



TRANSMISSION INTERFACE ARRANGEMENTS BETWEEN

SONI LTD

AND

NORTHERN IRELAND ELECTRICITY NETWORKS LTD

TIA SUBSIDIARY DOCUMENT NO 4

ROUTE CORRIDORS AND SITE LOCATIONS

27 FEBRUARY 2023

Transmission Interface Arrangements between SONI Ltd and Northern Ireland Electricity Networks Ltd

TIA Subsidiary Document No 4

Route Corridors and Site Locations

Document Authorisation

For and on behalf of SONI Limited

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1 Introduction

- 1.1 This TIA Subsidiary Document (TIASD) is one of a series which collectively defines the pre-construction processes required to plan and develop a large-scale infrastructure project identified in the Transmission Development Programme.
- 1.2 However, the Parties consider that all the steps set out in each TIASD in the series may not be necessary in every case, taking into account the scale, location and technology of a particular project. Where the Parties agree, the application and scope of each TIASD in the series may be varied or scaled back in appropriate circumstances.
- 1.3 This TIASD should be read in conjunction with the Transmission Interface Arrangements (TIA). It can only be changed in accordance with Section P of the TIA.
- 1.4 A copy of this TIASD may be obtained on each Party's website, subject to the provisions of Section A, paragraph 3 of the TIA.
- 1.5 Terms which are capitalised shall be interpreted according to the definitions in Section 9 of this TIASD.
- 1.6 This TIASD refers to or summarises the relevant provisions of the TIA applicable to the process described in this TIASD in order to place that process in context. In the event of any inconsistency between the provisions of this TIASD and the TIA the provisions of the TIA shall prevail. It is not the intention of this TIASD to revise or amend the rights and obligations of the Parties as stated in the TIA.
- 1.7 In the event of any inconsistency between the provisions of this TIASD and another TIASD, the Parties shall agree which provision(s) shall take precedence pending such amendment of the appropriate TIASD as may be required under Section P of the TIA.

2 Overview

- 2.1 Figure 1 illustrates a high-level summary of the overall pre-construction process and lists the six TIASDs in the series. This TIASD covers steps 9, 10 and 11.
- 2.2 It specifies the process to be followed when carrying out Route Corridor Studies (as per Section C sub-paragraph 10.6.3 and Section D sub-paragraph 9.6.3 of the TIA) in order to identify Route Corridors and then a Preferred Route Corridor within which new transmission infrastructure can be constructed, for example overhead transmission lines, underground transmission cables or substations.
- 2.3 A process map is contained in Appendix A of this document and the following sections provide additional detail to that contained in the process map.
- 2.4 The Parties recognise that the design evolution is an iterative process and achieving good design which best satisfies the Parties' legal and regulatory obligations requires:
 - (i) careful environmental assessment of the Study Area
 - (ii) the application of established design and construction policies, and
 - (iii) due consideration of consultation responses and representations from stakeholders, including landowners.

- 2.5 Given that the responsibilities for these activities are split between the Parties, each having its own priorities, the Parties recognise the importance of co-ordination and co-operation in determining the optimal design, with the aim of seeking to achieve the same outcome that would be accomplished if only one party was undertaking the process. The outcome should be that which is in the best interest of consumers having due regard for the environment and stakeholders.
- 2.6 The process map does not illustrate any feedback loops. It is felt that to include such loops would cause the process map to be unnecessarily complex. However, the Parties shall frequently review and back-check earlier decisions to establish if they are still sound. Where new information is acquired which challenges the validity of an earlier decision then the Parties shall reconsider that decision taking the new information into account in order to establish if the decision should still stand or not.
- 2.7 This TIASD does not define specific timescales nor deadlines for activities. These could not be defined in a generic document. TIA Subsidiary Document 3 requires the Parties to agree and comply with, as far as practicable, a Pre-construction Programme prior to the commencement of pre-construction works. Therefore, this document should be read in conjunction with the Pre-construction Programme prepared under TIA Subsidiary Document 3.
- 2.8 The arrows within the process map solely indicate the sequence of activities and should not be interpreted in any other way, such as exchanges of data.
- 2.9 The process starts after a Preferred Transmission Reinforcement Option (PTRO) has been selected to be taken forward for further development (see TIASD 2). The PTRO may be defined simply by identifying circuit start and end points. A technology may also have been chosen overhead or underground. Decisions may also have been made regarding the transmission infrastructure required at the circuit start and end points.
- 2.10 The process consists of seven principal phases:
 - (i) Appointment of a project team
 - (ii) The delineation of a Study Area
 - (iii) Constraint mapping within the Study Area and identification of Route Corridors/site locations
 - (iv) The appraisal of each Route Corridor
 - (v) Identification of the initial Preferred Route Corridor/site locations
 - (vi) A consultation on the initial Preferred Route Corridor/site locations
 - (vii) Confirmation of the Preferred Route Corridor/site locations to be taken forward for Route Alignment.

