Our Ref:

Your Ref:

Date: July 2007

To: All Recipients of the Serviced Grid Code

Regulatory Frameworks
Electricity Codes

National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Tel No: 01926 656368
Fax No: 01926 656601

Dear Sir/Madam

THE SERVICED GRID CODE – ISSUE 3 REVISION 21

Revision 21 of Issue 3 of the Grid Code has been approved by the Authority for implementation on **16th July 2007**.

I have enclosed the replacement pages that incorporate the agreed changes necessary to update the Grid Code Issue 3 to Revision 21 standard.

The enclosed note provides a brief summary of the changes made to the text.

Yours faithfully

L Macleod
Electricity Codes

THE GRID CODE – ISSUE 3 REVISION 21

INCLUSION OF REVISED PAGES

Title Page			
Glossary and Definitions	G&D	-	**Pages 27 to 32**
Operation Code 8A	OC8A	-	**Contents Pages, Pages 1 to 14**
Operation Code 8B	OC8B	-	**Contents Pages, Pages 3 to 26**
Revisions		-	**Page 21**

NOTE: See Page 1 of the Revisions section of the Grid Code for details of how the revisions are indicated on the pages.

NATIONAL GRID ELECTRICITY TRANSMISSION PLC

THE GRID CODE – ISSUE 3 REVISION 21

SUMMARY OF CHANGES

The changes arise from the implementation of modifications proposed in the following Consultation Paper:

- **A/07** – Management of No System Connection

THE GRID CODE

Issue 3

Revision 21
16th July 2007

THIS DOCUMENT IS ISSUED BY:-

NATIONAL GRID ELECTRICITY TRANSMISSION plc
ELECTRICITY CODES, REGULATORY FRAMEWORKS
NATIONAL GRID HOUSE
WARWICK TECHNOLOGY PARK
GALLOWS HILL
WARWICK
CV34 6DA

REGISTERED OFFICE: **1-3 Strand**
London
WC2N 5EH

NGET Control Engineer	The nominated person employed by **NGET** to direct the operation of the **GB Transmission System** or such person as nominated by **NGET**.
NGET Operational Strategy	**NGET's** operational procedures which form the guidelines for operation of the **GB Transmission System**.
No-Load Field Voltage	Shall have the meaning ascribed to that term in **IEC** 34-16-1:1991 [equivalent to **British Standard BS**4999 Section 116.1 : 1992].
No System Connection	As defined in OC8A.1.6.2 and OC8B.1.7.2
Non-Embedded Customer	A **Customer** in **Great Britain**, except for a **Network Operator** acting in its capacity as such, receiving electricity direct from the **GB Transmission System** irrespective of from whom it is supplied.
Non-Synchronous Generating Unit	A **Generating Unit** that is not a **Synchronous Generating Unit** including for the avoidance of doubt a **Power Park Unit**.
Normal CCGT Module	A **CCGT Module** other than a **Range CCGT Module**.
Novel Unit	A tidal, wave, wind, geothermal, or any similar, **Generating Unit**.
OC9 De-synchronised Island Procedure	Has the meaning set out in OC9.5.4.
On-Site Generator Site	A site which is determined by the **BSC Panel** to be a Trading Unit under the **BSC** by reason of having fulfilled the Class 1 or Class 2 requirements as such terms are used in the **BSC**.
Operating Code or **OC**	That portion of the **Grid Code** which is identified as the **Operating Code**.
Operating Margin	**Contingency Reserve** plus **Operating Reserve**.
Operating Reserve	The additional output from **Large Power Stations** or the reduction in **Demand**, which must be realisable in real-time operation to respond in order to contribute to containing and correcting any **System Frequency** fall to an acceptable level in the event of a loss of generation or a loss of import from an **External Interconnection** or mismatch between generation and **Demand**.
Operation	A scheduled or planned action relating to the operation of a **System** (including an **Embedded Power Station**).

Operational Data	Data required under the **Operating Codes** and/or **Balancing Codes**.
Operational Day	The period from 0500 hours on one day to 0500 on the following day.
Operation Diagrams	Diagrams which are a schematic representation of the **HV Apparatus** and the connections to all external circuits at a **Connection Site**, incorporating its numbering, nomenclature and labelling.
Operational Effect	Any effect on the operation of the relevant other **System** which causes the **GB Transmission System** or the **System** of the other **User** or **Users**, as the case may be, to operate (or be at a materially increased risk of operating) differently to the way in which they would or may have operated in the absence of that effect.
Operational Intertripping	The automatic tripping of circuit-breakers to prevent abnormal system conditions occurring, such as over voltage, overload, **System** instability, etc. after the tripping of other circuit-breakers following power **System** fault(s) which includes **System** to **Generating Unit**, **System** to **CCGT Module, System** to **Power Park Module, System** to **DC Converter** and **System** to **Demand** intertripping schemes.
Operational Planning	Planning through various timescales the matching of generation output with forecast **GB Transmission System Demand** together with a reserve of generation to provide a margin, taking into account outages of certain **Generating Units**, of parts of the **GB Transmission System** and of parts of **User Systems** to which **Power Stations** and/or **Customers** are connected, carried out to achieve, so far as possible, the standards of security set out in **NGET's Transmission Licence**, each **Relevant Transmission Licensee's Transmission Licence** or **Electricity Distribution Licence**, as the case may be.
Operational Planning Margin	An operational planning margin set by **NGET**.
Operational Planning Phase	The period from 8 weeks to the end of the 5th year ahead of real time operation.
Operational Procedures	Management instructions and procedures, both in support of the **Safety Rules** and for the local and remote operation of **Plant** and **Apparatus**, issued in connection with the actual operation of **Plant** and/or **Apparatus** at or from a **Connection Site**.
Operational Switching	Operation of **Plant** and/or **Apparatus** to the instruction of the relevant **Control Engineer.** For the avoidance of doubt, the operation of **Transmission Plant** and/or **Apparatus** forming part of the **GB Transmission System** in England and Wales, will be to the instruction of **NGET** and in Scotland will be to the instruction of the **Relevant Transmission Licensee**.

Other Relevant Data The data listed in BC1.4.2(f) under the heading **Other Relevant Data**

Out of Synchronism The condition where a **System** or **Generating Unit** cannot meet the requirements to enable it to be **Synchronised**.

Output Usable or **OU** The (daily or weekly) forecast value (in MW), at the time of the (daily or weekly) peak demand, of the maximum level at which the **Genset** can export to the **Grid Entry Point**, or in the case of **Embedded Power Stations**, to the **User System Entry Point**.

Over-excitation Limiter Shall have the meaning ascribed to that term in **IEC** 34-16-1:1991 [equivalent to **British Standard BS**4999 Section 116.1 : 1992].

Part 1 System Ancillary Services **Ancillary Services** which are required for **System** reasons and which must be provided by **Users** in accordance with the **Connection Conditions**. An exhaustive list of **Part 1 System Ancillary Services** is included in that part of CC.8.1 headed Part 1.

Part 2 System Ancillary Services **Ancillary Services** which are required for **System** reasons and which must be provided by a **User** if the **User** has agreed to provide them under a **Bilateral Agreement**. A non-exhaustive list of **Part 2 System Ancillary Services** is included in that part of CC.8.1 headed Part 2.

Part Load The condition of a **Genset**, or **Cascade Hydro Scheme** which is **Loaded** but is not running at its Maximum Export Limit.

Permit for Work for proximity work In England and Wales, a document issued by **NGET** or a **User** in accordance with its respective **Safety Rules** to enable work to be carried out in accordance with OC8A.8 and which provides for **Safety Precautions** to be applied and maintained. An example format of **NGET**'s permit for work is attached as Appendix E to **OC8A**.

In Scotland, a document issued by a **Relevant Transmission Licensee** or a **User** in accordance with its respective **Safety Rules** to enable work to be carried out in accordance with OC8B.8 and which provides for **Safety Precautions** to be applied and maintained. Example formats of the **Relevant Transmission Licensees'** permits for work are attached as Appendix E to **OC8B**.

Partial Shutdown The same as a **Total Shutdown** except that all generation has ceased in a separate part of the **Total System** and there is no electricity supply from **External Interconnections** or other parts of the **Total System** to that part of the **Total System** and, therefore, that part of the **Total System** is shutdown, with the result that it is not possible for that part of the **Total System** to begin to function again without **NGET's** directions relating to a **Black Start**.

Phase (Voltage) Unbalance	The ratio (in percent) between the rms values of the negative sequence component and the positive sequence component of the voltage.
Physical Notification	Data that describes the **BM Participant**'s best estimate of the expected input or output of **Active Power** of a **BM Unit** and/or (where relevant) **Generating Unit**.
Planning Code or **PC**	That portion of the **Grid Code** which is identified as the **Planning Code**.
Planned Maintenance Outage	An outage of **NGET** electronic data communication facilities as provided for in CC.6.5.8 and **NGET's** associated computer facilities of which normally at least 5 days notice is given, but in any event of which at least twelve hours notice has been given by **NGET** to the **User** and which is anticipated to last no longer than 2 hours. The length of such an outage may in exceptional circumstances be extended where at least 24 hours notice has been given by **NGET** to the **User**. It is anticipated that normally any planned outage would only last around one hour.
Planned Outage	An outage of a **Large Power Station** or of part of the **GB Transmission System**, or of part of a **User System**, co-ordinated by **NGET** under **OC2**.
Plant	Fixed and movable items used in the generation and/or supply and/or transmission of electricity, other than **Apparatus**.
Point of Common Coupling	That point on the **GB Transmission System** electrically nearest to the **User** installation at which either **Demands** or **Loads** are, or may be, connected.
Point of Connection	An electrical point of connection between the **GB Transmission System** and a **User's System**.
Point of Isolation	The point on **Apparatus** (as defined in OC8A.1.6.2 and OC8B.1.7.2) at which **Isolation** is achieved.
Post-Control Phase	The period following real time operation.
Power Factor	The ratio of **Active Power** to **Apparent Power**.
Power Island	**Gensets** at an isolated **Power Station**, together with complementary local **Demand**. In Scotland a **Power Island** may include more than one **Power Station.**

Power Park Module	A collection of **Non-synchronous Generating Units** (registered as a **Power Park Module** under the **PC**) that are powered by an **Intermittent Power Source**, joined together by a **System** with a single electrical point of connection to the **GB Transmission System** (or **User System** if **Embedded).** The connection to the **GB Transmission System** (or **User System** if **Embedded**) may include a **DC Converter.**
Power Park Module Availability Matrix	The matrix described in Appendix 1 to BC1 under the heading **Power Park Module Availability Matrix**.
Power Park Module Planning Matrix	A matrix in the form set out in Appendix 4 of OC2 showing the combination of **Power Park Units** within a **Power Park Module** which would be expected to be running under normal conditions.
Power Park Unit	A **Generating Unit** within a **Power Park Module**.
Power Station	An installation comprising one or more **Generating Units** or **Power Park Modules** (even where sited separately) owned and/or controlled by the same **Generator**, which may reasonably be considered as being managed as one **Power Station**.
Power System Stabiliser or **PSS**	Equipment controlling the **Exciter** output via the voltage regulator in such a way that power oscillations of the synchronous machines are dampened. Input variables may be speed, frequency or power (or a combination of these).
Preface	The preface to the **Grid Code** (which does not form part of the **Grid Code** and therefore is not binding).
Preliminary Notice	A notice in writing, sent by **NGET** both to all **Users** identified by it under OC12.4.2.1 and to the **Test Proposer**, notifying them of a proposed **System Test**.
Preliminary Project Planning Data	Data relating to a proposed **User Development** at the time the **User** applies for a **CUSC Contract** but before an offer is made and accepted.
Primary Response	The automatic increase in **Active Power** output of a **Genset** or, as the case may be, the decrease in **Active Power Demand** in response to a **System Frequency** fall. This increase in **Active Power** output or, as the case may be, the decrease in **Active Power Demand** must be in accordance with the provisions of the relevant **Ancillary Services Agreement** which will provide that it will be released increasingly with time over the period 0 to 10 seconds from the time of the start of the **Frequency** fall on the basis set out in the **Ancillary Services Agreement** and fully available by the latter, and sustainable for at least a further 20 seconds. The interpretation of the **Primary Response** to a – 0.5 Hz frequency change is shown diagrammatically in Figure CC.A.3.2.

