



**TRANSMISSION INTERFACE ARRANGEMENTS BETWEEN**

**SONI LTD**

**AND**

**NORTHERN IRELAND ELECTRICITY NETWORKS LTD**

**TIA SUBSIDIARY DOCUMENT NO 1**

**DEVELOPMENT OF A NEED CASE**

**27 FEBRUARY 2023**



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

**TIA Subsidiary Document No 1**

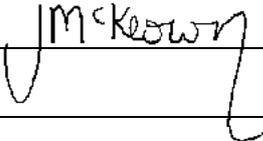
**Development of a Need Case**

**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 6 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 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 step 1.
- 2.2 It specifies the process to be followed when developing a Need Case, the purpose of which is to explain to stakeholders and other interested parties why it is essential to consider a Modification to the Transmission System.
- 2.3 In developing a Need Case it is important that potential solutions, costs, locations of new assets and technology choices should not be considered. The identification of potential solutions to a Need Case is addressed later in the pre-construction process.
- 2.4 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.
- 2.5 The scope of this TIASD does not include transmission works relating to new or modified connections to the Distribution System.
- 2.6 The Parties shall frequently backcheck and review data and assumptions which support the Need Case to ensure its continuing accuracy. Where new information emerges which could challenge the Need Case, the Parties shall consider that new information in order to establish if the Need Case remains valid, needs updated or if the need no longer exists.

- 2.7 This document 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 Development of a Need Case consists of three principal phases:
- (i) Development and implementation of the Annual Planning Programme which sets out the timescales for:
    - (a) SONI's annual review of the future requirements of the Transmission System and the performance of the system against the Transmission System Security and Planning Standards
    - (b) NIE Networks' annual review of the condition of its assets and the development of the Asset Replacement Plan
  - (ii) The development of the Transmission Network Annual Report (the "TNAR"), and
  - (iii) The development of Need Cases which define the need to assess the potential non-compliances and asset replacement requirements.

### **3 Annual Planning Programme**

- 3.1 Section C, paragraph 3 of the TIA requires the Parties to agree the Annual Planning Programme by the end of September each year. The Annual Planning Programme shall set out the timescales for a number of activities, the following being relevant to this TIA Subsidiary Document:
- (i) NIE Networks to provide to SONI a draft Asset Replacement Plan in respect of the current and each of the following nine financial years, and
  - (ii) SONI to provide to NIE Networks the TNAR.
  - (iii) SONI to provide to NIE Networks the Transmission Investment Plan.

- 3.2 Each Party agrees to carry out the activities assigned to it under the Annual Planning Programme.

### **4 Transmission Network Annual Report**

- 4.1 Section C, paragraph 4 of the TIA requires the Parties to agree the Transmission Network Annual Report. In order to enable SONI to commence work on the TNAR NIE Networks shall, in accordance with the Annual Planning Programme, provide its Asset Replacement Plan to SONI in an agreed format.
- 4.2 SONI shall take account of NIE Networks' requirements for asset replacement when carrying out system studies.
- 4.3 SONI shall promptly notify NIE Networks if it anticipates difficulties in accommodating NIE Networks requirements for asset replacement and provide the reasons why.

- 4.1 Following completion of the system studies SONI shall prepare and, in accordance with the Annual Planning Programme, provide to NIE Networks the TNAR which shall assess the compliance of the Transmission System in the current and each of the following nine Financial Years and shall set out:
- (i) details of any potential non-compliances predicted to occur in that same period; and
  - (ii) likely requirements to replace assets in that same period.

NIE Networks and SONI shall jointly review the TNAR and then agree the Transmission Development Programme.