3 Project Team

- 3.1 A joint project team shall be appointed at the outset to ensure the efficient development of the Preferred Route Corridor. The team will contain representatives from each Party.
- 3.2 The team will work closely throughout the process to ensure effective communication and avoid situations where the ownership of, or responsibility for, the steps within the process is constantly changing or shifting. The team shall work in an efficient, coordinated and co-operative manner.

4 Study Area

- 4.1 NIE Networks shall make use of the Functional Specification to commence development of the Design Specification. High-level proposals shall be developed for structure types, heights, conductor selection and any other technical matters which may have a bearing on the definition of the Study Area.
- 4.2 SONI shall define a Study Area within which the PTRO can be developed. The Study Area may be discussed with relevant statutory bodies and, if so, SONI shall lead the discussions and NIE Networks shall provide support, if requested.
- 4.3 The Study Area is essentially the shortest distance between the circuit start and end points plus a reasonable zone of influence either side. The Study Area may need to be extended or varied due to, for example, environmental factors, geographical features and existing electricity or other infrastructure. NIE Networks shall provide support to SONI regarding asset related considerations.
- 4.4 It is essential that the Study Area is able to accommodate the PTRO. It is therefore essential that NIE Networks reviews the proposed Study Area to ensure that the infrastructure that NIE Networks envisages will be required can be constructed and maintained within the Study Area and accommodated alongside any existing electricity infrastructure.
- 4.5 The Parties will jointly review and agree the Study Area.

5 Route Corridor Study and Identification of Route Corridors/site locations

- 5.1 SONI will undertake a Route Corridor Study in order to identify potential Route Corridors and potential site locations within which the PTRO could be located. NIE Networks, as the asset owner, shall provide support to SONI regarding asset related considerations. The Route Corridor Study will mainly entail a desktop constraint mapping exercise to identify environmental, geographical and other relevant constraints within the Study Area. It may also require drive through or walk over surveys.
- 5.2 SONI and NIE Networks shall jointly agree if earthing studies are required which will help inform the selection of suitable site locations
- 5.3 Following completion of the Route Corridor Study SONI shall identify potential Route Corridors and suitable site locations for transmission infrastructure.
- 5.4 SONI shall document the results and provide a copy to NIE Networks.
- 5.5 NIE Networks shall assess the potential Route Corridors and site locations for transmission infrastructure from an asset owner perspective and provide the results of the assessment to SONI.
- 5.6 SONI shall select the potential Route Corridors and potential site locations, taking due account of NIE Networks' assessments. Where SONI's decision is inconsistent with NIE Networks' views an explanation of the decision shall be provided to NIE Networks.

6 Appraisal of each Route Corridor

6.1 SONI shall carry out a detailed appraisal of each Route Corridor by assessing factors considered significant in selecting the Preferred Route Corridor. The factors might

- include, for example, environmental (ecology, cultural heritage, landscape, water and designated areas) and socio-economic (economic activity, people / communities and planned developments).
- 6.2 NIE Networks shall also carry out a detailed appraisal of each Route Corridor by assessing factors considered significant in selecting the Preferred Route Corridor. NIE Networks' appraisal will be from an asset owner perspective and the factors considered will be, as a minimum, technical, construction, cost and safety. NIE Networks will provide the results of its appraisal to SONI.
- 6.3 SONI shall give due consideration to NIE Networks' appraisal, select the initial Preferred Route Corridor/site locations to be taken forward for consultation and finalise the Route Corridor Study report. A copy shall be provided to NIE Networks. Where the conclusions of the report are inconsistent with NIE Networks' appraisal an explanation shall be provided to NIE Networks.

7 Consultation Process

- 7.1 It may be necessary at this stage to re-assess and update the Stakeholder engagement strategy¹.
- 7.2 The Parties shall prepare the required documentation and consultation materials relevant to their areas of expertise to enable key stakeholders, statutory consultees and local communities to understand the Route Corridor Study and the selection of the initial Preferred Route Corridor/site locations, ensuring an effective consultation. This could include reports, maps, environmental and technical assessments and explanations of constraints within the Route Corridors.
- 7.3 NIE Networks shall also provide consultation materials and resources regarding any associated or proximate developments on the Distribution System.
- 7.4 The Parties shall jointly undertake the consultation, each providing sufficient resources to support their areas of expertise.

8 Consideration of Consultation Feedback

- 8.1 Following the consultation each Party shall document feedback relevant to its business. The Parties shall meet and work co-operatively to develop a comprehensive and accurate record of the consultation which will form part of the application for Consent and to consider whether or not there is a need to amend the Preferred Route Corridor and/or site locations.
- 8.2 SONI shall confirm the Preferred Route Corridor/site locations to be taken forward for Route Alignment taking due account of NIE Networks' views and stakeholder feedback. Where SONI's selection is not consistent with NIE Networks' views an explanation of the decision shall be provided to NIE Networks.
- 8.3 SONI shall finalise the consultation report and publish it on the SONI website, making public its decision on the Preferred Route Corridor/site locations.

¹ The Stakeholder Engagement strategy sets out the stakeholders relevant to the project and the planned engagement approach such as how and when engagement would be implemented.

