

# A Summary of the Connection and Use of System Code



## DOCUMENT CONTROL

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# A SUMMARY OF THE CONNECTION AND USE OF SYSTEM CODE

## FOREWORD

This document provides a summary of the Connection and Use of System Code (CUSC), which constitutes the contractual framework for connection to, and use of, Great Britain's high voltage transmission system.

Implementation of the CUSC and related documents took effect following consultation by the Office of Gas & Electricity Markets and the Department of Trade & Industry on the principles and the licence changes, and then by National Grid in relation to the documentation.

The CUSC was designated by the Secretary of State on 25 June 2001 and implemented on 18 September 2001 (the "CUSC Implementation Date").

The CUSC was amended to reflect changes under BETTA. The GB CUSC was implemented on 1<sup>st</sup> September 2005 (Betta Go-Active Date).

This Summary along with the full CUSC and further information relating to the CUSC is available on our website:

<https://www.nationalgrid.com/uk/Electricity/Codes/systemcode/>

This document summarises the contractual arrangements existing upon the introduction of the CUSC. National Grid endeavours to keep this document as up to date as possible; however, given the flexible governance processes under the CUSC it is possible that at any particular moment in time this document may not fully represent the most up to date position.

This document is in 3 parts:

- Part 1 - A general introduction to the structure of the CUSC and related documentation and the interaction between the documents;
- Part 2 - An overview of the CUSC itself; and,
- Part 3 - An overview of the amendment process contained in the CUSC.



If you require further details about any information contained in this document or want to know more about connecting to and/or using the GB Transmission System please contact our CUSC team at:

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Or by calling:  
Tel: 01926 654625

We are always trying to improve the information contained in this document and would therefore appreciate it if any comments on how this document might be improved could be sent to the contacts detailed above.

## THE PARTIES

National Grid is required under the Transmission Licence to be a party to the CUSC Framework Agreement and comply with the CUSC. It is also a requirement for holders of a generation, distribution or supply licence to be a party to the CUSC Framework Agreement and comply with the CUSC.

In addition to licensees, the following parties need to be a party to the CUSC Framework Agreement and comply with the CUSC:

Users who are:

- required to sign an agreement pursuant to the Balancing and Settlement Code; or
- not licensed nor subject to the Balancing and Settlement Code but who are directly connected to the GB Transmission System; or
- who are Embedded and required pursuant to Paragraph 6.5 of the CUSC to have an agreement with National Grid.

## Part 1 – General Introduction

The CUSC is the legal document that forms the basis of the contractual framework for connection to, and use of, Great Britain's high voltage transmission system.

The CUSC was developed as an amendment to the Master Connection and Use of System Agreement (MCUSA) which had been used since Vesting. All persons who were party to the MCUSA as at the CUSC Implementation Date continued as Original Parties to the CUSC Framework Agreement. Other Parties who have since acceded to the CUSC are additional parties.

National Grid is required by the terms of its Transmission Licence to prepare a CUSC and to produce this summary. The summary does not form part of the CUSC and therefore has no legally binding effect.

### The CUSC Documentation

The CUSC together with the

- CUSC Framework Agreement
- Accession Agreement
- Bilateral Connection Agreement
- Bilateral Embedded Generation Agreement,
- Construction Agreement,
- Mandatory Services Agreement
- Charging Statements

are developments of the former:

- MCUSA,
- Supplemental Agreements
- Ancillary Services Agreements ("ASAs")
- Master Ancillary Services Agreements ("MASAs")
- Supplemental Ancillary Services Agreements ("SASAs"),
- "Licence Condition 10 Statement".

Each of the CUSC documents, including the Bilateral Embedded Licence exemptable Large power station Agreements (introduced in line with BETTA requirements), are briefly described below:

### CUSC

The CUSC is a licence based code setting out within it the principal rights and obligations in relation to connection to and/or use of the GB Transmission System and also relating to the provision of certain Balancing Services.

### CUSC Framework Agreement

The CUSC Framework Agreement gives contractual effect to the licence based CUSC. All new persons wishing to connect to and/or use the GB Transmission System must do so by acceding to the CUSC Framework Agreement.

**CUSC Accession Agreement**

This is the agreement that all new parties need to sign in order to be admitted as an additional party to the CUSC Framework Agreement.

