

Great Britain Security and Quality of Supply Standard Fundamental Review

Main Interconnected Transmission System Working Group Terms of Reference

Working Group: 3	Chairperson: Noel McGoldrick
Title of Working Group: Main Interconnected Transmission System (MITS)	
Background: <p>This Working Group has been formed by the GB SQSS Project Steering Group and forms part of the project for the Fundamental Review of the GB SQSS as detailed in the GBSQSS Fundamental Review Project Definition Document.</p> <p>The draft GB SQSS dated 29 April 2008¹ contains a co-ordinated set of criteria and methodologies that the relevant transmission licensees will be required to use in the planning, operation and maintenance of the GB transmission system (i.e. both the onshore transmission system and the offshore transmission systems).</p> <p>The onshore generation connection criteria set out in Section 2 of the GB SQSS cover the connections which extend from the generation points of connection and reach into the main interconnected transmission system (MITS). The onshore demand connection criteria set out in Section 2 of the GB SQSS cover the connections which extend from the lower voltage side of the GSP transformers and again reach into the MITS. Section 4 sets out the criteria for minimum transmission capacity on the MITS which extends from the generation points of connection through to the demand points of connection on the high voltage side of the GSP transformers and includes those parts of an offshore transmission system which may be classified as part of the MITS (e.g. by virtue of connection to separate points on the onshore transmission system). Criteria relating to the operation of the onshore transmission system are presented in Section 5.</p> <p>Accordingly, there is a degree of overlap of criteria and in those parts of the GB transmission system where more than one set of criteria apply, the requirements of all relevant criteria must be met.</p> <p>There is a range of issues relating to onshore transmission entry, onshore transmission exit and the MITS and these are, to a certain extent, interdependent. Separate Working Groups are to address issues relating to transmission entry and exit principles (WG2) and planning and operational contingency criteria (WG4). The focus of this Working Group is on the MITS. Clearly close liaison with the other Working Groups will be necessary.</p> Scope: <p>The MITS Working Group will review the MITS criteria and methodologies and explore and report on: whether those criteria and methodologies remain appropriate given wider industry developments (e.g. the findings of the Transmission Access Review); options available for change; and the development of scenarios to demonstrate how each potential option might work in practise.</p>	

¹ A PDF copy of the 29 April 2008 draft GB SQSS can be accessed from the Ofgem website at the following link: [draft GB SQSS, dated 29 April 2008](#)

In those cases where the need for a change to the GB SQSS is specifically identified, the Working Group shall put forward appropriate change proposals to the GB SQSS. Any such change proposal should be relative to the draft GB SQSS dated 29 April 2008 rather than relative to the existing GB SQSS dated 2004.

The review will focus on the following three broad interrelated areas:

- Appropriate criteria and methodologies whereby Market Access signals may be converted into transmission capacity requirements;
- The use of cost benefit analyses; including consideration of the appropriate balance between operational and investment costs, sharing methodology (taking due account of the findings of the Transmission Access Review) and overrun (e.g. where a generator may exceed its share allocation); and
- Regional differences in criteria and methodologies (i.e. between the NGET, SPT and SHETL transmission systems).

In exploring the above three areas, the Working Group may wish to consider the following:

- The use of intertrip schemes to disconnect exports across interconnections with external systems (Note: the possible use of intertrip schemes in planning timescales is to be considered by WG4 (Planning and Operational Contingency Criteria));
- The contribution of different generation technologies (e.g. conventional, renewable and intermittent generation);
- The appropriate methodology for setting the year round background conditions (recognising the contribution of different generation technologies) against which the need for additional transmission capacity is judged in planning timescales to provide generation access to the MITS (e.g. exporting group).
- The treatment of large demand zones with little or no generation;
- The integration of Offshore Transmission Systems;
- Methods for assessing options should include: accuracy of results; complexity of applying proposed methodology; assumptions including reliability of data source; and the sensitivity of the results to data changes;
- The implications of TAR options for long term access rights and short term access rights;
- Treatment of potentially non-compliant parts of the GB transmission system during periods when short term access rights are applicable (i.e. where the transmission system is not designed to accommodate all short term access rights either bought or acquired through auction); and
- Criteria for assessing the consequences of any change proposal.