Programming Phase The period between **Operational Planning Phase** and the **Control Phase**. It starts at the 8 weeks ahead stage and finishes at 17:00 on the day ahead of real time.

Proposal Notice A notice submitted to **NGET** by a **User** which would like to undertake a **System Test**.

Proposal Report A report submitted by the **Test Panel** which contains:

a) proposals for carrying out a **System Test** (including the manner in which the **System Test** is to be monitored);

b) an allocation of costs (including un-anticipated costs) between the affected parties (the general principle being that the **Test Proposer** will bear the costs); and

c) such other matters as the **Test Panel** considers appropriate.

The report may include requirements for indemnities to be given in respect of claims and losses arising from a **System Test**.

Protection The provisions for detecting abnormal conditions on a **System** and initiating fault clearance or actuating signals or indications.

Protection Apparatus A group of one or more **Protection** relays and/or logic elements designated to perform a specified **Protection** function.

Pumped Storage Generator A **Generator** which owns and/or operates any **Pumped Storage Plant**.

Pumped Storage Plant The Dinorwig, Ffestiniog, Cruachan and Foyers **Power Stations**.

Pumped Storage Unit A **Generating Unit** within a **Pumped Storage Plant**.

OPERATING CODE NO.8 Appendix 1 (OC8A)

SAFETY CO-ORDINATION IN ENGLAND AND WALES

CONTENTS

(This contents page does not form part of the Grid Code)

OPERATING CODE NO.8 APPENDIX 1 (OC8A)

SAFETY CO-ORDINATION IN ENGLAND AND WALES

OC8A.1 INTRODUCTION

OC8A.1.1 **OC8A** specifies the standard procedures to be used by **NGET** and **Users** for the co-ordination, establishment and maintenance of necessary **Safety Precautions** when work is to be carried out on or near the **GB Transmission System** in England and Wales or the **System** of a **User** in England and Wales and when there is a need for **Safety Precautions** on **HV Apparatus** on the other's **System** for this work to be carried out safely. **OC8A** applies to **NGET** and **Users** only in England and Wales. Where work is to be carried out on or near equipment in Scotland, but such work requires **Safety Precautions** to be established in England and Wales, **OC8A** should be followed by **NGET** and **Users** to establish the required **Safety Precautions** in England and Wales.

OC8B specifies the procedures to be used by the **Relevant Transmission Licensees** and **Users** in Scotland.

In this **OC8A** the term “work” includes testing, other than **System Tests** which are covered by **OC12**.

OC8A.1.2 **OC8A** also covers the co-ordination, establishment and maintenance of necessary safety precautions on the **Implementing Safety Co-ordinator’s System** when work is to be carried out at a **User’s Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or **NGET** as the case may be where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator’s System**.

OC8A.1.3 **OC8A** does not apply to the situation where **Safety Precautions** need to be agreed solely between **Users**. **OC8A** does not apply to the situation where **Safety Precautions** need to be agreed solely between **Transmission Licensees**.

OC8A.1.4 **OC8A** does not seek to impose a particular set of **Safety Rules** on **NGET** and **Users**; the **Safety Rules** to be adopted and used by **NGET** and each **User** shall be those chosen by each.

OC8A.1.5 **Site Responsibility Schedules** document the control responsibility for each item of **Plant** and **Apparatus** for each site.

OC8A.1.6 Defined terms

OC8A.1.6.1 **Users** should bear in mind that in **OC8** only, in order that **OC8** reads more easily with the terminology used in certain **Safety Rules**, the term "**HV Apparatus**" is defined more restrictively and is used accordingly in **OC8A. Users** should, therefore, exercise caution in relation to this term when reading and using **OC8A.**

OC8A.1.6.2 In **OC8A** only the following terms shall have the following meanings:

(1) "**HV Apparatus**" means **High Voltage** electrical circuits forming part of a **System**, on which **Safety From The System** may be required or on which **Safety Precautions** may be applied to allow work to be carried out on a **System**.

(2) "**Isolation**" means the disconnection of **Apparatus** from the remainder of the **System** in which that **Apparatus** is situated by either of the following:

(a) an **Isolating Device** maintained in an isolating position. The isolating position must either be:

(i) maintained by immobilising and **Locking** the **Isolating Device** in the isolating position and affixing a **Caution Notice** to it. Where the **Isolating Device** is **Locked** with a **Safety Key**, the **Safety Key** must be secured in a **Key Safe** and the **Key Safe Key** must be, where reasonably practicable, given to the authorised site representative of the **Requesting Safety Co-Ordinator** and is to be retained in safe custody. Where not reasonably practicable the **Key Safe Key** must be retained by the authorised site representative of the **Implementing Safety Co-Ordinator** in safe custody; or

(ii) maintained and/or secured by such other method which must be in accordance with the **Local Safety Instructions** of **NGET** or that **User**, as the case may be; or

(b) an adequate physical separation which must be in accordance with, and maintained by, the method set out in the **Local Safety Instructions** of **NGET** or that **User**, as the case may be, and, if it is a part of that method, a **Caution Notice** must be placed at the point of separation;

or

(c) in the case where the relevant **HV Apparatus** of the **Implementing Safety Co-ordinator** is being either constructed or modified, an adequate physical separation as a result of a **No System Connection**.

(3) **"No System Connection"** means an adequate physical separation (which must be in accordance with, and maintained by, the method set out in the **Local Safety Instructions** of the **Implementing Safety Co-orinator**) of the **Implementing Safety Co-ordinator's HV Apparatus** from the rest of the **Implementing Safety Co-ordinator's System** where such **HV Apparatus** has no installed means of being connected to, and will not for the duration of the **Safety Precaution** be connected to, a source of electrical energy or to any other part of the **Implementing Safety Co-ordinators System**.

(4) "**Earthing**" means a way of providing a connection between conductors and earth by an **Earthing Device** which is either:

(i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** is **Locked** with a **Safety Key**, the **Safety Key** must be secured in a **Key Safe** and the **Key Safe Key** must be, where reasonably practicable, given to the authorised site representative of the **Requesting**

Safety Co-Ordinator and is to be retained in safe custody. Where not reasonably practicable the **Key Safe Key** must be retained by the authorised site representative of the **Implementing Safety Co-Ordinator** in safe custody; or

(ii) maintained and/or secured in position by such other method which must be in accordance with the **Local Safety Instructions** of **NGET** or that **User** as the case may be.

OC8A.1.6.3 For the purpose of the co-ordination of safety relating to **HV Apparatus** the term **"Safety Precautions"** means **Isolation** and/or **Earthing.**

OC8A.2 OBJECTIVE

OC8A.2.1 The objective of **OC8A** is to achieve:-

(i) **Safety From The System** when work on or near a **System** necessitates the provision of **Safety Precautions** on another **System** on **HV Apparatus** up to a **Connection Point**; and

(ii) **Safety From The System** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or **NGET** (as the case may be) where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**.

OC8A.2.2 A flow chart, set out in **OC8A Appendix C**, illustrates the process utilised in **OC8A** to achieve the objective set out in OC8A.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8A**, the written text will prevail.

OC8A.3 SCOPE

OC8A.3.1 **OC8A** applies to **NGET** and to **Users** in England and Wales, which in OC8A means:-

(a) **Generators**;

(b) **Network Operators**; and

(c) **Non-Embedded Customers.**

The procedures for the establishment of safety co-ordination by **NGET** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8A.4 PROCEDURE

OC8A.4.1 Approval of **Local Safety Instructions**

OC8A.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **User** will supply to **NGET** a copy of its **Local Safety Instructions** relating to its side of the **Connection Point** at each **Connection Site**.

(b) In accordance with the timing requirements of each **Bilateral Agreement**, **NGET** will supply to each **User** a copy of its **Local Safety Instructions** relating to the **Transmission** side of the **Connection Point** at each **Connection Site**.

(c) Prior to connection **NGET** and the **User** must have approved each other's relevant **Local Safety Instructions** in relation to **Isolation** and **Earthing**.

OC8A.4.1.2 Either party may require that the **Isolation** and/or **Earthing** provisions in the other party's **Local Safety Instructions** affecting the **Connection Site** should be made more stringent in order that approval of the other party's **Local Safety Instructions** can be given. Provided these requirements are not unreasonable, the other party will make such changes as soon as reasonably practicable. These changes may need to cover the application of **Isolation** and/or **Earthing** at a place remote from the **Connection Site**, depending upon the **System** layout. Approval may not be withheld because the party required to approve reasonably believes the provisions relating to **Isolation** and/or **Earthing** are too stringent.

OC8A.4.1.3 If, following approval, a party wishes to change the provisions in its **Local Safety Instructions** relating to **Isolation** and/or **Earthing**, it must inform the other party. If the change is to make the provisions more stringent, then the other party merely has to note the changes. If the change is to make the provisions less stringent, then the other party needs to approve the new provisions and the procedures referred to in OC8A.4.1.2 apply.

OC8A.4.2 **Safety Co-ordinators**

OC8A.4.2.1 For each **Connection Point**, **NGET** and each **User** will at all times have nominated and available a person or persons ("**Safety Co-ordinator(s)**") to be responsible for the co-ordination of **Safety Precautions** when work is to be carried out on a **System** which necessitates the provision of **Safety Precautions** on **HV Apparatus** pursuant to **OC8A**. A **Safety Co-ordinator** may be responsible for the co-ordination of safety on **HV Apparatus** at more than one **Connection Point**.

OC8A.4.2.2 Each **Safety Co-ordinator** shall be authorised by **NGET** or a **User**, as the case may be, as competent to carry out the functions set out in **OC8A** to achieve **Safety From The System**. Confirmation from **NGET** or a **User**, as the case may be, that its **Safety Co-ordinator(s)** as a group are so authorised is dealt with in CC.5.2. Only persons with such authorisation will carry out the provisions of **OC8A.**

OC8A.4.2.3 Contact between **Safety Co-ordinators** will be made via normal operational channels, and accordingly separate telephone numbers for **Safety Co-ordinators** need not be provided. At the time of making contact, each party will confirm that they are authorised to act as a **Safety Co-ordinator**, pursuant to **OC8A.**

OC8A.4.2.4 If work is to be carried out on a **System**, or on equipment of **NGET** or a **User** near to a **System**, as provided in this **OC8A**, which necessitates the provision of **Safety Precautions** on **HV Apparatus** in accordance with the provisions of **OC8A**, the **Requesting Safety Co-ordinator** who requires the **Safety Precautions** to be provided shall contact the relevant **Implementing Safety Co-ordinator** to co-ordinate the establishment of the **Safety Precautions**.