## **5 Need Case**

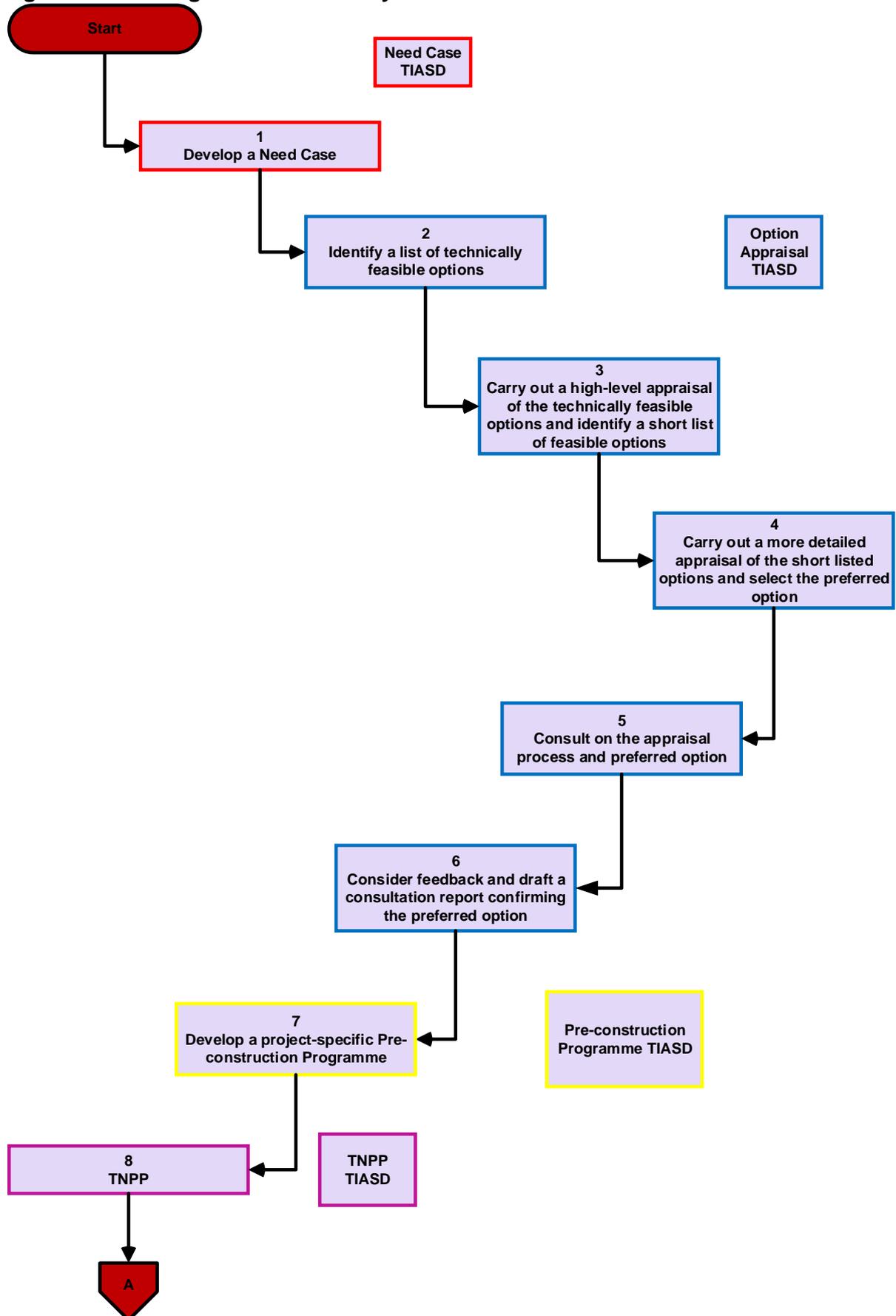
- 5.1 A Need Case shall be prepared for each project in accordance with an agreed prioritisation list.
- 5.2 Where the Need Case is driven by anticipated changes in flows on the Transmission System then SONI shall draft the Need Case.
- 5.3 Where the Need Case relates to asset replacement then NIE Networks shall draft the Need Case.
- 5.4 Each Need Case shall not address more than one need. For example, while it is possible that an asset replacement need and a load related need are expected to arise near to each other on the Transmission System, and both might ultimately be resolved by a single solution, these should be the subject of separate Need Cases.
- 5.5 Need Cases may vary in format and content depending on the circumstances but, unless otherwise agreed between the Parties, each Need Case shall describe the following matters:
- (i) A description of the relevant transmission infrastructure in the area under consideration setting out, where relevant, circuit configurations, ratings, age and reliability
  - (ii) A summary of the circumstances requiring the Parties to consider Modifications to the Transmission System including, where relevant, system performance, changes in system or User requirements and system availability
  - (iii) A description of the consequences of doing nothing
  - (iv) Dates by which Modifications are likely to be required, and
  - (v) A conclusion on system need.

