerns in relation to the dTDPNI. The Plan and the associated SEA, consider the likely environmental impacts of the projects outlined in the dTDPNI. However, they do not assess the direct and indirect significant effects of the proposed development, as is required under the Planning (EIA) Regulations (NI) 2017. This is despite the Plan describing the proposed projects as "critical enabling infrastructure in the realisation of the Northern Ireland Energy Strategy and Climate Change Act". | Comment noted as a strategic issue for SONI. No action needed. |
| | Paragraph 3.5.2 describes the statutory environmental consideration of the Plan and the need for appropriate assessments. The approach focuses on the impact of individual projects. These often fall outside the thresholds outlined in the EIA | In-line with The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 legislation, the Transmission Development Plan has been subject to a Strategic |

| Respondent | Comment | Action Taken |
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| | regulations, with many of the proposed projects being 110kV lines, with the threshold set at 220kV. It is important to consider that subsequent applications for renewable energy will be a direct result of the dTDPNI and should be assessed within the SEA. | Environmental Assessment (SEA). The SEA seeks to outline the environmental and social effects of the Plan (both positive and negative) and propose mitigation measures to minimise or avoid the negative effects. As with all SEAs, it would not be possible to assess all individual projects within the Plan as there is separate planning and environmental legislation to address individual projects. In addition, the strategic level of the Plan will mean that not all point of details of individual projects are available for assessment within the SEA. Individual projects will be assessed through the planning requirements applicable to each project. Where a project is sub-threshold EIA, there will be an assessment of the suitability of the project and the developer will work with the planning authority to scope that assessment. On grid development projects (e.g. 110 kV and 275 kV projects), where SONI has developed and is responsible for the planning of the project, SONI will screen the projects for the requirement for EIA. Where a project is identified to be sub-threshold and not requiring an EIA, SONI will still prepare an assessment of the environmental and social effects of the project. This report will be scoped in consultation with the local council and other key stakeholders to ensure that any concerns are addressed. This assessment will address the environmental and social effects of the project and include an assessment of the cumulative effects with other projects. |
| | The general location of renewable energy development will largely be predetermined by the availability of infrastructure to transport and deliver the generated electricity to areas with high load, such as the southeast or beyond via the Moyle interconnector. The fragmented nature of the renewable energy industry and the way the Plan will be implemented, effectively commits the northwest to the delivery of large-scale energy production, without appropriate assessment of the environmental impacts. This is comparable to assessing the environmental impact of a power station, solely on the impacts of the associated energy transportation infrastructure. | The assessment of all large scale renewable generation will be subject to planning and assessment. The location and approval of renewable generation projects is outside of SONI's area of responsibility but will be a balance of a number of factors including but not limited to: wind/solar levels, availability of land, planning requirements (e.g. Local Area Plans), environmental and social considerations, and connection to the grid. |
| | Section 4.1 is entitled, Our Approach to the Environment. It lists SONI's policies and objectives in relation to environmental issues, including Biodiversity, Climate Change and Cultural Heritage. The scope of the impacts is limited to the transmission infrastructure and makes no reference to the development that the infrastructure enables. | The Plan will not be directly responsible for the development and approval of any infrastructure projects. As identified above, all projects, generation and grid development, will be subject to separate planning processes outside of the TDP. The individual projects will assess any cumulative effects as appropriate and in consultation with the planning authority |

