



TRANSMISSION INTERFACE ARRANGEMENTS BETWEEN

SONI LTD

AND

NORTHERN IRELAND ELECTRICITY NETWORKS LTD

TIA SUBSIDIARY DOCUMENT No 5

ROUTE ALIGNMENT AND SITE LOCATIONS

27 FEBRUARY 2023

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

TIA Subsidiary Document No 5

Route Alignment and Site Locations

Document Authorisation

For and on behalf of SONI Limited

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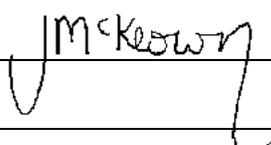
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Table of Contents

	Page
1 Introduction.....	1
2 Overview.....	1
3 LIDAR Survey and Information Gathering within the Preferred Route Corridor.....	2
4 Optimisation of the Route Alignment and Substation Conceptual Designs.....	3
5 Consultation Process	4
6 Consideration of consultation feedback	4
7 Definitions	6
Figure 1 – High-level Summary of the Overall Pre-construction Process.....	8
Appendix A – Process Map	10

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 7 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 12 – 15.
- 2.2 It specifies the process to be followed when developing a Route Alignment and substation conceptual designs under Section C sub-paragraph 10.6.3 and Section D sub-paragraph 9.6.3 of the TIA. It is undertaken following a Route Corridor Study and the selection of the Preferred Route Corridor and preferred general site locations.
- 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 Preferred Route Corridor
 - (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 Route Alignment process starts after a Preferred Transmission Reinforcement Option (PTRO) has been selected and the Preferred Route Corridor and preferred general site locations have been identified (see TIASD 4).
- 2.10 The Route Alignment and substation conceptual designs process consists of four principal phases:
- (i) A LIDAR Survey of the Preferred Route Corridor and preferred general site location(s) and the gathering of environmental, technical, economic, deliverability and other relevant local data,
 - (ii) The development of the Route Alignment and substation conceptual designs within the Preferred Route Corridor,
 - (iii) A consultation process to seek views on the Route Alignment and substation conceptual designs, and
 - (iv) Consideration of consultation feedback and a decision on the Route Alignment and substation conceptual designs to be taken forward in the application for Consents and the acquisition of Land Rights.

3 LIDAR Survey and Information Gathering within the Preferred Route Corridor

- 3.1 This phase of the process commences with a LIDAR Survey of the Preferred Route Corridor and preferred general site location(s) to develop a 3-D model of the area to be studied.
- 3.2 SONI shall contact NIE Networks to enquire if NIE Networks also intends to procure a LIDAR Survey in the area within similar timescales. If so, the Parties shall agree the most economical way to proceed.
- 3.3 The Party procuring the LIDAR Survey shall ensure the survey fully covers the relevant area and, on completion, shall provide a copy of the LIDAR Data to the other Party in an agreed form and level of detail.

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- 3.4 On completion of the LIDAR Survey and receipt of the LIDAR Data, NIE Networks shall commence the development of the Route Alignment and substation conceptual designs ensuring that its progress is fully co-ordinated with SONI's activities. In doing so, NIE Networks shall consider capital costs, ease of maintenance, constructability and safety. As the design work progresses NIE Networks shall keep SONI informed of the development of the Route Alignment and substation conceptual designs by providing monthly updates.
- 3.5 In parallel with this, SONI shall gather further environmental and geographical data, assess any development plans in the area and examine any other local matters which may have a bearing on the Route Alignment or substation conceptual designs. SONI shall share these data with NIE Networks.
- 3.6 NIE Networks shall consider the additional data provided by SONI then finalise and provide to SONI the Route Alignment and substation conceptual designs.