OC8A.4.3 **RISSP**

OC8A.4.3.1 **OC8A** sets out the procedures for utilising the **RISSP**, which will be used except where dealing with equipment in proximity to the other's **System** as provided in OC8A.8. Sections OC8A.4 to OC8A.7 inclusive should be read accordingly.

OC8A.4.3.2 **NGET** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8A.** That set out in **OC8A** Appendix A and designated as "RISSP-R", shall be used when **NGET** is the **Requesting Safety Co-ordinator**, and that in **OC8A** Appendix B and designated as "RISSP-I", shall be used when **NGET** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by **NGET** staff.

OC8A.4.3.3 (a) **Users** may either adopt the format referred to in OC8A.4.3.2, or use an equivalent format, provided that it includes sections requiring insertion of the same information and has the same numbering of sections as RISSP-R and RISSP-I as set out in Appendices A and B respectively.

(b) Whether **Users** adopt the format referred to in OC8A.4.3.2, or use the equivalent format as above, the format may be produced and held in, and retrieved from an electronic form by the **User**.

(c) Whichever method **Users** choose, each must provide proformas (whether in tangible or electronic form) for use by its staff.

OC8A.4.3.4 All references to RISSP-R and RISSP-I shall be taken as referring to the corresponding parts of the alternative forms or other tangible written or electronic records used by each **User**.

OC8A.4.3.5 RISSP-R will have an identifying number written or printed on it, comprising a prefix which identifies the location at which it is issued, and a unique (for each **User** or **NGET**, as the case may be) serial number consisting of four digits and the suffix "R".

OC8A.4.3.6 (a) In accordance with the timing requirements set out in CC.5.2 each **User** shall apply in writing to **NGET** for **NGET's** approval of its proposed prefix.

(b) **NGET** shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by **NGET** or another **User** and shall, as soon as possible (and in any event within ten days), respond in writing to the **User** with its approval or disapproval.

(c) If **NGET** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.

(d) If **NGET** has disapproved, then the **User** shall either notify **NGET** in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to **NGET** with revised proposals and the above procedure shall apply to that application.

OC8A.4.3.7 The prefix allocation will be periodically circulated by **NGET** to all **Users,** for information purposes, using a National Grid Safety Circular in the form set out in **OC8A** Appendix D.

OC8A.5 **SAFETY PRECAUTIONS** ON **HV APPARATUS**

OC8A.5.1 Agreement of **Safety Precautions**

OC8A.5.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the **Location** of the **Safety Precautions** to be established. This agreement will be recorded in the respective **Safety Logs**.

OC8A.5.1.2 It is the responsibility of the **Implementing Safety Co-ordinator** to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved on the **HV Apparatus**, specified by the **Requesting Safety Co-ordinator** which is to be identified in Part 1.1 of the **RISSP**. Reference to another **System** in this OC8A.5.1.2 shall not include the **Requesting Safety Co-ordinator's System** which is dealt with in OC8A.5.1.3.

OC8A.5.1.3 When the **Implementing Safety Co-ordinator** is of the reasonable opinion that it is necessary for **Safety Precautions** on the **System** of the **Requesting Safety Co-ordinator**, other than on the **HV Apparatus** specified by the **Requesting Safety Co-ordinator,** which is to be identified in Part 1.1 of the **RISSP**, he shall contact the **Requesting Safety Co-ordinator** and the details shall be recorded in part 1.1 of the **RISSP** forms. In these circumstances it is the responsibility of the **Requesting Safety Co-ordinator** to establish and maintain such **Safety Precautions**.

OC8A.5.1.4 In the event of disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** on which **Safety From The System** is to be achieved as indicated on the **Operation Diagram**.

OC8A.5.2 Implementation of **Isolation**

OC8A.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8A.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.

OC8A.5.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** has been established, and identify the

Requesting Safety Co-ordinator's HV Apparatus up to the **Connection Point**, for which the **Isolation** has been provided. The confirmation shall specify:

(a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as applicable) of each point of **Isolation**;

(b) whether **Isolation** has been achieved by an **Isolating Device** in the isolating position, by an adequate physical separation or as a result of **a No System Connection**;

(c) where an **Isolating Device** has been used whether the isolating position is either :

(i) maintained by immobilising and **Locking** the **Isolating Device** in the isolating position and affixing a **Caution Notice** to it. Where the **Isolating Device** has been **Locked** with a **Safety Key**, the confirmation shall specify that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable (including where **Earthing** has been requested in OC8A.5.1), the confirmation shall specify that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or

(ii) maintained and/or secured by such other method which must be in accordance with the **Local Safety Instructions** of **NGET** or that **User**, as the case may be; and

(d) where an adequate physical separation has been used that it will be in accordance with, and maintained by, the method set out in the **Local Safety Instructions** of **NGET** or that **User**, as the case may be, and, if it is a part of that method, that a **Caution Notice** has been placed at the point of separation;

(e) where a **No System Connection** has been used the physical position of the **No System Connection** shall be defined and shall not be varied for the duration of **Safety Precaution** and the **Implementing Safety Co-ordinator's** relevant **HV Apparatus** will not, for the duration of the **Safety Precaution** be connected to a source of electrical energy or to any other part of the **Implementing Safety Co-ordinator's System**.

The confirmation of **Isolation** shall be recorded in the respective **Safety Logs**.

OC8A.5.2.3 Following the confirmation of **Isolation** being established by the **Implementing Safety Co-ordinator** and the necessary establishment of relevant **Isolation** on the **Requesting Safety Co-ordinators System**, the **Requesting Safety Co-ordinator** will then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if agreed in section OC8A.5.1. If the implementation of **Earthing** has been agreed, then the authorised site representative of the **Implementing Safety Co-ordinator** shall retain any **Key Safe Key** in safe custody until any **Safety Key** used for **Earthing** has been secured in the **Key Safe**.

OC8A.5.3 Implementation of **Earthing**

OC8A.5.3.1 The **Implementing Safety Co-ordinator** shall then establish the agreed **Earthing**.

OC8A.5.3.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Earthing** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point**, for which the **Earthing** has been provided. The confirmation shall specify:

(a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as is applicable) of each point of **Earthing**; and

(b) in respect of the **Earthing Device** used, whether it is:

(i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** has been **Locked** with a **Safety Key**, that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not resonably practicable, that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or

(ii) maintained and/or secured in position by such other method which is in accordance with the **Local Safety Instructions** of **NGET** or the **Relevant Transmission Licensee** or that **User**, as the case may be.

The confirmation of **Earthing** shall be recorded in the respective **Safety Logs**.

OC8A.5.3.3. The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.

OC8A.5.4 **RISSP** Issue Procedure

OC8A.5.4.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work on the **Requesting Safety Co-ordinator's System**, before any work commences they must be recorded by a **RISSP** being issued. The **RISSP** is applicable to **HV Apparatus** up to the **Connection Point** identified in section 1.1 of the RISSP-R and RISSP-I forms.

OC8A.5.4.2 Where **Safety Precautions** are being provided to enable work to be carried out on both sides of the **Connection Point** a **RISSP** will need to be issued for each side of the **Connection Point** with **NGET** and the respective **User** each enacting the role of **Requesting Safety Co-ordinator**. This will result in a RISSP-R and a RISSP-I form being completed by each of the **NGET** and the **User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.

OC8A.5.4.3 Once the **Safety Precautions** have been established (in accordance with OC8A.5.2 and OC8A.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a RISSP-I form recording the details specified in OC8A.5.1.3, OC8A.5.2.2

and OC8A.5.3.2. Where **Earthing** has not been requested, Part 1.2(b) will be completed with the words “not applicable” or “N/A”. He shall then contact the **Requesting Safety Co-ordinator** to pass on these details.

OC8A.5.4.4 The **Requesting Safety Co-ordinator** shall complete Parts 1.1 and 1.2 of the RISSP-R, making a precise copy of the details received. On completion, the**Requesting Safety Co-ordinator** shall read the entries made back to the sender and check that an accurate copy has been made.

OC8A.5.4.5 The **Requesting Safety Co-ordinator** shall then issue the number of the **RISSP**, taken from the RISSP-R, to the **Implementing Safety Co-ordinator** who will ensure that the number, including the prefix and suffix, is accurately recorded in the designated space on the RISSP-I form.

OC8A.5.4.6 The **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** shall complete and sign Part 1.3 of the RISSP-R and RISSP-I respectively and then enter the time and date. When signed no alteration to the **RISSP** is permitted; the **RISSP** may only be cancelled.

OC8A.5.4.7 The **Requesting Safety Co-ordinator** is then free to authorise work (including a test that does not affect the **Implementing Safety Co-ordinator's System**) in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator’s System**. This is likely to involve the issue of safety documents or other relevant internal authorisations. Where testing is to be carried out which affects the **Implementing Safety Co-ordinator's System**, the procedure set out below in OC8A.6 shall be implemented.

OC8A.5.5 **RISSP** Cancellation Procedure

OC8A.5.5.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **RISSP**.

OC8A.5.5.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **RISSP** identifying number (including the prefix and suffix), and agree it is the **RISSP** to be cancelled.

OC8A.5.5.3 The **Requesting Safety Co-ordinator** and the relevant **Implementing Safety Co-ordinator** shall then respectively complete Part 2.1 of their respective RISSP-R and RISSP-I forms and shall then exchange details. The details being exchanged shall include their respective names and time and date. On completion of the exchange of details the respective **RISSP** is cancelled. The removal of **Safety Precautions** is as set out in OC8A.5.5.4 and OC8A.5.5.5.

OC8A.5.5.4 Neither **Safety Co-ordinator** shall instruct the removal of any **Isolation** forming part of the **Safety Precautions** as part of the returning of the **HV Apparatus** to service until it is confirmed to each by each other that every earth on each side of the **Connection Point**, within the points of isolation identified on the **RISSP**, has been removed or disconnected by the provision of additional **Points of Isolation**.

OC8A.5.5.5 Subject to the provisions in OC8A.5.5.4, the **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety**

Co-ordinator is representing. Where a **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator**, the **Key Safe Key** must be returned to the authorised site representative of the **Implementing Safety Co-ordinator**. The only situation in which any **Safety Precautions** may be removed without first cancelling the **RISSP** in accordance with OC8A.5.5 or OC8A.5.6 is when **Earthing** is removed in the situation envisaged in OC8A.6.2(b).

OC8A.5.6 **RISSP** Change Control

Nothing in this **OC8A** prevents **NGET** and **Users** agreeing to a simultaneous cancellation and issue of a new **RISSP**, if both agree. It should be noted, however, that the effect of that under the relevant **Safety Rules** is not a matter with which the **Grid Code** deals.

OC8A.6 TESTING AFFECTING ANOTHER **SAFETY CO-ORDINATOR'S SYSTEM**

OC8A.6.1 The carrying out of the test may affect **Safety Precautions** on **RISSPs** or work being carried out which does not require a **RISSP**. Testing can, for example, include the application of an independent test voltage. Accordingly, where the **Requesting Safety Co-ordinator** wishes to authorise the carrying out of such a test to which the procedures in OC8A.6 apply he may not do so and the test will not take place unless and until the steps in (a)-(c) below have been followed and confirmation of completion has been recorded in the respective **Safety Logs**:

(a) confirmation must be obtained from the **Implementing Safety Co-ordinator** that:

(i) no person is working on, or testing, or has been authorised to work on, or test, any part of its **System** or another **System(s)** (other than the **System** of the **Requesting Safety Co-ordinator**) within the points of **Isolation** identified on the **RISSP** form relating to the test which is proposed to be undertaken, and

(ii) no person will be so authorised until the proposed test has been completed (or cancelled) and the **Requesting Safety Co-ordinator** has notified the **Implementing Safety Co-ordinator** of its completion (or cancellation);

(b) any other current **RISSPs** which relate to the parts of the **System** in which the testing is to take place must have been cancelled in accordance with procedures set out in OC8A.5.5;

(c) the **Implementing Safety Co-ordinator** must agree with the **Requesting Safety Co-ordinator** to permit the testing on that part of the **System** between the points of **Isolation** identified in the **RISSP** associated with the test and the points of **Isolation** on the **Requesting Safety Co-ordinator's System**.