**Bilateral Agreements**

The Bilateral Agreements are entered into pursuant to the CUSC and contain the site specific terms for connection to and/or use of the GB Transmission System.

The types of Bilateral Agreements relating to connection and/or use of the GB Transmission System are as follows:

Bilateral Connection Agreement (BCA)

Deals with connection related issues and must be entered into by Users in relation to Plant and/or Apparatus connected directly to the GB Transmission System, be that generation, distribution networks, other demand sites or Interconnectors.

Bilateral Embedded Generation Agreement (BEGA)

Deals with embedded generation and must be entered into by Users in relation to a Licensed Embedded Power Station connected to Distribution Systems, and in relation to equipment for which the User is responsible (as defined in Section K of the Balancing and Settlement Code) or a person acting as a Small Power Station Trading Party, all as provided for in the CUSC.

Bilateral Embedded Licence exemptable Large power station Agreement (BELLA)

Embedded generation that is large (Grid Code definition) and licence exemptable which has opted not to have a BEGA is required to have a BELLA. In general the BELLA requirements are the same as for a BEGA other than they do not require the Generator to comply with Section 3 of the CUSC (Charging) and hence confer no rights to use the system.

**Construction Agreements**

A Construction Agreement will need to be entered into if there are any construction elements required for connection to and/or use of the GB Transmission System.

**Non-Generation Use of System**

There is no specific Bilateral Agreement required for non-generation related Use of System for Embedded Sites (e.g. for Suppliers), or for Interconnector Users as all the provisions relating to Use of System are set out in Section 3 (or Section 9 in relation to Interconnector Users and Interconnector Error Administrators) of the CUSC.

**Mandatory Services Agreements**

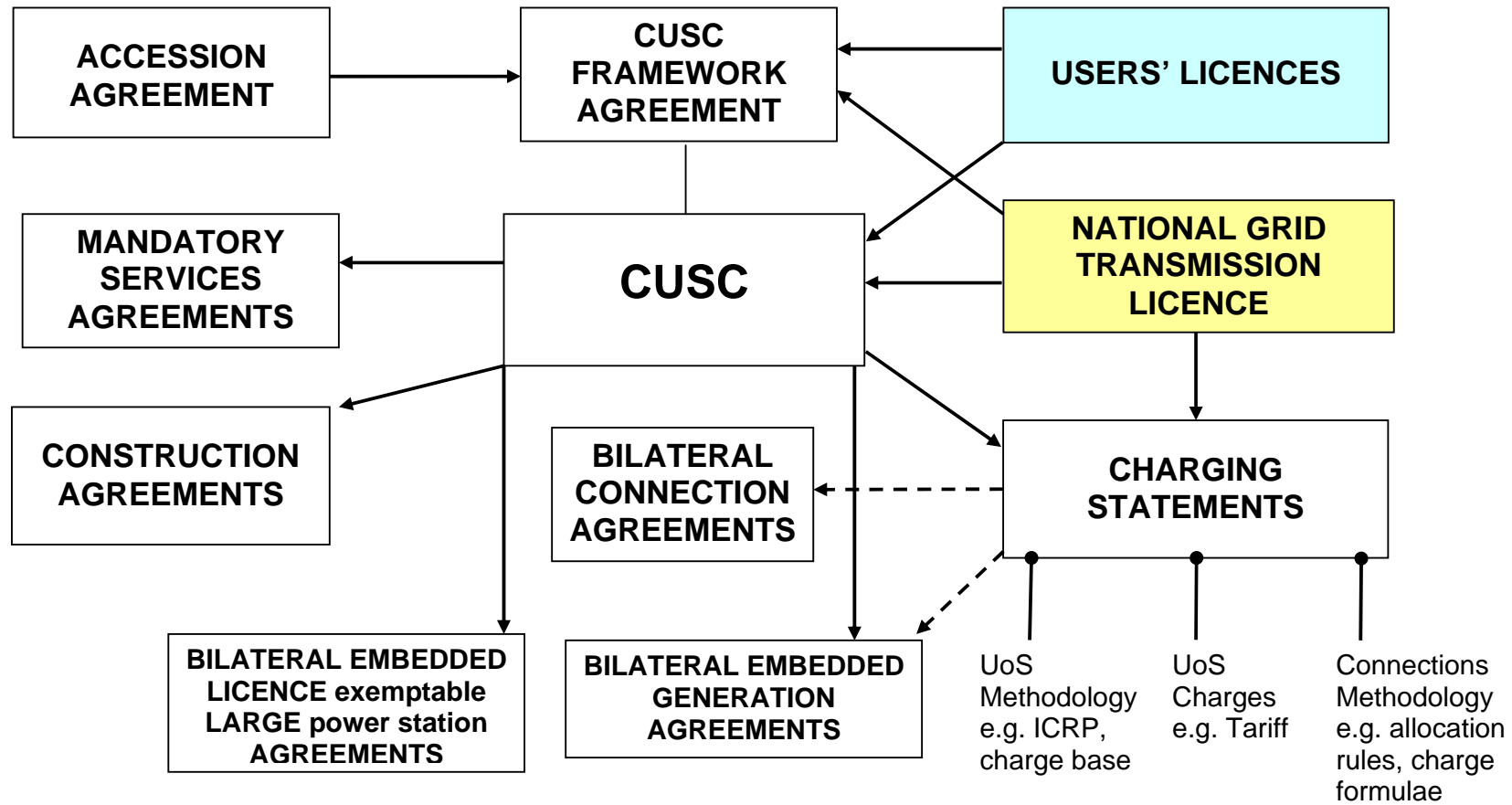
The Mandatory Services Agreements are supplemental to the CUSC and contain site specific terms for provision to National Grid of Mandatory Ancillary Services. Commercial Services Agreements will also be entered into between National Grid and Users to govern the provision of and payment for Agreed Ancillary Services where agreed to be provided by a User. Commercial Services Agreements are not supplemental to the CUSC.

