nationalgrid

Headline Report

Meeting name	European Code Coordination Application Forum (ECCAF)
Meeting number	1
Date of meeting	21 November 2013
Location	Energy Networks Association, 6th Floor, Dean Bradley House, 52 Horseferry Road, London, SW1P 2AF

Please also refer to the slide pack which has been published with this headline report, as material is not repeated in this headline report.

1. Attendees

ECCAF Members

Barbara Vest	EnergyUK	BSC Panel
Garth Graham	SSE	CUSC Modification Panel
Mike Kay	ENWL	D-Code Review Panel
Chris Allanson	Northern Powergrid	DCUSA Panel (by Phone)
Joseph Dunn	SPT	STC Panel
Fiona Navesey	DECC	
Adid Sheikh	Ofgem	
Paul Wakeley	National Grid	Technical Secretary

Other Attendees

Ian Pashley	National Grid	Temporary Chair
Rob Wilson	National Grid	Presenter
Adam Hipgrave	National Grid	Presenter
Mark Askew	Ofgem	
Reuben Aitken	Ofgem	
Rupika Madhura	Ofgem	
Steve Wilkin	Elexon	BSC Code Administrator
Claire Hynes	Electralink	DCUSA Code Administrator

Apologies

Bec Thornton	National Grid	
Jim Barrett	Centrica	Grid Code Review Panel

2. Brief Overview of ECCAF

A brief presentation was given on the background, structure, purpose and interactions of ECCAF. ECCAF is an advisory body of the seven GB Code Panels which will advise the Code Panels on matters of application of European Network Codes to the GB Codes.

Consumer Futures are provided with a seat on ECCAF and members highlighted that their engagement is important due to the impact on of the RFG and DCC Network Codes domestic consumers. The Technical Secretary will contact Cornwall Energy (Consumer Futures' representative on the Code Panels) to discuss their involvement with ECCAF.

During the meeting it was noted that further consideration is required to understand the role of ECCAF and other bodies in mapping ENC requirements to GB Codes. A process for this mapping will be discussed at the next ECCAF meeting.

3. Appointment of Chair

The ECCAF Terms of Reference[1] state that "(10) The ECCAF Chair shall be appointed by DECC and Ofgem." DECC and Ofgem indicated that they would consider it to be appropriate for the members of ECCAF to vote for the Chair at its first meeting.

Following a brief discussion, Barbara Vest of Energy UK was elected as the Chair of ECCAF by the members. Barbara noted that were as a natural alignment between her role as the JESG independent Chair and the Chair of ECCAF and is looking forward to working with the industry through the upcoming period of change.

It was also noted that the Terms of Reference envisaged seven Code Panel appointees plus a Chair to form ECCAF. The BSC Panel are therefore to be invited to nominate a representative following Barbara's appointment as Chair.

4. Development process for European Network Codes and status of ENCs

A brief presentation was given on the development and approval process for European Network Codes, and the status of the priority European Network Codes.

At present the nine Network Codes are at the following states of the progress:

- Comitology (just starting cross-border committee): RFG, DCC, CACM
- Comitology (just started pre-comitology): OS, OPS, LFCR
- ACER Review: FCA (until December 2013)
- ENTSO-E drafting: Balancing (until December 2013), HVDC (public consultation until 7 January, with drafting due to complete by end of March 2013)

A timeline is maintained by National Grid and published monthly to the JESG website.

ECCAF's core period of activity on each Code is likely to be during and after the Comitology phase for the Network Code. At the end of the cross-border committee phase of Comitology, the Network Code is in practice fixed and subject only to parliamentary approval and publication. The latter process fixes the date of entry in to force.

5. Application in GB: Changes to the domestic framework

DECC presented on the overall approach to implementation and noted that there were four 'implementation instruments' which could be deployed for making changes to the GB industry framework, in order of preference:

- Modification to existing GB Codes using the standard code modification process, led by National Grid and other Code Administrators;
- Changes to access rules, led by Ofgem;
- Changes to licences, led by DECC and Ofgem;
- Legislation, led by DECC (as a last resort).

In addition DECC has an 'enforcement instrument' to ensure all those parties who need to be subject to the licences or a party to a code are captured.

[1] The Terms of Reference for ECCAF are included on Page 8 of this Headline Report.

It was noted that as European Regulations, the Network Codes will be directly applicable and will be legally binding in GB; they do not by themselves require changes in domestic law/arrangements to implement them. That said, there are three reasons why it may be necessary to modify the GB framework:

- There are likely to be a number of conflicts between European and existing domestic requirements
- Some European requirements need supplementary provision to make them workable
- Requirements will need to be appropriately enforceable at the domestic level.

