

## **STCP20-1 Issue ~~003~~ Seven 004 Electricity Ten Year Statement**

### **STC Procedure Document Authorisation**

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

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### **STC Procedure Change Control History**

Issue 001	26/05/2005	Issue 001 following BETTA Go-Live
Issue 002	25/11/2005	Issue 002 incorporating PA034, PA037 & PA042
Issue 003	14/02/2012	Issue 003 Incorporating OFTOs
<u>Issue 004</u>	<u>Xx/xx/2016</u>	<u>Issue 004 changes to ETYS instead of SYS</u>

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## 1 Introduction

### 1.1 Scope

1.1.1 This procedure describes the process for producing and publishing the ~~Seven~~Electricity Ten Year Statement (~~SYSETYS~~).

1.1.2 This procedure applies to NGET ~~acting as SO~~ and each TO. For the purposes of this document, TOs are:

- ~~• SPT,~~
- ~~• SHETL and~~
- ~~• National Grid Electricity Transmission acting as TO;~~
- ~~• 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 NGET ~~acting as SO~~ and the TOs.

1.1.4 NGET ~~acting as SO~~ shall be responsible for preparing and publishing the ~~SYSETYS~~ in accordance with its Transmission Licence. This will include:

- submitting proposed changes to the ~~SYSETYS~~ Form to the Authority for approval;
- ~~• creating and updating the Demand and generation backgrounds (for Great Britain) and SYS Networks (for the NGET's Transmission System);~~
- ~~creating the Future Energy Scenarios;~~
- carrying out analysis on the ~~NGET's~~ Transmission System;
- producing the relevant commentaries;
- collating and compiling the ~~SYSETYS~~ document; and
- making the ~~SYSETYS~~ publicly available.

1.1.5 Each TO shall be responsible for supporting NGET ~~acting as SO~~ in producing and publishing the ~~SYS in accordance with the agreed SYS Study Guidelines~~.~~ETYS~~. This will include:

- ~~Creating~~creating and ~~update~~updating the ~~SYS Networks (GB network models for that TO's Transmission System);~~ their TO network;
- carrying out analysis on ~~its~~its Transmission System;
- producing the deliverables ~~relevant to the respective TO network~~ (tables, figures, text etc.) to be included in the ~~SYSETYS~~; and
- producing ~~the~~relevant commentaries.

### 1.2 Objectives

1.2.1 The objective of this procedure is to detail how ~~creation of the Seven Year Statement process~~annual ~~ETYS~~ will be ~~addressed~~co-ordinated across the ~~NGET~~SO ~ TO interface and the TO ~ TO interface, so as to ensure that responsibilities are clear and Transmission Licence conditions are satisfactorily discharged.

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## 2 Key Definitions

### 2.1 For the purposes of STCP 20-1:

~~2.1.1 **Boundary Capability** means the firm Transmission capability of a boundary between any two areas of the GB Transmission System in accordance with GB SQSS.~~

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~~2.1.2.1.1 **Consultation Freeze Date** means the 1st of September annually closing date for the ETYS Annual Review consultation. For the avoidance of doubt this date will be no later than 30<sup>th</sup> April of each calendar year. This is the date that NGET cease to consider comments from industry participants for that year's publication of the ETYS.~~

~~2.1.3.1.2 **Stakeholders** means any user of the SYS, and includes ETYS including TOs.~~

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~~2.1.3 **SYSETYS Form** means the scope and format of the Statement.~~

~~2.1.4 **ETYS Form Outline** means the document that NGET shall submit to the Authority which records all the proposed changes that NGET wishes to make to the ETYS Form.~~

~~2.1.4.2.1.5 **ETYS and NOA Study Guidelines** means a document agreed between NGET and the TOs that specifies details of the analysis work for the SYSETYS and NOA. It includes: generic Planning Assumptions, the SYS Programme ETYS and NOA Programmes, TO and NGET deliverables and the format in which 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)~~

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~~2.1.5.2.1.6 **SYS Form ETYS Programme** means the scope programme of works to be undertaken by the SO and format of TOs to deliver the Seven Year Statement annual ETYS.~~

