

STCP21-1 Issue 003 Network Options Assessment

STC Procedure Document Authorisation

Company	Name of Party Representative	Signature	Date
National Grid Electricity System Operator Ltd			
National Grid Electricity Transmission plc			
SP Transmission plc			
Scottish Hydro Electric Transmission plc			
Offshore Transmission Owners			

STC Procedure Change Control History

Issue 001	20/04/2011	New procedure
Issue 002	10/08/2016	Issue 002 incorporating PM092
Issue 003	01/04/2019	Issue 003 incorporating National Grid Legal Separation changes

1 Introduction

1.1 Scope

1.1.1 This procedure describes the process for applying the Network Options Assessment (NOA) methodology, and producing and publishing the Network Options Assessment Report.

1.1.2 This procedure applies to NGESO and each TO. For the purposes of this document, TOs are:

- NGET;
- SP Transmission plc;
- SHE Transmission;
- All OFTOs.

1.1.3 This procedure defines the tasks, formal documentation, interface requirements, timescales and responsibilities that apply to NGESO and the TOs.

1.1.4 NGESO shall be responsible for preparing and publishing the NOA report in accordance with its Transmission Licence. This will include:

- submitting proposed changes to the NOA methodology to the Authority for approval;
- creating the Future Energy Scenarios;
- carrying out analysis on the Transmission System;
- producing the relevant commentaries and recommendations;
- collating and compiling the NOA report; and
- making the NOA report publicly available.

1.1.5 Each TO shall be responsible for supporting NGESO in applying the NOA methodology, and producing and publishing the NOA report. This will include:

- creating and updating the GB network models for their TO network;
- carrying out analysis on its Transmission System where agreed;
- producing the deliverables relevant to the respective Transmission Owners network (reinforcement options, tables, figures, text etc.) to be included in the NOA; and
- producing relevant commentaries.

1.2 Objectives

1.2.1 The objective of this procedure is to detail how the annual Network Options Assessment will be co-ordinated across the SO ~ TO interface and the TO ~ TO interface, so as to ensure that responsibilities are clear and Transmission Licence conditions are satisfactorily discharged.

2 Key Definitions

2.1 For the purposes of STCP 21-1:

- 2.1.1 **Consultation Close Date** means the closing date for the NOA Annual Review consultation. This date is based on a fixed period of time following the NOA Report's publication each year and described by the NOA Report methodology. This is the date that NGENSO cease to consider comments from industry participants for that year's publication of the NOA report.
- 2.1.2 **Stakeholders** mean any user of the NOA including TOs.
- 2.1.3 **NOA Report Form** means the scope and format of the NOA Report.
- 2.1.4 **NOA methodology** means the document that NGENSO shall submit to the Authority which records all the proposed changes that NGENSO wishes to make to the NOA Report Form.
- 2.1.5 **ETYS and NOA Study Guidelines** means a document agreed between NGENSO and the TOs that specifies details of the analysis for the ETYS and NOA. It includes: generic Planning Assumptions, the ETYS and NOA Programmes, TO and NGENSO deliverables and the format they will be presented, contingencies and rules of comparison (i.e. acceptable tolerances) for consistency checking, outlines of the analysis work to be carried out (i.e. scenarios and sensitivities)
- 2.1.6 **NOA Programme** means the programme of works to be undertaken by NGENSO and TOs to deliver the annual NOA Report.
- 2.1.7 **JPC ETYS and NOA sub-group** means the group formed under section 3.1.1.
- 2.1.8 **System Requirement Form** means a template used for requesting and defining network reinforcement options for NOA.

3 Procedure

3.1 Working Group

- 3.1.1 To facilitate ETYS and NOA co-ordination between NGENSO and the TOs, a subgroup of the Joint Planning Committee (JPC), as formed in accordance with STCP 16-1, is formed with membership by each relevant party. Reporting of this ETYS and NOA subgroup actions and recommendations is to the JPC.
- 3.1.2 ETYS and NOA subgroup meeting intervals are to be decided by the subgroup and dependant on the ETYS and NOA Programmes. Regular meetings are expected during the NOA active modelling, analysis and drafting stages of the NOA Programme.