Concerns were raise as to nature of implementation is GB. Historically, different member states implement European Regulations to differing degree. There is a concern that GB will take a potentially overly detailed, complex and onerous route for implementation known as 'gold plating'. DECC indicated that it is Government policy[2] to not gold plate the implementation of European legislation, and their approach is to ensure the lowest level of change to ensure the highest level of compliance and understanding.

Although each of the GB Codes has slightly differing governance structures and possible routes for modifications, at this stage DECC indicated that it considers that these existing processes are sufficient to allow the changes to be made as required. It was noted that there is a certain level of flexibility in the existing code governance in Ofgem's third package powers.

A general concern was expressed regarding the volume of work that is required. There may not be the resource, as an industry, to adequately progress the required changes in the necessary timescales.

6. Long term structures of GB Codes: A strawman

A paper was produced to accompany this item entitled "Strawman GB application / implementation of the European Network Codes, starting with the RfG NC" which is attached to the report.

Garth Graham, SSE, presented a paper to stimulate debate on the way that application / implementation of the Europe Network Codes could be done in a GB context. At the core of the strawman concept is that instead of making changes to existing GB Codes, that European Requirements would be placed in a suite of new GB Codes. Over time, the expectation is that existing GB Codes would be superseded by the new versions.

A number of benefits and disbenefits of the strawman approach (and that of using the existing approach) were discussed. It was felt that both approaches need to be assessed using a standard set of criteria and this will be discussed at a future meeting.

The expectation is for the strawman to be presented to the JESG in December and for broader industry consultation to follow in early 2014.

7. Requirements for Generators – Application through GB Codes

A paper was produced to accompany this item entitled "Requirements for Generators European Network Code GB Application" which is attached to the report.

The Requirements for Generators (RFG) is one of the European Network Codes in development. It started the pre-Comitology phase in March 2013 and we are presently awaiting text from the Commission prior to the start of the cross-border committee / member state approval phase. By default, the code applies to new generators only; existing generators can be captured retrospectively through demonstration of a positive Cost Benefit Analysis, however, initial investigations have indicated there may be no immediate concerns requiring retrospective application. Exceptions are those already

[2] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78800/Guiding_Principles_for_EU_legislation.pdf

being considered by GCRP such as Fault Ride Through (FRT) and Rate of Change of Frequency (RoCoF)

As such the RFG will be one of the first European Network Codes requiring changes to the GB Codes. The RFG contains many requirements which will need a national choice of parameter within a range specified in the European Network Code.

The key GB documents which are expected to change because of the nature of the provisions within the RFG include the Grid Code, D-Code and the Engineering Recommendations G59 and G83.

The requirements in RFG apply according to the generator type, based on output rating and connection voltage, and are cumulative; the requirements that apply to a Type B generators include those for a Type A generator unless specified.

A summary of the generators types in RFG are as follows, note that it is consistent banding across GB and does not have any differences for the three TOs in GB.

Type	Generator Capacity	Connection Voltage
A	800W – 1MW	< 110kV
B	1 – 10MW	< 110kV
C	10 – 30MW	< 110kV
D	> 30 MW	> 110kV

Rob Wilson, National Grid, provided a summary of the options for implementing the RFG requirements across the Grid Code and Distribution Code. It was noted that the GCRP has approved the establishment of a joint DCRP/GCRP Workgroup on RFG Implementation to consider two aspects – the choice of national parameters, and the overall structure of the implementation.

8. Risks and Issues for GB Application

The JESG continues to maintain a number of Issue logs; issues for individual Network Codes, overall issues, and issues with GB Application.

The Issues recorded by JESG thus far on Application to GB are as Items 1 to 4 in the ECCAF Risks and Issue Log on Page 6.

Going forward, the expectation is for JESG and ECCAF to either share issue logs between the groups or for a common Issue log to be maintained between them. This will be facilitated by National Grid who provides the Technical Secretary for both forums.

9. High-level mapping of ENCs to GB Codes

Based on assimilation of various data sources, and the initial mappings to GB Codes provided to Stakeholders through the development process, and initial high-level mapping of the ENCs to GB Codes was provided. These documents have been circulated to ECCAF members.

It should be noted that this mapping is not complete or definitive and does not capture requirements on an article-by-article basis.