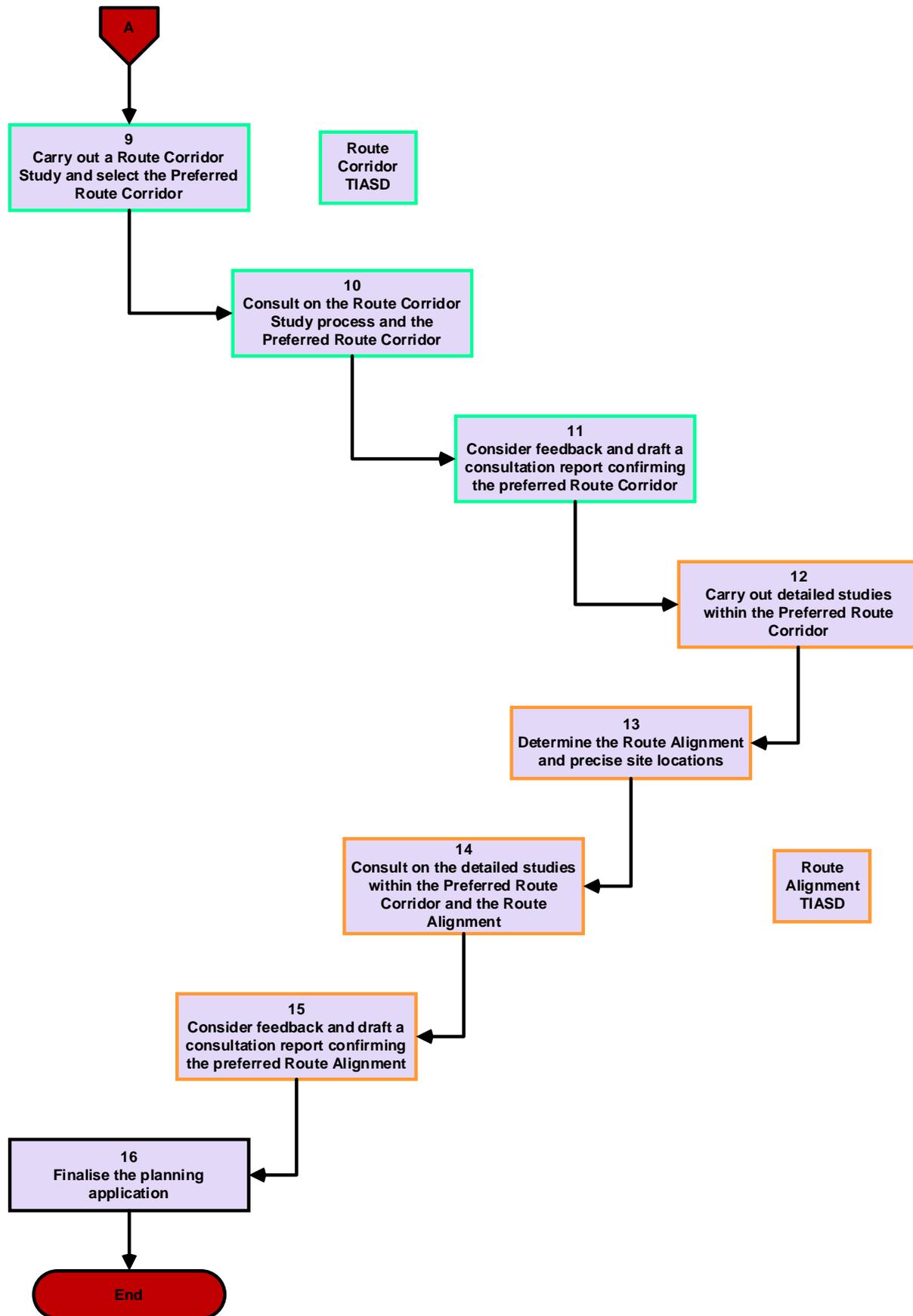
## 6 Definitions

Term	Definition
All-Island Transmission Networks	The Transmission System and the RoI Transmission System taken together.
Annual Planning Programme	The document defined in Section C, paragraph 3 of the TIA.
Apparatus	All equipment in which electrical conductors are used, supported or of which they may form a part.
Asset Replacement Plan	NIE Networks' annual plan for the replacement, renovation, modification or alteration of its assets in respect of the following nine financial years.
Authorised Area	As defined in NIE Networks' licence.
Authority	The Utility Regulator, as established under the Energy (Northern Ireland) Order 2003.
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.
Grid Code	The code of that name drawn up pursuant to SONI's Transmission Licence as amended from time to time in accordance with SONI's Transmission Licence.
Modification	Actual or proposed replacement, renovation, modification, alteration, or construction by or on behalf of a User or NIE Networks to either the User's Plant or Apparatus or the manner of its operation or NIE Networks' Plant or Apparatus or the manner of its operation
Need Case	A document which explains the need to consider Modifications to the Transmission System in order to ensure the Parties continue to comply with the relevant Transmission Licence. It explains the consequences of doing nothing but does not propose solutions to resolve the Need Case.
New Connection	A new or proposed connection for which SONI has received a User Application.
Order	The Electricity (Northern Ireland) Order 1992

<b>Term</b>	<b>Definition</b>
Party or Parties	SONI Ltd (“SONI”) and Northern Ireland Electricity Networks Ltd (“NIE Networks”).
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.
RoI Transmission System	The system of electric lines operated by EirGrid.
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 Electricity (Northern Ireland) Order 1992.
Transmission Network Annual Report or TNAR	The document referred to in Section C, paragraph 4 of the TIA.
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.
Transmission System Security and Planning Standards	The document referred to in Condition 20 of the SONI Transmission Licence.
User	Any person who is a “user” under particular sections of the Grid Code and has a Connection Agreement
User Application	An application made by a User to SONI in respect of a New Connection or a Modification or use of the All-Island Transmission Networks.

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





**Appendix A – Process Map**