4 Optimisation of the Route Alignment and Substation Conceptual Designs

- 4.1 The Parties shall meet and work co-operatively to optimise the Route Alignment and substation conceptual designs, including any mitigation measures, which can be taken forward to consultation.
- 4.2 The Parties recognise that each will have different licence obligations and objectives but each agrees to attempt to resolve any differences by developing a Route Alignment and substation conceptual designs which are in the best interest of consumers taking due account of the environment.
- 4.3 This may involve the identification of mitigation measures, such as line deviations and partial undergrounding.
- 4.4 NIE Networks shall, in accordance with the requirements of the Functional Specification, select the preferred circuit Route Alignment, structure locations and the preferred transmission substation conceptual design taking due account of SONI's views. Where NIE Networks' decision is not consistent with SONI's views an explanation of the decision shall be provided to SONI.
- 4.5 NIE Networks shall further develop any designs and documentation to the extent required for consultation, such as:
- the preparation of design drawings for circuits and substations, and
 - the preparation of documents explaining the proposed construction methodology and working practices, to the level of detail as is available at the particular time.
- 4.6 NIE Networks shall share the above documentation with SONI in a timely manner and in a format agreed with SONI.

5 Consultation Process

- 5.1 It may be necessary at this stage to re-assess and update the Stakeholder engagement strategy¹.
- 5.2 In preparation for the consultation, SONI shall carry out land registry searches and commence landowner communication.
- 5.1 SONI shall identify names and addresses of landowners and contact them directly or indirectly by appropriate means. Where SONI has contacted a landowner and the landowner has provided SONI with details of an unresolved Land Rights issue, matter or dispute affecting NIE Networks then SONI shall pass these details to NIE Networks and request NIE Networks to contact the landowner to attempt to resolve the matter. NIE Networks shall keep SONI updated on its engagement with the landowner regarding resolution of the unresolved Land Rights issue, matter or dispute. Prior to SONI landowner engagement, SONI may contact NIE Networks to seek any relevant information on any unresolved land rights issues or matters that may arise during discussions with the landowner.
- 5.2 SONI shall identify the approximate locations of equipment and structures to each landowner to enable them to have a better understanding of how the proposals could affect them.
- 5.3 The Parties shall prepare the required documentation and consultation materials relevant to their areas of expertise to enable relevant stakeholders, statutory consultees and local communities to understand the proposed development and selection of the Route Alignment and substation conceptual designs ensuring an effective consultation. This could include photomontages of the project once constructed, reports, maps, environmental and technical assessments and explanations of constraints within the Preferred Route Corridor.
- 5.4 NIE Networks shall also provide consultation materials and resources regarding any associated or proximate developments on the Distribution System.
- 5.5 The Parties shall jointly undertake the consultation, each providing sufficient resources to support their areas of expertise.

6 Consideration of consultation feedback

- 6.1 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 Route Alignment or substation conceptual designs.
- 6.2 NIE Networks shall confirm the Route Alignment and substation conceptual designs to be taken forward in the application for Consents and the acquisition of Land Rights taking due account of SONI's views and stakeholder feedback. Where NIE Networks' decision is not consistent with SONI's views an explanation of the decision shall be provided to SONI.

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.