OC8A.6.2 (a) The **Requesting Safety Co-ordinator** will inform the **Implementing Safety Co-ordinator** as soon as the test has been completed or cancelled and the confirmation shall be recorded in the respective **Safety Logs**.

(b) When the test gives rise to the removal of **Earthing** which it is not intended to re-apply, the relevant **RISSP** associated with the test shall be cancelled at the completion or cancellation of the test in accordance with the procedure set out in either OC8A.5.5 or OC8A.5.6. Where the **Earthing** is re-applied following the completion or cancellation of the test, there is no requirement to cancel the relevant **RISSP** associated with the test pursuant to this OC8A.6.2.

OC8A.7 EMERGENCY SITUATIONS

OC8A.7.1 There may be circumstances where **Safety Precautions** need to be established in relation to an unintended electrical connection or situations where there is an unintended risk of electrical connection between the **GB Transmission System** and a **User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.

OC8A.7.2 In those circumstances, if both **NGET** and the respective **User** agree, the relevant provisions of OC8A.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this **OC8A**, a **Connection Point**.

OC8A.7.3 (a) The relevant **Safety Co-ordinator** shall be that for the electrically closest existing **Connection Point** to that **User's System** or such other local **Connection Point** as may be agreed between **NGET** and the **User**, with discussions taking place between the relevant local **Safety Co-ordinators**. The **Connection Point** to be used shall be known in this OC8A.7.3 as the "relevant **Connection Point**".

(b) The **Local Safety Instructions** shall be those which apply to the relevant **Connection Point**.

(c) The prefix for the **RISSP** will be that which applies for the relevant **Connection Point.**

OC8A.8 **SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM**

OC8A.8 applies to the situation where work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or **NGET** as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**. It does not apply to other situations to which **OC8A** applies. In this part of **OC8A**, a **Permit for Work for proximity work** is to be used, rather then the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8A.8.

OC8A.8.1 Agreement of **Safety Precautions**

OC8A.8.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or **NGET**, as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the Location of the **Safety Precautions** to be established, having as part of this process informed the **Implementing Safety Co-ordinator** of the equipment and

the work to be undertaken. The respective **Safety Co-ordinators** will ensure that they discuss the request with their authorised site representative and that the respective authorised site representatives discuss the request at the **Connection Site**. This agreement will be recorded in the respective **Safety Logs**.

OC8A.8.1.2 It is the responsibility of the **Implementing Safety Co-ordinator**, working with his authorised site representative as appropriate, to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved for work to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment and in relation to work which is to be identified in the relevant part of the **Permit for Work for proximity work** where the work or equipment is near to **HV Apparatus** of the **Implementing Safety Co-ordinator's System** specified by the **Requesting Safety Co-ordinator**. Reference to another **System** in this OC8A.8.1.2 shall not include the **Requesting Safety Co-ordinator's System**.

OC8A.8.1.3 In the event of disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** near to which the work is to be carried out as indicated on the **Operation Diagram**.

OC8A.8.2 Implementation of **Isolation and Earthing**

OC8A.8.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8A.8.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation** and (if required) **Earthing**.

OC8A.8.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** and (if required) **Earthing** has been established.

OC8A.8.2.3 The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.

OC8A.8.3 **Permit for Work for proximity work Issue Procedure**

OC8A.8.3.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work to be carried out at a **User's Site** or **Transmission Site** (as the case may be) on equipment where the work or equipment is in proximity to **HV Apparatus** of the **Implementing Safety Co-ordinator**, before any work commences they must be recorded by a **Permit for Work for proximity work** being issued. The **Permit for Work for proximity work** shall identify the **Implementing Safety Co-ordinator's HV Apparatus** in proximity to the required work

OC8A.8.3.2 Once the **Safety Precautions** have been established (in accordance with OC8A.8.2), the **Implementing Safety Co-ordinator** shall agree to the issue of the **Permit for Work for proximity work** with the appropriately authorised site representative of the **Requesting Safety Co-ordinator's Site**. The **Implementing Safety Co-ordinator**

will inform the **Requesting Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number.

OC8A.8.3.3 The appropriately authorised site representative of the **Implementing Safety Co-ordinator** shall then issue the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Requesting Safety Co-ordinator**. The **Permit for Work for proximity work** will in the section dealing with the work to be carried out, be completed to identify that the work is near the **Implementing Safety Co-ordinator's HV Apparatus.** No further details of the **Requesting Safety Co-ordinator's** work will be recorded, as that is a matter for the **Requesting Safety Co-ordinator** in relation to his work.

OC8A.8.3.4 The **Requesting Safety Co-ordinator** is then free to authorise work in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's Site**. This is likely to involve the issue of safety documents or other relevant internal authorisations.

OC8A.8.4 **Permit for Work for proximity work Cancellation Procedure**

OC8A.8.4.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **Permit for Work for proximity work**.

OC8A.8.4.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number, and agree that the **Permit for Work for proximity work** can be cancelled. The cancellation is then effected by the appropriately authorised site representative of the **Requesting Safety Co-ordinator** returning the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Implementing Safety Co-ordinator**.

OC8A.8.4.3 The **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing.

OC8A.9 LOSS OF INTEGRITY OF **SAFETY PRECAUTIONS**

OC8A.9.1 In any instance when any **Safety Precautions** may be ineffective for any reason the relevant **Safety Co-ordinator** shall inform the other **Safety Co-ordinator(s)** without delay of that being the case and, if requested, of the reasons why.

OC8A.10 SAFETY LOG

OC8A.10.1 **NGET** and **Users** shall maintain **Safety Logs** which shall be a chronological record of all messages relating to safety co-ordination under **OC8A** sent and received by the **Safety Co-ordinator(s)**. The **Safety Logs** must be retained for a period of not less than one year.

[**NGET**] [_____ **CONTROL CENTRE/SITE**]

RECORD OF INTER-SYSTEM **SAFETY PRECAUTIONS** (RISSP-R)
(**Requesting Safety Co-ordinator's** Record)

RISSP NUMBER

PART 1

1.1 **HV APPARATUS** IDENTIFICATION

Safety Precautions have been established by the **Implementing Safety Co-ordinator** (or by another **User** on that **User's System** connected to the **Implementing Safety Co-ordinator's System**) to achieve (in so far as it is possible from that side of the **Connection Point**) **Safety From The System** on the following **HV Apparatus** on the **Requesting Safety Co-ordinator's System**: [State identity - name(s) and, where applicable, identification of the **HV** circuit(s) up to the **Connection Point**]:

_____

_____

Further **Safety precautions** required on the **Requesting Safety Co-ordinator's System** as notified by the **Implementing Safety Co-ordinator**.

_____

1.2 **SAFETY PRECAUTIONS** ESTABLISHED

(a) **ISOLATION**

[State the **Location(s)** at which **Isolation** has been established (whether on the **Implementing Safety Co-ordinator's System** or on the **System** of another **User** connected to the **Implementing Safety Co-ordinator's System**). For each **Location,** identify each point of **Isolation**. For each point of **Isolation**, state the means by which the **Isolation** has been achieved, and whether, immobilised and **Locked**, **Caution Notice** affixed, other safety procedures applied, as appropriate.]

_____

_____

_____

(b) **EARTHING**

[State the **Location(s)** at which **Earthing** has been established (whether on the **Implementing Safety Co-ordinator's System** or on the **System** of another **User** connected to the **Implementing Safety Co-ordinator's System**). For each **Location**, identify each point of **Earthing**. For each point of **Earthing**, state the means by which **Earthing** has been achieved, and whether, immobilised and **Locked**, other safety procedures applied, as appropriate].

_____

_____

_____

1.3 ISSUE

I have received confirmation from _____ (name of **Implementing Safety Co-ordinator**) at _____ (location) that the **Safety Precautions** identified in paragraph 1.2 have been established and that instructions will not be issued at his location for their removal until this **RISSP** is cancelled.

Signed .....(**Requesting Safety Co-ordinator**)

at .....(time) on ..... (Date)

PART 2

2.1 CANCELLATION

I have confirmed to _____ (name of the **Implementing Safety Co-ordinator**) at _____ (location) that the **Safety Precautions** set out in paragraph 1.2 are no longer required and accordingly the **RISSP** is cancelled.

Signed .....(**Requesting Safety Co-ordinator**)

at .....(time) on ..... (Date)

OPERATING CODE NO.8 Appendix 2 (OC8B)

SAFETY CO-ORDINATION IN SCOTLAND

CONTENTS

(This contents page does not form part of the Grid Code)

part of that method, a **Caution Notice** must be placed at the point of separation; or

(c) in the case where the relevant **HV Apparatus** of the **Implementing Safety Co-ordinator** is being either constructed or modified, an adequate physical separation as a result of a **No System Connection**.

(3) **"No System Connection"** means an adequate physical separation (which must be in accordance with, and maintained by, the method set out in the **Safety Rules** of the **Implmenting Safety Co-ordinator**) of the **Implementing Safety Co-ordinator's HV Apparatus** fom the rest of the **Implementing Safety Co-ordinator's System** where such **HV Apparatus** has no installed means of being connected to, and will not for the duration of the **Safety Precaution** be connected to, a source of electrical energy or to any other part of the **Implementing Safety Co-ordinator's System**.

(4) "**Earthing**" means a way of providing a connection between conductors and earth by an **Earthing Device** which is either:

(i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** is **Locked** with a **Safety Key**, the **Safety Key** must be secured in a **Key Safe** and the **Key Safe Key** must be given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable the **Key Safe Key** must be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or

(iii) maintained and/or secured in position by such other method which must be in accordance with the **Safety Rules** of the **Relevant Transmission Licensee** or that **User** as the case may be.

OC8B.1.7.3 For the purpose of the co-ordination of safety relating to **HV Apparatus** the term **"Safety Precautions"** means **Isolation** and/or **Earthing.**

OC8B.2 OBJECTIVE

OC8B.2.1 The objective of **OC8B** is to achieve:-

(i) **Safety From The System** when work on or near a **System** necessitates the provision of **Safety Precautions** on another **System** on **HV Apparatus** up to a **Connection Point**; and

(ii) **Safety From The System** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or the **Relevant Transmission Licensee** (as the case may be) where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**.

OC8B.2.2 A flow chart, set out in **OC8B** Appendix C, illustrates the process utilised in **OC8B** to achieve the objective set out in OC8B.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8B**, the written text will prevail.

OC8B.3 SCOPE

OC8B.3.1 **OC8B** applies to **NGET**, **Relevant Transmission Licensees** and to **Users**, which in OC8 means:-

(a) **Generators**;

(b) **Network Operators**; and

(c) **Non-Embedded Customers.**

The procedures for the establishment of safety co-ordination by **NGET** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8B.4 PROCEDURE

OC8B.4.1 Approval of **Safety Rules**

OC8B.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **User** will supply to the **Relevant Transmission Licensee** a copy of its **Safety Rules** relating to its side of the **Connection Point** at each **Connection Site**.