Code	Primary Effect	Secondary Effect
RFG	Grid Code / D-Code (Technical requirements)	
DCC	Grid Code / D-Code (Technical requirements)	
HVDC	Requirements are new for GB	Grid Code / D-Code (Data Provision)
CACM	No existing Code for Market	Grid Code / D-Code (Data Provision)

Code	Primary Effect	Secondary Effect
FCA	Requirements	
BAL	BSC	
OS	Grid Code / D-Code (Data Provision)	SQSS (Operational)
OPS	Grid Code / D-Code (Data Provision)	SQSS (Operational)
LFCR	Grid Code / D-Code (Data Provision) SQSS (Operational)	BSC (heavily linked to Balancing Code)
Transparency	BSC (Transfer mechanism)	Grid Code / STC (Data Provision)

10. Future meetings dates, venues and agenda items

It is proposed to hold monthly meetings throughout 2014, with further meetings/workshops if required. These are likely to be held at Elexon with teleconference facilities available. The Technical Secretary is to prepare draft dates for the ECCAF meetings avoiding clashes with the Code Panel dates.

Items proposed for the next meeting of ECCAF include:

- Overall GB Code Structure discussion (including criteria).
- Process for application and engagement (high-level strategy).
- Ensuring consistency in the application of multiple ENCs to multiple GB Codes.
- ECCAF Workplan to drive future agenda items, expecting to broadly consider Code in order of progress through the development / approval process.

11. AOB

ENA were thanked for hosting the meeting.

DECC and members recorded their thanks for the efforts of National Grid in establishing ECCAF.

ECCAF Action Log

ID	Action	Lead Party	Target Date
1/1	Contact Consumer Futures to ensure we are engaging appropriately especially around obligations on small domestic consumers in RFG / DCC	PW	January 2014
1/2	BSC Panel to consider nominating a new representative to ECCAF, as Barbara Vest as Chair holds that an ECCAF seat automatically, and the Terms of Reference envisage seven Code Panel representatives plus the Chair.	IP/BV	January 2014
1/3	Prepare a set of standard criteria against which to judge different structural methods for making changes to the GB Codes, for discussion at the next ECCAF meeting.	RW/GG	January 2013
1/4	Prepare calendar of meetings for 2014 for circulation to members, avoiding dates of GB Code Panels and JESG Meetings.	PW	December 2014

ECCAF Risks and Issue Log

Issue No	Source	Risk / Issue	Further information
1.	JESG	Implementation: Can areas of the GB Network Code be changed to comply with the ENCs be modified through the normal GB governance arrangements, provided it does not affect compliance with the ENCs?	Governance arrangements of GB Codes are not expected to change by implementing the ENCs. However, GB must demonstrate compliance to the ENCs or risks being found in breach and fined.
2.	JESG	How do the definitions in the Transparency Regulation, expected to become law as an Annex to Regulation 714/2009 prior to any Network Code, interact with those in the Network Codes? Do the definitions in the Transparency Regulations have primacy over those in the Network Codes?	Once published in the OJEU, the definitions became law. The Transparency Regulation have been published are Regulation 543/2009 amending Annex I of Regulation 714/2009. The interaction of future definitions is not yet fully understood.
3.	JESG	How will the changes to the GB Framework be made as a result of the European Network Codes, for example, will existing structures (panels etc.) be used where possible, or will third package powers be used to make changes via the Secretary of State?	It is expected that existing standard Code Governance will be used where possible, however, Ofgem have powers to make changes to the GB Codes to ensure compliance with European legislation.
4.	JESG	Further details of the modification process for GB Codes as a result of the ENCs need to be defined, for example, how will raise modifications, can alternatives be proposed etc.	Noted.
5.	ECCAF	The industry may not have sufficient resource to make the scale of the changes required to the GB Codes.	This is a high impact risk, and all industry parties should consider how application can be done in the most efficient method possible to reduce the burden where possible.

Useful Links

GB Codes: Text and Panel Websites

Code	Document	Review/Modification Panel
BSC	http://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/	http://www.elexon.co.uk/group/the-panel/
CUSC	http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/	http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/
Grid Code	http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/gridcodedocs/	http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/
D-Code	http://www.dcode.org.uk/the-distribution-code/	http://www.dcode.org.uk/dcode-review-panel/
SQSS	http://www.nationalgrid.com/uk/Electricity/Codes/gbsqsscode/DocLibrary/	http://www.nationalgrid.com/uk/Electricity/Codes/gbsqsscode/Review+Group/
STC	http://www.nationalgrid.com/uk/Electricity/Codes/sotocode/Library/	http://www.nationalgrid.com/uk/Electricity/Codes/sotocode/Modification+Panel/
DCUSA	http://www.dcusa.co.uk/Public/DCUSADocuments.aspx?s=c	http://www.dcusa.co.uk/Public/CPs.aspx

NB. We are expecting National Grid's website to be updated shortly, so these links will be revised in future.