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~~2.1.6 **SYS Form Outline** means the document that NGET shall submit to the Authority which records all the proposed changes that NGET wishes to make to the SYS Form. An explanation for each of the changes will also be provided in the document.~~

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~~2.1.7 **SYS Network** is the connectivity network used in the creation of the SYS model.~~

~~2.1.8 **SYS Update** means an update to the SYS in accordance with the Transmission Licence Standard Conditions C41, paragraph 3.~~

~~2.1.7 **JPC ETYS and NOA sub-group** means the group formed under section 3.1.1.~~

## 3 Procedure

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### 3.1 Working Group

~~3.1.1 To facilitate ETYS and NOA co-ordination between NGET and the TOs, a subgroup of the Joint Planning Committee (JPC), as formed in accordance with STCP 16 1, shall be formed with membership by each relevant party. Reporting of this ETYS and NOA subgroup actions and recommendations shall be 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 ETYS active modelling, analysis and drafting stages of the ETYS programme.~~

### 3.2 Disputes

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

### **3.13.3 Consultation and Contents/Format Approval**

~~3.1.43.3.1~~ Following the Consultation Freeze Date, NGET SO shall evaluate any responses that relate solely to ~~NGET's~~NGET acting as SO's contribution to the SYSETYS. NGET acting as SO and each TO shall jointly evaluate responses that are related solely to the TOs' contributions to the SYSETYS in a ~~'SYSan 'ETYS~~ Form Outline' meeting, if required.

~~3.1.23.3.2~~ Not less than 5 Business Days prior to the SYSETYS Form Outline meeting NGET acting as SO 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 SYSETYS Form that will impact on the TOs SYSETYS deliverables within 20 Business Days of closure of the Consultation Freeze Date.

~~3.1.33.3.3~~ Following the SYSETYS Form Outline meeting, if there are any proposed changes, NGET acting as SO shall produce a draft of the SYSETYS Form Outline document containing the proposed changes to the SYSETYS Form, highlighting any changes from the previous year's SYSETYS format. This document will include possible changes to the TOs' deliverables.

~~3.1.43.3.4~~ NGET acting as SO shall circulate the draft of the SYSETYS Form Outline to each TO, who shall then submit comments to NGET. NGET SO shall incorporate comments from each TO into the SYSETYS Form Outline where appropriate. When the SYSETYS Form Outline 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.

~~3.1.53.3.5~~ If NGET acting as SO and ~~TO~~TOs fail to agree upon the SYSETYS Form for the next SYSETYS, either Party may raise a dispute in accordance with the STC.

~~3.1.63.3.6~~ NGET SO shall submit the revised SYSETYS Form Outline document, incorporating the Stakeholder's comments as appropriate, to the Authority for approval ~~within 5 Business Days of the Parties formally signing off the SYS Form Outline (see 3.1.4~~by no later than 31<sup>st</sup> May (of each calendar year).

3.3.7 If there are no proposed changes to the ETYS Form then no submission is required.

~~3.1.73.3.8~~ Following the submission of the SYSETYS Form Outline document to the Authority, NGET acting as SO and where relevant the TOs, shall make themselves available to the Authority to discuss any aspects of the SYSETYS Form that may be of concern to the Authority, or which the Authority may wish to alter.

3.3.9 NGET acting as SO shall produce and submit to the TOs draft ETYS Programme and associated list of deliverables based on the previous year's ETYS Programme, updated to reflect any changes required to the submitted ETYS Form. This may also include any updates required to improve the efficiency of the ETYS production, identified from the previous years' experience.

~~3.1.83.3.10~~ NGET acting as SO shall produce and submit to the TOs' draft SYSETYS and NOA Study Guidelines, based on the previous years' SYSETYS and NOA Study Guidelines, updated to reflect any changes required to the submitted SYSETYS Form. This may also include any updates required to improve the efficiency of the SYSETYS production, identified from the previous years' experience.

~~3.1.9~~The draft ~~SYS~~ Study Guidelines will include a ~~SYS~~ Programme and an associated list of deliverables with target dates. NGET shall submit, to the TOs, the draft ~~SYS~~ Study Guidelines 10 Business Days after the submission to the authority of the ~~SYS~~ Form.