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| | Paragraph 4.1.7 outlines the policy and objectives of SONI with regards consideration of landscape. The approach again focuses on the appraisal of transmission development in isolation, with no consideration of the associated development over the plan period, and the resulting cumulative impact on the landscape of the northwest. | The Plan will not be directly responsible for the development and approval of any infrastructure projects. As identified above, all projects, generation and grid development, will be subject to separate planning processes outside of the TDP. The individual projects will assess any cumulative effects as appropriate and in consultation with the planning authority. |
| | In the context of the dTDPNI, the continued relevance of the NI Landscape Character Assessment (NILCA) 2000 as an appropriate evidence base is questionable. The NILCA 2000 and the evidence which supports it were developed over 25 years ago, prior to significant growth in renewable energy infrastructure in the northwest. | RPS note that this is the only national assessment of landscape character currently available for NI. RPS have included as a recommendation for future working in Section 5.4 Difficulties and Data Gaps, as LAPs are out of date / not available digitally. |
| | The impact of the dTDPNI on the landscape of the northwest will likely be significant. Given the scale of the infrastructure upgrades proposed, and the level of energy generation development required to meet Northern Ireland's energy ambitions, the Plan could significantly alter the landscape character of the area. It would therefore be appropriate for the energy industry to undertake a robust landscape assessment and sensitivity analysis, to determine if the northwest has the capacity to absorb this level of development, prior to the adoption of the plan for the enabling infrastructure. | The landscape character area assessment have assessed the sensitivity of the LCAs to development. The Plan will operate in the context of local and regional policy with regard to suitability of development. As will the separate generation projects. |
| | It is noted that the HRA also looks at projects in isolation and fails to consider the cumulative impact of associated energy generating development. Given the correlation between the areas of upland often favoured for wind energy development and areas of active peatland, it would be appropriate to undertake a detailed assessment of potential development. A failure to appropriately assess the capacity of the landscape to absorb the levels of energy development required could undermine the objectives of the Climate Change Act, such is the importance of active peatland in sequestering carbon dioxide. | Point noted but opening paragraphs of Section 6.2 of the HRA point to the project level assessment that will follow on from plan level assessment, and be required in every case. At the project level assessment, a much more focused in-combination assessment will be undertaken by the competent authority, bespoke to that project and will include energy generating development that is already operating, under construction, has received consent and /or is in the consenting system pipeline at that time. Such an assessment will take into account the potential for in combination effects on active peatland in the area of the relevant project under consideration at that time. |
| | The dTDPNI responds to the oversupply of renewable energy development in the northwest, which has largely been dictated by energy companies seeking to maximise productivity. Given the implications of the plan for the landscape across the northwest this would not appear to be a sound basis for the development of an energy strategy. | SONI is seeking to facilitate the NI Executive's target of up to 80% renewable energy by 2030. The Transmission Development Plan (TDP) does seek to facilitate the connection of more renewable energy to the grid, as well as strengthening supply to all areas in Northern Ireland, and helping to lower electricity prices. The locating and approval of new generation projects are outside of SONI's area of responsibility and will be subject to normal planning requirements and should be prepared in-line with Regional Strategies, Local Area Plans, and other requirements. |

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| | There is also no evidence to support the role of the northwest as the focal point of wind energy generation. Available data on wind speed and power reflects a relatively even distribution across Northern Ireland. Whilst the northwest may experience optimal conditions, the data indicates that within the southeast there are comparable conditions which would more than support commercial energy generation. | This is not an area within SONI's area of responsibility. |
| | Clearly it is more cost effective to concentrate infrastructure in one region as opposed to a balanced distribution which would require additional network infrastructure. However, the long-term implications for both the natural environment and tourism economy have not been fully explored. An even distribution of infrastructure would develop a more secure and robust network, better equipped to absorb potential outages and avoiding overreliance on a particular region or connector. | The Energy Strategy for Northern Ireland – The Path to Net Zero Energy is one such plan that helps to address these concerns. However, there are a number of other plans and development frameworks have are required for a strategic overview as suggested by the Council. While it is outside of the scope of Transmission Development Plan, SONI would be happy to play its role and work with the Council and other key stakeholders to address these concerns. |
| | It is accepted that the targets outlined in the Climate Act place significant pressure on the energy industry to work towards decarbonisation. However, it is worth taking the time to ensure that the measures introduced are achievable without causing lasting detrimental impact. | SONI agrees with this point and will seek to minimise negative effects as far as possible. |
| | Given the importance of this plan in meeting Northern Ireland's energy and climate change ambitions there is perhaps a lack of transparency in relation to the aims and objectives of the Plan. Renewable energy has a critical role to play in the journey to net-zero carbon emissions. However, renewable energy development can be contentious and public opinion on visual impact remains guarded, as was evident during public consultation on the Council's Preferred Options Paper. | SONI is happy to meet with the Council to discuss further. It is hoped that the responses given have clarified the intent and scope of the Plan. |
| | The absence of a strategic energy plan which clearly defines the implications of the dTDPNI limits the conversation. There is perhaps a need for a clear discussion as to whether it is appropriate and fair for the northwest planning area to accommodate the energy generating development to serve the southeast area and beyond, given the potential for visual and general amenity impacts. | SONI is happy to discuss this with the Council and other key stakeholders. |