



Strategic Environmental Assessment of the Northern Ireland Network 25 Strategy

Scoping Report

Client	Northern Ireland Electricity					
Project Title	Strategic Environmental Assessment of the Network 25 Strategy					
Document Title	Scoping Report					
Document No.	DO1					
This Document Comprises	DCS	TOC	Text	List of Tables	List of Figures	No. of Appendices
	1	1	54	1	1	2

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
D01	Draft	RB	RH	AB	Belfast	10/09/13



Part Funded by the
EU TEN-E Initiative

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EXECUTIVE SUMMARY

Northern Ireland Electricity (NIE) is responsible for the planning, development, construction and maintenance of the electrical network in Northern Ireland. NIE also manages the distribution network, and carries out metering of electricity on behalf of suppliers. The System Operator for Northern Ireland (SONI) ensures the safe, secure and economic operation of the electricity transmission system in Northern Ireland. NIE works closely with SONI when planning the transmission network, through a formal set of processes. SONI have contributed to the development of Network 25.

The Strategic Environmental Assessment Directive has been implemented in order to integrate environmental considerations into the preparation of plans and programmes and is a means of ensuring a high level of protection for the environment, while also promoting sustainable development. The Strategic Environmental Assessment Directive will ensure that consideration is given to the environment in implementing the NIE Network 25 Strategy.

This document establishes the scope of works involved for the Strategic Environmental Assessment for the Network 25 Strategy (2013 – 2025).

An Environmental Report will be produced as part of the Strategic Environmental Assessment and this will be available, together with the draft Network 25 Strategy for public consultation. All comments received during both this consultation and public consultation on the draft Strategy and Environmental Report will be considered in the finalisation of the Strategy.

1 INTRODUCTION

1.1 NORTHERN IRELAND ELECTRICITY

Northern Ireland Electricity (NIE) is responsible for the planning, development, construction and maintenance of the electrical network in Northern Ireland. NIE also manages the distribution network, and carries out metering of electricity on behalf of suppliers. The System Operator for Northern Ireland (SONI) ensures the safe, secure and economic operation of the electricity transmission system in Northern Ireland. NIE works closely with SONI when planning the transmission network, through a formal set of processes. SONI have contributed to the development of Network 25.

The basic function of an electricity network is to connect the sources of energy (generators) with the ultimate users (demand) of that energy. The transmission network moves bulk electricity on high voltage lines or underground cables from where it is being generated to the area where it is needed. This can be likened to a motorway. Whereas the distribution network, operating at lower voltages, is like smaller roads, delivering electricity into homes and businesses.

Reinforcement of transmission systems becomes necessary with changes in the amounts of either generation or load that are connected to the system. In Northern Ireland, the key driver of transmission reinforcement is the need to enable EU and Assembly policy objectives for major increases in the connection of renewable power generation.

1.2 ELECTRICITY IN NORTHERN IRELAND

The existing electricity network in Northern Ireland was largely in place by the late 1960s, with an electrically strong transmission network having been developed to link major fossil fuelled power stations and to deliver bulk electricity to the more heavily populated parts of the country. Northern Ireland has three large fossil fuel power stations; Ballylumford (1,213MW mainly gas fired, near Larne), Kilroot (614MW mainly coal fired, near Carrickfergus), and Coolkeeragh (455MW mainly gas fired, near Londonderry).

The electricity network can be sub-divided into the transmission and distribution networks. Voltages at or above 110kV are used in the transmission network as they can deliver large quantities of power over long distances, very efficiently. The transmission network consists of approximately 400km of 275kV overhead line, almost all double circuit, developed between 1963 and 1978. The 110kV system consists of 924km of overhead line and 90km of cable, with the majority installed between 1944 and 1958. **Figure 1.1** shows the Northern Ireland electrical transmission network. The distribution network operates at lower voltages of between 33kV and 230V and distributes electricity to customers' homes and business premises.

The Northern Ireland electrical network is connected to the Scottish network via the Moyle Interconnector, which runs from Islandmagee to Ayrshire. Existing interconnection with the Republic of Ireland is principally achieved by a 275kV double circuit connection between Tandragee and Louth, and there are two smaller 110kV standby connections at Enniskillen and Strabane.

The transmission network is designed to certain standards that ensure a secure supply is maintained and provided to all customers at all times. This effectively means that the network is designed, built and operated in such a way that if a signal component fails there will be an alternate available and customer supplies will not be interrupted. It is vitally important for all customers that there is no reduction in the performance of the transmission network and that this Network 25 strategy delivers security of supply to the same standard.

It is NIE's role to develop an electrical network that will meet all future requirements, both load and generation related. Regarding the key driver that is renewable generation, the type of generation technology deployed and the geographical location of that generation is a matter for developers and the planning process. For both regulators and licensees this means a level of uncertainty in planning, delivering and funding network development. Substantial network reinforcement is required to accommodate renewable generation connection applications and facilitate the renewable energy target. When considering network reinforcement NIE has a statutory obligation to balance the costs to the consumer, network security, network reliability and its impact on the environment. Planning the network over a time frame to at least 2025 allows the most efficient, affordable, reliable and environmentally sensitive network to be developed.

1.3 NETWORK 25 STRATEGY

The Northern Ireland Assembly published its Strategic Energy Framework (SEF) in 2010, the aim of which is to:

- Create a more secure and sustainable energy system;
- Provide competitively priced energy;
- Offer robust security of supply;
- Enable a greater share of energy from renewable sources;
- Exploit the resulting economic opportunities, and
- Maximise energy efficiency.

Northern Ireland energy policy is developed with reference to both EU legislation, such as the EU Renewable Energy Directive (2009/28/EC), and UK approaches, such as the Climate Change Act 2008 and the Department of Energy and Climate Change (DECC) Renewable Energy Action Plan. The SEF sets out a target to have 40% of electrical consumption from renewable energy by 2020. This represents a major increase from the current level of approximately 14%. The SEF is given effect

by an Onshore Renewable Energy Action Plan (OREAP) and an Offshore Renewable Energy Strategic Action Plan (ORESAP), which have been created by the Department of Enterprise Trade and Investment (DETI).

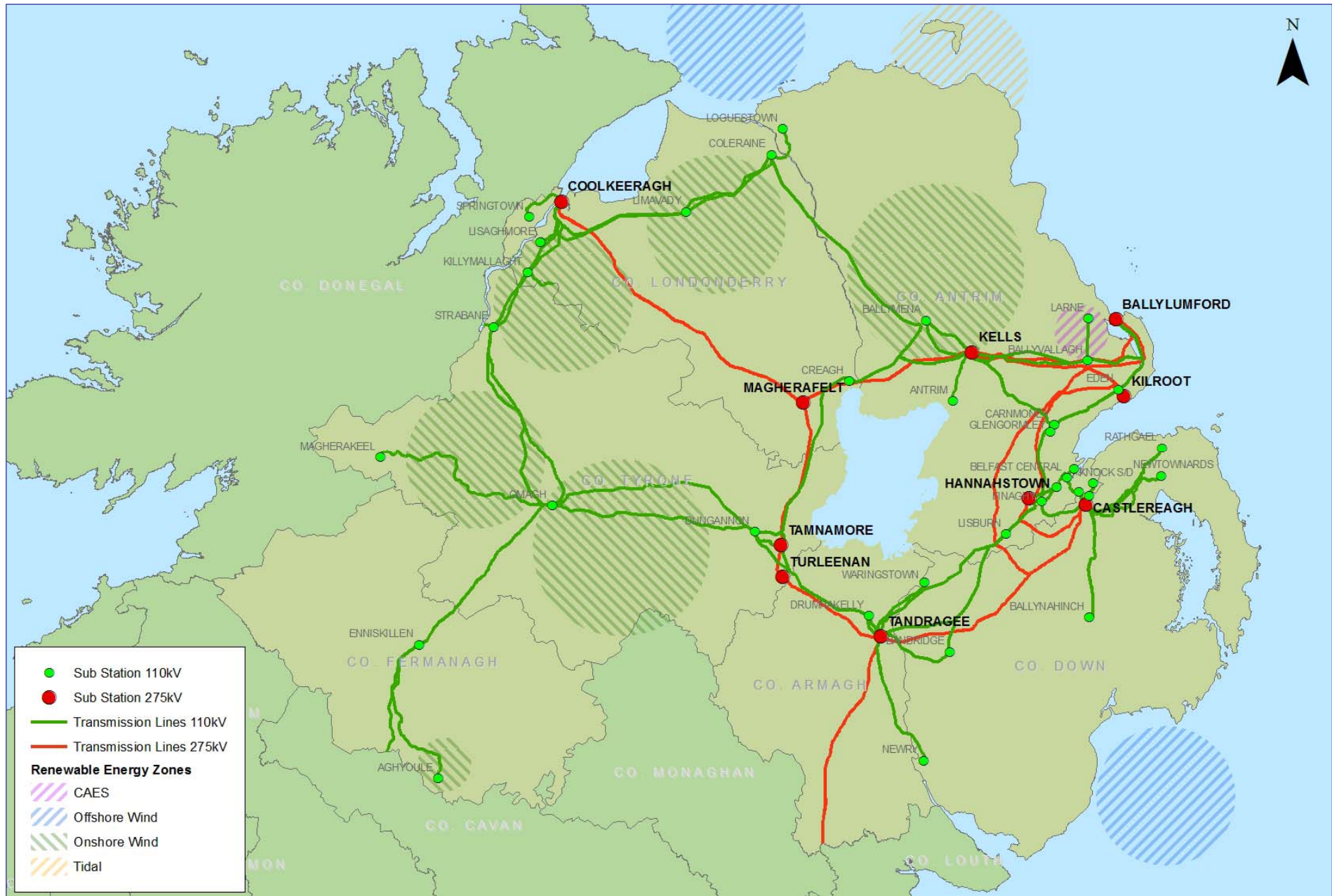
This Network 25 Strategy indicates the scale and range of development needed to meet the SEF target of 40% renewable energy in 2020, depending upon the type and location of renewable energy deployed. DETI has undertaken Strategic Environmental Assessments (SEAs) based upon the impact of renewable generators, on-shore and off-shore, leading on from the OREAP and ORESAP plans. These Plans and SEAs have not specifically assessed associated transmission reinforcement plans. NIE is therefore undertaking their own SEA during the development of the Network 25 Strategy to provide a clear understanding of the likely environmental consequences of decisions arising from the Network 25 draft Implementation Plan (IP).

The areas of potential renewable energy development that may need to be connected to the NI electrical grid are shown in **Figure 1.2**. The required transmission reinforcements or connections from the source of energy into the existing grid will form the individual measures in the Strategy, and these will be assessed in the SEA.

Figure 1.1: Existing NIE Transmission System



Figure 1.2: Northern Ireland Potential Renewable Generation Areas



1.4 KEY OBJECTIVES OF THE NETWORK 25 STRATEGY

The subject of the SEA for which this Scoping Report is being compiled is the Network 25 Strategy.

The key objectives of the Strategy are to:

- Comply with the NIE and SONI's regulatory and licence obligations;
- Conform to environmental best practice;
- Develop the Transmission network that will support a long term, sustainable and reliable electricity supply;
- Contribute towards the achievement of the 40% renewable energy target and actions outlined in the SEF, and
- Ensure that the NIE network delivers safe, reliable and cost effective performance to meet the requirements of stakeholders and customers.

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2 STRATEGIC ENVIRONMENTAL ASSESSMENT

Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest appropriate stage, the environmental quality and consequences of implementing Plans or Programmes. The purpose is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental consequences of implementing plans or programmes and to be kept informed during the decision making process.

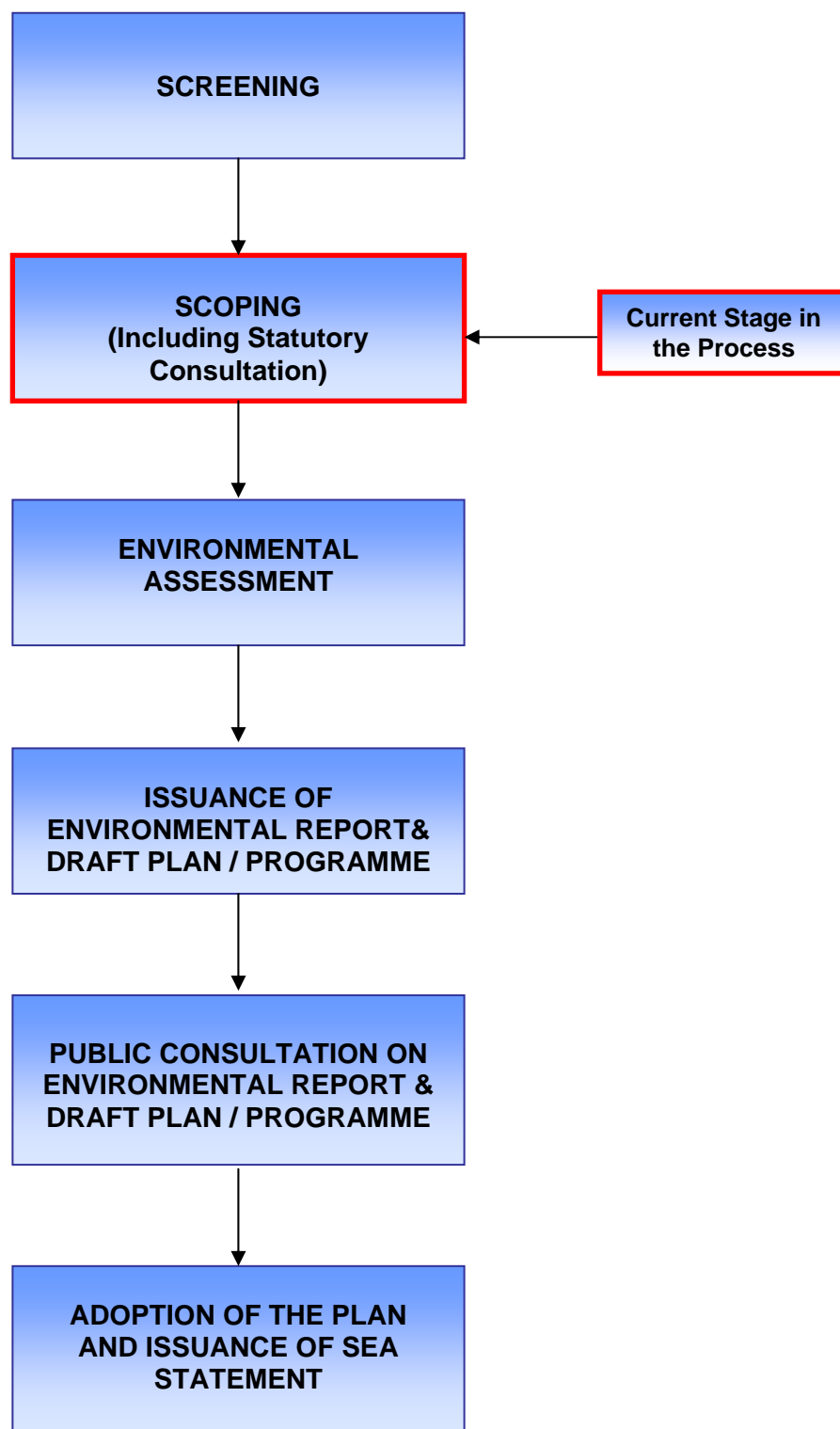
The European Directive (2001/42/EC) on the 'Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive)', was transposed into national legislation in Northern Ireland by the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (S.R. 280/2004).