~~3.1.103.3.11~~ The TOs shall respond to NGET acting as SO within 10 Business Days, with any issues or changes they would like to make to the draft SYSETYS Programme, list of deliverables or ETYS and NOA Study Guidelines ~~document~~.

~~3.1.143.3.12~~ NGET acting as SO shall revise the draft SYSETYS Programme, list of deliverables or ETYS and NOA Study Guidelines to reflect the TOs' comments where

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appropriate, and re-submit it to the TOs for agreement, within 10 Business Days of receiving the TOs' comments.

~~3.1.143.3.13~~ NGET acting as SO and each TO may meet to review any outstanding issues associated with the draft ETYS Programme, list of deliverables or ETYS and NOA Study Guidelines.

~~3.1.143.3.14~~ NGET acting as SO and TOs shall continue to produce the SYSETYS taking account of the proposed SYSETYS Form Outline document, and the existing SYSETYS Form ~~and the draft SYS Study Guidelines~~.

~~3.1.143.3.15~~ When NGET acting as SO has received the SYSETYS Form conclusions of the Authority and any amendments to the SYSETYS Form Outline document, NGET shall notify the TOs of these amendments.

~~3.1.153.3.16~~ NGET acting as SO shall revise the draft ETYS Programme, list of deliverables or ETYS and NOA Study Guidelines to reflect any changes to SYSthe ETYS Form and submit the ~~revised SYS Study Guidelines~~revisions to the TOs as soon as possible after the confirmation of the SYSETYS Form from the Authority, but not longer than 10 Business Days after that confirmation.

~~3.1.163.3.17~~ The TOs shall respond to NGET acting as SO within 10 Business Days, with any comments they would like to make to the SYSETYS Programme, list of deliverables or ETYS and NOA Study Guidelines ~~document~~.

~~3.1.173.3.18~~ NGET acting as SO shall revise the SYSETYS 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.

~~3.1.183.3.19~~ NGET acting as SO shall arrange a meeting with all the TOs' to discuss any changes in detail. When the SYSETYS Programme, list of deliverables and ETYS and NOA Study Guidelines have been finalised and agreed by all Parties ~~it~~they shall be signed off by each of the Parties.

### **3.23.4 GB Model Creation**

~~3.2.13.4.1~~ Parties shall create ~~Preliminary~~ GB ~~SYS~~ Models 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.

### **3.33.5 Analysis and Commentaries**

~~3.3.13.5.1~~ NGET acting as SO and each of the TOs shall carry out analysis work in accordance with the agreed SYSETYS and NOA Study Guidelines ~~to establish the information required for the ETYS~~. This will include:

- ~~• Determining any reinforcements required to make the Preliminary GB SYS Models compliant with the GB SQSS. Details of these reinforcements will be contained within Project Listing Documents and will be exchanged, with whole datasets, in accordance with STCP22-1;~~
- determining fault levels for each transmission node in their network;
- determining loading on each part of their Transmission System;
- determining forecast power flows on each part of their Transmission System;
- determining Boundary Capabilities, and
- ~~• carrying out such additional studies as maybe required to identify opportunities for connection and use of the GB Transmission System.~~

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STCP20-1 ~~Seven~~Electricity Ten Year Statement

Issue ~~003~~— 14/02/2012004 – xx/xx/2016

~~3.3.23.5.2~~ Parties will follow the procedures in STCP22-1 to allow NGET acting as SO to provide TOs with the Final Compliant GB SYSETYS Models.

~~3.3.33.5.3~~ Each TO shall provide draft commentaries on their Transmission System Boundary Capabilities to NGET- acting as SO. These shall include areas of opportunities and those boundaries that are close to their Boundary Capability limits. The TOs shall submit these draft commentaries to NGET acting as SO in accordance with the agreed SYSETYS and NOA Study Guidelines (format and SYSETYS Programme).

~~3.3.43.5.4~~ NGET acting as SO shall use the draft commentaries on the TOs' Transmission System Boundary Capabilities to evaluate the opportunities available to customers seeking to connect to and/or make use of the GB Transmission System. NGET acting as SO shall discuss the availability of opportunities with each TO that exists on that TO's Transmission System. Following discussions with each TO, NGET shall prepare the commentary indicating those parts of the GB Transmission System most suited to new connections and transport of further quantities of electricity.