(b) In accordance with the timing requirements of each **Bilateral Agreement** the **Relevant Transmission Licensee** will supply to each **User** a copy of its **Safety Rules** relating to the **Transmission** side of the **Connection Point** at each **Connection Site**.

(c) Prior to connection the **Relevant Transmission Licensee** and the **User** must have approved each other's relevant **Safety Rules** in relation to **Isolation** and **Earthing**.

OC8B.4.1.2 Either party may require that the **Isolation** and/or **Earthing** provisions in the other party's **Safety Rules** affecting the **Connection Site** should be made more stringent in order that approval of the other party's **Safety Rules** can be given. Provided these requirements are not unreasonable, the other party will make such changes as soon as reasonably practicable. These changes may need to cover the application of **Isolation** and/or **Earthing** at a place remote from the **Connection Site**, depending upon the **System** layout. Approval may not be withheld because the party required to approve reasonably believes the provisions relating to **Isolation** and/or **Earthing** are too stringent.

OC8B.4.1.3 If, following approval, a party wishes to change the provisions in its **Safety Rules** relating to **Isolation** and/or **Earthing**, it must inform the other party. If the change is to make the provisions more stringent, then the other party merely has to note the changes. If the change is to make the provisions less stringent, then the other party needs to approve the new provisions and the procedures referred to in OC8B.4.1.2 apply.

OC8B.4.2 **Safety Co-ordinators**

OC8B.4.2.1 For each **Connection Point,** the **Relevant Transmission Licensee** and each **User** will have nominated to be available, to a timescale agreed in the **Bilateral Agreement**, a person or persons ("**Safety Co-ordinator(s)**") to be responsible for the co-ordination of **Safety Precautions** when work is to be carried out on a **System** which necessitates the provision of **Safety Precautions** on **HV Apparatus** pursuant to **OC8B.** A **Safety Co-ordinator** may be responsible for the co-ordination of safety on **HV Apparatus** at more than one **Connection Point**.

OC8B.4.2.2 Each **Safety Co-ordinator** shall be authorised by the **Relevant Transmission Licensee** or a **User,** as the case may be, as competent to carry out the functions set out in **OC8B** to achieve **Safety From The System**. Confirmation from the **Relevant Transmission Licensee** or a **User**, as the case may be, that its **Safety Co-ordinator(s)** as a group are so authorised is dealt with, for **Users**, in CC.5.2 and for **Relevant Transmission Licensees** in the **STC**. Only persons with such authorisation will carry out the provisions of **OC8B.** Each **User** shall, prior to being connected to the **GB Transmission System**, give notice in writing to the **Relevant Transmission Licensee** of its **Safety Co-ordinator(s)** and will update the written notice yearly and whenever there is a change to the identity of its **Safety Co-ordinators** or to the **Connection Points.** The **Relevant Transmission Licensee** will, at the time of a **User** being connected to the **GB Transmission System** give notice in writing to that **User** of the identity of its **Safety Co-ordinator(s)** and will update the written notice whenever there is a change to the **Connection Points** or **Safety Co-ordinators.**

OC8B.4.2.3 Contact between **Safety Co-ordinators** will be made via normal operational channels, and accordingly separate telephone numbers for **Safety Co-ordinators** need not be provided.

OC8B.4.2.4 If work is to be carried out on a **System**, or on equipment of the **Relevant Transmission Licensee** or a **User** near to a **System**, as provided in this **OC8B,** which necessitates the provision of **Safety Precautions** on **HV Apparatus** in accordance with the provisions of **OC8B**, the **Requesting Safety Co-ordinator** who requires the **Safety Precautions** to be provided shall contact the relevant **Implementing Safety Co-ordinator** to co-ordinate the establishment of the **Safety Precautions**.

OC8B.4.3 **RISSP**

OC8B.4.3.1 **OC8B** sets out the procedures for utilising the **RISSP**, which will be used except where dealing with equipment in proximity to the other's **System** as provided in **OC8B.8**. Sections **OC8B.4** to **OC8B.7** inclusive should be read accordingly.

OC8B.4.3.2 The **Revant Transmission Licensee** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8B**, or any other format which may be agreed between the **Relevant Transmission Licensee** and each **User**. That set out in **OC8B** Appendix A and designated as "RISSP-R", shall be used when the **Relevant Transmission Licensee** is the **Requesting Safety Co-ordinator**, and that in **OC8B** Appendix B and designated as "RISSP-I", shall be used when the **Relevant Tranmission Licensee** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by **Relevant Transmission Licensees** staff.

OC8B.4.3.3 **Users** may either adopt the format referred to in OC8B.4.3.2 or any other format which may be agreed between the **Relevant Transmission Licensee** and the **User** from time to time.

OC8B.4.3.4 All references to RISSP-R and RISSP-I shall be taken as referring to the corresponding parts of the alternative forms or other tangible written or electronic records used by each **User** or **Relevant Transmission Licensee**.

OC8B.4.3.5 RISSP-R will have an identifying number written or printed on it, comprising a prefix which identifies the location at which it is issued, and a unique (for each **User** or **Relevant Transmission Licensee**, as the case may be) serial number consisting of four digits and the suffix "R".

OC8B.4.3.6 (a) In accordance with the timing requirements set out in the **Bilateral Agreement** each **User** shall apply in writing to **Relevant Transmission Licensee** for **Relevant Transmission Licensee's** approval of its proposed prefix.

(b) **Relevant Transmission Licensee** shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by **Relevant Transmission Licensee** or another **User** and shall, as soon as possible (and in any event within ten days), respond in writing to the **User** with its approval or disapproval.

(c) If **Relevant Transmission Licensee** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.

(d) If **Relevant Transmission Licensee** has disapproved, then the **User** shall either notify **Relevant Transmission Licensee** in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to **Relevant Transmission Licensee** with revised proposals and the above procedure shall apply to that application.

OC8B.5 **SAFETY PRECAUTIONS** ON **HV APPARATUS**

OC8B.5.1 Agreement of **Safety Precautions**

OC8B.5.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the **Location** of the **Safety Precautions** to be established. This agreement will be recorded in the respective **Safety Logs**.

OC8B.5.1.2 It is the responsibility of the **Implementing Safety Co-ordinator** to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved on the **HV Apparatus**, specified by the **Requesting Safety Co-ordinator** which is to be identified in Part 1.1 of the **RISSP**. Reference to another **System** in this OC8B.5.1.2 shall not include the **Requesting Safety Co-ordinator's System** which is dealt with in OC8B.5.1.3.

OC8B.5.1.3 When the **Implementing Safety Co-ordinator** is of the reasonable opinion that it is necessary for **Safety Precautions** on the **System** of the **Requesting Safety Co-ordinator**, other than on the **HV Apparatus** specified by the **Requesting Safety Co-ordinator,** which is to be identified in Part 1.1 of the **RISSP**, he shall contact the **Requesting Safety Co-ordinator** and the details shall be recorded in part 1.1 of the **RISSP** forms. In these circumstances it is the responsibility of the **Requesting Safety Co-ordinator** to establish and maintain such **Safety Precautions**.

OC8B.5.1.4 The location of the **Safety Precautions** should be indicated on each **User's** operational diagram and labelled as per the local instructions of each **User**.

OC8B.5.1.5 In the event of disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** on which **Safety From The System** is to be achieved as indicated on the **Operation Diagram**.

OC8B.5.2 Implementation of **Isolation**

OC8B.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.

OC8B.5.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point**, for which the **Isolation** has been provided. The confirmation shall specify:

(a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as applicable) of each point of **Isolation**;

(b) whether **Isolation** has been achieved by an **Isolating Device** in the isolating position, by an adequate physical separation or as a result of a **No System Connection**;

(c) where an **Isolating Device** has been used whether the isolating position is either :

(i) maintained by immobilising and **Locking** the **Isolating Device** in the isolating position and affixing a **Caution Notice** to it. Where the **Isolating Device** has been **Locked** with a **Safety Key**, the confirmation shall specify that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site reresentative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable (including where **Earthing** has been requested in OC8B.5.1), the confirmation shall specify that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or

(ii) maintained and/or secured by such other method which must be in accordance with the **Safety Rules** of the **Relevant Transmission Licensee** or that **User**, as the case may be; and

(d) where an adequate physical separation has been used that it will be in accordance with, and maintained by, the method set out in the **Safety Rules** of the **Relevant Transmission Licensee** or that **User**, as the case may be, and, if it is a part of that method, that a **Caution Notice** has been placed at the point of separation;

(e) where a **No System Connection** has been used the physical position of the **No System Connection** shall be defined and shall not be varied for the duration of the **Safety Precaution** and the **Implementing Safety Co-ordinator's** relevant **HV Apparatus** will not, for the duration of the **Safety Precaution** be connected to a source of electrical energy or to any any other part of the **Implmenting Safety Co-ordinator's System**.

The confirmation of **Isolation** shall be recorded in the respective **Safety Logs**.

OC8B.5.2.3 Following the confirmation of **Isolation** being established by the **Implementing Safety Co-ordinator** and the necessary establishment of relevant **Isolation** on the **Requesting Safety Co-ordinators System**, the **Requesting Safety Co-ordinator** will then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if agreed in section OC8B.5.1. If the implementation of **Earthing** has been agreed, then the authorised site representative of the **Implementing Safety Co-ordinator** shall retain any **Key Safe Key** in safe custody until any **Safety Key** used for **Earthing** has been secured in the **Key Safe**.

OC8B.5.3 Implementation of **Earthing**

OC8B.5.3.1 The **Implementing Safety Co-ordinator** shall then establish the agreed **Earthing**.

OC8B.5.3.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Earthing** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point**, for which the **Earthing** has been provided. The confirmation shall specify:

(a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as is applicable) of each point of **Earthing**; and

(b) in respect of the **Earthing Device** used, whether it is:

(i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** has been **Locked** with a **Safety Key**, that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable, that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or

(ii) maintained and/or secured in position by such other method which is in accordance with the **Safety Rules** of the **Relevant Transmission Licensee** or that **User**, as the case may be.

The confirmation of **Earthing** shall be recorded in the respective **Safety Logs**.

OC8B.5.3.3. The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.

OC8B.5.4 **RISSP** Issue Procedure

OC8B.5.4.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work on the **Requesting Safety Co-ordinator's System**, before any work commences they must be recorded by a **RISSP** being issued. The **RISSP** is applicable to **HV Apparatus** up to the **Connection Point** identified in section 1.1 of the RISSP-R and RISSP-I forms.

OC8B.5.4.2 Where **Safety Precautions** are being provided to enable work to be carried out on both sides of the **Connection Point** a **RISSP** will need to be issued for each side of the **Connection Point** with **Relevant Transmission Licensee** and the respective **User** each enacting the role of **Requesting Safety Co-ordinator**. This will result in a RISSP-R and a RISSP-I form being completed by each of the **Relevant Transmission Licensee** and the **User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.

OC8B.5.4.3 Once the **Safety Precautions** have been established (in accordance with OC8B.5.2 and OC8B.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a RISSP-I form recording the details specified in OC8B.5.1.3, OC8B.5.2.2 and OC8B.5.3.2. Where **Earthing** has not been requested, Part 1.2(b) will be completed with the words "not applicable" or "N/A". He shall then contact the **Requesting Safety Co-ordinator** to pass on these details.