The SEA process is normally comprised of the following steps:

- **Screening:** Decision on whether or not a SEA of a Plan/Programme is required;
- **Scoping:** Consultation with the defined statutory bodies on the scope and level of detail to be considered in the assessment;
- **Environmental Assessment:** An assessment of the likely significant impacts on the environment as a result of the Plan or Programme, including alternatives available to the Plan;
- An **Environmental Report**;
- **Public Consultation** on the draft Plan/Programme and associated Environmental Report;
- **Evaluation of the submissions** and observations made on the draft Plan/Programme and Environmental Report; and
- Issuance of a **SEA Statement** (identifying how environmental considerations and consultation have been integrated into the Final Plan/Programme).

Figure 2.1 shows the anticipated key steps required to complete this SEA process in accordance with the Northern Ireland legislation. The Guidance documents to be used in this SEA process are given in **Appendix A**.

It should be noted that the Appropriate Assessment (AA) process typically runs in parallel to and informs the SEA process. More information on the Appropriate Assessment of the NIE Network 25 Strategy can be found in **Section 6.4** of this document.

Figure 2.1: Overview of SEA Process

2.1.1 SEA Screening

Under Article 6 of the SEA Directive, the competent authority (in this case NIE) preparing the plan or programme is required to consult with specific “environmental authorities” (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report. The statutory consultees established within the legislation for Northern Ireland are the Northern Ireland Environment Agency (NIEA) (formerly Environment and Heritage Service)

Screening information on the proposed NIE Network 25 Strategy was sent to the Northern Ireland Environment Agency (NIEA) on the 10th May 2013 and a confirmation letter acknowledging that NIE would undertake a SEA of the Strategy were sent to the NIEA on the 16th May 2013. The determination response received from the NIEA with regard to this SEA Screening was posted on the NIE website alongside information on the Network 25 Strategy. The NIEA Screening Determination is given in **Appendix A** of this report.

2.1.2 Current Stage – SEA Scoping

The main objective of this scoping process is to identify key issues of concern that should be addressed in the assessment of the Plan and the appropriate level of detail to which they should be considered. The scoping exercise should answer the following questions:

- What are the relevant significant issues to be addressed by the SEA?
- Against what environmental objectives should the potential options be evaluated?

While the issue of a draft Scoping Report is not a formal requirement of the SEA Regulations, it is recommended as good practice. A Scoping Report can inform stakeholders about the key environmental issues and the key elements of the Plan/Programme (P/P). In addition, the Scoping Report can be used as a tool to generate comments from stakeholders on the scope and approach of the SEA.

As the NIE Network 25 Strategy covers much of Northern Ireland it is deemed prudent to ensure that any potential transboundary effects are considered, and therefore the statutory SEA consultees for the Republic of Ireland are also to be consulted as part of scoping, as per the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (as amended):

- Environmental Protection Agency (EPA)
- Department of the Environment, Community and Local Government (DECLG)
- Department of Communications, Energy and Natural Resources (DCENR)
- Department of Arts, Heritage and the Gaeltacht (DAHG)

As the Strategy is unlikely to have significant impacts upon fisheries or the marine environment in the Republic of Ireland no consultation is proposed with the Department of Agriculture, Fisheries and the Marine (DAFM).

3 SCOPING

3.1 SCOPE OF THE PLAN

3.1.1 Geographic Scope

DETI have outlined the potential upcoming onshore and offshore renewable energy generation developments for Northern Ireland and NIE must therefore develop options to connect the proposed energy sources to the Northern Ireland electrical grid. The NIE Network 25 Strategy is proposing to develop new, and reinforce existing, transmission corridors that cover large areas of Northern Ireland. These new corridors and reinforcement of existing corridors are required in certain areas where the existing electricity transmission network is not capable of coping with the supply from the new renewable energy developments. These areas and transmission corridors for potential reinforcement and / or development have been identified by NIE and are shown in **Figure 3.1**. These corridors / areas have been converted into SEA study areas through addition of a 5km buffer on existing lines for reinforcement and potential corridors / areas for development. It has been assumed that any new or upgraded transmission lines will follow approximately the same path as the existing lines. Where there is no existing transmission network a large study area of the entire region between the energy development location and the transmission network has been adopted.

The draft list of potential alternatives to be brought forward into the Strategy is given in **Table 3.1**. These draft options are broken down into geographical areas for purposes of this SEA in both **Figure 3.1** and **Table 3.1**. This draft list will be developed and refined as the Strategy and the SEA develop. **Table 3.1** includes projects that are not proposed to be assessed by this SEA. The reasoning behind the exclusion of these projects is that they have been fully implemented, or are at least sufficiently progressed, that the Strategy and SEA will have no influence on them.

3.1.2 Temporal Scope

The NIE Network 25 Plan considers the period from 2013 – 2025, and will consider development within the short, medium and long term. The short term is likely to be defined as the first few years following implementation, e.g 2013 - 2015. The medium term is likely to be defined as the five years following the short term, eg. 2015 - 2020. Finally the long term is likely to be defined as the remainder of the Strategy period following the medium term eg. 2020 – 2025.

Figure 3.1: Draft SEA Study Area

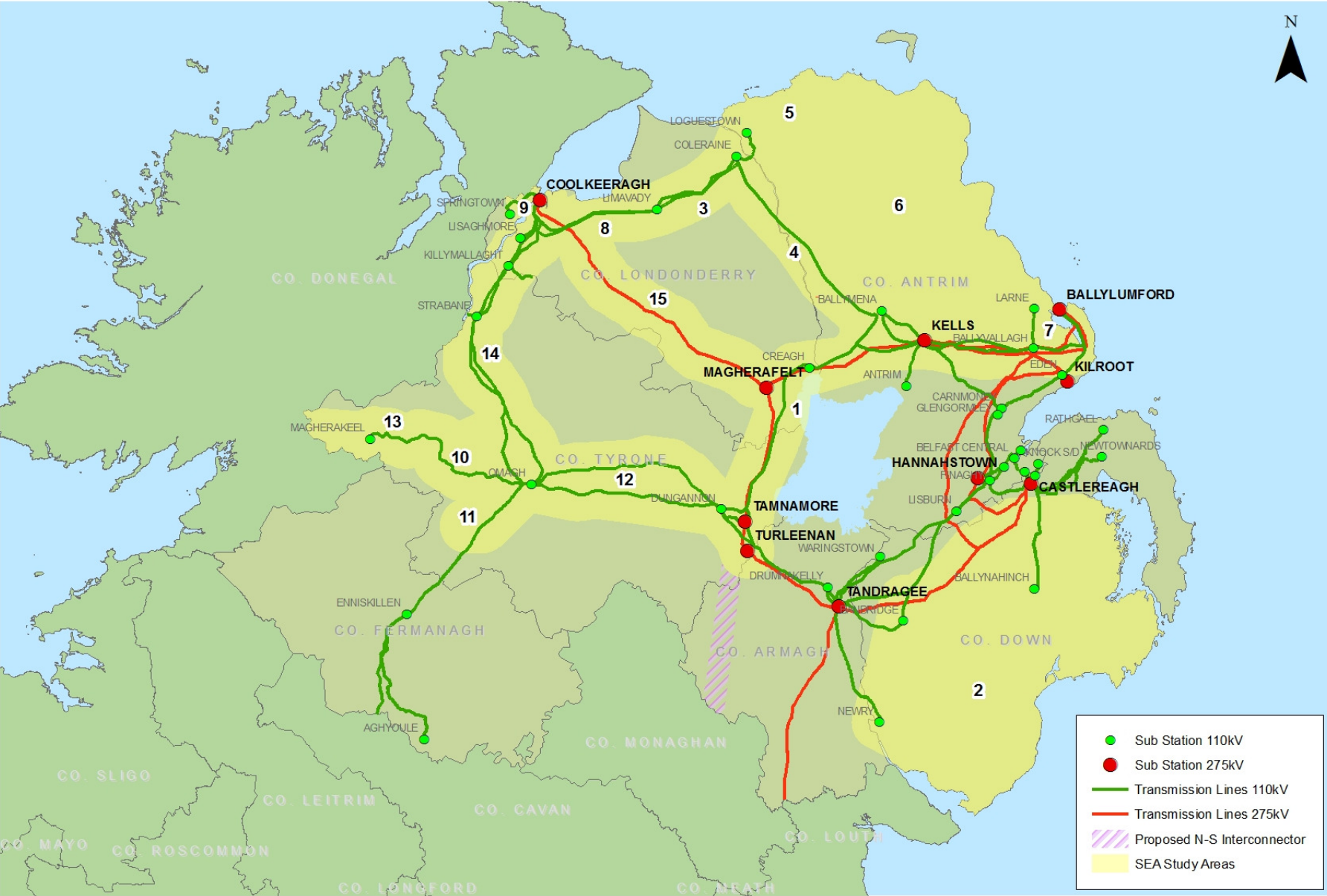


Table 3.1: Draft Options for Development

Strategy Option No.	Project	Description	Status	Assess in SEA?	SEA Study Area No.
1	Dungannon to Omagh A&B Phase 2 (Part 2)	Restrung 110 kV tower line with Invar conductor	Construction stage	No	x
2	Tamnamore Phase 2	Install a second 275/110 kV interbus transformer, divert second 275 kV line to Tamnamore, divert multiple 110 kV lines into Tamnamore, install 200 MVA cable on selected 110 kV circuits	Construction stage	No	x
3	Tamnamore to Omagh new circuit	Construct a new 110 kV single circuit between Tamnamore and Omagh	Pre Construction Work underway	No	x
4	Tamnamore / Creagh / Kells	Complete 110 kV OHL up-rating with invar conductor.	Under consideration	Yes	1
5	Tremoge	Initially 1x60/90, 110/33 kV Tx with room for 2nd, Looped into Dungannon - Omagh B 110 kV cct.	Pre Construction Work underway	No	x
6	Gort	Initially 1x60/90, 110/33 kV Tx with room for 2nd, Looped into Dungannon - Omagh B 110 kV cct.	Pre Construction Work underway	No	x
7	400 kV Interconnection	35 km of 400 kV single cct OHL (Cross Border Link)	At Planning Appeal Commission. EIA completed	No	x
8	East Coast, Co. Down	Transmission connection to 600 MW Offshore Wind	Under consideration	Yes	2
9	Kells to Coleraine Phases 2 & 3	Ph 2- Up-rate 110 kV OHL Kells to Terrygowan with HTLS conductor. PH 3- Up-rate Mid-Antrim to Coleraine with HTLS conductor	Construction stage	No	x
10	Coleraine to Limavady	Complete 110 kV OHL up-rating with HTLS conductor	Under consideration	Yes	3
11	Limavady Substation	Substation expansion and divert the Coleraine to Limavady 110 kV lines into Limavady	Under consideration	Yes	3
12	Mid-Antrim	Initially 1x60/90, 110/33 kV Tx with room for 2nd, Looped into Kells - Coleraine 110 kV portal line	Pre Construction Work underway	No	x
13	Coleraine	Construct a 275/110 kV transmission station in Coleraine, 4 x Construct a 275/110 kV transformer in Coleraine	Under consideration	Yes	3
14	Coleraine to Kells	57 km of 275kV double circuit lines (or 110kV)	Under consideration	Yes	4
15	North Coast, Antrim	Transmission connection of off shore Tidal Generation 2x100MW at Torr Head and Fair Head	Under consideration	Yes	5, 6, 7
16	Glynn, Larne, Co. Antrim	Transmission connection of 268 MW Generation, 210 MW Load (Compressed Air Energy Storage)	Under consideration	Yes	7
17	Larne, Co. Antrim	Transmission connection of 50 MW Gas Storage Demand	Under consideration	Yes	7

18	Coolkeeragh to Limavady	Complete 110 kV OHL up-rating with HTLS conductor	Under consideration	Yes	8
19	Coolkeeragh to Coleraine	Complete 110 kV OHL up-rating with HTLS conductor	Under consideration	Yes	3 , 8
20	Coolkeeragh	275/110 kV transformer in Coolkeeragh (1no.)	Under consideration	Yes	8 , 9
21	Coolkeeragh to Coleraine	42 km of 275 kV line	Under consideration	Yes	3 , 8
22	Coolkeeragh to Trillick (ROI)	17 km of 110 kV line (Cross Border Link)	Under consideration	Yes	9
23	Drumquin	Initially 1x60/90 110/33 kV Tx with room for 2nd, 110 kV line to new switching site at Omagh South	Under consideration	Yes	10
24	Omagh South	Construct a 275/110 kV transmission station in Omagh South, 2 x Construct a 275/110 kV transformer in Omagh south	Under consideration	Yes	11
25	Omagh South to Turleenan	63 km of 275 kV line	Under consideration	Yes	11 , 12
26	Omagh South to Tir Chonaill (RoI)	58 km of 275 kV line (Cross Border Link)	Under consideration	Yes	10 , 11 , 13
27	Omagh South	275 kV phase shifting transformer	Under consideration	Yes	11
28	Omagh-Strabane -Killymallaght-Coolkeeragh	110kV OHL uprating 75km, Invar condr portal constn and Gap condr double cct towers	Under consideration	Yes	14
29	West of Omagh.	Transmission connection to 90 MW onshore wind. 110kV supply connected into Omagh/Strabane ccts (NIE S/S, 110kV line and Customer S/S at site)	Under consideration	Yes	10, 13
30	Magherafelt to Coolkerragh	Restrung 275kV line	Under consideration	Yes	15

3.2 SCOPING OF STRATEGIC ENVIRONMENTAL ASSESSMENT TOPICS

In accordance with S.R. 280 of 2004 the responsible authority has considered whether the environmental effects of the NIE Network 25 Strategy are likely to be significant, and should therefore be 'scoped in' for the SEA. A summary of the conclusions is listed in **Table 3.2**, below.