~~3.3.5~~ NGET shall prepare commentaries on ancillary service opportunities, including:

- ~~•~~Frequency response;
- ~~•~~voltage support, and
- ~~•~~reactive market in accordance with the agreed SYS Form.

~~To assist NGET in producing the commentary on voltage support, each TO shall submit to NGET any additional reactive compensation equipment that the TO considers to be required on their Transmission System over the next seven years.~~

~~3.3.6~~ NGET shall prepare commentaries on GB electrical demands and GB energy requirements, including existing and future generation plant margins and penetration of embedded generation, in accordance with the agreed SYS Form and SYS Study Guidelines.

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### **3.4.3.6 Production and Publication**

~~3.4.13.6.1~~ NGET acting as SO and each of the TOs shall produce outputs from their network analysis, including the relevant text, in accordance with the SYS Study Guidelines, ETYS Programme and associated list of deliverables. Each TO shall submit to NGET ~~the~~acting as SO their completed outputs in accordance with the SYSETYS Programme.

~~3.4.23.6.2~~ NGET acting as SO shall use the completed outputs ~~from the TOs~~ to prepare a draft of the SYSETYS, (including the text, figures, tables and appendices) in accordance with the agreed SYSETYS Form.

~~3.4.33.6.3~~ In accordance with the SYSETYS Programme, NGET acting as SO shall send the relevant sections of the draft SYSETYS document to the relevant TO for comment. The TO shall provide comments back to ~~the~~ NGET acting as SO within 10 Business Days of receiving the relevant sections of the draft SYSETYS document.

~~3.4.43.6.4~~ NGET acting as SO shall evaluate the comments from the TOs and redraft the SYSETYS document incorporating the TOs' comments as appropriate. NGET acting as SO shall re-circulate the relevant sections of the document to the TOs for final comments in line with the dates set out by the SYSETYS Programme.

~~3.4.53.6.5~~ The TOs shall provide to NGET acting as SO, from the appropriate company representative, agreement to the relevant sections of the SYS Programme in the form of a company letter ETYS (in accordance with the SYSETYS Programme). If required, NGET acting as SO shall arrange a meeting with the TOs to discuss any outstanding comments and gain editorial agreement.

~~3.4.63.6.6~~ NGET shall publish the SYSETYS in accordance with its Transmission Licence.

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### **~~3.5 Quarterly/Periodic Update Process~~**

~~3.5.1~~A calendar month before the publication of a SYS Update, NGET shall notify each TO, by email that an update to the SYS is going to be produced. The notification will include the first draft of the SYS Update, based upon information currently available to NGET, and request the TOs to verify any changes to any committed schemes in the period since the previous SYS or SYS Update.

~~3.5.2~~NGET shall also provide to the TOs additional technical information, relating to generators that have entered into connection agreements since the previous SYS or SYS Update was produced.

~~3.5.3~~As soon as reasonably practicable and in any event within 10 Business Days of the receipt of the notification, each TO shall provide to NGET, by email, confirmation of any changes to the committed schemes as well as any new committed schemes, which require inclusion in the SYS Update. For any new committed schemes, the TOs shall produce Project Listing Documents and TO Models in accordance with STCP 16.1.

~~3.5.4~~On receipt of the confirmation from the TOs and details of any relevant changes, NGET shall revise the draft SYS Update accordingly and within 5 Business Days circulate to the TOs a second draft for final comments.

~~3.5.5~~As soon as reasonably practicable and in any event within 3 Business Days of the receipt of the second draft of the SYS Update, each TO shall provide to NGET with final comments and approval to publish.

~~3.5.6~~ NGET shall make any final amendments to the SYS Update in line with the TOs final comments and publish the SYS Update in accordance with its Transmission Licence.