OC8B.5.4.4 The **Requesting Safety Co-ordinator** shall complete Parts 1.1 and 1.2 of the RISSP-R, making a precise copy of the details received. On completion, the **Requesting Safety Co-ordinator** shall read the entries made back to the sender and check that an accurate copy has been made.

OC8B.5.4.5 The **Requesting Safety Co-ordinator** shall then issue the number of the **RISSP**, taken from the RISSP-R, to the **Implementing Safety Co-ordinator** who will ensure that the number, including the prefix and suffix (where applicable), is accurately recorded in the designated space on the RISSP-I form.

OC8B.5.4.6 The **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** shall complete and sign Part 1.3 of the RISSP-R and RISSP-I respectively and then enter the time and date. When signed no alteration to the **RISSP** is permitted; the **RISSP** may only be cancelled.

OC8B.5.4.7 The **Requesting Safety Co-ordinator** is then free to authorise work, but not testing, in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's System**. This is likely to involve the issue of safety documents or other relevant internal authorisations. Where testing is to be carried out, the procedure set out below in OC8B.6 shall be implemented.

OC8B.5.5 **RISSP** Cancellation Procedure

OC8B.5.5.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **RISSP**.

OC8B.5.5.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **RISSP** identifying number, including the prefix and suffix (where applicable), and agree it is the **RISSP** to be cancelled.

OC8B.5.5.3 The **Requesting Safety Co-ordinator** and the relevant **Implementing Safety Co-ordinator** shall then respectively complete Part 2.1 of their respective RISSP-R and RISSP-I forms and shall then exchange details. The details being exchanged shall include their respective names and time and date. On completion of the exchange of details the respective **RISSP** is cancelled. The removal of **Safety Precautions** is as set out in OC8B.5.5.4 and OC8B.5.5.5.

OC8B.5.5.4 Neither **Safety Co-ordinator** shall instruct the removal of any **Isolation** forming part of the **Safety Precautions** as part of the returning of the **HV Apparatus** to service until it is confirmed to each by each other that every earth on each side of the **Connection Point**, within the points of isolation identified on the **RISSP**, has been removed or disconnected by the provision of additional **Points of Isolation**.

OC8B.5.5.5 Subject to the provisions in OC8B.5.5.4, the **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing. Where a **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator**, the **Key Safe Key** must be returned to the authorised site representative of the **Implementing Safety Co-ordinator**. The only situation in which any **Safety Precautions** may be removed without first cancelling the **RISSP** in accordance with OC8B.5.5 or OC8B.5.6 is when **Earthing** is removed in the situation envisaged in OC8B.6.2(b).

OC8B.5.6 **RISSP** Change Control

Nothing in this **OC8B** prevents **Relevant Transmission Licensee** and **Users** agreeing to a simultaneous cancellation and issue of a new **RISSP**, if both agree. It should be noted, however, that the effect of that under the relevant **Safety Rules** is not a matter with which the **Grid Code** deals.

OC8B.6 TESTING

OC8B.6.1 The carrying out of the test may affect **Safety Precautions** on **RISSPs** or work being carried out which does not require a **RISSP**. Testing can, for example, include the application of an independent test voltage. Accordingly, where the **Requesting Safety Co-ordinator** wishes to authorise the carrying out of such a test to which the procedures in OC8B.6 apply he may not do so and the test will not take place unless and until the steps in (a)-(c) below have been followed and confirmation of completion has been recorded in the respective **Safety Logs**:

(a) confirmation must be obtained from the **Implementing Safety Co-ordinator** that:

(i) no person is working on, or testing, or has been authorised to work on, or test, any part of its **System** or another **System(s)** (other than the **System** of the **Requesting Safety Co-ordinator**) within the points of **Isolation** identified on the **RISSP** form relating to the test which is proposed to be undertaken, and

(ii) no person will be so authorised until the proposed test has been completed (or cancelled) and the **Requesting Safety Co-ordinator** has notified the **Implementing Safety Co-ordinator** of its completion (or cancellation);

(b) any other current **RISSPs** which relate to the parts of the **System** in which the testing is to take place must have been cancelled in accordance with procedures set out in OC8B.5.5;

(c) the **Implementing Safety Co-ordinator** must agree with the **Requesting Safety Co-ordinator** to permit the testing on that part of the **System** between the points of **Isolation** identified in the **RISSP** associated with the test and the points of **Isolation** on the **Requesting Safety Co-ordinator's System**.

OC8B.6.2 (a) The **Requesting Safety Co-ordinator** will inform the **Implementing Safety Co-ordinator** as soon as the test has been completed or cancelled and the confirmation shall be recorded in the respective **Safety Logs**.

(b) When the test gives rise to the removal of **Earthing** which it is not intended to re-apply, the relevant **RISSP** associated with the test shall be cancelled at the completion or cancellation of the test in accordance with the procedure set out in either OC8B.5.5 or OC8B.5.6. Where the **Earthing** is re-applied following the completion or cancellation of the test, there is no requirement to cancel the relevant **RISSP** associated with the test pursuant to this OC8B.6.2.

OC8B.7 EMERGENCY SITUATIONS

OC8B.7.1 There may be circumstances where **Safety Precautions** need to be established in relation to an unintended electrical connection or situations where there is an unintended risk of electrical connection between the **GB Transmission System** and a **User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.

OC8B.7.2 In those circumstances, if both the **Relevant Transmission Licensee** the **User** agree, the relevant provisions of OC8B.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this OC8B, a **Connection Point**.

OC8B.7.3 (a) The relevant **Safety Co-ordinator** shall be that for the electrically closest existing **Connection Point** to that **User's System** or such other local **Connection Point** as may be agreed between the **Relevant Transmission Licensee** and the **User**, with discussions taking place between the relevant local **Safety Co-ordinators**. The **Connection Point** to be used shall be known in this OC8B.7.3 as the "relevant **Connection Point**".

(c) The **Safety Rules** shall be those which apply to the relevant **Connection Point**.

(c) The prefix for the **RISSP** (where applicable) will be that which applies for the relevant **Connection Point.**

OC8B.8 **SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM**

OC8B.8 applies to the situation where work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or a **Relevant Transmission Licensee** as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**. It does not apply to other situations to which **OC8B** applies. In this part of **OC8B**, a **Permit for Work for proximity work** is to be used, rather then the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8B.8.

OC8B.8.1 Agreement of **Safety Precautions**

OC8B.8.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or a **Relevant Transmission Licensee**, as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the Location of the **Safety Precautions** to be established, having as part of this process informed the **Implementing Safety Co-ordinator** of the equipment and the work to be undertaken. The respective **Safety Co-ordinators** will ensure that they discuss the request with their authorised site representative and that the respective authorised site representatives discuss the request at the **Connection Site**. This agreement will be recorded in the respective **Safety Logs**.

OC8B.8.1.2 It is the responsibility of the **Implementing Safety Co-ordinator**, working with his authorised site representative as appropriate, to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved for work to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment and in relation to work which is to be identified in the relevant part of the **Permit for Work for proximity work** where the work or equipment is near to **HV Apparatus** of the **Implementing Safety Co-ordinator's System** specified by the **Requesting Safety Co-ordinator**. Reference to another **System** in this OC8B.8.1.2 shall not include the **Requesting Safety Co-ordinator's System**.

OC8B.8.1.3 In the event of disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** near to which the work is to be carried out as indicated on the **Operation Diagram**.

OC8B.8.2 Implementation of **Isolation and Earthing**

OC8B.8.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.8.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation** and (if required) **Earthing**.

OC8B.8.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** and (if required) **Earthing** has been established.

OC8B.8.2.3 The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.

OC8B.8.3 **Permit for Work for proximity work Issue Procedure**

OC8B.8.3.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work to be carried out at a **User's Site** or **Transmission Site** (as the case may be) on equipment where the work or equipment is in proximity to **HV Apparatus** of the **Implementing Safety Co-ordinator**, before any work commences they must be recorded by a **Permit for Work for proximity work** being issued. The **Permit for Work for proximity work** shall identify the **Implementing Safety Co-ordinator's HV Apparatus** in proximity to the required work

OC8B.8.3.2 Once the **Safety Precautions** have been established (in accordance with OC8B.8.2), the **Implementing Safety Co-ordinator** shall agree to the issue of the **Permit for Work for proximity work** with the appropriately authorised site representative of the **Requesting Safety Co-ordinator's Site**. The **Implementing Safety Co-ordinator** will inform the **Requesting Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number.

OC8B.8.3.3 The appropriately authorised site representative of the **Implementing Safety Co-ordinator** shall then issue the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Requesting Safety Co-ordinator**. The **Permit for Work for proximity work** will in the section dealing with the work to be carried out, be completed to identify that the work is near the **Implementing Safety Co-ordinator's HV Apparatus.** No further details of the **Requesting Safety Co-ordinator's** work will be recorded, as that is a matter for the **Requesting Safety Co-ordinator** in relation to his work.

OC8B.8.3.4 The **Requesting Safety Co-ordinator** is then free to authorise work in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's Site**. This is likely to involve the issue of safety documents or other relevant internal authorisations.

OC8B.8.4 **Permit for Work for proximity work Cancellation Procedure**

OC8B.8.4.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **Permit for Work for proximity work**.

OC8B.8.4.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number, and agree that the **Permit for Work for proximity work** can be cancelled. The cancellation is then effected by the appropriately authorised site representative of the **Requesting Safety Co-ordinator** returning the **Permit for Work for proximity work**

to the appropriately authorised site representative of the **Implementing Safety Co-ordinator**.

OC8B.8.4.3 The **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing.

OC8B.9 LOSS OF INTEGRITY OF **SAFETY PRECAUTIONS**

OC8B.9.1 In any instance when any **Safety Precautions** may be ineffective for any reason the relevant **Safety Co-ordinator** shall inform the other **Safety Co-ordinator(s)** without delay of that being the case and, if requested, of the reasons why.

OC8B.10 SAFETY LOG

OC8B.10.1 **Relevant Transmission Licensees** and **Users** shall maintain **Safety Logs** which shall be a chronological record of all messages relating to safety co-ordination under **OC8** sent and received by the **Safety Co-ordinator(s)**. The **Safety Logs** must be retained for a period of not less than six years.

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-R)
(Requesting Safety Co-ordinator's Record)

RISSP NUMBER _____

Part 1

1.1 CIRCUIT IDENTIFICATION

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

_____

_____

_____

_____

_____

_____

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Locations(s) at which Isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

_____

_____

_____

_____

_____

_____

(b) EARTHING

State the Locations(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

_____

_____

_____

_____

_____

_____

1.3 ISSUE

I have received confirmation from _____ (name of Implementing Safety Co-ordinator) at _____ (Location) that the Safety Precautions identified in paragraph 1.2 have been established and that instructions will not be issued at his Location for their removal until this RISSP is cancelled.

Signed ..... (Requesting Safety Co-ordinator)

at ..... (time) on ..... (date)

PART 2

2.1 CANCELLATION

I have confirmed to _____ (name of the Implementing Safety Co-ordinator) at _____ (Location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

Signed ..... (Requesting Safety Co-ordinator)

at ..... (time) on ..... (date)

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-I)
(Implementing Safety Co-ordinator's Record)

RISSP NUMBER _____

PART 1

1.1 CIRCUIT IDENTIFICATION

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

_____

_____

_____

_____

_____

_____

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Location(s) at which isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

_____

_____

_____

_____

_____

_____

(b) EARTHING

State the Location(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

_____

_____

_____

_____

_____

_____

1.3 ISSUE

I confirmed to _____ (name of Requesting Safety Co-ordinator) at _____ (Location) that the Safety Precautions identified in paragraph 1.2 have been established and that instructions will not be issued at my Location for their removal until this RISSP is cancelled.