Table 3.2: Scoping of SEA Issues

SEA Issue	Scoped In / Out	Significant environmental effects that have the potential to occur or reason for scoping out
Biodiversity, Flora and Fauna	In	<ul style="list-style-type: none"> • Effects on protected areas: European (e.g. SACs, SPAs, Ramsar) sites, National sites (e.g. ASSIs) and Local Area Plan Natural Heritage Sites and Conservation Interest Sites. • Effects on flora and fauna, (including migratory bird species, invertebrates etc.) and habitats. • Effects on priority and sensitive habitats and species. • Potential introduction or transportation of alien and invasive species. • Potential for habitat loss and fragmentation. • Potential for interaction with Habitats Directive, i.e Article 6. • Potential effects on ecological networks and Ecosystems Services.
Population	In	<ul style="list-style-type: none"> • Potential visual and audible nuisance of transmission lines. • Requirement for secure supply of electricity. • Creation and maintenance of employment.
Human Health	In	<ul style="list-style-type: none"> • Health implications from proximity to transmission lines. • Safety risk from transmission lines. • EMF from transmission lines. • Effects of construction on drinking water abstractions (surface and groundwater). • Effects of construction on overall water quality, including municipal and private drinking water supplies.
Soil	In	<ul style="list-style-type: none"> • Impacts on agricultural areas. • Impacts on the soil as a resource. • Land vulnerable to erosion.
Water	In	<ul style="list-style-type: none"> • Pressures and impacts on water status of waterbodies from transmission development. • Potential water pollution (surface and groundwater) from infrastructure.
Air	In	<ul style="list-style-type: none"> • Emissions from power stations. • Emissions from construction. • Noise from construction and operation. • Ozone generation from transmission lines.
Climatic Factors	In	<ul style="list-style-type: none"> • Greenhouse gas emissions from power generation. • Increased use of renewable energy sources. • Planning for climatic change.
Material Assets	In	<ul style="list-style-type: none"> • Construction and maintenance of transmission lines and stations. • New security of local supply from renewables integration. • Land take from agriculture
Cultural, Architectural and Archaeological Heritage	In	<ul style="list-style-type: none"> • Potential for disturbance of previously undiscovered archaeological remains near or within development infrastructure. • Impacts on heritage settings.
Landscape	In	<ul style="list-style-type: none"> • Effects of infrastructure on areas of designated landscape quality and scenic views (i.e. in Area Plans and AONBs). • Sensitivity of the landscape to change. • Visual intrusion on sensitive receptors.

3.3 PARTS OF THE PLAN TO BE ASSESSED

The purpose of the SEA is to provide a meaningful assessment of those parts of the Network 25 Strategy that may lead to significant environmental effects. To achieve this, a decision on which parts of the Strategy are to be assessed is required. **Table 3.3** sets out the draft elements of the Strategy that are to be assessed and why. Again this information is provided to generate discussion during the consultation process and is subject to change based on the comments received. Please note that all information will be reported upon, however it is only the objectives of the Strategy and the Strategy Alternatives that will be assessed within the SEA.

Table 3.3: Proposed Parts of the New Plan to be Assessed

	Plan	Will this be <u>assessed</u> in the SEA?
1	A general description of the NIE transmission and distribution network.	No – This provides factual information about the environment in the area.
2	A summary of significant issues in relation to implementing the Network 25 Strategy.	No – This provides factual information about the Strategy.
3	A list of the Objectives for the Network 25 Strategy.	Yes – These Strategic Objectives will be assessed within the environmental report. To test the Plan Objectives compatibility with the SEA Objectives.
4	Identification, description and mapping of the potential measures.	Yes – Each new realistic option available to the NIE will be assessed.
5	A summary of the technical and economic analysis for implementing proposed measures of the Strategy.	Yes/No – Some data will be incorporated into sections of the Environmental Assessment, however full technical and economic analysis of the Strategy will be included supplementary to the Strategy. This information will inform the alternatives.
6	A summary of any consultation on the proposed Network 25 Strategy.	No – This is a statement about the consultation arrangements put in place. SEA consultation arrangements however may be incorporated into this. The SEA Statement may also be incorporated into this.

4 PLAN CONTEXT

4.1 INTERACTION WITH OTHER RELEVANT PLANS AND PROGRAMMES

As part of the SEA process the context of the Network 25 Strategy must be established with regard to other plans and programmes that have been adopted at International, European and National Levels. In particular the interaction of the environmental protection objectives and standards included within these plans and programmes with the Network 25 Strategy requires consideration.

Tables 4.1 to 4.4 summarise the findings of an initial review of environmental plans and programmes, adopted at International, European Community or Member State level, which would be expected to influence, or be influenced by, the Strategy. The Environmental Report will continue this review and identify how these Plans and Programmes influence or are influenced by the Strategy.

Table 4.1: Preliminary Review of Legislations, Plans, Policies and Programmes – International

Topic	Title	Summary of Objectives
Biodiversity	UN Convention on Biological Diversity (1992)	Objectives include the maintenance and enhancement of Biodiversity.
	The Ramsar Convention The Convention on Wetlands of International Importance (1971 and amendments)	Objectives include protection and conservation of wetlands, particularly those of importance to waterfowl as Waterfowl Habitat.
Climate	United Nations Framework Convention on Climate Change (UNFCCC)	UNFCCC seeks to reduce international GHG emissions by setting national level targets based on the concept of 'common but differentiated responsibility'. This means that nations which have emitted the majority of GHGs up to now should seek to reduce GHGs at a greater rate.
	UN Kyoto Protocol The United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol 1997	Objectives seek to alleviate the impacts of climate change and reduce global emissions of GHGs.
Cultural Heritage, including Architectural and Archaeological Heritage	The World Heritage Convention United Nations Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris 1972)	Objectives seek to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage and ensure that effective and active measures are taken for these.
Sustainable Development	Agenda 21 (1992)	Agenda 21 is a comprehensive action plan which works to promote sustainable development at a local and regional level by taking into account environmental protection in the development process.

Table 4.2: Preliminary Review of Legislations, Plans, Policies and Programmes - European Union

Topic	Title	Summary of Objectives
Air	The Air Framework Directive Directive on Air Quality Assessment and Management (Framework Directive) (1996/62/EC)	The Air Quality Framework Directive (96/62/EC) sets out the principles of ambient air quality monitoring, assessment and management and was followed by four daughter directives which detailed the limit values for specific pollutants. Objectives include the prevention and/or reduction of airborne pollutants for the protection of human health and environment.
	Arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (2004/107/EC).	This is the fourth daughter directive of the Air Quality Framework Directive and covers polyaromatic hydrocarbons, arsenic, nickel, cadmium and mercury in ambient air.
	Directive on National Emission Ceilings for Certain Atmospheric Pollutants (2001/81/EC)	Objectives seek to limit the national emissions of certain airborne pollutants for the protection of human health and the environment.
Biodiversity	The EU Biodiversity Strategy Communication on a European Community Biodiversity Strategy	Objectives seek to prevent and eliminate the causes of biodiversity loss and maintain and enhance current levels of biodiversity.
	The EU Habitats Directive (92/43/EEC)	Objectives seek to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity.
	The EU Birds Directive (as modified) (EC/79/409)	Objectives seek to prevent and eliminate the causes of bird species loss and maintain and enhance current levels of biodiversity.
	The Pan-European Biological and Landscape Diversity Strategy	The principal aim of the Strategy is to find a consistent response to the decline of biological and landscape diversity in Europe and to ensure the sustainability of the natural environment.
Climate	EU Climate and Energy Package	To meet the EU's obligation under international law and in line with European ambition. Member States are required to: Collectively reduce their combined GHG emissions in 2020 by at least 20 % compared to 1990 levels. Produce 20 % of their combined energy from renewable sources. Improve energy efficiency to reduce primary energy use by 20 % compared with projected levels. The collective EU target of reducing emissions by 20 % by 2020 is to be achieved by: The EU Emissions Trading System, the backbone of the EU mitigation effort, which sets a cap on emissions from the most polluting sectors, including over 11 000 factories, power plants and other installations, including airlines. By 2020, the cap should result in a 21 % reduction relative to 2005 levels. The EU ETS covers about 40 % of all EU emissions. The 'effort sharing decision', which operates outside the EU ETS and establishes annual binding GHG emission targets for individual Member States for the 2013-2020 period. These concern emissions from sectors such as waste, agriculture, buildings, etc. The '20-20-20' targets are supported by the long-term target of 85-90 % reduction in GHG emissions against 1990 levels by 2050.

Topic	Title	Summary of Objectives
	EU Strategy on Adaptation to Climate Change	The European Commission adopted a White Paper on Adapting to Climate Change in 2009, leading to an EU Adaptation Strategy in 2013. The Adaptation Strategy will recognise how important impact assessment is for climate proofing, identify the key priorities for action and how EU policies can encourage effective adaptation action, highlight the issue of adapting infrastructure to climate change and include a separate document on this topic, encourage creating green infrastructure and applying ecosystem-based approaches. Provides guidance on how to mainstream adaptation into the Common Agricultural Policy and Cohesion Policy will be developed after the Adaptation Strategy is adopted.
	Second European Climate Change Programme (ECCP II) 2005.	Objectives seek to develop the necessary elements of a strategy to implement the Kyoto protocol.
	Adapting to climate change in Europe – options for EU action {SEC (2007) 849}	Objective is to kick-start a Europe-wide public debate and consultation on how to take forward possible avenues for action in adapting to climate change at EU level.
Cultural Heritage, including Architectural and Archaeological Heritage	Convention for the Protection of the Archaeological Heritage of Europe (revised) (Valletta 1992)	Objective is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.
	Convention for the Protection of the Architectural Heritage of Europe (Granada 1985)	Objectives seek to provide a basis for protection of architectural heritage and are a means for proclaiming conservation principles, including a definition of what is meant by architectural heritage, such as monuments, groups of buildings and sites. The Convention also seeks to define a European standard of protection for architectural heritage and to create legal obligations that the signatories undertake to implement.
Energy	Renewable Energy Directive (2009/28/EC)	This Directive establishes a common framework for the use of energy from renewable sources in order to limit greenhouse gas emissions and to promote cleaner transport. The Member States are to establish national action plans which set the share of energy from renewable sources consumed in transport, as well as in the production of electricity and heating, for 2020.
Landscape	European Landscape Convention (ETS No. 176), Florence, 20 October 2000	The Convention promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues.
Sustainable Development	Roadmap to a Resource Efficient Europe (COM(2011) 571)	Outlines how we can transform Europe's economy into a sustainable one by 2050. It proposes ways to increase resource productivity and decouple economic growth from resource use and its environmental impact. It illustrates how policies interrelate and build on each other.
	EC Environmental Liability Directive (2004/35/EC)	This establishes a common framework for liability with a view to preventing and remedying damage to animals, plants, natural habitats and water resources, and damage affecting the land. The liability scheme applies to certain specified occupational activities and to other activities in cases where the operator is at fault or negligent. The public authorities are also responsible for ensuring that the operators responsible take or finance the necessary preventive or remedial measures themselves.

Topic	Title	Summary of Objectives
	The Gothenburg Strategy (2001) Communication from the Commission on “a Sustainable Europe for a Better World”	Objectives seek to make the future development of the EU more sustainable. Informs the 6 th EAP and the Irish sustainable development strategy.
	The SEA Directive (2001/42/EC)	Objective is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment. Under the SEA Directive, the NIE Network 25 Plan would require an SEA.
	The EIA Directive (2011/92/EU)	Objective is to require Environmental Impact Assessment of the environmental effects of those public and private projects, which are likely to have significant effects on the environment.
	Industrial Emissions Directive (Integrated Pollution Prevention and Control) (2010/75/EU)	The Industrial Emissions Directive is the successor of the IPPC Directive and in essence is about minimising pollution from various industrial sources throughout the European Union. Operators of industrial installations operating activities covered by Annex I of the IED are required to obtain an integrated permit from the authorities in the EU countries.
Waste	EU Waste Electrical and Electronic Equipment Directive (2002/96/EC), as recast by 2012/19/EU	The WEEE Directive (Waste Electrical and Electronic Equipment) aims to conserve landfill and support more sustainable development by providing an impetus to boost recycling. Electronic and electrical manufacturers and importers will be most affected by the Directive and will be required to take responsibility for treating and recycling their products when they become waste. The Directive does not just apply to new products. Producers will be made responsible collectively for goods already on the market.
	EU Batteries and Accumulators Directive (2006/66/EC)	This Directive aims to minimise the negative impacts of batteries and accumulators on the environment and also harmonising requirements for the smooth functioning of the internal market. To achieve these objectives, the Directive introduces measures to prohibit the marketing of some batteries containing hazardous substances. It contains measures for establishing schemes aiming at high level of collection and recycling of batteries with quantified collection and recycling targets. The Directive sets out minimum rules for producer responsibility and provisions with regard to labelling of batteries and their removability from equipment.
Water	The Water Framework Directive EU Water Framework Directive (2000/60/EC)	Objectives seek to maintain and enhance the quality of all surface waters in the EU.
	Groundwater Directive (2006/118/EC)	This directive establishes a regime, which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater.
	EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding. With trends such as climate change and increased domestic and economic development in flood risk zones, this poses a threat of flooding in coastal and river basin areas.
	Bathing Water Directive (2006/7/EC)	The overall objective of the revised Directive remains the protection of public health whilst bathing, but it also offers an opportunity to improve management practices at bathing waters and to standardise the information provided to bathers across Europe.

Topic	Title	Summary of Objectives
	Drinking Water Directive (98/83/EC)	The primary objective is to protect the health of the consumers in the European Union and to make sure the water is wholesome and clean.
	EC Shellfish Water Directive (2006/113/EC)	Seeks to protect or improve shellfish waters identified by Member States in order to support shellfish life and growth and thus contribute to the high quality of edible shellfish products.
	The EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those fresh water bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters.
	Urban Wastewater Treatment Directive 91/271/EEC. Amended under Directive 98/15/EEC	The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.

Table 4.3: Preliminary Review of Legislations, Plans, Policies and Programmes – Northern Ireland

Topic	Title	Summary of Objectives
Air	UK Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007	Sets out a comprehensive strategic framework for air quality policies, and establishes Air Quality Objectives for key air pollutants.
	Air Quality Standard Regulations (NI) 2007 (SR No. 265 of 2007)	Transposes the limit values required by EU Daughter Directives on Air Quality into NI law
	Air Quality Standard Regulations (NI) 2010 (SR No. 188 of 2010)	Transposes the limit values required by EU Daughter Directives on Air Quality into NI law
	Air Quality Limit Value Regulations (NI) 2003 (SR No. 2121 of 2003) and amendments.	Sets out air quality limit or guide values for specified pollutants to be achieved by local authorities.
Biodiversity	NIEA Strategic Priorities 2012 – 2022 Our Passion Our Place	This plan sets out the NIEA strategic direction over the next ten years to bring together the diverse roles of the NIEA and guide corporate business planning. It is aimed at everyone who works for the NIEA and with the NIEA to help understand what the NIEA do and where they fit. It describes the context for their work, who they are, what they do and how they deliver, their strategic goals and actions under four priority themes – Healthy Natural Environment, People and Places, Sustainable Economic Growth, Using Our Resources Well. Finally it sets out how the NIEA will measure and monitor success.
	UK National Ecosystem Assessment (2011) The UK National Ecosystem Assessment Technical Report.	Provides a comprehensive overview of the state of the natural environment in the UK and a new way of estimating our national wealth. Northern Ireland covered in Chapter 18.

Topic	Title	Summary of Objectives
	UK Biodiversity Action Plan	Sets out the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992 and describes the UK's biological resources and commits a detailed plan for the protection of these resources. Includes Species Action Plans, Habitat Action Plans and Local Biodiversity Action Plans with targeted actions.
	Northern Ireland Biodiversity Strategy 2002 (including NI Species and Habitat Action Plans and Departmental Biodiversity Implementation Plans)	Northern Ireland Biodiversity Group (NIBG) identified 15 major issues affecting Biodiversity in Northern Ireland. The Northern Ireland Biodiversity Strategy 2002 is the Government response to the publication.
	Delivering the Northern Ireland Biodiversity Strategy 2002-2005 and 2005-2009	The Northern Ireland Biodiversity Group's first report concentrated on the delivery mechanisms for implementing the Northern Ireland Biodiversity Strategy and identified a large number of aspects by which the operation could be improved. The present report devotes one chapter to mechanisms, or components for delivery, and then assesses how each of the original Strategy recommendations has progressed and provides commentary. This is followed by an appraisal of the actual outcomes for biodiversity in Northern Ireland. Finally, NIBG examines the issue of climate change and its importance for biodiversity conservation in Northern Ireland. Throughout the report, NIBG makes recommendations with the aim of improving progress towards Northern Ireland's 2016 target of halting biodiversity loss.
	The Environment (Northern Ireland) Order 2002 (SI No. 3153 of 2002)	Provides much of the legislative basis for the protection of sites of importance to nature conservation in Northern Ireland. The Order provides for such areas to be designated as Areas of Special Scientific Interest (ASSIs).
	The Nature Conservation and Amenity Lands (Northern Ireland) Order (NCALO) 1985 as amended	Legislates for National Nature Reserves (NNRs), Marine Nature Reserves (MNRs) and Local Nature Reserves (LNRs).
	Natural Heritage Strategic Plan 2003. To be updated with Natural Vision and Heritage Strategic Plan 2020.	Sets out the direction for conserving the natural heritage of Northern Ireland and includes the following objectives: Biodiversity of Northern Ireland stabilised or enhanced <ul style="list-style-type: none"> ▪ Invasive introduced species and other genetic material brought under control and no further establishments in the wild; ▪ An accessible record of the distribution and abundance of wild species of all taxonomic groups established and maintained, so as to enable a balanced monitoring and conservation of biodiversity; and, ▪ The use, misuse and management of plants and animals requiring special protection. The DoE intends to ensure that the biodiversity of Northern Ireland is stabilised or enhanced.
	The Conservation (Natural Habitats) Regulations (Northern Ireland) 1995 (SR No. 380 of 1995) and amendments.	Implements the Habitats Directive in NI.
	The Wildlife (NI) Order 1985 as amended	This Order aims to protect wild animals, birds, plants and their habitats. It makes it an offence to kill, injure, disturb, take or sell specially protected wild animals, all wild birds, their nests and eggs, and to uproot, pick, or sell specially protected plants.

Topic	Title	Summary of Objectives
Climate	Northern Ireland Climate Change Risk Assessment (2012)	The most important impacts and consequences of climate change have been produced. The Northern Ireland CCRA in particular plays a key part in helping to develop a Northern Ireland Adaptation Programme, which will identify priorities for action and appropriate adaptation measures that will be required to minimise risks to our economy, environment and society.
	Northern Ireland Greenhouse Gas Emission Reduction Plan (2011)	A key objective is to reduce the greenhouse gas emissions that can have a harmful effect on our atmosphere. The Executive has shown leadership in this area by setting a Programme for Government target to reduce greenhouse gas emissions by 25% below 1990 levels by 2025.
	UK Climate Change Act 2008	The Climate Change Act, the first of its kind in any country, set out a framework for moving the UK to a low-carbon economy. The key component of the legislation requires a mandatory 60% cut in the UK's carbon emissions by 2050.
	UK Climate Change Programme	This Programme provides details and national targets for the reduction of greenhouse gas emissions in accordance with the Kyoto agreement, the goal of the programme is a 20% reduction of the 1990 CO ₂ emissions by 2010. It also aims to protect and where possible enhance, the UK's economic standing, tackle social exclusion and health risks.
Cultural Heritage, including Architectural and Archaeological Heritage	Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995	This Order enables the protection of monuments through State Care and Scheduling, the regulation of excavation activities and the reporting of finds.
	Planning (NI) Order 1991	Article 42 of the Order places a duty on the Department of the Environment (DoE) to compile lists of buildings of special architectural or historic interest. The Order gives the Department powers to influence change to these structures through Listed Building Consent, grant aid and enforcement against unauthorized works. The statutory listing page provides more information on the specific articles of the order which apply.
Environment	Environmentally Sensitive Areas Designation Order (Northern Ireland) 2005. SR No. 276 of 2005.	Aims to conserve and enhance designated natural beauty areas, to conserve flora and fauna and geological and physiographical features of those areas; and to protect buildings and other objects of archaeological, architectural or historic interest in those areas.
	The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 1999. SR No. 73 of 1999.	Defines activities that require an Environmental Impact Assessment, and the preferred methods and contents of the assessment.
Energy	Northern Ireland Strategic Energy Framework 2010	The SEF 2010 details Northern Ireland's energy future over the next ten years or so and illustrates the key energy goals in terms of building competitive markets, ensuring security of supply, enhancing sustainability and developing energy infrastructure. It also confirms the new and ambitious renewable electricity and renewable heat targets by 2020.
	Offshore Renewable Energy Strategic Action Plan 2012	This Plan outlines the Executive's aim of Northern Ireland generating 900MW of energy from offshore wind and 300MW from tidal resources by 2020. This Plan is currently being implemented as offshore energy lease zones have been granted by the Crown Estate.
	Draft Onshore Renewable Energy Strategic Action Plan 2012	The Plan aims to maximise the amount of renewable electricity generated from onshore renewable sources in order to enhance diversity and security of supply, reduce carbon emissions, contribute to the 40% renewable electricity target by 2020 and beyond and develop business and employment opportunities for Northern Ireland companies.

Topic	Title	Summary of Objectives
	Climate Change Act 2008	The Climate Change Act 2008 provides a legally binding framework to tackle the dangers of climate change. The Act extends throughout the UK. The Act sets a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050, to be achieved through action in the UK and abroad. There is also a target to reduce emissions by at least 34% by 2020 against a 1990 baseline.
Planning	NI Programme for Government 2011 - 2015	The Programme for Government identifies the actions the Executive will take to deliver its number one priority – a vibrant economy which can transform our society while dealing with the deprivation and poverty which has affected some of our communities for generations.
	The Regional Development Strategy 2025 – Shaping Our Future	Offers a strategic and long-term perspective on the future development of Northern Ireland up to the year 2025
	PPS 1 - 18	Policies on land-use and other planning matters that apply to the whole of Northern Ireland.
Sustainable Development	UK Sustainable Development Strategy	Aims to achieve sustainable development which: <ul style="list-style-type: none"> Meets the needs of everyone; Does not damage the environment; Uses resources in a sustainable manner; and Encourages economic growth and employment.
	Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004	These Regulations came into force on 22 July 2004. They deal with the assessment of environmental plans and programmes, and implement EC Directive 2001/42/EC, the SEA Directive, on the assessment of the effects of certain plans and programmes on the environment.
	Northern Ireland Executive Sustainable Development Strategy 2010. 'Everyone's Involved.' (and Implementation Plans)	Everyone's Involved is different from the previously produced Strategy (2006). The OFMDFM believe that it has the potential to act effectively as an enabling mechanism for the wider sustainable development agenda and, in particular, to inform and assist the development of the second Sustainable Development Implementation Plan.
Water	The Surface Waters (Dangerous Substances) (Classification) Regulations (NI) 1998 (SR 397 of 1998)	Prescribe a system of classifying the quality of inland freshwaters, coastal waters and relevant territorial waters. It creates a system for classifying waters according to the presence in them of concentrations of the dangerous substances listed in the Schedules. Sampling requirements are prescribed in regulation 4. Regulation 5, by modifying section 4C of the Water Act (Northern Ireland) 1972, requires (and enables) the Department of the Environment to establish water quality objectives for those dangerous substances by applying the classifications prescribed in the Regulations.
	The Groundwater Regulations (Northern Ireland) 1998	This legislation aims to prevent pollution of groundwater. Before certain listed substances including used sheep dips and waste pesticides are disposed of by land spreading, authorisation must be obtained from Department for the Environment's Environment and Heritage Service (NIEA).
	The Water (Northern Ireland) Order 1999 (No. 662 (N.I. 6))	Contains a number of provisions to combat and prevent pollution affecting waterways and groundwater. It is an offence under the Water Order to make a polluting discharge or deposit either directly or via a drain into a waterway or the underground strata. It is also an offence to make an effluent discharge from a septic tank or treatment plant into a waterway or a soak-away without the consent of the Department of Environment (DoE).
	The Water Abstraction & Impoundment (Licensing) Regulations (Northern Ireland) 2006	The introduction of this legislation was to fulfil Northern Ireland's obligation to the European Commission under the Habitats and Water Framework Directives and will establish a water resource management, assessment and licensing

Topic	Title	Summary of Objectives
		regime. These Regulations aim to provide a single and consistent environmental risk based approach that covers all abstractions and impoundment operations. These powers will help protect our water environment including protected species and dependent ecosystems and will help deliver efficient and sustainable water usage in Northern Ireland.
Waste	The Hazardous Waste Regulations (Northern Ireland) 2005	The purpose of the Hazardous Waste Regulations (Northern Ireland) 2005 is to provide an effective system of control for these wastes and to make sure that they are soundly managed from their point of production to their final destination for disposal or recovery.
	The Industrial Pollution Control (Northern Ireland) Order 1997 (No. 2777 (N.I. 18))	Aims to prevent or minimise environmental pollution by prescribed substances from certain industrial processes. Best Available Techniques Not Entailing Excessive Cost (BATNEEC) must be used to minimise releases.
	Pollution Prevention and Control Regulations (Northern Ireland) 2003 (SR46 of 2003)	This established Pollution Prevention and Control (PPC) in Northern Ireland and has three tiers of control. Activities listed in Part A of Schedule 1 to the Regulations are subject to an integrated approach controlling a wide range of environmental issues, while Part B and Part C installations are subject to controls on emissions to air only. All industrial installations controlled under the PPC regulations are required to have a permit to operate. Part A and Part B installations are regulated by the Industrial Pollution and Radiochemical Inspectorate (IPRI) of NIEA. Part C activities are regulated by district councils.
	Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2012 (SR453 of 2012)	The Industrial Emissions Directive sets environmental controls on large industrial plants and brings together seven directives into one, namely those concerning integrated pollution and prevention control, large combustion plants, waste incineration, solvent emissions and three concerning waste from the titanium dioxide industry. The purpose of the IED is to achieve a high level of protection for the environment and human health from the harmful effects of industrial activities.

Table 4.4: Preliminary Review of Legislations, Plans, Policies and Programmes – Regional and Local

Title	Summary of Objectives
Local Air Quality Management Policy Guidance	The guidance is designed to help relevant authorities with their local air management duties.
Guidance for Public Bodies on Climate Change in Northern Ireland	A guidance document for public bodies which identifies key areas for action in dealing with climate change.
Northern Ireland Biodiversity Strategy	Sets out how the Executive plans to protect and enhance biodiversity in Northern Ireland over the period up to 2016.

Title	Summary of Objectives
Implementation Plan for 2002/2005 for the Northern Ireland Biodiversity Strategy	Contains a number of actions to ensure that the Biodiversity Strategy is implemented. The NIEA intends to deliver a number of action points including identifying Sites of Local Nature Conservation Importance, ensure that biodiversity is enshrined in planning policy and review opportunities to work with statutory undertakers to achieve biodiversity gains.
Local Biodiversity Action Plans (LBAPs)	Local Biodiversity Action Plans are a way of encouraging people to work together and deliver a programme of continuing action for biodiversity at a local level. They set out practical steps that aim to help protect biodiversity, enhance and improve biodiversity where possible, and promote biodiversity at a local level.
Renewables Integration Development Project	The Renewables Integration Development Project is to identify the optimum reinforcement of the electricity transmission grid in the north and the north west of the island of Ireland to cater for expected power output from renewable energy sources.
Regional Development Strategy for Northern Ireland 2025	A Strategy to guide the future development of Northern Ireland to 2025. The RDS will be material to decisions on planning applications and appeals.
Northern Ireland Sustainable Development Strategy	The Northern Ireland Sustainable Development Strategy ('Everyone's Involved') was adopted by the Northern Ireland Executive in May 2010. The Strategy sets out the principles and strategic objectives to ensure socially responsible economic development while protecting the resource base and the environment for future generations.
A Planning Strategy for Rural Northern Ireland	This document considers the inter-relationships between town and country and seeks to present a clear vision for the future development of the rural area.
Regional Transport Strategy 2002-2012	Aims to have a modern, sustainable, safe transportation system which benefits society, the economy and the environment and which actively contribute to social inclusion and everyone's quality of life.
Regional Strategic Transport Network Transport Plan 2015	To plan the maintenance, management and development of Northern Ireland's Strategic Transport Network.
PPS1: General Principles	Sets out the general principles that the DoENI observes in carrying out its planning functions.
PPS2: Planning and Nature Conservation	Aims to ensure the effective conservation of wildlife and natural features as important elements of a clean and healthy environment whilst making adequate provision for development and economic growth. Its aims for nature conservation are: To ensure that its policies contribute to conservation of the abundance and diversity of the United Kingdoms wildlife and its habitats; and, To minimise the adverse effects on wildlife, where conflict of interest is unavoidable; To meet its international responsibilities and obligations for nature conservation.
PPS4: Planning and Economic Development	Sets out the Department's revised planning policies for economic development uses and indicates how growth associated with such uses can be accommodated and promoted in development plans. It seeks to facilitate and accommodate economic growth in ways compatible with social and environmental objectives and sustainable development.
PPS6: Planning, Archaeology and the Built Heritage	Provides the main criteria in assessing proposals which affect the archaeological or built heritage.

Title	Summary of Objectives
PPS15: Planning and Flood Risk	The main objectives are to: Adopt a precautionary approach to decision-making taking account of climate change so that risk is avoided where possible; Ensure that development is not exposed to the direct threat of flooding and that it does not increase flood risk elsewhere; Secure and promote the natural role of floodplains as a form of flood defence and an important environmental and social resource and ensure that this is recognised; Promote an integrated sustainable approach to the management of development and flood risk which contributes to the safety and wellbeing of people, to the prudent and efficient use of economic resources and the conservation and enhancement of the biodiversity of Northern Ireland.
PPS18: Renewable Energy	Sets out the planning policy for development that generates energy from renewable resources. The PPS aims to facilitate the siting of renewable energy generating facilities in appropriate locations within the built and natural environments. The policy is accompanied by a Best Practice Guidance document which provides technical information and guidance on a range of renewable energy technologies as well as information about approaches to Passive Solar Design (PSD).
PPS21: Sustainable Development in the Countryside	Sets out planning policies for development in the countryside. For the purpose of this document the countryside is defined as land lying outside of settlement limits as identified in development plans. The provisions of this document will apply to all areas of Northern Ireland's countryside.
Antrim, Ballymena and Larne Plan 2016 – Issues Paper	The Plan will play a major role in guiding the future development of the Antrim, Ballymena and Larne Borough Council areas over the Plan period. In so doing, it will help to give effect to the Regional Development Strategy 2025 (RDS), published on 20th September 2001, which provides an overarching strategic framework to help achieve a strong balanced economy, a healthy environment and an inclusive society, in accordance with the Programme for Government 2001.
Antrim Area Plan 1984 - 2001	Previous Area Plan for the Antrim Borough Council area that set out the development framework until 2001.
Ards and Down Area Plan 2015	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within Ards Borough and Down District over the Plan period 2000 -2015.
Armagh Area Plan 2004	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area. This development plan remains the statutory instrument for its particular plan area, however a new development plan covering this area is being prepared. See Armagh Area Plan 2018 – Issues Paper.
Armagh Area Plan 2018 – Issues Paper	The Armagh Area Plan 2018 provides a policy framework for development and conservation of Armagh, acting as a blueprint for land use decisions affecting housing, industry, tourism, retailing, roads, transportation, open space, and community facilities. It also protects the environment through designations and policies such as the Green Belt Policy, Countryside Policy Areas.
Ballymena Area Plan 1986-2001	Previous Area Plan for the Ballymena Borough Council area that set out the development framework until 2001.
Banbridge Rural Area Plan 1986 - 1998	This development plan remains the statutory instrument for its particular plan area; however a new development plan covering this area is being prepared. See Draft Banbridge, Newry and Mourne Area Plan 2015.
Draft Banbridge, Newry and Mourne Area Plan 2015	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2015. The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2010.

Title	Summary of Objectives
Draft Belfast Metropolitan Area Plan 2015	The purpose of the Plan is to inform the general public, statutory authorities' developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Belfast Metropolitan Area over the Plan period. The Plan will help to give effect to the Regional Development Strategy. The Plan covers Belfast City, Lisburn City, Carrickfergus Borough, Castlereagh Borough, Newtownabbey Borough and North Down Borough Councils.
Cookstown Area Plan 2010	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2010.
Craigavon Area Plan 2010	The purpose of the Plan is to inform the general public, statutory authorities and other interested bodies within the context of the Adopted Area Plan 2010, of the policy framework and designations that will be used to guide retail development decisions within the Craigavon Borough.
Derry Area Plan 2011	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2011.
Dungannon & South Tyrone Area Plan 2010	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within Dungannon and South Tyrone Borough.
Fermanagh Area Plan 2007	The Fermanagh Area Plan sets out the policies and proposals to guide development decisions in the Fermanagh District Council area up to the year 2007.
Larne Area Plan 2010	Previous Area Plan for the Larne Borough Council area that set out the development framework until 2010.
Magherafelt Area Plan 2015	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2015.
Newry and Mourne Rural Area Subject Plan 1986 - 1999	This development plan remains the statutory instrument for its particular plan area; however a new development plan covering this area is being prepared. See Draft Banbridge, Newry and Mourne Area Plan 2015.
Northern Area Plan 2016 (Ballymoney, Coleraine, Limavady & Moyle)	The purpose of the Plan is to inform the general public, statutory authorities, developers and other interested bodies of the policy framework and land use proposals that will be used to guide development decisions within the Plan area for the period up to 2016.
Omagh Area Plan 1987 - 2002	This development plan remains the statutory instrument for its particular plan area; however a new development plan covering this area is being prepared. See West Tyrone Area Plan 2019 – Issues Paper
Strabane Area Plan 1986 - 2001	This development plan remains the statutory instrument for its particular plan area; however a new development plan covering this area is being prepared. See West Tyrone Area Plan 2019 – Issues Paper
Shared Horizons: Statements of Policy on Protected Landscapes in Northern Ireland	Sets out the issues associated with the protection and sustainable use of the landscape or countryside and indicates the way in which to address them. Specifically, it seeks to illustrate: Why the protection and management of our special landscapes is important; What Environment and Heritage Service does, both through its own actions and in partnership with others, to manage this resource and facilitate the sustainable use of these areas; What the future plans of the Department are with respect to designating and managing further areas of high landscape quality and reviewing the status of some of the existing areas.

Title	Summary of Objectives
North Western River Basin Management Plan	Describes existing condition of waters in the international River Basin District, the objectives for improving their condition and the measures to be used to deliver these improvements.
Neagh Bann River Basin Management Plan	Describes existing condition of waters in the international River Basin District, the objectives for improving their condition and the measures to be used to deliver these improvements.
North Eastern River Basin Management Plan	Describes existing condition of waters in the River Basin District, the objectives for improving their condition and the measures to be used to deliver these improvements.
Water Resource Strategy 2002-2030	Outlines the current status of sources and how this water is currently used. It confirms the important roles of Lough Neagh and other reservoirs and highlights the need for rationalisation of many smaller uneconomic resources. It also contains recommendations for meeting estimated demands to 2030.
Policy and Practice for the Protection of Groundwater in Northern Ireland	Outlines the approach to protect both groundwater resources and groundwater quality in Northern Ireland.
arc21 Waste Management Plan 2013 - 2020	The arc21 Waste Management Plan has been prepared by arc21, in fulfilment of its councils' obligations under Article 23 of the Waste and Contaminated Land (Northern Ireland) Order 1997. The plan sets out the arrangements for the management of controlled wastes arising within the arc21 Region, which includes identifying capacity needs, potential sites and/or siting criteria, and the services needed for the collection, treatment and disposal of wastes.
North West Region Waste Management Group – Waste Management Plan 2013 – 2020	The North West Waste Management Plan has been prepared by the North West Region Waste Management Group, in fulfilment of its councils' obligations under Article 23 of the Waste and Contaminated Land (Northern Ireland) Order 1997. The plan sets out the arrangements for the management of controlled wastes arising within the North West Region, which includes identifying capacity needs, potential sites and/or siting criteria, and the services needed for the collection, treatment and disposal of wastes.
SWaMP2008 Waste Management Plan 2013 - 2020	The SWaMP 2008 Waste Management Plan 2013-2020 outlines how it will efficiently manage waste for the Councils it represents with the overall goal of creating a system that 'meets the region's needs and contributes towards economic and sustainable development'. Subject to review every five years the Plan details how SWaMP will fulfil its statutory obligations under the EU Waste Framework Directive and The Waste and Contaminated Land (Northern Ireland) Order 1997.

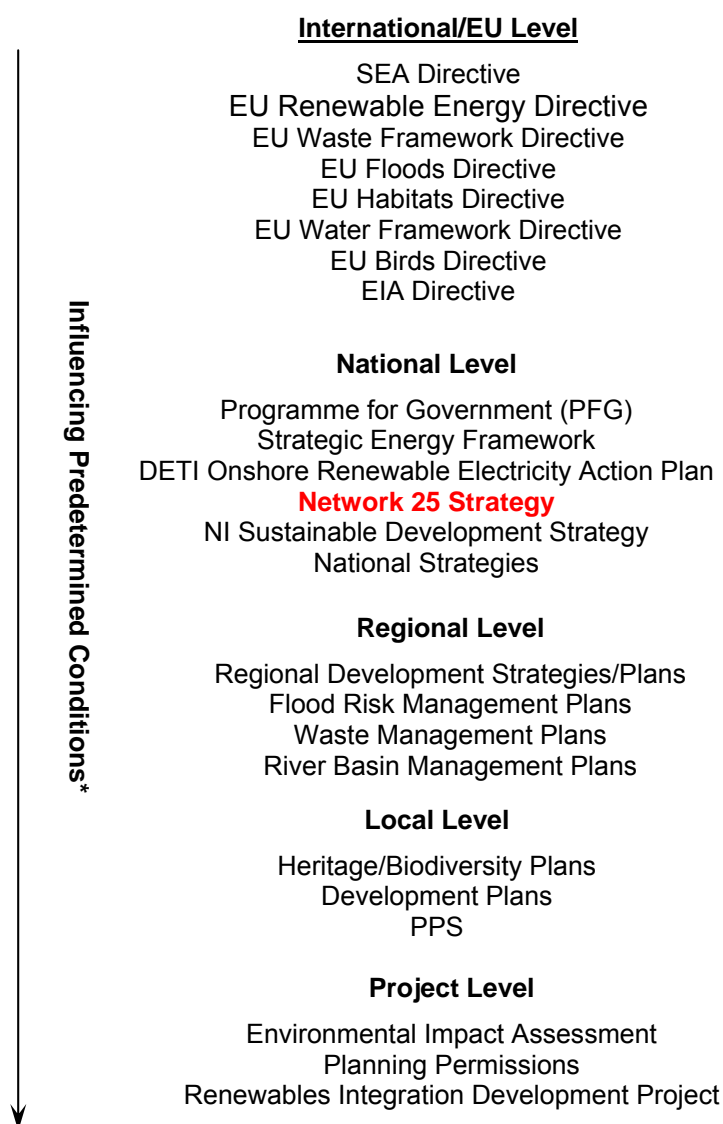
4.2 PLANNING HIERARCHY

DoE Planning of Northern Ireland demonstrates the planning hierarchy as:

- Regional Development Strategy (RDS);
- Planning Policy Statements (PPS) and Development Plans (e.g. Area Plans); and
- Supplementary Planning Guidance (e.g. Design Guides).

A draft Hierarchy of Plans and Programmes in which this Strategy is placed in context is illustrated in **Figure 4.1**, with example Plans and Programmes given as reference. The NIE Network 25 Strategy represents national level planning and will inform regional plans, development plans and other local-level planning strategies.

Figure 4.1: Draft Hierarchy of Relevant Plans and Policies in Northern Ireland



*Note that there is no hierarchy within the levels, only between levels.

5 ENVIRONMENTAL BASELINE

In line with the SEA Directive an environmental baseline will be compiled for the SEA of the NIE Network 25 Strategy. This will include: a description of the state of the environment at present; a discussion of the key problems/ issues currently being faced in the area; and a description of the expected evolution of the environment should the electrical transmission plan not be implemented, i.e. in the absence of the plan. It should be noted that this Strategy covers a large proportion of Northern Ireland and is proposed to be at a high / strategic level, and therefore the level of detail in the environmental baseline will have to reflect this strategic approach.

5.1 CURRENT STATE OF THE ENVIRONMENT

The Environmental Report will expand on the existing information from this SEA Scoping document and will contain a full description of the relevant Environmental Baseline data within the vicinity proposed transmission routes. Below is a non-exhaustive list of the information sources that may be used to compile the environmental baseline for the Network 25 Strategy:

- Corine and Landcover Land Use Databases;
- Northern Ireland Environment Agency (NIEA) databases;
- Northern Ireland Environmental Link;
- Joint Nature Conservation Committee (JNCC);
- Geological Survey of Northern Ireland (GSNI);
- NI State of the Environment Reports;
- NI Environmental Statistics Reports;
- NI Water;
- Air Quality Archive;
- Relevant Development Plans;
- Department for Regional Development (DRD);
- NI Statistics and Research Agency (NISRA);
- Department of Agriculture and Rural Development (DARD);
- RSPB Bird Database;
- Monuments and Buildings Record / Sites and Monuments Records;
- Council databases;
- Ulster Museum and National Museum of Ireland databases, and
- Ulster and Irish Wildlife Trusts.
- University databases.
- WFD Databases.

It is key that the current state of the environment be described using the most recent and up-to-date environmental data, information and reports. Where updates of significant environmental data and associated reports become available during the SEA process, consideration should be given to incorporating the new information into the description of the current state of the environment.

Where data gaps are found for particular aspects of the current state of the environment, the significance of these data gaps should be clearly stated. In addition, it should be stated whether these gaps can be reasonably and realistically addressed during the SEA process.

5.2 PRELIMINARY BASELINE

Included in this Scoping Report is a preliminary discussion of the environmental baseline for the proposed Strategy area. The preliminary baseline has been divided by topic into the issues requiring assessment under the SEA legislation. Further detailed baseline studies, with all associated mapping, will be developed as part of the Environmental Report to follow this Scoping Report.

Due to the large area to be covered by this SEA the baseline in the environmental report will be further subdivided into SEA Study Areas, as per **Figure 3.1**. An outline description of these areas is given below in **Table 5.1**. The baseline within the environmental report will provide the information by SEA study area, against which the potential impacts of the alternatives will be assessed. This preliminary baseline for the scoping report will summarise the entire study area and will demonstrate the scale and level of information to be used in assessment.

Table 5.1 Study Area Descriptions

SEA Study Area No.	Name	Outline Area	Draft Option No.
1	Tamnamore to Kells	5km buffer on existing 110kV lines from Tamnamore to Kells.	4
2	Co. Down coast	Area between likely landfall locations from proposed offshore wind energy along south Down coast to existing NIE transmission network, buffered by 5km.	8
3	Coleraine to Limavady	5km buffer on existing 110kV lines from Coleraine to Limavady.	10, 11, 13, 19
4	Coleraine to Kells	5km buffer on existing 110kV lines from Coleraine to Kells.	14
5	Coleraine to Ballycastle	Straight line between Coleraine and Ballycastle, buffered by 5km.	15
6	North Antrim	Area between likely landfall locations from proposed offshore tidal energy to all nearest existing NIE transmission network options.	15
7	Larne Area	Area encompassing the Compressed Air Energy Storage project and Islandmagee Gas Storage project, and their nearest grid connection, buffered by 5km.	15, 16, 17

8	Coolkeeragh to Limavady	5km buffer on existing 110kV lines from Coolkeeragh to Limavady.	18
9	Coolkeeragh to Trillick	5km buffer on existing 110kV lines from Coolkeeragh towards Trillick / North Donegal	20, 22
10	Omagh to Drumquin	5km buffer on existing 110kV lines from Omagh to Drumquin area.	23, 29
11	South Omagh	Proposed area for development of South Omagh substation and connection to existing grid, buffered by 5km.	24, 25, 26, 27
12	Omagh to Turleenan	5km buffer on existing 110kV lines from Omagh to Turleenan	25
13	Drumquin to Donegal	5km buffer on existing 110kV lines from Drumquin area towards Donegal (Tir Chonaill)	23, 26
14	Omagh to Coolkeeragh	5km buffer on existing 110kV lines from Omagh to Strabane, Killymallaght and Coolkeeragh.	28, 29
15	Magherafelt to Cookerragh	5km buffer on existing 275kV lines from Magherafelt to Cookerragh	30

5.2.1 Air and Climate

5.2.1.1 Air

Air Quality Management Areas (AQMAs) are designated by local authorities in Northern Ireland in areas where there are potential exceedances of air pollutants as prescribed by the Air Quality Standard and Limit Regulations (SR No. 265 of 2007, SR No. 188 of 2010 and SR No. 2121 of 2003 and amendments) in areas with potential sensitive receptors. There are 15 AQMAs that intersect the overall study area, which are detailed below by Council area.

Newtownabbey Borough Council has designated 1 AQMA that intersects the study area, being the Ballyclare AQMA, which is designated for potential exceedances of nitrogen dioxide in an area comprising 2-83 Main street, Ballyclare.

Ballymena Borough Council has designated 3 AQMAs that intersect the study area. The Ballykeel AQMA is designated for potential exceedances of particular matter <10µm in an area encompassing dwellings in the Ballykeel zones 1 and 2, Chichester Park Central, Chichester Park East and Chichester Park West estates, together with certain houses on Crebilly Road, Larne Road, Meadowvale, Moat Road, River View and Knockeen Crescent. The Dunclag AQMA is designated for potential exceedances of particular matter <10µm in an area encompassing: dwellings in the Dunclag Gardens, Dunclag Park, Dunvale and Millfield estates together with certain houses within Blacksgrove, Cushendall Road, Doury Road, Garvey Wood, Grove Road, Johnstone Close, Moorland Close and Parklands. The Ballymena AQMA is designated for potential exceedances of nitrogen dioxide in an area encompassing roads within the Linenhall Street/George Street area of Ballymena.

Magherafelt District Council has designated 1 AQMA within the study area. The Church Street AQMA is designated for potential exceedences of Nitrogen dioxide in an area encompassing Church Street/Lower King Street.

Derry City Council has designated 2 AQMAs within the study area. The Derry AQMA is designated for potential exceedences of nitrogen dioxide in an area encompassing parts of Creggan Road, Windsor Terrace on Infirmary Road, Creggan Street and Marlborough Terrace on Lone Moor Road. The Derry AQMA 2 is designated for potential exceedences of nitrogen dioxide in an area encompassing all of Ebrington Terrace and Columba Terrace on Limavady Road, 1-19 Glendermott Road, all of St. Patrick's Terrace, all of Maybrook Terrace, and 1-12 Collon Terrace, Buncrana Road.

Strabane District Council has designated 2 AQMAs within the study area. The Strabane AQMA is designated for potential exceedences of particular matter <10µm in an area encompassing most of Strabane south of Railway Street / Newtown Street. The Newtownstewart AQMA is designated for potential exceedences of particular matter <10µm in an area encompassing the majority of Newtownstewart south / west of the river Strule, and extending east to Newtonstewart Model Primary School.

Dungannon District Council has designated 4 AQMAs within the study area. The Church Street AQMA is designated for potential exceedences of nitrogen dioxide in an area encompassing the eastern end of Church Street from the junction of Perry Street and Park Road up to the western end of Church Street to the junction with Market Square and Scotch Street. The Moy AQMA is designated for potential exceedences of nitrogen dioxide in an area incorporating a section of the A29 Road from the River Blackwater Bridge running northwest up to the junction with Benburb Road. The AQMA also incorporates a section of the B106 Road (Killyman St) running northwards from the junction with the A29 to the junction at Meadowview. The Newell Road AQMA is designated for potential exceedences of nitrogen dioxide in an area that incorporates a section of the Newell Road (B43) from the roundabout at the junction of Newell Road and Ballygawley Road (A45) to the gable end of No. 20 Newell Road. The Stewartstown road (Coalisland) AQMA is designated for potential exceedences of nitrogen dioxide in an area that incorporates a section of the B520 Road from the roundabout at the junction of Stewartstown Road (B520) and Main Street/ Mamie's Corner (Coalisland) up to the gable end of No. 12 Stewartstown Road.

Newry and Mourne District Council have designated 2 AQMAs with the study area. The Newry Urban Centre AQMA is designated for potential exceedences of nitrogen dioxide in an area incorporating 5 previous AQMAs (Bridge St, St Mary St, Canal St, Water St & Kilmorey St) and a new area of exceedence in Sandy Street. This AQMA is now only for nitrogen dioxide, as the previous AQMAs for PM₁₀s have been revoked. The Canal Street AQMA is designated for potential exceedences of particular matter <10µm in an area encompassing properties abutting Canal Street between its

junction with Chequer Hill and Barrack Street to the North and the junction with New Street to the South (DOENI, 2013).

The IPPC Directive (European Community 2008/1/EC) was created to prevent or minimise emissions to air, water and soil, as well as waste, from industrial and agricultural activities in the Community, with a view to achieving a high level of environmental protection. There are approximately 137 IPPC Licensed sites that intersect the study area. The main activities within the study area include mineral activities, disposal of waste by landfill, disposal of waste by means other than landfill, treatment and processing of animal and vegetable raw materials, production of cement and lime, and the production of tar and bitumen.

5.2.1.2 Climate

The climate of Northern Ireland is characterised by equability, a consequence of the moderating effects of the Atlantic Ocean, which brings relatively mild winters and cool summers. However, the indented shape of the coastline and the presence of high ground introduce localised differences in temperature, cloud and precipitation.

The mean annual temperature at low altitudes in Northern Ireland varies from about 8.5°C to 9.5°C, with the higher values occurring around or near to the coasts. The mean annual temperature decreases by approximately 0.5°C for each 100 metre increase in elevation. In winter, temperatures in the UK are influenced to a very large extent by those of the surface of the surrounding sea, which reach their lowest values in late February or early March. July is normally the warmest month in Northern Ireland with mean daily maximum temperatures varying from about 17°C in the upland areas and along the north coast to almost 20°C in low lying areas south of Lough Neagh and in Fermanagh. Rainfall in Northern Ireland varies widely, with the wettest places being in the Sperrin, Antrim and Mourne Mountains. The highest areas have average annual totals of about 1600 mm. In addition to topographic effects, greater exposure to rain-bearing winds off the Atlantic results in higher averages in the more western counties of Fermanagh, Londonderry and Tyrone. The wettest places are in the upland area around Killeter Forest in the extreme west of County Tyrone, where the annual average reaches about 1950 mm. The driest places are further east, around Strangford Lough and close to the east coast, and near to the southern and eastern shores of Lough Neagh, where the annual totals are just under 800 mm. The seasonal variation of rainfall in Northern Ireland is less marked in the drier southern and eastern areas than in the wetter areas, but in all areas the wettest months are between October and January. Northern Ireland is one of the windier parts of the UK, with the windiest areas being over the highest ground and along the coasts of Counties Antrim and Down. The strongest winds are associated with the passage of deep areas of low pressure close to or across the UK. The frequency and strength of these depressions is greatest in the winter half of the year, especially from November to January, and this is when mean speeds and gusts (short duration peak values) are strongest (Met Office, 2013).

It is anticipated that global climate change will cause Northern Ireland to see warmer wetter winters, with drier summers. The frequency of extreme weather events such as flooding may increase as rainfall patterns change. The timing of natural events may alter in response to a changing climate (NIEA, 2013).

The latest environmental indicators as part of the NIEA State of the Environment Reporting show that in Northern Ireland in 2010 greenhouse gas (GHGs) emissions were almost 15% lower than in 1990, when monitoring of such emissions commenced. However, emissions have increased between 2009 and 2010 by almost 4%. This increase is mostly attributable to consecutive cold winters and an increase in fossil fuel use as a consequence (NIEA 2013). GHGs are closely associated with the generation, transmission, and distribution of energy, accounting for approximately 22-25% of the total GHG emissions in 2011 (DOENI, 2011). These gases are released during the combustion of fossil fuels, such as coal, oil and natural gas, to produce energy. Carbon dioxide (CO₂) makes up the majority of these greenhouse gas emissions with lesser amounts of methane (CH₄), nitrous oxide (N₂O) and Particulate Matter (PM_{2.5} and PM₁₀) also being emitted during the process. Emissions of GHGs from energy production in Northern Ireland have decreased by 30% since 1990. This has been mainly been due to the increase use of gas in power stations and residential homes over recent years (DOENI, 2013a).

5.2.2 Biodiversity, Flora and Fauna

There are a wide variety of natural habitats within the overall study area, protected by a range of designations. There are 31 Special Areas of Conservation (SAC) that intersect the study area. SACs are designated under the Habitats Directive (92/43/EEC), and are enacted in Northern Ireland by The Conservation (Natural Habitats) Regulations (Northern Ireland) 1995 (SR No. 380 of 1995) and amendments. These areas will contain rare and vulnerable habitats and/or species of European importance. Special Protection Areas (SPA) are designated under The EU Directive on the Conservation of Wild Birds (EC/79/409), "The Birds Directive", as areas that are important for rare and vulnerable bird species as they use them for breeding, feeding, wintering or migration. There are 7 Special Protection Areas that intersect the study area. Any development with the potential to impact upon a Natura2000 designated site (SACs or SPAs) is likely to require a Habitats Regulation Assessment (HRA) under the Habitats Directive 92/43/EEC.

The Convention on Wetlands in Ramsar, Iran (1971), called the "Ramsar Convention", is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance. These designations are known as Ramsar sites. There are 10 Ramsar sites that intersect the study area.

Northern Ireland environmental designations that are within the study area have been designated under Northern Ireland legislation for environmental protection of biodiversity, flora and fauna consist

of Areas of Special Scientific Interest (ASSI) and National Nature Reserves (NNR). ASSIs are protected under the Environment (Northern Ireland) Order 2002, and the NIEA must, as required by the law laid down in the Order, declare land as an ASSI if it is of special scientific interest because of the flora or fauna that is found on it, or because of geological features. There are 156 ASSIs that intersect the study area. National Nature Reserves (NNR) are chosen from among the very best examples of Northern Ireland's wildlife, habitats and geology. They contain a wide range of species, communities and geology and their designation is a public recognition by Government of their importance. The primary aim of managing NNRs is to conserve their features now and for future generations through the development of experience and techniques in managing land for conservation. A secondary aim is to provide opportunities, where practical, for the public to experience these natural habitats and landscape features and to interact quietly with nature. There are 24 Nature Reserves and 1 Marine Nature Reserve that intersect the study area. There are also 28 National Trust properties / areas that intersect the study area.

Sites of Local Nature Conservation Interest (SLNCI) designations are required under Planning Policy Statement 2, Planning and Nature Conservation, and are designated by District Councils under Article 22 of the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985. These SLNCIs are wildlife refuges where special protection measures for some or all species are implemented, or are non-statutory nature reserves managed by voluntary conservation bodies. There are approximately 499 SLNCIs that intersect the study area. These SLNCIs however do not include habitats and areas protected in the Area Plans for Antrim, Ballymena, Derry, Fermanagh, Omagh and Strabane, which predate the SLNCI designation.

In addition to these designated areas there are also sensitive and valued habitats and species which are reported by each council area in their Local Biodiversity Action Plans (LBAPs). These Plans establish the natural heritage value for the area and guide where development should be allowed to happen and what enhancement works could be undertaken to improve biodiversity. Also, under the Northern Ireland Ancient Woodland Inventory there are 2,577 ancient or long established woodlands that intersect the study area.

5.2.3 Cultural Heritage, including Architectural and Archaeological Heritage

Within the study area there are known to be approximately 305 Shipwrecks, 8,057 Sites and Monuments, 4,425 Industrial Heritage Features, 6,042 Listed Buildings, 124 Heritage Gardens, and 779 Scheduled Zones. These various heritage designations are protected under the following legislation in Northern Ireland:

- Sites and Monuments - The Historic Monuments and Archaeological Objects (NI) Order 1995;
- Historic Buildings - The Planning (NI) Order 1991;

- Maritime Sites - The Protection of Wrecks Act (1973).

Planning policies for protection and conservation of archaeological remains and features of the built heritage are contained in Planning Policy Statement 6 (PPS 6).

There is also one UNESCO World Heritage Site within the study area, the Giant's Causeway and Causeway Coast, which was inscribed as a World Heritage Site by UNESCO in 1986 recognising the outstanding universal value of the site as per the World Heritage Convention.

5.2.4 Landscape

5.2.4.1 Landscape

There are eight Areas of Outstanding Natural Beauty (AONB) that intersect the study area, being the Sperrins AONB to the north of Omagh and Cookstown, the Antrim Coast and Glens AONB along the north east coast, the Giants Causeway on the north Antrim coastline, Binevenagh AONB stretching from Lough Foyle to Portstewart, the Ring of Gullion AONB to the south of Newry and the Mourne AONB to the surrounding Newcastle, Strangford and Lecale AONB surrounding Strangford Lough and the Lagan Valley AONB south of Belfast. These AONBs are designated under the Nature Conservation and Lands (NI) Order 1985, as are areas of landscape of distinctive character and special scenic value. The study area intersects approximately 95 Landscape Character Assessment Areas, as defined by the NIEA in their Landscape Character Assessment Series.

5.2.4.2 Topography

The land surface of the Northern Ireland is predominantly lowland, with approximately 75% of its total area lying below 150m. Much of this forms an extensive saucer-shaped lowland around Lough Neagh, Coastal lowland extends along the north coast westward into the Foyle estuary. In the south, corridors of lowland connect to the basin of the Upper and Lower Lough Erne in County Fermanagh and also eastwards into the Lagan Valley, through Belfast and ultimately to the Ards Peninsula beyond Strangford Lough (Betts, 2002).

There are four main uplands in Northern Ireland. On the northern side of Belfast, the skyline of three summits of Divis, Black Mountain and Cave Hill is part of the tertiary basalt plateau of County Antrim. Further north of Belfast lies the extruded plateau formed by sheets of basalt lava. This upland area forms the glens of Antrim and extends some 80km to the North Antrim cliff coastline of the Giant's Causeway. In the south east of Northern Ireland lies the Mourne Mountains formed from hard Tertiary Granites. To the west of the Lough Neagh basin, the more extensive Sperrin Mountains are formed of metamorphosed sediments in the form of mica-schist rock. There are other smaller mountains in Northern Ireland but are quite restricted in area. In County Tyrone there are rolling uplands of Old Red

Sandstone, and in South Armagh there is the isolated peak of Slieve Gullion, surrounded by smaller hills in ring formation all formed from a mixture of hard and acidic igneous rocks (Betts, 2002).

5.2.5 Population and Human Health

The study area covers an area of 7,058 km², around 49.8% of Northern Ireland's landmass, with a population of about 807,323 and approximately 361,546 households (NISRA 2013). The 16-74 employment rate in the study area was 66 % which is 1.0% lower than the Northern Ireland average of 67.1%. In 2011, 17.3% of the employees in the study area were employed in wholesale and retail trade, 13.8% in human health and social work, 10.6% in manufacturing, 10.1% in construction, 9.7% in Education, 7.0% in public administration and defence and 5.0% in the accommodation and food service industry.

From the 2011 census (NISRA, 2013) the public within the study area estimated that their health was as follows:

- Very Good Health ~ 48.5%
- Good Health ~ 31.8%
- Fair Health ~ 14.6%
- Bad health ~ 4.1%
- Very Bad Health ~ 1.1%

5.2.6 Soil and Land Use

5.2.6.1 Geology

Northern Ireland represents one of the most complex and varied areas of geology in the world. The oldest rocks are Mesoproterozoic formed over 500 million years ago and are succeeded by rocks representing nearly every era (exception being Cambrian Era) of the Phanerozoic system. The bedrock geology map of Northern Ireland can be divided into quadrants being; the northeast, northwest, southwest and southeast each with unique geological characteristics (Mitchell 2004).

The northwest quadrant covers the area of west County Londonderry and north County Tyrone and is comprised of Mesoproterozoic to Silurian formations, mainly metamorphic rocks of the Dalradian Supergroup (Southern Highland and Argyll groups) of the northern terrane and the Tyrone Igneous Complex of the central terrane.

The southwest quadrant covers the area of south County Armagh and the majority of County Down. This area is composed of Ordovician and Silurian formations (Hawick and Gala groups) of the

southern Uplands-Down-Longford terrane which is comprised mainly of greywacke sandstone, siltstone and mudstone as well as other Devonian intrusive complexes (Fintona Group).

The southeast quadrant covers an area of south County Tyrone and County Fermanagh, this area is composed largely of Carboniferous and Devonian formations such as; the Owenkillev Sandstone group, the Roe Valley Sandstone group, Omagh Sandstone group and Tyrone and Ballycastle Groups.

The northeast quadrant is the largest of the four covers County Antrim, the majority of County Londonderry and parts of Armagh and Tyrone. This quadrant predominantly comprises the area of the Antrim Plateau and is composed at surface of Palaeogene basalt lavas of the Antrim Lava Group and sedimentary rocks of the Lough Neagh Group underlain by rocks of Permian to Cretaceous era.

Superficial deposits or 'drift' are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years. Northern Ireland has experienced repeated glaciations during the Pleistocene period, as a result a large percentage of is covered in a mantle of glacial deposits or Till. The other main deposits include peat formations which is particularly obvious the west of Northern Ireland in the Sperrin Mountains and also towards of the Antrim Plateau. These blanket peat formed most likely as a result of increased altitude and precipitation during the last glacial movements. Alluvium deposits reside along rivers beds, the most obvious being the narrow band of lacustrine alluvium around the shore of Lough Neagh. This band has been most likely exposed by arterial drainage works that have been carried to improve drainage conditions within the surrounding Basin. There are also isolated areas of clay, sand and silt, particularly in areas around Lough Neagh and Upper Lough Erne.

5.2.6.2 Soils

The AFBI Soil Survey has identified 308 different soil series (each over 50 hectares in area) in Northern Ireland, developed from 97 soil parent materials. Free draining soil types, such as shallow rocky soils make up 9% of the land area, Brown Earths comprise 13% and Podzols 4%. Poorly draining soils or Gleys comprise 56% of the soils in Northern Ireland, while Peaty soils make up 14% and 4% of the soils are comprised of organic alluvium, lake deposits and other alluvial deposits.

5.2.6.3 Land Use

The Land Cover Database for 2000 (LC 2000) shows the land cover in the study area to be mainly made up of the following land cover types:

- | | | |
|--------------------------|---|-------|
| • Improved Grassland | - | 51.1% |
| • Acid Grassland | - | 8.8% |
| • Neutral Grassland | - | 8.2% |
| • Arable Cereals | - | 7.5% |
| • Open Dwarf shrub heath | - | 4.6% |

- Dense Dwarf Shrub heath - 3.8%
- Coniferous Woodland - 3.8%
- Bogs - 3.0%
- Suburban/Rural Development - 2.7%
- Calcareous grassland - 2.1%
- Broadleaved/Mixed Woodland - 1.5%

5.2.7 Water

The Water Framework Directive (WFD) (2000/60/EC) introduces a holistic approach to the management of water quality, and establishes a system for the protection and improvement of all aspects of the water environment including rivers, lakes, estuaries, coastal waters and groundwater. The Directive requires all inland and coastal waters to reach at least “good status” by 2015. Where a waterbody has significant external pressures causing reductions in water quality and therefore its “status”, it may have may be given to 2021 or 2027 to achieve “good status.”

The study area intersects three River Basin Districts (RBDs) in Northern Ireland, being the North Eastern RBD, the North Western iRBD and the Neagh Bann iRBD. International RBDs (iRBDs) are so called as they are transboundary, crossing the border between Northern Ireland and Ireland. Any negative impacts on surface water, coastal water or groundwater quality from electrical transmission development or maintenance activities within the study area therefore has the potential to have both local, regional and transboundary consequences. The River Basin Management Plans for these RBDs were published in 2009.

There are 357 WFD surface waterbodies that intersect the study area. Only 0.3% of these waterbodies are of High Status, while 24.4% are of Good Status. Over 75% of the surface waterbodies within the study area need to improve their status to adhere to the WFD. There are 32 WFD groundwater bodies that intersect the study area. Over 93% of these groundwater bodies are of Good Status, with less than 7% needing to improve their status to adhere to the WFD. There are 8 WFD Lake Waterbodies that intersect the study area. All of the lake waterbodies in the study area are of Good Status and therefore none of these lake waterbodies need to improve their status to adhere to the WFD. There are 16 WFD coastal waterbodies just offshore of the study area, being Lough Foyle, Dundrum Bay inner, Dundrum Bay outer, Carlingford Lough, North Channel, Larne Lough North, Larne Lough Mid, Larne Lough South, Belfast Lough Outer, Mourne Coast, North Coast, Portstewart Bay, Strangford Lough Narrows, Strangford Lough North and Strangford Lough South . Of the coastal waterbodies 40% are of good status or higher, while 60% are of moderate status and therefore require improvement in status to adhere to the requirements of the WFD. There are four transitional water body sites that intersect in the study area being the Foyle and Faughan Estuaries, the Bann Estuary, the Newry Estuary, Quoile Estuary and the Roe Estuary. Of these transitional water bodies 20% are of

good status and therefore 80% of the transitional water bodies within the study area will need to improve their status to adhere to the WFD.

Under the Register of Protected Areas from the WFD there are 39 rivers and 6 lakes that intersect the study area that are used for drinking water abstractions. Drinking water abstractions are protected by the Water Framework Directive (2000/60/EC). There are also 7 salmonid lakes and 263 salmonid river sections that intersect the study area. Atlantic Salmon (*Salmo salar*) are a Priority Species and are protected under the Freshwater Fish Directive (78/659/EEC) and are listed under in Annexes IIa and Va of the EC Habitat and Species Directive and in Appendix III of the Bern Convention.

There are 7 designated bathing waters that intersect the study area, which are at Ballycastle, Browns Bay, Newcastle, Cranfield, Portstewart, Portrush Mill and Tyrella. These waters are protected under the Bathing Water Directive (76/160/EEC), which sets quality standards for Bathing Water. All countries in the European Union have to ensure that their Bathing Waters meet these standards.

An important indicator species of water quality in Northern Ireland and Ireland is the Freshwater Pearl Mussel (FPM) *Margaritifera Margaritifera*. The FPM is protected in Northern Ireland under the Wildlife Order 1985 and is also listed on Annexes II and IV of the EU Habitats Directive and Appendix III of the Bern Convention. There are two designated Freshwater Pearl Mussel catchments that intersect the study area, being the Ballinderry and Owenkillew. The FPM is listed as Vulnerable on the IUCN Red List and classified as a Priority Species by the UK Biodiversity Steering Group.

5.2.8 Interrelationships

In accordance with the SEA Directive, the inter-relationship between the SEA environmental topics must be taken into account. **Table 5.1** highlights the potential inter-relationships between the SEA topics. These potential interactions will be taken into account in the assessment of options / alternatives.

Table 5.1: Potential Inter-Relationships between SEA Topics

	Biodiversity Flora, Fauna	Population / Human Health	Soil	Water	Air	Climatic Factors	Material Assets	Cultural Heritage*	Landscape
Biodiversity Flora, Fauna									
Population / Human Health	✓								
Soil	✓	✓							
Water	✓	✓	✓						
Air	✓	✓	✗	✗					
Climatic Factors	✓	✓	✓	✓	✓				
Material Assets	✓	✓	✓	✓	✓	✓			
Cultural Heritage*	✗	✓	✓	✓	✗	✗	✓		
Landscape	✓	✗	✓	✓	✗	✓	✓	✓	

✓ = interrelationship anticipated

✗ = no interrelationship anticipated

*Including Architectural and Archaeological Heritage

6 FRAMEWORK FOR ASSESSING ENVIRONMENTAL EFFECTS

The preceding sections have identified the environmental characteristics of the Network 25 Strategy area, the key environmental issues relating to the proposed Strategy and the key influences from external plans, policies and strategies. This section will deal with the actual method of assessment for the proposed Strategy.

6.1 SEA ASSESSMENT METHODOLOGY

The Environmental Report shall comply with Schedule 2 of The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (S.R. No. 280 of 2004) and will provide an assessment of the Strategy by outlining the state of the existing environment and predicting how the environment is likely to change as a consequence of proposed measures. Mitigation and monitoring measures will also be outlined.

The information that is proposed to be included in the Environmental Report is listed below:

1. Non Technical Summary

A non technical summary will be prepared to summarize key environmental issues.

2. Introduction

This section will comprise a brief description of the SEA process in relation to the NIE Network 25 Strategy. It will also look at the overall aims and implications of the SEA for the Strategy.

3. Related Plans and Programmes

This section of the Environmental Report will describe the policy context within which the Strategy is being developed and will also detail the legislation and other new guidance that informs or is informed by the Strategy, including international, European Union, national and other sources.

4. Summary of Objectives of the Plan

This section will provide a brief overview of the Strategy and will provide an outline of the contents, main goals, strategic principles and objectives.

5. Summary of the Baseline Environment

This section of the SEA will provide a description of the current state of the environment in the study area and the likely evolution of the environment without implementation of the Strategy. The purpose of this section is to provide enough environmental baseline data to: Support the identification of environmental problems; Support the process of assessing the environmental effects; and Provide a

baseline against which future monitoring data can be compared. The following baseline environmental issues will be addressed in the Environmental Report: Biodiversity; Flora and Fauna; Population; Human Health; Soil; Water; Air and Climatic Factors; Material Assets; Cultural Heritage; and Landscape.

6. Sustainability Criteria

This section of the Environmental Report will detail the Environmental Protection Objectives for the SEA. Each Environmental Protection Objective will be accompanied by corresponding target(s) and indicator(s). **Table 6.1** proposes draft SEA Objectives, Targets and Indicators, for use in assessment of potential Strategy options / alternatives. These SEA Objectives have been grouped under the SEA subject headings, i.e Biodiversity, Flora and Fauna, Population and Human Health, Soils and Land Use, Water; Air, Climate, Material Assets, Cultural Heritage, including Architectural and Archaeological Heritage, and Landscape.

7. Assessment of Alternatives

Alternatives will be assessed in terms of their potential positive and negative impacts, and the significance of these impacts on the environment against the Strategy and SEA objectives. The purpose of this is to predict and evaluate as far as possible the environmental effects of the Strategy, highlighting any environmental problems that are likely to arise from implementation of the Strategy. Where possible this assessment will be quantitative, with a graphical output to aid public appreciation and understanding of the implications of each proposed measure in the Strategy.

The Strategy will be assessed via a *Baseline Led Assessment*. This method will involve the assessment of each option available in the enactment of the Plan against each of the following headings/subjects:

- Biodiversity, Flora and Fauna;
- Population and Human Health;
- Soils and Land Use;
- Water;
- Air;
- Climate;
- Material Assets;
- Cultural Heritage, including Architectural and Archaeological Heritage, and
- Landscape.

Each alternative available in the Strategy will be assessed in the short, medium and long term for likely effects, the significance of the effects, and whether they are positive or negative effects. Other impacts that will be assessed for significance are secondary effects, cumulative effects, synergistic

effects, temporary and permanent effects, and the inter-relationship of effects. The scenario of “The Evolution of the Environment without the Plan” will also be assessed in the same format. This will be considered the *Do-Nothing Scenario*.