**Charging Statements**

The Charging Statements are produced in accordance with the requirements of the Transmission Licence. Certain obligations in the CUSC are made by reference to the Charging Statements, such that although they do not form part of the CUSC, their terms are relevant to a number of CUSC obligations.

The linkages between the documents described above are shown in Figure 1 below.

Figure 1 - Overall Structure of CUSC Documentation



## Part 2 – An Overview of the CUSC

This section contains further information on the Connection and Use of System Code. The CUSC can be divided into three main sections:

1. **CUSC Introduction** - This section is contained for information purposes only and does not form part of the CUSC itself or have any legally binding effect.
2. **The CUSC** - The main body of the CUSC is divided into 12 sections that are applicable to various categories of User.
3. **Schedules and Exhibits to the CUSC** - The Schedules include proformas of the bilateral agreements associated with the CUSC. The other exhibits include examples of various application forms and offer letters.

The following section of this CUSC Summary describes each of the above sections in more detail.

### 1. CUSC Introduction

This is a general introduction to the CUSC, providing an overview of the CUSC documentation, includes a description of how the CUSC interacts with the licences, the CUSC Framework Agreement, the CUSC Bilateral Agreements, the Construction Agreements, the Mandatory Services Agreement and the Charging Statements. The CUSC Introduction does not form part of the CUSC and therefore has no legally binding effect.

### 2. The CUSC

#### Section 1 - Applicability of Sections and Related Agreements Structure

The CUSC is divided into 12 different sections, including Connection and Use of System, the provision of Balancing Services, Interconnectors and other sections of more general application. Compliance with the various sections by a User is dependent on the nature of that User's connection to or use of the system for any given instance. Section 1 is intended to act as a guide, so CUSC Signatories are informed of which other sections of the CUSC are applicable to them. Section 1 also deals with the requirement for a User to enter into Bilateral Agreements, Construction Agreements and Mandatory Services Agreements where appropriate.

A further explanation of the applicability of sections relating specifically to the major types of User (e.g. Directly Connected Power Station, Supplier etc) is contained at the end of this section as Table 1.

## **Section 2 - Connection**

Section 2 deals with connection to the GB Transmission System of User's Equipment at Connection Sites. This Section is split into three parts; General, Connection Charges and Credit Requirements. The first part contains clauses concerned with general provisions.

Part 2 specifically covers Connection Charges and sets out the procedures for invoicing and payment by Users of Connection Charges, One-off Charges, Land Charges and Termination Amounts and details of Revision of Charges. This Section also contains the clauses detailing the processes and charging elements for the replacement of Transmission Connection Assets.