Signed ..... (Implementing Safety Co-ordinator)

at ..... (time) on ..... (date)

PART 2

2.1 CANCELLATION

I have received confirmation from _____ (name of the Requesting Safety Co-ordinator) at _____ (Location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

Signed ..... (Implementing Safety Co-ordinator)

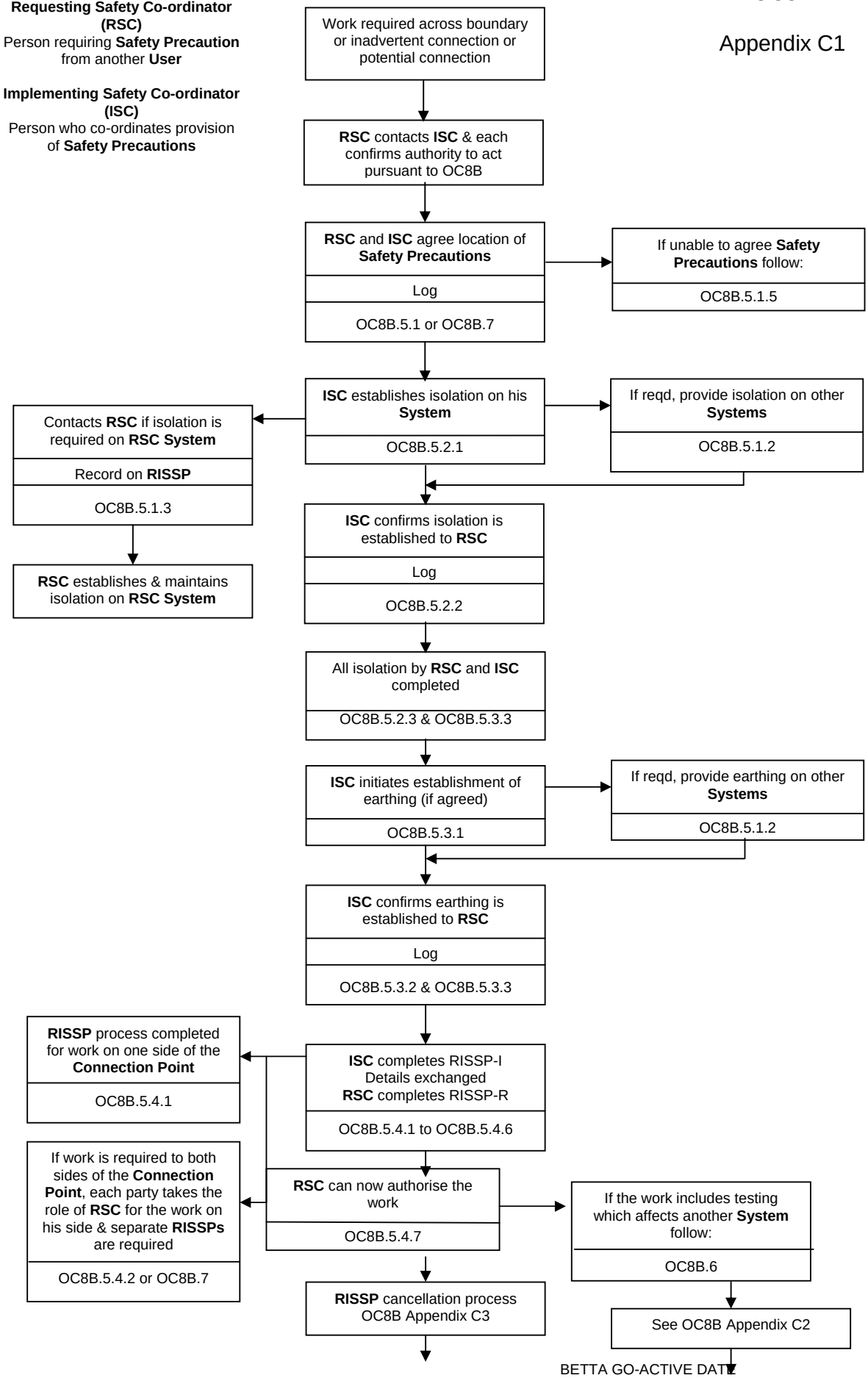
at ..... (time) on ..... (date)

(Note: This form to be of a different colour from RISSP-R.)

RISSP ISSUE PROCESS

Requesting Safety Co-ordinator (RSC)
Person requiring **Safety Precaution** from another **User**

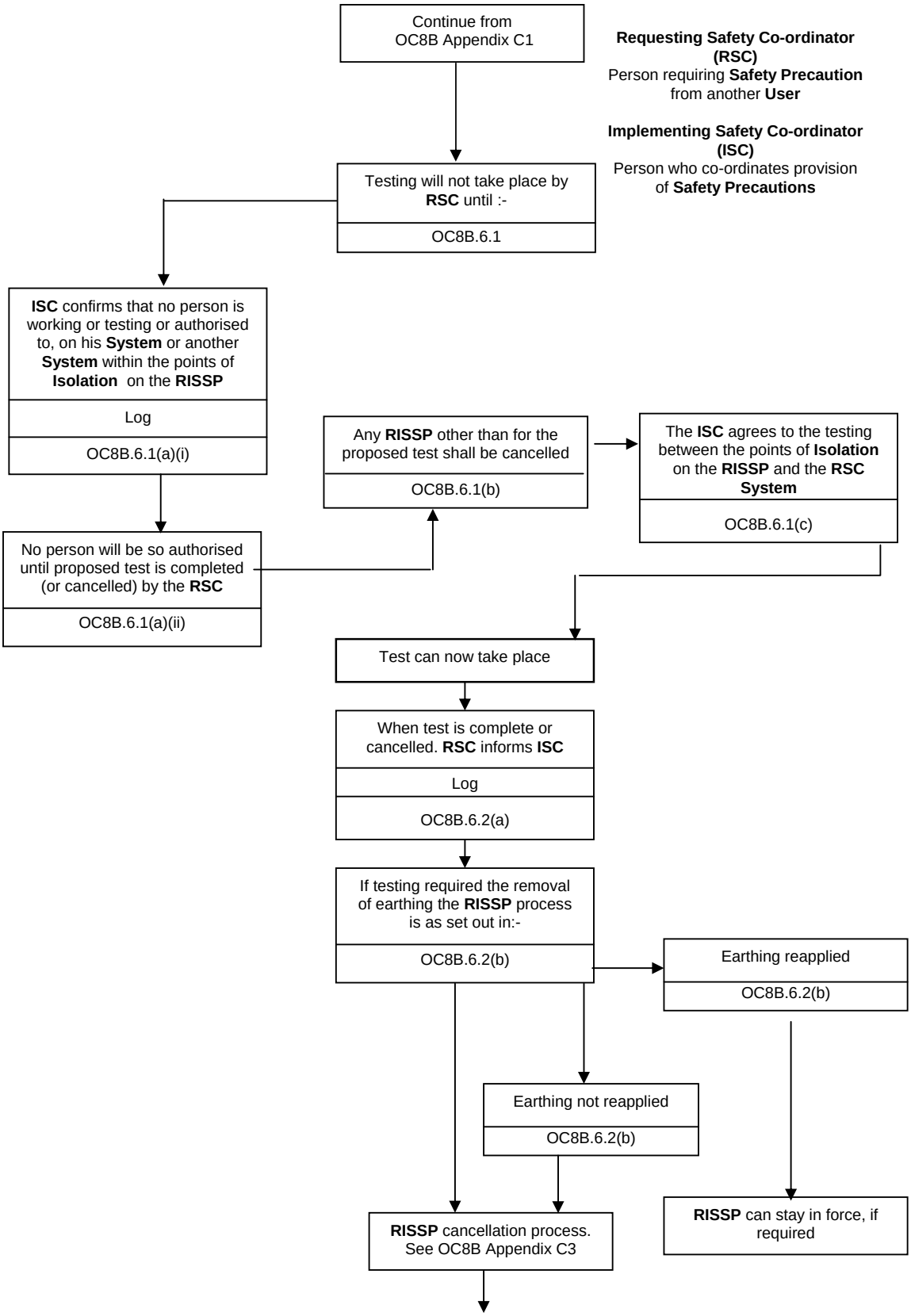
Implementing Safety Co-ordinator (ISC)
Person who co-ordinates provision of **Safety Precautions**



TESTING PROCESS

Where testing affects another Safety Co-ordinator's System

Appendix C2

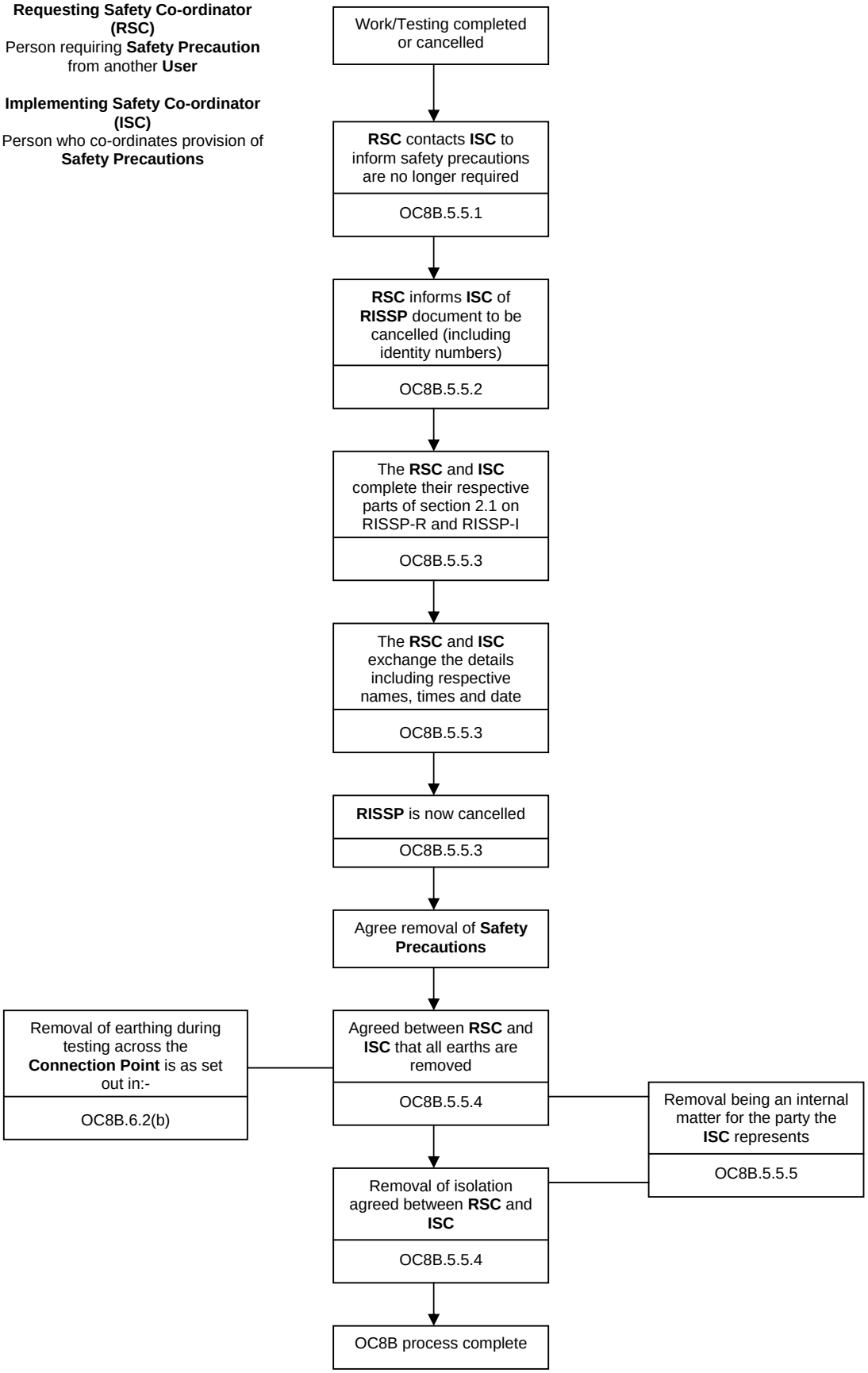


RISSP CANCELLATION PROCESS

Appendix C3

Requesting Safety Co-ordinator (RSC)
Person requiring **Safety Precaution** from another **User**