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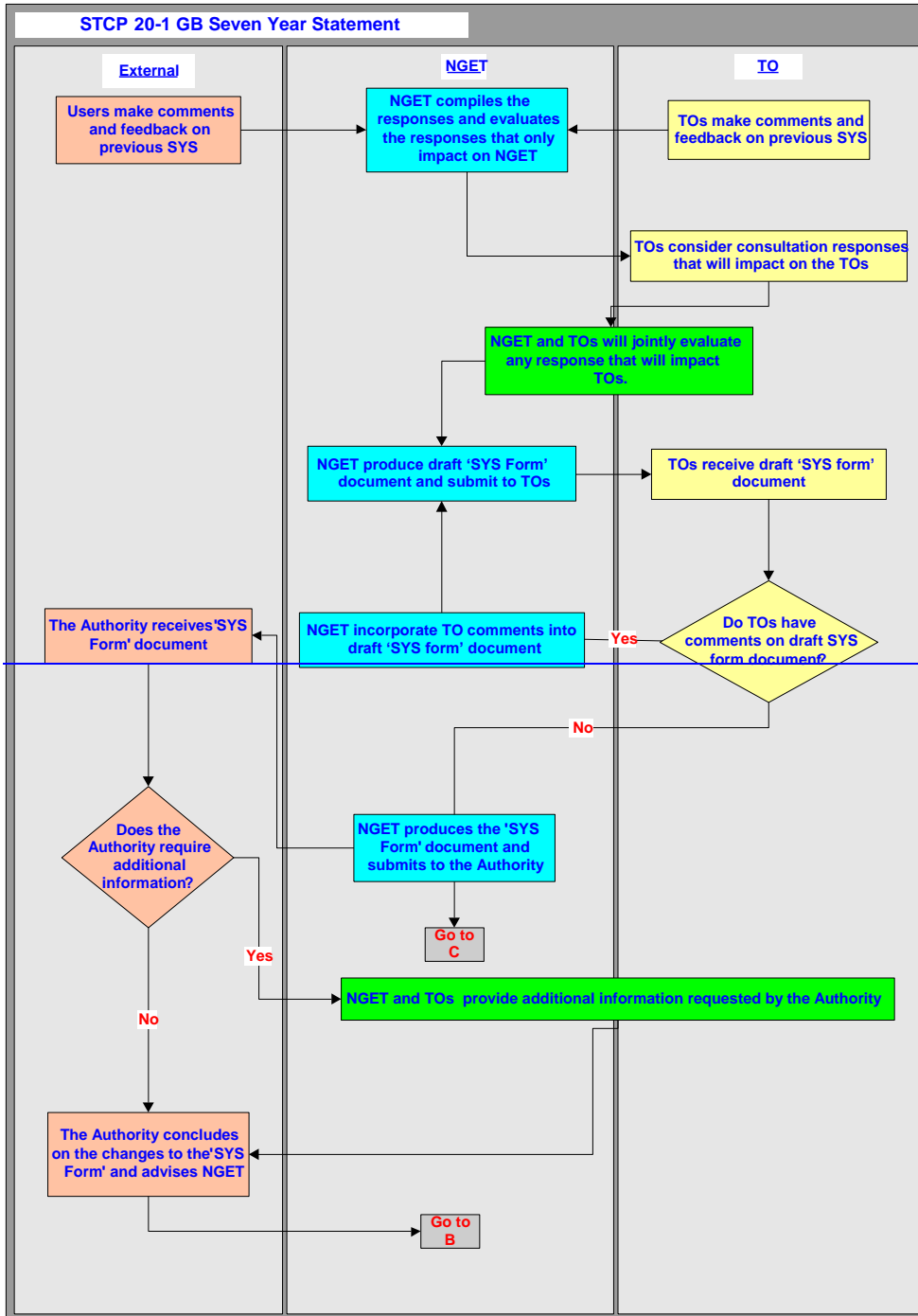
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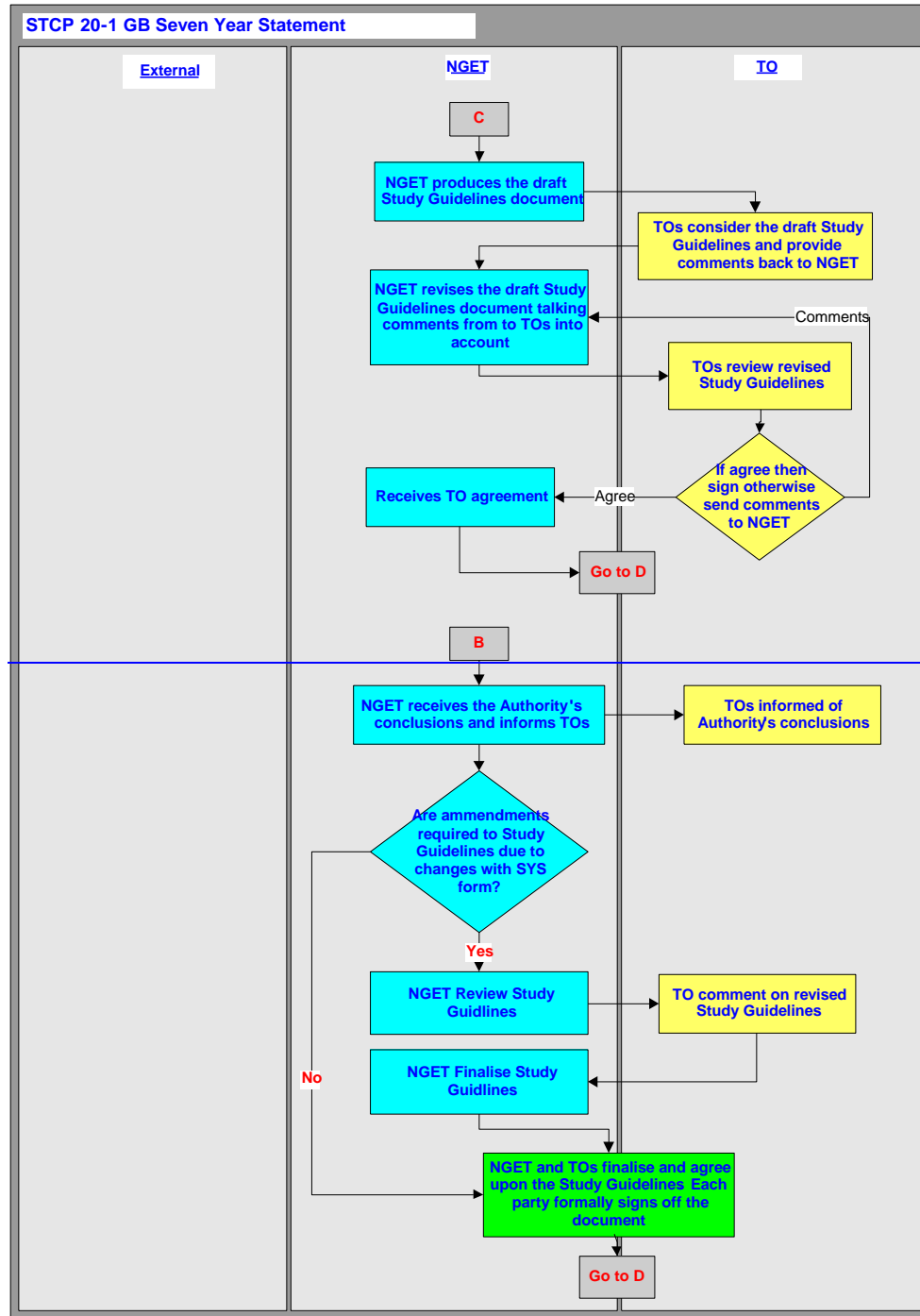