Part 3 details the types, security and method of provision required by National Grid for Termination Amounts in relation to Transmission Connection Assets, which are those Assets used to connect a User's equipment to the GB Transmission System.

## **Section 3 - Use of System**

Section 3 deals with use of the GB Transmission System. Again the section is split into three parts; Part 1 covers General provisions; Part 2 deals with Use of System Charges; and Part 3 details the credit requirements.

The Section sets out general provisions (relating to generation and supply), charging related provisions and credit requirements related to use of system.

## **Section 4 - Mandatory Balancing Services**

Section 4 provisions apply to Generators in respect of Generating Units from which they are required to supply Mandatory Balancing Services (in so far as required by their Licence to comply with the Grid Code or any Distribution Code, or in the case of National Grid, the Transmission Licence). Part 1 of the section deals with the provision of Mandatory Ancillary Services, which are Reactive Power (Obligatory and Enhanced) and Frequency Response. Part 2 details the general provisions relating to Mandatory Ancillary Services, such as metering, termination, decommissioning and disconnection.

## **Section 5 - Events of Default, Deenergisation, Disconnection and Decommissioning**

Section 5 deals with events and obligations relating to Events of Default, Deenergisation, Disconnection and Decommissioning, including Events of Default with regard to Balancing Services Use of System Charges. The Section also contains additional provisions relating to Users that are directly connected to the GB Transmission System and/or Non-Embedded Customers.

## **Section 6 - General Provisions**

Section 6 contains those provisions which are generic, but which do not relate directly to the specific areas dealt with in other sections of the CUSC, including:

- Metering
- Data
- Intellectual Property
- Third Party Rights

Details are also included setting out obligations on CUSC Parties to comply with the Grid Code and Distribution Code. Section 6 also sets out the obligations on Distribution System Operators with regard to the connection of embedded generation.

The section also contains all the provisions for short term access products e.g. Short Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC).

### **Section 7 - Dispute Resolution**

Section 7 sets out how disputes under the CUSC, Bilateral Agreements, Mandatory Services Agreements and Construction Agreements are to be dealt with (Transitional issues and disputes arising prior to the Amendment of the MCUSA and the associated agreements are dealt with in Section 10). It deals with Charging Disputes, Other Disputes and Third Party Claims.

### **Section 8 - CUSC Amendment**

Section 8 deals with the provisions for amendment of the CUSC following proposals by CUSC Parties, BSC Parties and others (via the “energywatch” representative). Ofgem ultimately determines Amendments to the CUSC. This determination follows the processing of a proposed Amendment through the formal Amendment procedures provided for in this section (for further details see Part 3 of this document).

The section also sets out the arrangements for the CUSC Amendments Panel which oversees the CUSC Amendment process.

### **Section 9 - Interconnectors**

Section 9 of the CUSC deals with Interconnectors. It provides for connection to the GB Transmission System by the Interconnector Owners (except the existing interconnectors with Scotland and France where the existing arrangements for connection continue to exist), and for use of the GB Transmission System by Interconnector Users and Interconnector Error Administrators.

### **Section 10 - Transitional Issues**

Section 10 deals with issues arising out of the transition from the MCUSA and associated documents to the CUSC and include amongst other issues, MCUSA Disputes, Outstanding Offers and Continuity of Security.

### **Section 11 - Interpretation and Definitions**

Section 11 sets out the general rules to be applied in interpreting the CUSC, Bilateral Agreements, Construction Agreements and Mandatory Services Agreements. It also sets out many of the defined terms used by the CUSC and other agreements.

### **Section 12 – BETTA Transition Issues**

Section 12 deals with issues arising out of the transition associated with the designation of amendments to the CUSC by the Secretary of State in accordance with the provisions of the Energy Act 2004 for the purposes of Standard Condition C10 of the Transmission Licence.

### **3. Schedules and Exhibits to the CUSC**

The Schedules and Exhibits form part of the CUSC documentation and contain pro-formas, which are substantially in the form of the types of agreements that may be required by parties to the CUSC.

## Table 1 - Applicability

Sections 1, 5 to 8 and Sections 10 and 11 apply to all categories of signatory. In relation to Sections 2 (Connection), 3 (Use of System) and 9 (Interconnectors) the following table sets out the applicability of those Sections in addition to the sections of general applicability:

	Categories	Applicable CUSC Sections	Other Relevant Agreements
1	Power Station directly connected to the GB Transmission System	2 and 3	Bilateral Connection Agreement Construction Agreement Mandatory Services Agreement
2	Non-Embedded Customer Site	2 only	Bilateral Connection Agreement Construction Agreement
3	Distribution System directly connected to the GB Transmission System	2 only	Bilateral Connection Agreement Construction Agreement
4	Suppliers	3 only	Use of System Supply Confirmation Notice
5	Embedded Power Station	3 only	Bilateral Embedded Generation Agreement Mandatory Services Agreement (where appropriate)
6	Small Power Station Trading Parties	3 only	Bilateral Embedded Generation Agreement
7	Interconnector User	9 Part II only	Use of System Interconnector Confirmation Notice
8	Interconnector Error Administrator	9 Part II only	Use of System Interconnector Confirmation Notice
9	Interconnector Owner	9 Part I only	Bilateral Connection Agreement Construction Agreement
10	Distribution Interconnector Owner	3 only	Bilateral Embedded Generation Agreement
11	Embedded Exemptable Large Power Stations whose Boundary Point Metering System is either SMRS registered or is registered in CMRS by a User who is responsible for the Use of System Charges associated with the BM Unit registered in CMRS.	None	Bilateral Embedded Licence exemptable Large power station Agreement

Users, when making a Connection Application or Use of System Application (in each case in the form of the relevant exhibit), should identify the category for which they are applying.

Parties who are not already CUSC Parties will be required to accede to the CUSC via the Accession Agreement in order to become a Party to the CUSC Framework Agreement (which gives the contractual effect to the CUSC).

## Part 3 - Overview of the CUSC Amendment Process

Section 8 sets out the provisions for bringing about an Amendment of the CUSC. An Amendment Proposal can be made by a CUSC Party, a BSC Party or others, e.g. via the 'energywatch' representative, by submitting the relevant information (specified in Section 8) to the Amendments Panel Secretary. A more detailed guide to the Amendment process is available in the Amendments Area of the National Grid CUSC website.

### The Amendments Panel and Amendment Process

The Panel consists of seven elected industry members who, in their capacity as members of the Amendments Panel, are required to act impartially. The Amendments Panel comprises the following members:

- An independent chairman (appointed by National Grid)
- Not more than 7 persons appointed by Users in accordance with the Election procedures set out in the CUSC
- 2 persons appointed by National Grid
- Not more than one person appointed by "energywatch" to represent customers

In addition a representative of the Authority attends meetings of the Amendments Panel as an observer.

There are also up to 5 Alternate Members appointed by Users at the same time Panel Members are appointed, in accordance with the Election Procedures set out in the CUSC.

Proposals to amend the CUSC are submitted to the Panel Secretary for consideration by the Amendments Panel. It is then for the Panel to decide whether the proposal should be considered by a Working Group prior to consultation or be sent straight out to industry consultation.

If an Amendment Proposal has been sent to a Working Group for consideration and if the Panel is satisfied that the terms of reference have been fulfilled, then the proposal will proceed to wider industry consultation.

Wider industry consultations take the form of a consultation document prepared by National Grid and published on the National Grid industry information CUSC website and sent to CUSC Parties, inviting their representations and comments on the Amendment Proposal.

Upon completion of the consultation phase, National Grid prepares an Amendment Report for submission to Ofgem. The requirements of an Amendment Report are detailed in Section 8 of the CUSC. The Amendment Report is also copied to relevant parties and published on the National Grid industry information website. Ofgem then determine whether the Amendment Proposal, or any Alternative Amendment as developed through the process, should be approved for implementation.