Implementing Safety Co-ordinator (ISC)
Person who co-ordinates provision of **Safety Precautions**

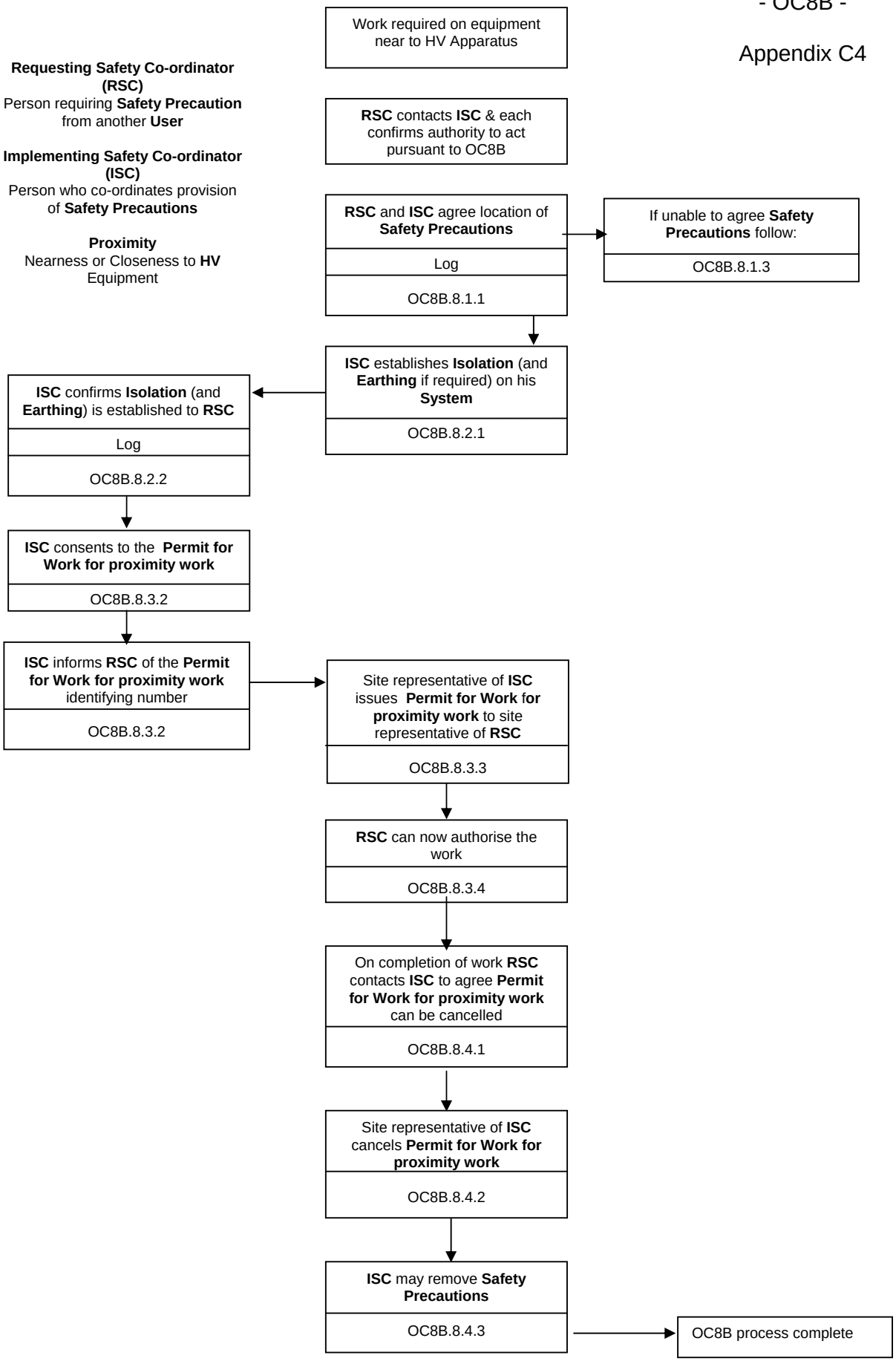


PROCESS FOR WORKING NEAR TO SYSTEM EQUIPMENT

Requesting Safety Co-ordinator (RSC)
Person requiring **Safety Precaution** from another **User**

Implementing Safety Co-ordinator (ISC)
Person who co-ordinates provision of **Safety Precautions**

Proximity
Nearness or Closeness to **HV** Equipment



OC8B - Appendix D

Not Used

OC8B APPENDIX E

Scottish & Southern Energy plc

PERMIT-TO-WORK

No. ……

---

1. ISSUE

To ……

The following High Voltage Apparatus has been made safe in accordance with the Operational Safety Rules for the work detailed on this Permit-to-Work to proceed:

……

……

……

TREAT ALL OTHER APPARATUS AS LIVE

Circuit Main Earths are applied at: ……

……

……

……

Other precautions (see Operational Safety Rules 3.2.1(b), 4.6.2(c) and 5.5.3), and any special instructions:

……

……

……

The following work is to be carried out: ……

……

……

……

Circuit Indentification Issued: Colour …… No. of wristlets …… No. of step bolts ……

Name: (print): …… Signature: …… Time: …… Date: ……

---

2. RECEIPT

I accept responsibility for carrying out the work on the Apparatus detailed on this Permit-to-Work, applying additional earths as necessary. No attempt will be made by me, or by the persons under my charge, to work on any other Apparatus.

Name: (print): …… Signature: …… Time: …… Date: ……

Circuit Indentification Equipment Checked as above (Initials): ……

---

3. CLEARANCE

All persons under my control have been withdrawn and warned that it is no longer safe to work on the Apparatus detailed on this Permit-to Work.

All gear, tools and additional earths have/have not* been removed. The works is/is not* complete.

All circuit identification equipment issued as above has been returned

Name: (print): …… Signature: …… Time: …… Date: ……

** Delete where not applicable*

---

4. CANCELLATION

This Permit-to-Work is cancelled.

Name: (print): …… Signature: …… Time: …… Date: ……

OC8B APPENDIX E

Scottish Power

PERMIT FOR WORK

	No.
KEY SAFE	No.

1. (i) LOCATION ……

……..

(ii) PLANT/APPARATUS IDENTIFICATION ……

……

(iii) WORK TO BE DONE ……

……..

……..

……..

---

2. (i) PRECAUTIONS TAKEN TO ACHIEVE SAFETY FROM THE SYSTEM: State points at which **Plant/Apparatus** has been Isolated and specify position(s) of **Earthing Devices** applied. State actions taken to avoid **Danger** by draining, venting, purging and containment or dissipation of stored energy.

……

……

……

……

……

……

……

……

……

Caution Notices have been affixed to all points of isolation

(ii) FURTHER PRECAUTIONS TO BE TAKEN DURING THE COURSE OF WORK TO AVOID SYSTEM DERIVED HAZARDS

……

……

……

……

……

I have confirmed with the **Control Person(s)*** …… that precautions in Section 2(i) have been carried out and that the **Control Person(s)** will maintain these until this **Permit for Work** is cancelled. I certify that the precautions in Section 2(i) together with the precautions in Section 2(ii) are adequate to provide **Safety from the System** in respect of the work in Section 1.

This **Permit for Work** must only be transferred under the **Personal Supervision** of a **Senior Authorised Person*** ……..

Signed …… being a **Senior Authorised Person**. Time: …….. Date: ……..

---

3. ISSUE

(i) **Key Safe Key** (No.)* …….. (ii) **Earthing Schedule*** ……... (iii) **Portable Drain Earths** (No. off)* ……

(iv) **Selected Person's** Report (No.)* …….. (v) **Circuit Identification** Flags (No. off)* ……

(vi) **Circuit Identification** Wristlets (No. off)* and Colours/Symbols ……

Signed …….. being the **Senior Authorised Person** responsible for the issue of this **Permit for Work** Time: …… Date: ……

---

4. RECEIPT

I understand and accept my responsibilities under the ScottishPower Safety Rules as recipient of this **Permit for Work** and acknowledge receipt of the items in Section 3.

Signed …….. Name (Block Letters) ……..

being a **Competent Person** in the employ of Firm/Dept …… Time ……. Date ……..

TRANSFER RECORD

PART 1		**PART 2**	**PART 3**			
Person surrendering Document	Time Date	**Senior Authorised Person** receiving suspended Document *	†**Person** receiving reissued Document		**Senior Authorised Person** reissuing document	Time Date
			Signature	Name (Block Letters)		

†Signature of **Person** receiving re-issued Document in accordance with conditions detailed in Section 4.

---

5. CLEARANCE: I certify that all persons working under this **Permit for Work** have been withdrawn from, and warned not to work on, the **Plant/Apparatus** in Section 1. All gears, tools, **Drain Earths** and loose material have been removed and guards and access doors have been replaced, except for:

……

……

……

Signed ……being the **Competent Person** responsible for

clearing this **Permit for Work** Time ……. Date ……..

---

6. CANCELLATION: I certify that all items issued under Section 3 have been accounted for and the **Control Person(s)*** …… informed of the cancellation and of any restrictions on returning the **Plant/Apparatus** to service.

Signed …… being the **Senior Authorised Person** responsible for

cancelling this **Permit for Work**. Time ……. Date ……..

---

*N/A if Not Applicable

< End of OC8B >

< End of OC8 >

CC	2	CC.3.4 amended
	26	CC.6.4.4 amended
OC1	5	OC1.6.1 (a) amended

Revision 19 Effective Date: 1 January 2007

CODE	PAGE	CLAUSE
CC	60	CC.A.5.1.1 amended
	61	CC.A.5.4 inserted

Revision 20 Effective Date: 1 April 2007

CODE	PAGE	CLAUSE
CC	26	CC.6.4.3 amended
	60	CC.A.5.1.1 amended
	61	CC.A.5.3.1(b) amended
	61 and 62	CC.A.5.5 inserted
OC6	7	OC6.6.1 amended
	7	OC6.6.2(b) amended

Revision 21 Effective Date: 16 July 2007

CODE	PAGE	CLAUSE
G&D	27	Definition of Non System Connection added
OC8A	2	OC8A.1.6.2 amended
OC8A	7	OC8A.5.2.2 amended
OC8B	3	OC8B1.7.2 amended
OC8B	7-8	OC8B.5.2.2 amended