

Great Britain Security and Quality of Supply Standard Fundamental Review

International Benchmarking Working Group Terms of Reference

Working Group: 1	Chairperson: Colin Bayfield Secretary: TBC
Title of Working Group: International Benchmarking (IB)	
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 GB SQSS, as the previous standards, recognises that some exceptional conditions are more likely than others and these are identified as 'secured events'. That is, events against which the GB transmission system is planned and operated such that, should those events occur, unacceptable conditions shall not arise as a result. Unacceptable conditions include: loss of power infeed in excess of stipulated limits; loss of supply capacity in excess of specified limits; unacceptable overloading; unacceptable voltage conditions; and system instability.</p> Scope: <p>The International Benchmarking Working Group will conduct an international comparison of planning and operational criteria and methodologies of the draft GB SQSS dated 29 April 2008. Any recommendations arising from the results of the comparison shall be used to inform the Project Steering Group and influence, where appropriate, the work of the other Working Groups of the Fundamental Review.</p> <p>The Working Group will include all aspects of the onshore and offshore GB SQSS criteria (i.e. secured events, unacceptable conditions and methodologies) in the international comparison. Of particular relevance is the treatment of high volumes of onshore and offshore renewable generation.</p> <p>Considerations will include:</p> <ul style="list-style-type: none">• Comparison of the various operational and planning procedures, methodologies and practices used by other utilities (the findings of the Transmission System Operational review Group (TSORG) may prove a useful starting point for this);• N-1, N-2, N-D, N-3 etc;	

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](#)

- Thermal, voltage and stability criteria;
- Transmission entry and exit criteria;
- MITS criteria and methodologies;
- Treatment of different types of generation;
- Interface between onshore and offshore systems; and
- Offshore transmission systems.
- Address the Security Standard issues identified in TSORG

Appropriate Benchmarks

The transmission networks selected for study shall reflect those with similar societal, political and economic background as the UK and include key European countries (UCTE members), USA, Australia and a selection of similar/smaller island networks (i.e. Japan, New Zealand and Ireland).

Approach

The study will examine the basic approach to the design planning and operation of each network (i.e. deterministic, probabilistic or cost benefit approaches etc.). The review will take other relevant information into account, including: network size; characteristics and physical disposition of assets; network demand; industry structure; regulatory regime; incentive schemes; and market arrangements. Where possible, supporting information shall also be gathered, such as: out-turn operating cost; network performance; and resilience.

For each Utility, the level of satisfaction in relation to costs (investment and operational) and the benefit in terms of security provided will be reported along with any initiatives, enduring or ad hoc, to revise the current standards.

A pro forma questionnaire will be developed and agreed as the basis for reporting on a common reference and this will seek to identify the key reasons for differences between each sample network and the GB SQSS.

Where possible the output from other previous benchmark studies undertaken by reputable organisations e.g. CIGRE, may be incorporated into the study. The transmission operators benchmarking organisation ITOMS (International Transmission Operation & Maintenance Study) may also prove to be a useful source of information.

Deliverables:

~~It is intended that, following consultation on initial change proposals arising out of the Fundamental Review, final change proposals which will address all relevant issues, will be submitted to Ofgem in December 2009 in the form of Version 2.0 of the GB SQSS. Thereafter, Ofgem will conduct its own Consultation and Impact Assessment on the necessary License Change which is anticipated will take a further three months. Accordingly, the target for commencement of the new GB SQSS regime is April 2010.~~

The working group will deliver a report that draws on information collected from the benchmarking questionnaire, proposed workshop and other available benchmark material. The report will identify and reconcile the difference in planning and operational standards used by the benchmarking partner population.

~~However,~~ The target completion for the work of the International Benchmarking Working Group is February 2009, which is in advance of that set for the other Working Groups of the Fundamental Review. Amongst other things, this mismatch in timing will provide some time

for early dissemination of conclusions and any change proposals arising, which may impact on the other work areas of the Fundamental Review.

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 (January 2009)
~~Issue detailed proposals to inform and assist other Working Groups, as necessary, in developing their draft change proposals to the GB SQSS.
The Programme Manager, with the assistance of the GB SQSS Drafting Working Group, will consolidate the draft change proposals from all Working Groups into a single set of change proposals and submit for consideration by the Project Steering Group.~~
- Benchmarking questionnaire (October 2008)
Questionnaire issued to benchmarking partners cited above for return by end of October
- Benchmarking Workshop (December 2008)
Benchmark partners that have returned questionnaires will be invited to attend a workshop where there will be presentation on the SQSS Review process and feedback on the results of the questionnaire
- Final Benchmarking Report Change Proposals (February 2009)
~~Issue final detailed proposals taking account of any comments received.
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 and submit for consideration by the Project Steering Group.~~

At this stage (~~February 2009~~) the main body of the work of the International Benchmarking Working Group will be complete and the findings shall be disseminated to the other Working Groups as early as possible. The impact on the GB SQSS of any change proposals arising will be included as part of the subsequent First Consultation (see below).

- 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~~

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~~submit the final Change proposals to Ofgem who will conduct a Second Consultation and Impact Assessment.~~

In addition to the above, the Working Group shall:

- Use reasonable endeavours to inform the Project Steering Group and other Working Groups of potential areas of change which may result from the international comparison. It is important that any recommended change arising, which may influence the work of the other Working Groups, is identified as early as possible;
- 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:

- Colin Bayfield SPT Chairperson
- Noel McGoldrick NGET
- Chandra Trikha SHETL
- ??Predrag Djapic Aiden Rhodes SEDG
- (Keith Bell) SEDG

Membership in parenthesis () indicates input in specific areas

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:

Working Group Chairman

Project Manager

Date:

Date: