



SONI's Transmission Development Plan for Northern Ireland 2019-28

Decision Paper – June 2020



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.



Our vision

To ensure value and sustainability in energy and water.



Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.



Abstract

SONI is the Transmission System Operator (TSO) for Northern Ireland and is responsible for ensuring continuity of electricity supply for homes and businesses across Northern Ireland. In order to do so SONI must plan investment in the transmission network.

The Transmission Development Plan for Northern Ireland (TDPNI) 2019-2028 is the proposal for the development of the NI transmission network and interconnection over the ten years from 2019. This plan presents projects that are expected to be needed for the operation of the transmission network in the short and medium-term.

Audience

This document is likely to be of interest to regulated companies in the energy industry, government, industry groups, consumer bodies, environmental groups and those with an interest in the energy industry and network planning.

Consumer impact

The TDPNI provides clarity to consumers on:

- 1) The drivers of electricity transmission investment;
- 2) The need for action;
- 3) The location and activity of network investment; and
- 4) The estimated cost and timing of project completion.



Contents page

Executive Summary	3
1. Introduction.....	4
Background.....	4
Related Documents	4
2. Overview	5
TDPNI.....	5
3. Findings	7
Consultation Responses	7
4. Conclusions.....	10
Decisions.....	10

Executive Summary

The Transmission Development Plan for Northern Ireland (TDPNI) 2019-2028 cover the proposals for the development of the NI transmission network and interconnection over the ten years from 2019. This plan presents projects that are expected to be needed for the operation of the transmission network in the short and medium-term.

The TDPNI will help to achieve the strategic objectives as laid out by national and EU policies. The strategic objectives include:

- a) Ensuring the security of electricity supply;
- b) Ensuring the competitiveness of the national economy;
- c) Ensuring the long-term sustainability of electricity supply.

In accordance with its' licence (Condition 40), SONI must prepare a TDPNI every year. Under Article 22(4) of Directive [2009/72/EC](#), the Utility Regulator (UR) must then consult on the draft TDPNI prepared by SONI.

As part of this process, SONI has consulted upon a plan and submitted a draft TDPNI to the UR for consideration. The UR has [consulted](#) on the draft plan, sharing stakeholder views with SONI.

Both the UR and SONI have considered the responses. This paper sets out the findings of the consultation and final decision of the UR regarding approval of the 2019-2028 TDPNI.

1. Introduction

Background

- 1.1 SONI is the independent electricity Transmission System Operator (TSO) for Northern Ireland. As part of its function as TSO SONI has a licence obligation under Condition 40 to produce a Transmission Development Plan for Northern Ireland (TDPNI).
- 1.2 SONI has consulted upon a draft TDPNI for 2019-28. Results have been considered and an updated plan has been submitted to the UR.
- 1.3 Under Article 22(4) of Directive [2009/72/EC](#), the UR must then consult on the draft TDPNI prepared by SONI. This consultation closed for comments on the 05 May 2020.
- 1.4 This paper details the findings of the consultation and the subsequent decisions by the UR.

Related Documents

- 1.5 UR consulted on the SONI [Draft TDPNI 2019-28](#). This was accompanied by:
 - a) SONI report - [TDPNI Consultation Responses](#);
 - b) SONI TSO & TAO spend – [Details of costs & completion dates](#)
 - c) Strategic Environmental Assessment (SEA) – [Environmental Report](#); SONI also produced an Environmental Appraisal Report ([link here](#)) assessing TDPNI 2019 against the SEA for TDPNI 2018.
 - d) Habitats Regulation Assessment (HRA) – [Report](#).
- 1.6 This paper should be read in conjunction with:
 - a) Final TDPNI 2019-28 – [Report](#);
 - b) SONI report – UR Consultation - [Response to Stakeholder Views](#).

2. Overview

TDPNI

2.1 SONI's TDPNI 2019-28 is the second such plan that they have had to complete. This ten year plan undertakes a variety of functions including:

- a) Outlines the drivers for network development;
- b) Details the network investment needs;
- c) Lists the projects and activity required to address these needs;
- d) Describes the TSO's planning process;
- e) Details project information i.e. category, planning area, location, activity, estimated cost and completion date.

2.2 The TDPNI describes 81 different projects under this plan. Of this 40 are NIE Networks asset replacement projects and 41 are network development projects. On a region and project category basis, they are captured as follows:

Table 1: Projects by Planning Area and Category

Projects by Planning Area and Category				
Project Category	North-West	South-East	Both Areas	TOTAL
New Build	9	9	0	18
Uprate / Modify	8	7	5	20
Refurbish / Replace	0	0	0	0
Combination/ Other	0	3	0	3
TOTAL	17	19	5	41

2.3 SONI expenditure on transmission development projects is estimated at £42m for the ten year period. This figure is the amount estimated to be required to bring projects to the point of handover to NIE Networks.

2.4 Estimated TAO (Transmission Asset Owner) costs associated with these projects are £465m. The UR will determine the amount that can eventually be recovered from customer and generator tariffs for these projects. Link to these costs & estimated completion dates can be found [here](#).

- 2.5 To allow for comparison of network development projects on a year-on-year basis, data is represented at a fixed point in time referred to as the data freeze date. The data freeze date of TDPNI 2019-2028 was 1 January 2019.
- 2.6 In regards to the Strategic Environmental Assessment (SEA), it should be noted that the SEA has a five year lifespan and was carried out on the TDPNI 2018-2027. The environmental report and shadow Habitats Regulations report are available on SONI's Website.¹ The main findings of these assessments have influenced and are incorporated into the Plan.
- 2.7 SONI has also produced a report summarising the feedback received from its own consultation. It details the TSO responses to issues raised and subsequent changes made from the previous version of the TDPNI to the updated plan consulted upon by the UR.

¹ <http://www.soni.ltd.uk/the-grid/projects/tdpni/related-documents/>

3. Findings

Consultation Responses

3.1 Six responses to the UR consultation were received. These are published alongside this decision paper. Submissions were provide by

- NIRIG (Northern Ireland Renewables Industry Group);
- MEL (Mutual Energy Limited);
- SSE Electricity;
- Sinead McLaughlin MLA
- Kells Vocal
- Name withheld

3.2 Amongst the responses there was significant overlap of views regarding the importance & development of the North South Interconnector, reinforcement & increased capacity of the Moyle Interconnector. There were also significant overlapping views on the need for grid development to support increased grid capacity including renewable & decarbonisation targets.

3.3 This chapter summarises the stakeholder views and provides UR thoughts.

Table 2: Views and Responses

Issue / Response	Comments
TPDNI Data Freeze Date	The TDPNI Data freeze in January does not reflect an up-to-date picture of the references made to projects detailed within the 10 year plan. <i>[NIRIG and SSE]</i>
UR response	<p>While UR recognises the information gap, this data freeze date is set to allow for a sufficient time to plan, consult and publish all documents related to the TDPNI in line with License requirements and EU regulations.</p> <p>SONI has addressed these comments in their consultation responses and are working on reducing timeframes as the process for the TDPNI evolves.</p>
Investment and Capacity	The TDPNI does not reflect the required investment needed for increased capacity and connections to deliver decarbonisation targets. <i>[NIRIG and SML]</i>
UR Response	<p>In the absence of a policy framework or future decarbonisation targets, such conclusions cannot be reasonably known within the existing plan.</p> <p>The point is however accepted and it would be anticipated that future plans will address this issue comprehensively when local policy is agreed and formalised.</p>

ATR's	The plan does not make sufficient reference to Associated Transmission Reinforcements (ATR's) and their impact on making existing generation firm. A live web register on SONI website of all ongoing and planned grid developments including ATRs would be beneficial. <i>[NIRIG]</i>
UR Response	SONI separately publishes a quarterly update on ATR's. This would seem the natural place to address these issues. Initiatives submitted within SONI business plan for the enhancement of information and data flow to stakeholders will be considered within the price control process.
Interconnection	A request for clarity on the work required to maximise export capacity on the Moyle Interconnector. <i>[NIRIG and MEL]</i>
UR Response	UR welcomes that investigation has begun to remove the current Moyle Interconnector restrictions. Details have been provided by SONI on the works that would be required for re-enforcement of the Moyle Interconnector.
Coordination	A request for additional focus on coordination between NIE Networks and SONI. Also emphasis on the importance of network planning and development of the NI grid infrastructure for the benefit of the NI consumer. <i>[NIRIG and KELLS]</i>
UR Response	Under the terms of their licence, SONI already has legal obligations to coordinate planning with NIE Networks and EirGrid. A Planning Panel of SONI and NIE Networks also exists and meets every two months. No change is therefore anticipated within the existing TDPNI. UR would however be keen to investigate if future arrangements could be strengthened in this regard.
Scenario Planning	A request to provide a timeline for completion of the Tomorrows Energy Scenarios (TES) as these will inform the energy strategy and TDPNI and future investment. <i>[NIRIG]</i>
UR Response	UR agrees with this request and shares NIRIG's view on the work completed to date by SONI on the TES. SONI informed us that within the next plan they were planning to refer to the TES in 2020 but fully address its implications from 2021. UR would expect Future Scenarios to be incorporated into transmission plans from 2021.
Technology	Suggestion and grid development to enable higher levels of renewable energy, grid capacity, networks access and an emphasis on innovation and future technologies related to battery storage, heating technologies and the increased micro generation should be encouraged. <i>[SML and NIRIG]</i>
UR Response	UR agrees that innovation and development of new grid technologies is important to the security of supply within NI. This should be identified with SONI TES.
Economics and Cost	The economic and social benefit of investment in a more robust network needs to be made e.g. grid access for projects within the North West. <i>[SML]</i>
UR Response	The TDPNI does not seem to the UR to be the appropriate vehicle to

	<p>detail the wider economic benefits of the transmission system.</p> <p>However the UR does acknowledge and support the requirement for grid access to support the growing requirements for businesses throughout NI.</p> <p>Further economic studies detailing the economic rationale (with figures) of certain projects may be of some use i.e. North South Interconnector reducing constraint costs etc. This may be a point of learning for future development plans.</p>
North – South Interconnector	<p>The completion of the North –South interconnector and its role in the security of supply for NI renewables. The benefits of its completion and impacts on pricing for NI consumers. Though SONI should be investigating contingency plans for the transmission system should the North South not be developed? <i>[NIRIG and SML]</i></p>
UR Response	<p>UR agrees that the completion of the North – South Interconnector is of great significance to the all-island grid infrastructure from a network and retail perspective. Contingency measures should be addressed by SONI in the event of delayed development of the North South interconnector.</p>
Renewables & NI Constraints / Dispatch Down	<p>The development of the transmission system along with the North – South Interconnector to reduce levels of dispatched down / constrained wind within NI including how these levels will lead to the SNSP and decarbonisation targets. <i>[NIRIG]</i></p>
UR Response	<p>UR welcomes the report findings provided within the NIRIG consultation response and acknowledges that ongoing infrastructure may be required to reach renewable targets. The safe and secure operation of the current transmission system is vitally important to NI consumers, therefore to balance the system, these levels of constraints are actions required to be taken by SONI in the best interests of the network.</p>

- 3.4 SONI has in parallel conducted a review of stakeholder views. Their comments can be found in the report published alongside this document.
- 3.5 Within their responses, SONI has helpfully provided additional detail where required. TSO thoughts are also largely aligned with UR views.

4. Conclusions

Decisions

- 4.1 UR welcomes the positive engagement from stakeholders on the second TDPNI to be completed by SONI. Value and transparency has been provided as a result of the work, though improvements are possible.
- 4.2 It is the decision of the UR that the 2019 TDPNI be approved and published accordingly.
- 4.3 As indicated in the consultation responses and UR's review of the plan, there are a number of information areas which we would like to see considered in future plans. This includes the following:
- 1) Detail on renewable capacity including projected connection dates per project.
 - 2) Continued monitoring of delivery against planned projects including reasoning for revised completion dates/costs
 - 3) Monitoring of estimated versus actual spend on completed projects
 - 4) Incorporation of Future Energy Scenarios work into the TDPNI on completion of Tomorrow Energy Scenario work streams.
 - 5) Detail on the economic costs and benefits of certain projects or information on constraint problems which provide a context for action.
- 4.4 We are currently reviewing the next SONI price control and will shortly be publishing our Draft Determination for 2020-2025. Within this we will consider SONI's processes to deliver future projects, how to facilitate increased transparency by providing open data and improved coordination with NIE Networks and other stakeholders.
- 4.5 As the Department of Economy develops its new energy policy we expect SONI to consider the implications and incorporate where relevant within future Transmission Plans.