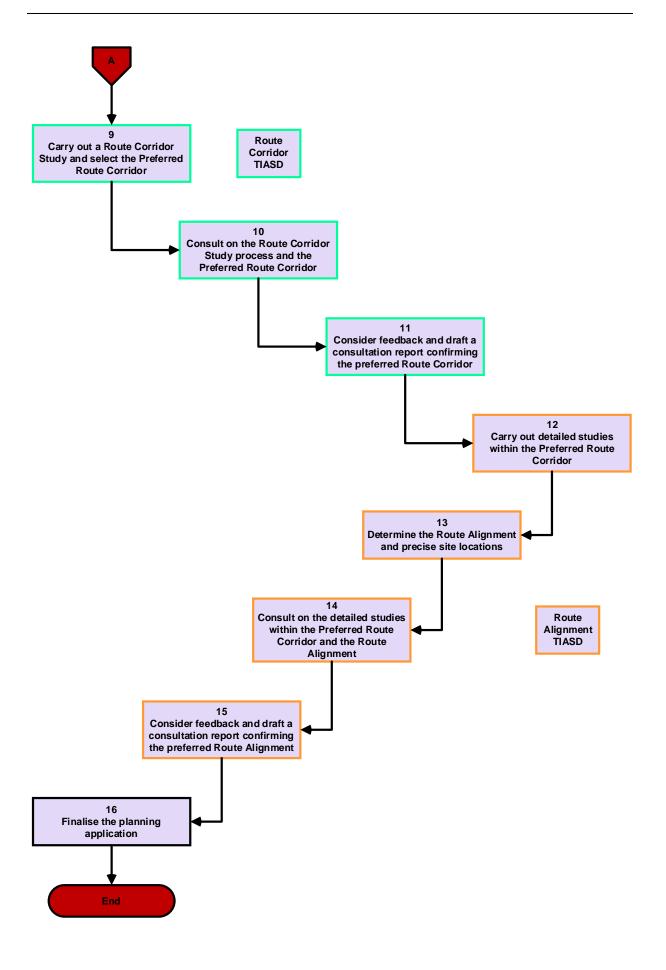
9 Definitions

Term	Definition
Authorised Area	As defined in NIE Networks' licence.
Authority	The Utility Regulator as established under the Energy Order.
Consent	The planning permission or approval under primary or subordinate legislation, in particular Article 40 of the Order.
Design Specification	The document referred to in the TIA, Section C, paragraph 10, Section D, paragraph 9 and specified in schedule 7.
Distribution System	The electric lines within the Authorised Area, owned by and operated by NIE Networks (but not, for the avoidance of doubt, any lines forming part of the Transmission System) and any other electric lines which the Authority may specify as forming part of the Distribution System, including (in each case) any electrical plant and/or meters used in connection with distribution.
Energy Order	The Energy (Northern Ireland) Order 2003.
Functional Specification	The document referred to in the TIA, Section C, paragraph 9, Section D, paragraph 8 and specified in Schedule 6.
Order	The Electricity (Northern Ireland) Order 1992.
Party or Parties	SONI Ltd ("SONI") and Northern Ireland Electricity Networks Ltd ("NIE Networks").
Pre-construction Programme	The programme prepared in accordance with TIA Subsidiary Document 3.
Preferred Route Corridor	The Route Corridor identified by SONI to be taken forward for the development of the Route Alignment;
Preferred Transmission Reinforcement Option or PTRO	The Transmission Reinforcement Option identified by SONI to be taken forward for Route Corridor Studies.
Route Alignment	A precise route for an overhead transmission line or underground transmission cable within the Preferred Route Corridor.
Route Corridor	A swathe of land between the proposed start and end points, within which an overhead transmission line or underground transmission cable could be located.
Route Corridor Study	An appraisal of the planning and environmental constraints to identify potential Route Corridor options and potential transmission substation site locations within a defined Study Area.

Term	Definition
Study Area	An area within which the Preferred Transmission Reinforcement Option may be developed and which will be examined by gathering and assessing environmental, geographical and other relevant information.
TIA Subsidiary Document or TIASD	A subsidiary document forming part of the TIA as listed in Schedule 1 of the TIA.
Transmission Interface Arrangements or TIA	The document of that name prepared pursuant to Condition 18 of the SONI Transmission Licence and Condition 17 of NIE Networks Transmission Licence.
Transmission Licence	A licence to participate in the transmission of electricity granted under Article 10(1)(b) of the Order.
Transmission System	The system owned by NIE Networks and operated by SONI consisting (wholly or mainly) of high voltage lines and electrical plant operating at a nominal voltage of 110 kV or greater.

Start Need Case **TIASD Develop a Need Case** 2 Option Identify a list of technically Appraisal feasible options TIASD Carry out a high-level appraisal of the technically feasible options and identify a short list of feasible options Carry out a more detailed appraisal of the short listed options and select the preferred option Consult on the appraisal process and preferred option Consider feedback and draft a consultation report confirming the preferred option Pre-construction Develop a project-specific Pre-construction Programme **Programme TIASD** 8 **TNPP TNPP** TIASD

Figure 1 – High-level Summary of the Overall Pre-construction Process



Appendix A - Process Map