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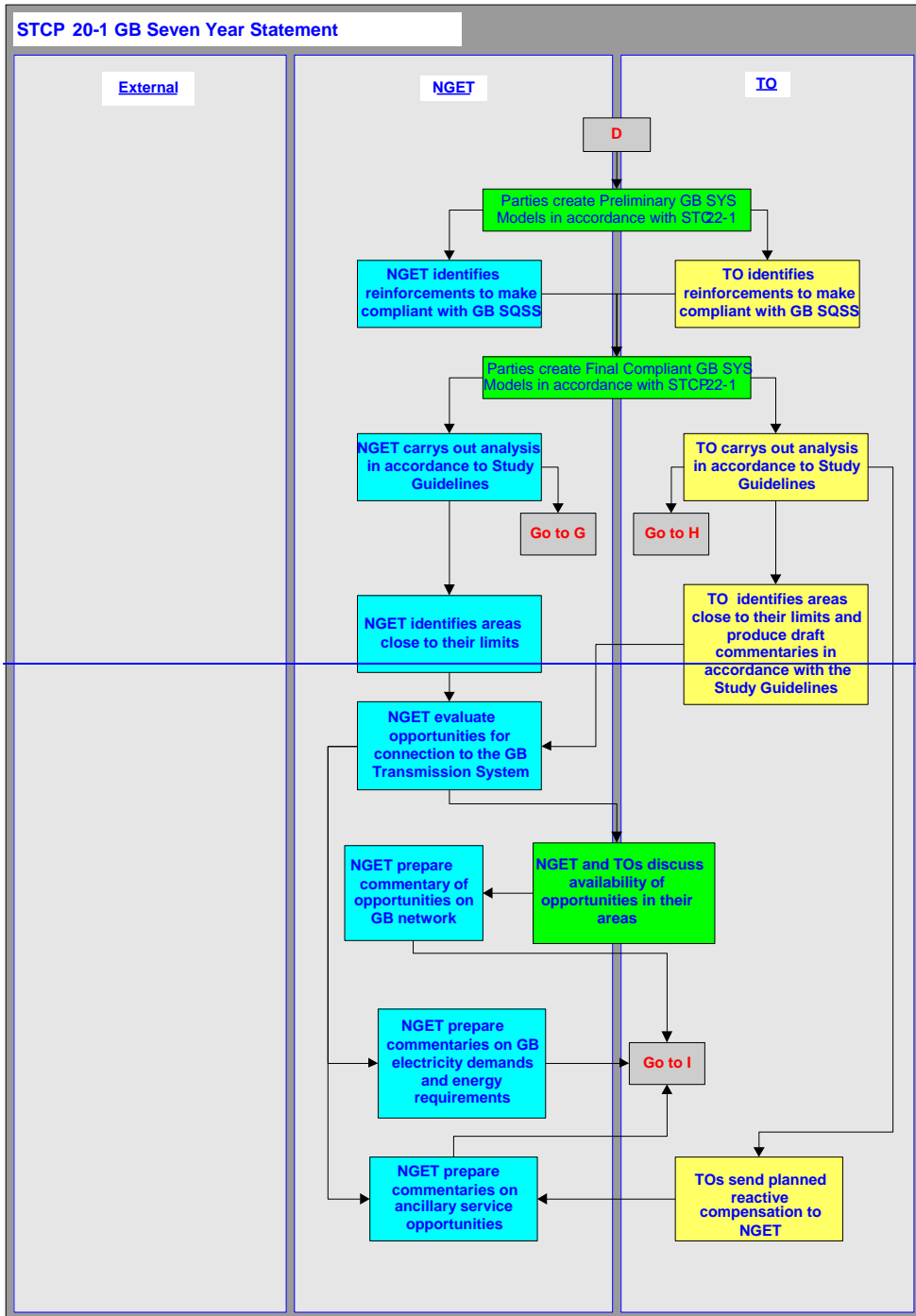