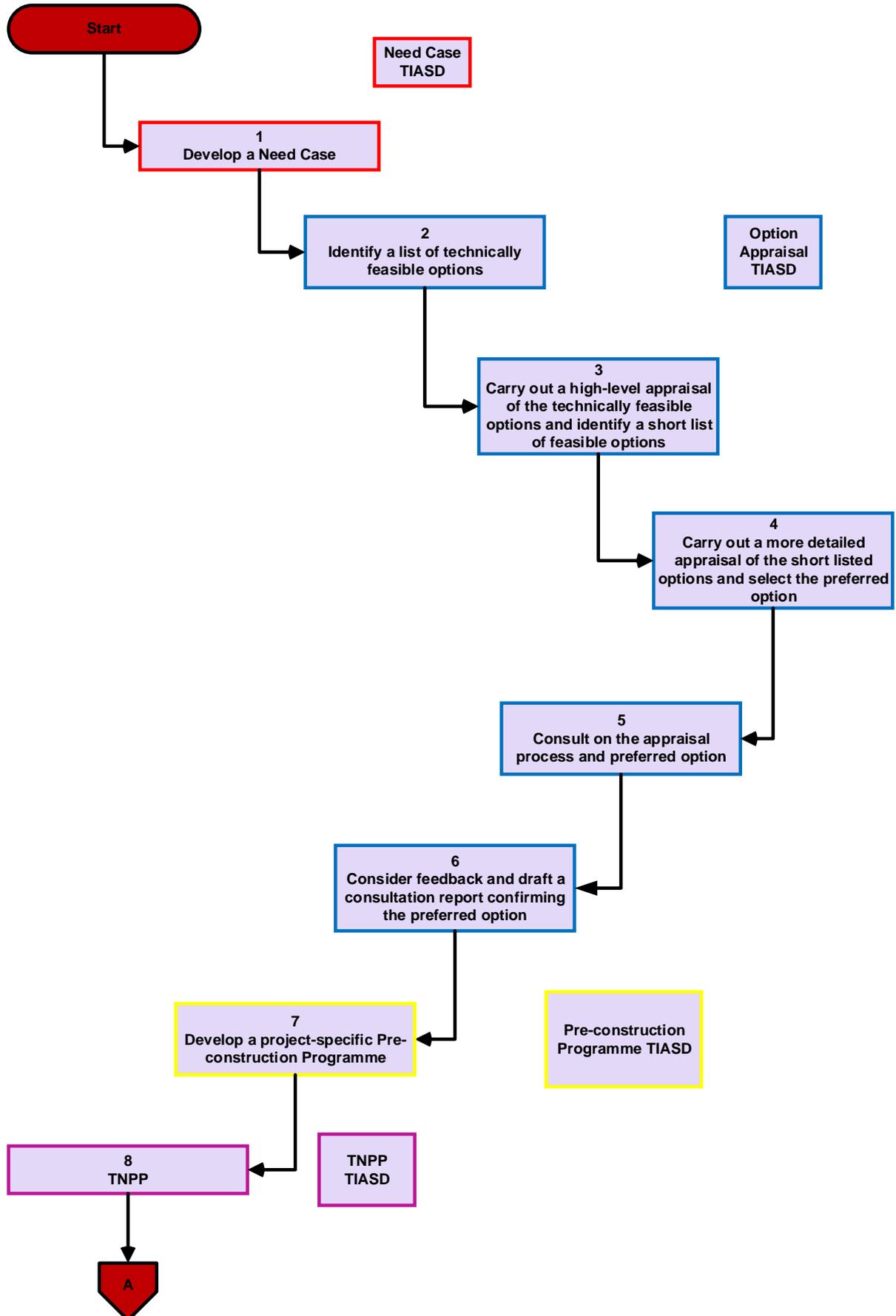
6.3 SONI shall finalise the consultation report.