3.2 Disputes

- 3.2.1 Any disputes arising within the subgroup unresolved within 20 days to be referred to the JPC.

3.3 Consultation and Contents/Format Approval

- 3.3.1 Following the Consultation Close Date, NGENSO shall evaluate any responses that relate solely to NGENSO's contribution to the NOA. NGENSO and each TO shall jointly evaluate responses that are related solely to the TOs' contributions to the NOA Report in a 'NOA Report Form Outline' meeting, if required.
- 3.3.2 Not less than 5 Business Days prior to the NOA methodology meeting NGENSO shall forward any Stakeholders responses to be discussed at the meeting, for consideration by the TOs. The Parties shall endeavour to agree any changes to the NOA methodology that will impact on the TOs NOA deliverables within 20 Business Days of closure of the Consultation Freeze Date.
- 3.3.3 Following the NOA methodology meeting, if there are any proposed changes, NGENSO shall produce a draft of the NOA methodology document containing the proposed

changes, highlighting any changes from the previous year's NOA format. This document will include possible changes to the TOs' deliverables.

- 3.3.4 NGESO shall circulate the draft of the NOA methodology to each TO, who shall then submit comments to NGESO. NGESO shall incorporate comments from each TO into the NOA methodology where appropriate. When the NOA methodology has been finalised and agreed by the Parties it shall be formally signed off by a company representative within 30 Business Days of the Consultation Freeze Date.
- 3.3.5 If NGESO and TOs fail to agree upon the NOA Report Form for the next NOA Report, either Party may raise a dispute in accordance with the STC.
- 3.3.6 NGESO shall submit the revised NOA methodology, incorporating the Stakeholder's comments as appropriate, to the Authority for approval by no later than 30th June (of each calendar year).
- 3.3.7 If there are no proposed changes to the NOA methodology then no submission is required.
- 3.3.8 Following the submission of the NOA methodology to the Authority, NGESO and where relevant the TOs, shall make themselves available to the Authority to discuss any aspects of the NOA methodology that may be of concern to the Authority, or which the Authority may wish to alter.
- 3.3.9 NGESO shall produce and submit to the TOs' draft NOA Programme and associated list of deliverables based on the previous year's NOA Programme, updated to reflect any changes required to the submitted NOA Report Form. This may also include any updates required to improve the efficiency of the NOA report production, identified from the previous years' experience.
- 3.3.10 NGESO shall produce and submit to the TOs' draft ETYS and NOA Study Guidelines, based on the previous years' ETYS and NOA Study Guidelines, updated to reflect any changes required to the submitted NOA Report Form. This may also include any updates required to improve the efficiency of the ETYS production, identified from the previous years' experience.
- 3.3.11 The TOs shall respond to NGESO within 10 Business Days, with any issues or changes they would like to make to the draft NOA Programme, list of deliverables or ETYS and NOA Study Guidelines.
- 3.3.12 NGESO shall revise the draft NOA Programme, list of deliverables or ETYS and NOA Study Guidelines to reflect the TOs' comments where appropriate, and re-submit it to the TOs for agreement, within 10 Business Days of receiving the TOs' comments.
- 3.3.13 NGESO and each TO may meet to review any outstanding issues associated with the draft NOA Programme, list of deliverables or ETYS and NOA Study Guidelines.
- 3.3.14 NGESO and TOs shall continue to produce the NOA Report taking account of the proposed NOA methodology and the existing NOA Report Form.
- 3.3.15 When NGESO has received the NOA methodology conclusions of the Authority and any amendments to the ETYS methodology, shall notify the TOs of these amendments.
- 3.3.16 NGESO shall revise the draft NOA Programme and associated list of deliverables to reflect any changes to NOA report Form and submit the revised NOA Programme and associated list of deliverables to the TOs as soon as possible after the confirmation of

the NOA report Form from the Authority, but not longer than 10 Business Days after that confirmation.