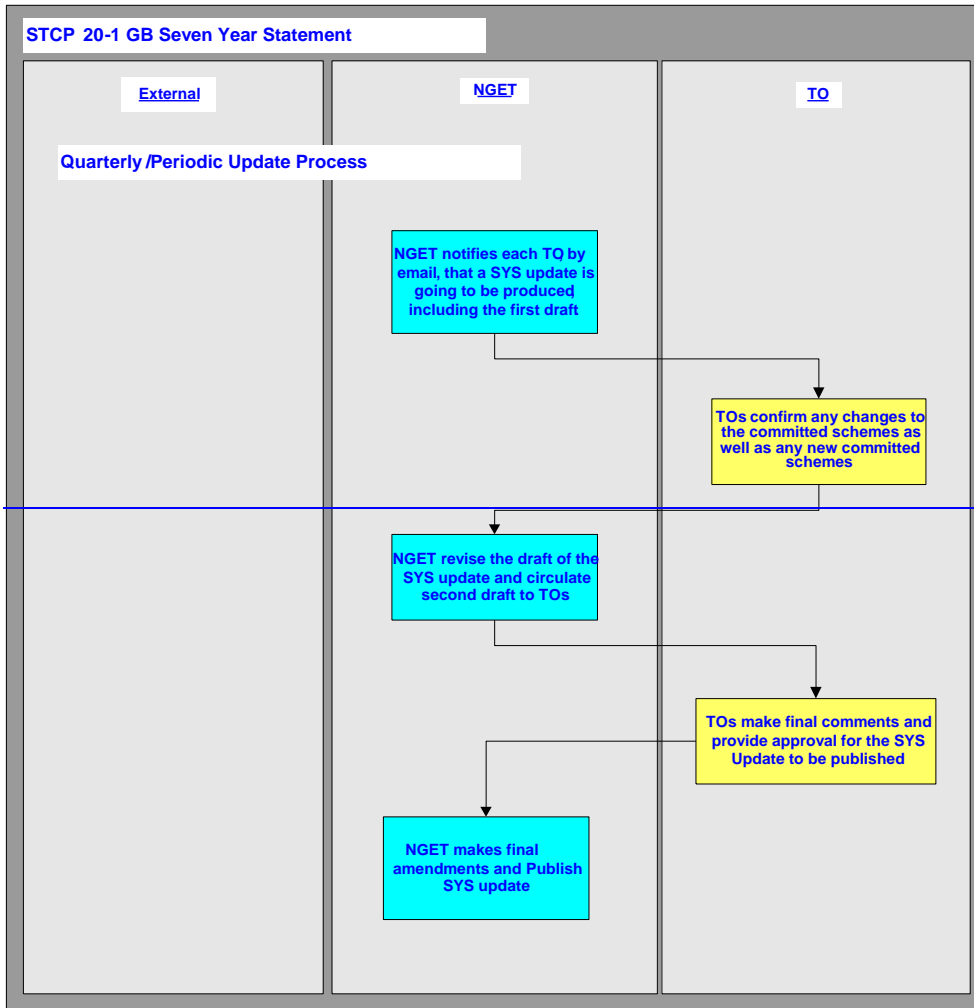
Appendix A: **Flow Diagram**

Note that the Flow Diagrams shown in this Appendix A are for information only. In the event of any contradiction between the process represented in this Appendix and the process described elsewhere in this STCP, then the text elsewhere in this STCP shall prevail.









## **Appendix B: Abbreviations & Definitions**

### **Abbreviations**

<del>GB</del> SQSS	<del>Security and Quality of Supply Standard</del>
<del>OFTO</del>	<del>Offshore</del> NGET National Grid Electricity Transmission <del>Owner</del> plc
<del>SHE</del> TNOA	<del>Network Options Assessment</del>
<del>SHE</del> Transmission	Scottish Hydro-Electric Transmission <del>Ltd</del> plc
SPT	SP Transmission <del>Ltd</del> plc
STC	System Operator – Transmission Owner Code
<del>SYS</del>	<del>Seven</del> ETYS Electricity Ten Year Statement
TO	Transmission Owner

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### **Definitions**

#### **STC definitions used:**

Authority

Business Days

~~GB~~

~~GB~~ Electricity Ten Year Statement

~~ETYS~~ Programme

~~Future~~ Energy Scenarios

~~NGET~~

~~NOA~~

~~Offshore~~ Transmission ~~System~~ Owner

~~NGET~~

~~Party~~

~~Planning~~ Assumptions

~~Seven~~ Year Statement

~~SYS~~ Programme

~~Transmission~~

Transmission Licence

Transmission Owner

Transmission System

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#### **Grid Code definitions used:**

~~Frequency~~

#### **Definitions used in the document that are covered in other STCPs:**

~~Final Compliant GB SYS Models~~ means as defined STCP 22-1.

~~TO Model~~ means as defined STCP 22-1.

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STCP20-1 ~~Seven~~Electricity Ten Year Statement

Issue ~~003~~ ~~14/02/2012~~2004 – xx/xx/2016

~~Preliminary GB SYS Models~~ means as defined STCP 22-1.

~~Project Listing Document~~ means as defined STCP 16-1.

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