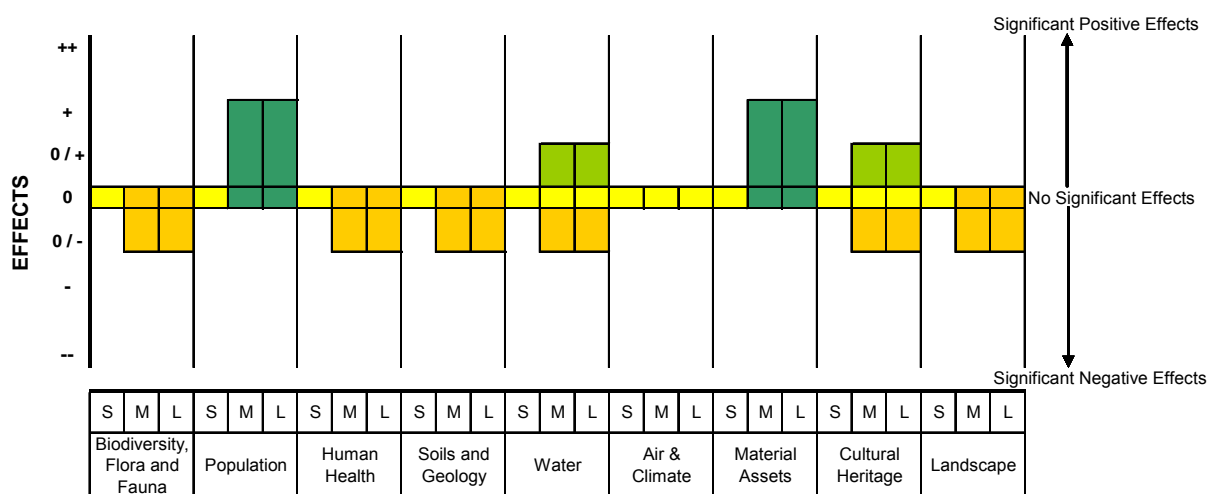
Each alternative will to be broken into discreet study areas based on the geographical location of the transmission corridor for development or reinforcement. These discreet study areas will be compartmentalised versions of the study area shown in **Figure 3.1**, including the 5km buffers. Certain options for assessment will therefore incorporate several of the discreet study areas, as demonstrated previously in **Table 5.1**. The boundaries of these areas will be defined in the next stage of assessment.

All potential positive and negative impacts will be presented individually, with a text description, and then a summary graphic as shown in **Figure 6.1**. In addition, a summary of the overall balanced potential effect will be presented for each environmental issue area.

Figure 6.1: Example of Proposed Assessment Output

Option Name

Positive and Negative Environmental Effects in the Short (S), Medium (M) and Long (L) Term.



8. Mitigation

This section will outline the mitigation measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment due to implementation of the Strategy.

9. Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of the Strategy are monitored in order to identify at an early stage unforeseen adverse effects and in order to

undertake appropriate remedial action. This monitoring programme will be based on the Targets and Indicators established in the SEA Objectives. This programme will aim to be realistic and achievable, with existing monitoring arrangements being used where possible.

Table 6.1: Draft Strategic Environmental Objectives, Targets and Indicators

SEA Topic	SEA Objective	SEA Target	SEA Indicators
Biodiversity, Flora & Fauna	Objective 1 Prevent damage to terrestrial, aquatic and soil biodiversity, particularly EU designated habitats, sites and species. Improve local biodiversity if possible.	<ul style="list-style-type: none"> No deterioration of habitats or their associated species due to implementation of the Strategy. No damage to protected sites in the Strategy area/corridors. No damage to or displacement of protected species in the Strategy area/corridors. 	<ul style="list-style-type: none"> Status of EU Protected Habitats and Species and status of national Priority Species and Habitats. Condition of Selection Features in sites designated for nature conservation (SACs, SPAs and ASSIs). Loss or deterioration of SLNCIs Loss or deterioration of priority habitats / species.
Population	Objective 2 Minimise disruption and displacement to the local population. Provide employment opportunities through construction and operation of transmission infrastructure where possible. Provide reliable electricity supply from renewable sources.	<ul style="list-style-type: none"> No displacement from dwellings due to implementation of the Strategy. No increase in electricity prices to the public due to the implementation of the Strategy. Provide new employment opportunities in construction and operation of the new infrastructure. No power failures due to supply and demand issues. 	<ul style="list-style-type: none"> Compulsory purchase orders in implementing the Strategy. Electricity costs per unit. NIE temporary and permanent staff numbers. Number and hours of power outages due to supply and demand issues.
Human Health	Objective 3 Minimise risks to human health through construction and operation of new / upgraded transmission equipment	<ul style="list-style-type: none"> Provide safe construction of infrastructure away from populations. Prevent nuisance to local populations from construction and operation of infrastructure. 	<ul style="list-style-type: none"> Number of accidents associated with NIE infrastructure. Health issues and nuisance complaints associated with NIE infrastructure.
Soils	Objective 4 Minimise damage to the function and quality of the soil resource in the study area through construction and operation of transmission infrastructure.	<ul style="list-style-type: none"> Avoid sterilisation of a usable or natural soil resource. 	<ul style="list-style-type: none"> Area and zoning of land use from NIE infrastructure.
Water	Objective 5 Avoid deterioration of any groundwater and surface water, quality and quantity.	<ul style="list-style-type: none"> No deterioration of water status up or downstream of NIE infrastructure, due to development or operation. No negative impacts on water supplies No negative impacts on flood defences, floodplains or local flooding characteristics. 	<ul style="list-style-type: none"> WFD water status of surface and groundwaters in the area. NIE infrastructure development footprints.
Air	Objective 6 Minimise emissions to air as a result of Strategy activities and enable increased renewable energy connection to reduce requirements for fossil fuel burning.	<ul style="list-style-type: none"> Reduce air emissions from NIE activities Reduce noise emissions from NIE activities Reduce requirement for power station activity and emissions. 	<ul style="list-style-type: none"> Estimated emissions from NIE fleet. Estimated emissions from NIE facilities. Estimated emissions from NI power stations. Noise complaints due to NIE activities.

SEA Topic	SEA Objective	SEA Target	SEA Indicators
Climatic Factors	Objective 7 Minimise contribution to climate change by emission of greenhouse gasses by supporting the development of alternative renewable energy supplies	<ul style="list-style-type: none"> Increased number of renewable energy developments feeding into the NI grid. Decreased GHG emissions from NI power generation due to reduced demand. 	<ul style="list-style-type: none"> Number of renewable energy developments. GHG emissions from NI power stations.
Climatic Factors	Objective 8 To prepare NIE infrastructure for anticipated climatic change.	<ul style="list-style-type: none"> Future proofing of NIE Plan infrastructure. 	<ul style="list-style-type: none"> Incidents of flooding of NIE Plan infrastructure Power cuts due to variable / unseasonable weather conditions.
Material Assets	Objective 9 Provide electrical transmission infrastructure for renewable energy.	<ul style="list-style-type: none"> Increased provision of renewable energy to the population. New and reinforced electricity grid infrastructure. 	<ul style="list-style-type: none"> Percentage of NI energy from renewable sources. Distance of transmission lines and number of substations developed due to implementation of the Strategy.
Cultural Heritage (inc. Architectural and Archaeological)	Objective 10 To protect the historic environment and cultural heritage	<ul style="list-style-type: none"> Avoid damage to any cultural heritage features in development and/or operation of NIE infrastructure. To preserve heritage features discovered in implementation of the Strategy. 	<ul style="list-style-type: none"> Number of heritage features restored due to Strategy activities. Number of new heritage features discovered due to Strategy activities. Number of heritage features lost or destroyed due to Strategy activities.
Landscape	Objective 11 Minimise negative impacts on landscape and townscape	<ul style="list-style-type: none"> No damage to local vistas and landscape in the Strategy area / corridors. Enhance the local vistas and landscape where possible, with sensitive and sustainable development practices. 	<ul style="list-style-type: none"> Significant changes in landscape quality. Percentage changes in land cover types in areas with a high sensitivity to change. Changes in landscape character definitions.

6.2 CONSULTATION

Article 6 of the SEA Directive requires that both environmental authorities and the public are given an early and effective opportunity to make submissions on the draft Strategy and the accompanying Environmental Report before the final decision is made on the Strategy. Therefore the draft Strategy and Environmental Report will be made available to the public with a formal call for submissions in accordance with the requirements of the Directive. The NIEA and other relevant environmental authorities will also be issued a copy of the draft Strategy and Environmental Report at the start of the consultation period and written submissions will be requested.

6.3 SEA STATEMENT

Based on the consultation process the Strategy will be revised if necessary. The Final Strategy will be issued accompanied by an SEA Statement and these will be made available to the public. The SEA Statement is compulsory under Article 9 of the SEA Directive, which requires that a statement be produced summarising how environmental considerations have been integrated into the Strategy. The main purpose of this SEA Statement is to provide information on the decision-making process and to document how environmental considerations, the views of consultees and the recommendations of the Environmental Report have been taken into account and how they have influenced the Strategy. The Statement will include a summary of the measures (both revised and new), which will be put in place to monitor the significant environmental effects of implementing the revised Strategy. It illustrates how decisions were taken, making the process more transparent.

6.4 APPROPRIATE ASSESSMENT (AA)

The Habitats Directive (Council Directive 92/43/EEC) on the conservation of natural habitats and of wild fauna and flora obliges member states to designate, protect and conserve habitats and species of importance in a European Union context. Article 6(3) requires that *“Any plan or project not directly connected with or necessary to the conservation of a site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.”*

The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (and as amended subsequently) require an Habitat Regulations Assessment to be carried out on any proposed plan or project that has potential to result in a significant effect on a Natura 2000 (N2K) site. Case law has determined that the likelihood need not be great, merely possible, and that the precautionary principle must apply as set out in European Commission Guidance and as required by CJEU case law (i.e. C 127/02 ‘Waddenzee’).

It has been determined by RPS that a Habitat Regulation Screening Assessment of the proposed Strategy is required due to the presence of multiple Natura 2000 sites within the Strategy area and the possibility that construction of regionally significant electrical infrastructure within certain corridors may result in negative effects upon those features of interest for which the Natura 2000 network is designed to protect.

7 NEXT STEPS

To begin the process of scoping the SEA for the NIE Network 25 Strategy there will be consultation with the Statutory Authority in Northern Ireland, the Northern Ireland Environment Agency, and the transboundary statutory consultees in Ireland, as designated by the relevant national SEA legislation. Following the statutory consultations, it was considered best practice to include a number of relevant non-statutory consultees in the scoping process; this draft list of consultees is given in **Table 7.1**.

Timely consultation with the statutory, transboundary and non-statutory consultees listed below will continue throughout the evolution of the Plan and the SEA processes, with additional bodies or individuals added, as appropriate.

Table 7.1: Draft List of Consultees in the SEA Scoping Process

Consultee	Status
NIEA	Statutory
EPA	Transboundary
DAHG	Transboundary
DECLG	Transboundary
DCENR	Transboundary
Utility Regulator Northern Ireland	Non-Statutory
DETI	Non-Statutory
SONI	Non-Statutory
EirGrid	Non-Statutory

7.1 INTEGRATION OF SEA / AA AND STRATEGY

The SEA/AA for the NIE Network 25 Strategy will occur in conjunction with the Plan creation process. **Table 7.2** demonstrates the proposed time stages for the Strategy and the SEA. In order to fully integrate the SEA and Plan processes, SEA Team / Plan Team Workshops will be held at key stages during both processes to ensure full engagement, interaction and information sharing between both teams as well as to ensure integration of environmental considerations.

Table 7.2: Draft Anticipated Milestones

NIE Network 25 Strategy	Date	Strategic Environmental Assessment
Plan Development and Writing	Sept – Nov 2013	Environmental Assessment
Plan Consultation	Late 2013	Public Consultation
Final Plan Release	Late 2013 / Early 2014	SEA Environmental Statement

The proposed timescale to complete the SEA process is given in **Table 7.3**.

Table 7.3: Proposed Timescale for SEA of the Network 25 Strategy

Action	Timescale
Scoping	May 2013 – September 2013
Consultation	September 2013
Environmental Assessment	September – November 2013
Public Consultation	Late 2013
Environmental Statement	Early 2014

Scoping is a dynamic process and is expected to continue throughout the SEA process, up to the publication of the Environmental Report. This Scoping Report will be available on the NIE website with the purpose of engaging the wider public in the ongoing consultation on this Strategy.

8 ABBREVIATIONS:

Abbreviation	Explanation
AFBI	Agri-Food and Biosciences Institute
AONB	Area of Outstanding Natural Beauty
ASSI	Area of Special Scientific Interest
DoE	Department of Environment
EHS	Environment and Heritage Service
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EU	European Union
NI	Northern Ireland
NIE	Northern Ireland Electricity
NIEA	Northern Ireland Environment Agency
PPS	Planning Policy Statement
RoI	Republic of Ireland
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SLNCI	Sites of Local Nature Conservation Importance
SMR	Sites and Monuments Record
SONI	Systems Operator for Northern Ireland
SPA	Special Protection Area

9 REFERENCES

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APPENDIX A

SEA SCREENING DETERMINATION

Mr Richard Bingham
RPS Consulting Engineers
Elmwood House
74 Boucher Road
Belfast
BT12 6RZ

Our ref: SEA 08-13

13 June 2013

Dear Richard

NIE Network 25 Strategy (SEA Screening)

Thank you for your formal submission of 16 May 2013 regarding a screening determination for the NIE Network 25 Strategy 2013-2025.

The Department notes that NIE, as the Responsible Authority preparing the Strategy, wishes to approach the electricity transmission planning from 2013 to 2025 in a socially responsible, sustainable and transparent manner and as such will be undertaking an SEA. We welcome the decision to undertake an SEA in this instance.

We look forward to receiving consultation about the scope and level of detail that should be included in the environmental report.

Should you have any further queries please contact Siobhan Conlon (SEA Coordinator) on direct line 028 90569442.

Yours sincerely



Pat Corker
Principal Policy Officer

APPENDIX B

SEA GUIDANCE

The following Guidance / Methodology documents will be referred to during the SEA process:

Northern Ireland

A Practical Guide to the Strategic Environmental Assessment Directive. September 2005. Office of the Deputy Prime Minister.

http://www.ehsni.gov.uk/bm_sea_practicalguide.pdf

Strategic Environmental Assessment. Services and Standards for Responsible Authorities. Environment and Heritage Service.

<http://www.ehsni.gov.uk/sea-servicesandstandards.pdf>

Ireland

Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA) as amended. DoECLG Circular (PL 9/2013)

Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland. Synthesis Report. 2003. Environmental Protection Agency.

<http://www.epa.ie/downloads/advice/ea/name.13547,en.html>

Further Transposition of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA). DoECLG Circular (PSSP 6/2011)

Implementation of SEA Directive (2001/42/EC). Assessment of Certain Plans and Programmes on the Environment. Guidelines for Regional Planning Authorities. November 2004. Department of Environment, Heritage and Local Government.

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Strategic Environmental Assessment (SEA) Checklist - Consultation Draft. January 2008. Environmental Protection Agency.

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Guidelines on SEA. Department of Communications, Energy and Natural Resources. Available at:

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Other

Strategic Environmental Assessment DRAFT Practical Guidance for Practitioners on How to Take Account of Air. June 2008. Scotland & Northern Ireland Forum for Environmental Research.

Strategic Environmental Assessment DRAFT Practical Guidance for Practitioners on How to Take Account of Soil. June 2008. Scotland & Northern Ireland Forum for Environmental Research.

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