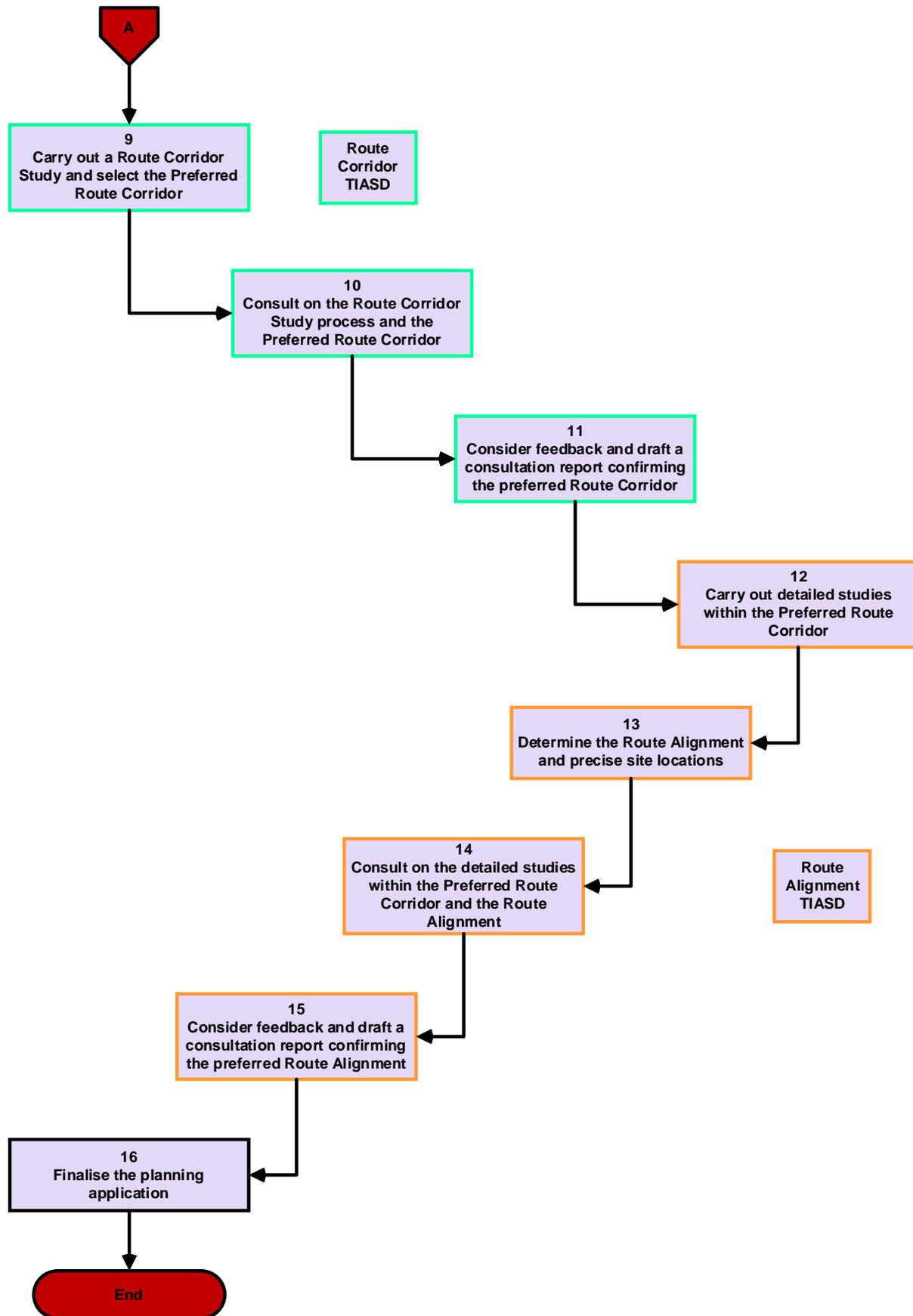
7 Definitions

Term	Definition
Apparatus	All equipment in which electrical conductors are used, supported or of which they may form a part.
Authorised Area	As defined in NIE Networks' licence.
Authority	The Utility Regulator as established under the Energy Order.
Connection Agreement	An agreement between SONI and a User setting out the terms relating to a connection to the Transmission System.
Consent	The planning permission or approval under primary or subordinate legislation, in particular Article 40 of the Order.
Distribution System	The electric lines within the Authorised Area, owned 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	As defined in the TIA.
Grid Code	The document of that name prepared pursuant to Condition 16 of SONI's Transmission Licence.
Land Rights	means the legal right required for the installation and retention of the Plant and Apparatus by NIE Networks as asset owner (whether by agreement or by use of compulsory powers) by means of wayleaves, easements, access rights, land options, leases and other legal rights.
LIDAR Data	Digital imagery and other relevant data sets of the Preferred Route Corridor and potential substation locations generated by a LIDAR Survey.
LIDAR Survey	An airborne survey using laser light to make a 3-D representation of the landscape.
Order	The Electricity (Northern Ireland) Order 1992
Party or Parties	A person(s) who is bound by the TIA by virtue of being a party to the TIA.
Plant	Fixed and moveable items used in the generation and/or supply and/or transmission of electricity other than Apparatus.
Pre-construction Programme	The programme prepared in accordance with TIA Subsidiary Document 3

Term	Definition
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 option identified by SONI to be taken forward for a Route Corridor Study.
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 a potential Route Corridor(s) and potential transmission substation site locations within a defined Study Area.
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 SONI's 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.
User	Any person who is a "user" under particular sections of the Grid Code and has a Connection Agreement.

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





Appendix A – Process Map