- 3.3.17 The TOs shall respond to NGESO within 10 Business Days, with any comments they would like to make to the NOA Programme, list of deliverables or ETYS and NOA Study Guidelines.
- 3.3.18 NGESO shall revise the NOA Programme, list of deliverables or ETYS and NOA Study Guidelines to reflect the TOs' comments where appropriate, and submit it to the TOs' for final agreement, within 10 Business Days of receiving the TOs' comments.
- 3.3.19 NGESO shall arrange a meeting with all the TOs' to discuss any changes in detail. When the NOA Programme, list of deliverables and ETYS and NOA Study Guidelines have been finalised and agreed by all Parties it shall be signed off by each of the Parties.

3.4 GB Model Creation

- 3.4.1 Parties shall create GB Models suitable for NOA analysis in accordance with STCP 22-1.
- 3.4.2 Before any models are created, all parties shall agree which Future Energy Scenarios shall be used for ETYS, NOA and Investment Planning modelling purposes.

3.5 Network Reinforcement Options

- 3.5.1 NGESO shall supply each TO with a description of boundary drivers seen by the system operator based on the latest FES.
- 3.5.2 NGESO shall, with the agreement of the TO's distribute templates of System Requirement Forms (SRF) that are used to return network development options for assessment using the NOA methodology.
- 3.5.3 TOs shall return to NGESO using the SRF templates all network development options applicable for analysis using the NOA methodology.
- 3.5.4 If insufficient network reinforcement options are supplied by the TOs to satisfy predicted future network requirements, NGESO may request additional SRFs from the TOs.
- 3.5.5 The SO together with the TO's devise and develops alternative build options for the NOA Report analysis. These include operations solutions such commercial arrangements, reduced build or offshore options.

3.6 Analysis and Commentaries

- 3.6.1 NGESO and each TO shall carry out analysis work in accordance with the agreed NOA methodology and ETYS and NOA Study Guidelines to establish the information required for the NOA methodology.

3.7 Production and Publication

- 3.7.1 NGESO and each of the TOs shall produce outputs from their network analysis including the relevant text, in accordance with the NOA Programme and associated list

- of deliverables. Each TO shall submit to NGENSO the completed outputs in accordance with the NOA Programme.
- 3.7.2 NGENSO shall use the outputs from the TOs to prepare a draft of the NOA report, (including the text, figures, tables and appendices) in accordance with the agreed NOA report Form.
- 3.7.3 In accordance with the NOA Programme, NGENSO shall send the relevant sections of the draft NOA report to the relevant TO for comment. The TO shall provide comments back to NGENSO within agreed timescales.
- 3.7.4 NGENSO shall evaluate the comments from the TOs and redraft the NOA report incorporating the TOs' comments as appropriate. NGENSO shall re-circulate the relevant sections of the document to the TOs for final comments in line with the dates set out by the NOA Programme.
- 3.7.5 The TOs shall provide to NGENSO, from the appropriate company representative, agreement to the relevant sections of the NOA report (in accordance with the NOA Programme). If required, NGENSO shall arrange a meeting with the TOs to discuss any outstanding comments and gain editorial agreement.
- 3.7.6 NGENSO shall publish the NOA report in accordance with its Transmission Licence.

Appendix A: Abbreviations & Definitions

Abbreviations

ETYS	Electricity Ten Year Statement
NGESO	National Grid Electricity System Operator Ltd
NGET	National Grid Electricity Transmission plc
NOA	Network Options Assessment
SHE Transmission	Scottish Hydro Electric Transmission plc
SPT	SP Transmission plc
SRF	System Requirement Form
STC	System Operator – Transmission Owner Code
TO	Transmission Owner

Definitions

STC definitions used:

Authority

Business Days

Electricity Ten Year Statement

Future Energy Scenarios

NGESONOA

NOA Programme

Offshore Transmission Owner

Party

Transmission Licence

Transmission Owner

Transmission System