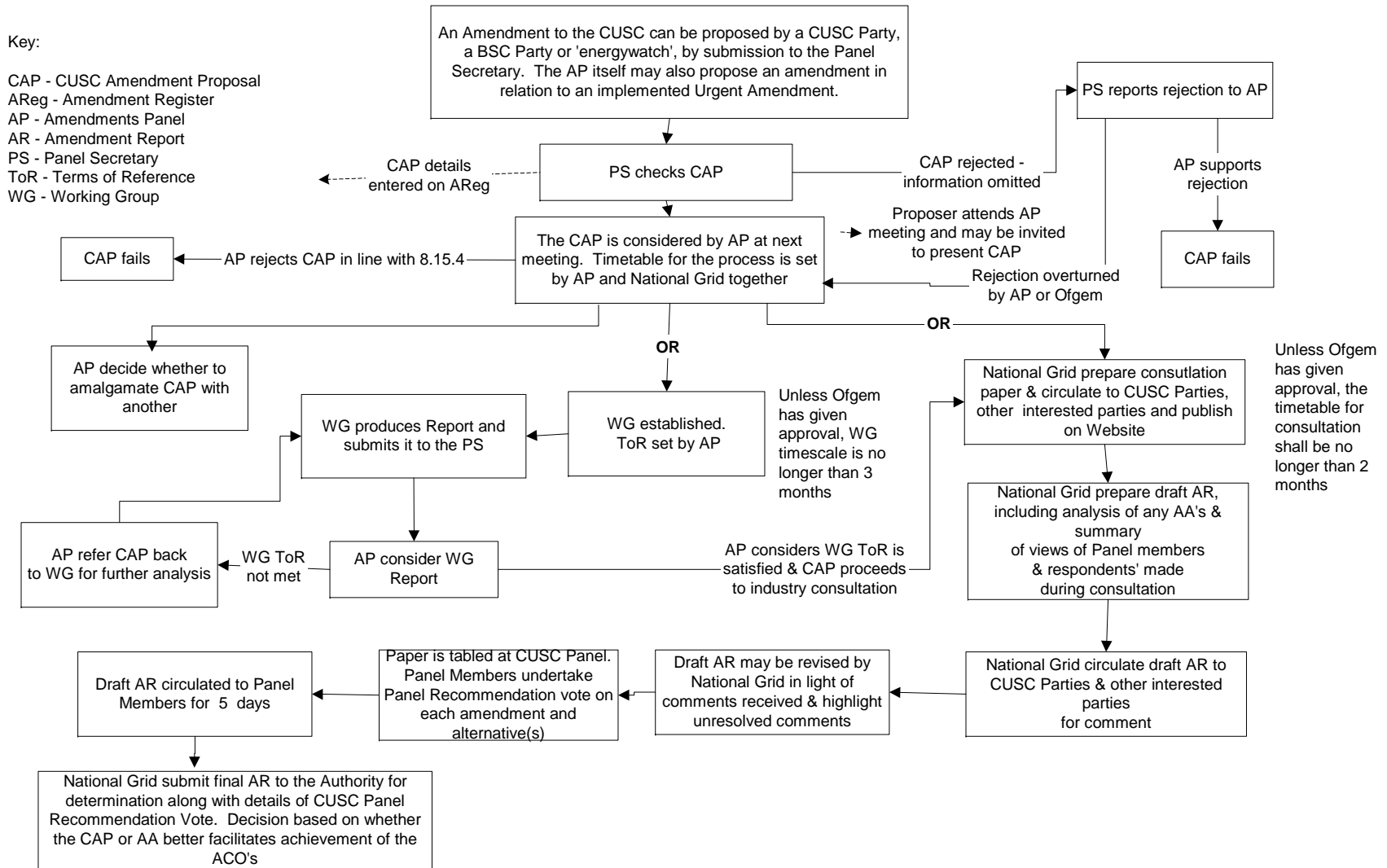
**Urgent Amendment Proposals**

From time to time, a CUSC Party may recommend to the Amendments Panel that an Amendment Proposal should be designated as Urgent.

If a Proposer recommends that his Proposal be given urgent treatment the Panel must first agree themselves and then seek approval for the urgent treatment from Ofgem. An Urgent Amendment Proposal can, with the approval of Ofgem, deviate from the 'normal' Amendment Procedures either in part or in full.

If an Urgent Amendment Proposal results in approval by Ofgem and implementation, the Amendments Panel may subsequently ask a Standing Group to consider whether an Alternative Amendment could better facilitate achievement of the Applicable CUSC Objectives.

**Figure 2 - Process Diagram for Amendment Proposals**



**Figure 3 - Process Diagram for Urgent Amendment Proposals**