In addition, the Working Group shall take due account of:

- Interactions with the work of other Fundamental Review Working Groups;
- The potential impact of the findings of other relevant reviews (e.g. Transmission Access Review, the 'Review of need for intermittent generation specific parameters in the GB SQSS (GSR 001) and the 'Review of Infeed loss Limits' (GSR007); and

- In the context of any change proposals to the GB SQSS arising, compatibility with other industry Codes (e.g. GB Grid Code).

Deliverables:

The Working Group deliverables include:

- Outline Principles Document (15 October 2008)
Written report to the Programme Manager on issues being addressed, new issues arising, approach adopted for addressing issues, progress to date and likely outcome (where reasonably known).
The Programme Manager will then consolidate the individual 'Outline Principles Documents' from each Working Group into a single document and submit for consideration by the Project Steering Group
- High Level Proposals (December 2008)
Written report to the Programme Manager on progress in the form of high level proposals to address issues.
The Programme Manager will then consolidate 'High Level Proposals' reports from all Working Groups into a single document and submit for consideration by the Project Steering Group (January 2009).
- Draft Change Proposals (May 2009)
Issue detailed proposals and assist the GB SQSS Drafting Working Group, as necessary, in developing any draft change proposals to the GB SQSS arising in the form of additional and/or modified change proposals to the NGET change proposals dated 29 April 2008.
The Programme Manager, with the assistance of the GB SQSS Drafting Working Group, will consolidate proposals from all Working Groups. In addition, the Programme Manager will consolidate any draft change proposals to the GB SQSS arising with change proposals from other Working Groups into a single set of change proposals and submit for consideration by the Project Steering Group.
- Final Change Proposals (August 2009)
Issue final detailed proposals taking account of comments received on draft proposals and any change proposals to the GB SQSS.
The Programme Manager, with the assistance of the GB SQSS Drafting Working Group, will consolidate proposals from all Working Groups. In addition, the Programme Manager will consolidate any draft change proposals to the GB SQSS (i.e. in the form of draft amendments to the draft GB SQSS **dated 29 April 2008**) arising with change proposals from other Working Groups into a single set of change proposals and submit for consideration by the Project Steering Group.

The Programme Manager, with the assistance of the GB SQSS Drafting Working Group, will prepare the consolidated set of change proposals to the GB SQSS (i.e. in the form of draft amendments to the draft GB SQSS **dated 29 April 2008**) and submit for consideration by the Project Steering Group.
- Final Change Proposals Consultation (First Consultation), (Sept to Oct 2009)
Assist the Project Steering Group, as required, to conduct a targeted consultation on the consolidated final change proposals with participants of the Industry Peer Review Group.
Following the First Consultation the GB SQSS Drafting Working Group will (with assistance of other Working Groups as necessary) amend the final change proposals to take due account of comments received. The revised final change proposals will be submitted to the Project Steering Group for onward submission to the GB SQSS Review Group for sign-off.
The Project Steering Group (on behalf of the GB SQSS Review Group) will then submit the final Change proposals to Ofgem.

In addition to the above, the Working Group shall:

- Prepare and maintain Working Group Risk and Assumptions Registers in accordance with the requirements set out in the Project Definition Document;
- Prepare and maintain a detailed plan covering the scope and deliverables contained within these Terms of Reference, again in accordance with the requirements set out in the Project Definition Document;
- Liaise with other Working Groups; particularly on areas of interaction; and take due account of other reviews which are currently in progress (e.g. Transmission Access Review); and
- Deliver a separate detailed report on the subject as a record/reference document.

Programme:

The Working Group detailed program should align with the overall Project Plan.

Members:

Provisional Working Group membership:

- Noel McGoldrick NGET Chairperson
- Andy Hiorns NGET
- Patrick Hynes NGET
- Cornel Brozio SPT
- Chandra Trikha SHETL
- Bless Kuri SHETL
- Keith Bell SEDG
- Danny Pudjiento SEDG
- Rodrigo Moreno SEDG

Meetings:

The meetings for the Working Group will alternate between Scotland and England and consideration will be given to using technology to minimise travel requirements.

Approved by:

Project Manager: Andrew Hiorns

Working Group Chairman: Noel McGoldrick

Date: 14 October 2008