European Code Coordination Application Forum (ECCAF) Terms of Reference

As approved by the BSC, CUSC, Grid Code, STC, SQSS, D-Code and DCUSA panels

Definitions

1. GB Codes comprise the following codes, standards and agreements:
    a. Balancing and Settlement Code (BSC),
    b. Connection and Use of System Code (CUSC),
    c. Grid Code,
    d. System Operator Transmission Owner Code (STC),
    e. National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS),
    f. Distribution Code (D-Code), and
    g. DCUSA (Distribution Connection and Use of System Agreement).
2. 'Code Panels' refers to those panels established for each of the GB Codes under the governance of the individual codes, standards and agreements.
3. European Network Codes (ENCs) include network codes and similar instruments prepared under Article 6 of Regulation (EC) No 714/2009, and are expected to be implemented as a supplementing regulation in Annex I of Regulation (EC) No 714/2009.
4. Application of ENCs to the GB Codes refers to demonstrating compliance of the GB Codes with the ENCs and, where necessary, making changes to the GB Codes.

Purpose, Objectives and Responsibilities

5. The European Code Coordination Application Forum (ECCAF) is established as a joint standing group of the Code Panels.
6. The purpose of ECCAF is to provide a forum for discussion of matters relating to the coordination of efficient Application of ENCs to the GB Codes and to provide advice to the Code Panels on these matters, specifically advising and reporting to the Code Panels on:
    a. which aspects of the GB Codes need to be changed to comply with ENCs;
    b. the coordination of application across the GB Codes;
    c. the coordination of application across the ENCs;
    d. timescales for complying with ENCs and for changing GB Codes;
    e. risks and issues associated with implementing the ENCs; and
    f. areas where further consultation with the industry may be required.
7. ECCAF shall own, develop, agree and maintain a delivery strategy which outlines how the requirements of the ENCs shall be applied across the GB Codes.
8. ECCAF is a purely advisory body and consequently:
    a. The body has no legal or governance role;
    b. Code Panels retain their existing roles and obligations in the governance and modification of the GB Codes; and
    c. The advice of ECCAF when engaging with the Code Panels is not binding.
9. ECCAF is not a forum to discuss the contents or drafting of the ENCs with stakeholders. Separate forums are provided for this function during drafting of the ENCs (Joint European Standing Group) and during Comitology (DECC-Ofgem European Stakeholder Group).

Chair

10. The ECCAF Chair shall be appointed by DECC and Ofgem.

Membership

11. The membership of ECCAF shall comprise the Chair, Technical Secretary and 11 members appointed as follows:
    a. Seven industry members, one appointed by each of the following Code Panels:
        i) BSC Panel;
        ii) CUSC Panel;
        iii) D-Code Panel;
        iv) DCUSA Panel.
        v) Grid Code Review Panel;
        vi) SQSS Review Panel;
        vii) STC Review Panel;
    b. Four members, one representing each of the following parties:
        i) National Consumer Council (Consumer Futures);
        ii) National Grid, as NETSO;
        iii) Ofgem;
        iv) Department of Energy & Climate Change (DECC).
12. Code Panels shall coordinate the appointment of their representatives to ensure that a broad cross-section of the electricity industry and companies are represented in the membership of ECCAF. Nominated individuals shall have the relevant skills and experience to allow them to actively participate in the functions of ECCAF. The ECCAF Chair may request a review of Code Panel nominees to ensure an appropriate cross-section of the electricity industry, companies and skills are represented in the membership of ECCAF.
13. Members of ECCAF may appoint an alternative person to attend meetings in their absence whilst respecting the provisions in paragraph 12.
14. Administrators of each of the GB Codes are invited to attend ECCAF meeting as technical advisors when deemed necessary by the ECCAF Chair.
15. Industry Parties, trade associations, Administrators of the GB Codes and other interested parties such as the Gas UNC Code Administrator may attend ECCAF meetings as observers by notice to the ECCAF Secretary. The ECCAF Chair may limit the number of observers at a meeting for practical reasons.
16. The ECCAF Chair may remove any ECCAF member if the member is deliberately and persistently disrupting or frustrating the work of ECCAF. Where a member has been removed the relevant Code Panel will be asked to nominate another member to take their place.

Meetings

17. ECCAF will meet in person, but may decide to hold meetings with teleconference facilities by agreement of the Chair and majority of the membership.
18. Meetings of ECCAF will be held on a required basis; monthly in the first instance. Meeting frequency will be reviewed on a regular basis, as decided by ECCAF Chair, in consultation with Code Administrators and ECCAF members, as appropriate.
19. ECCAF may establish subgroups to consider specific issues in further detail. Membership of the subgroups may be drawn from ECCAF members and from other Industry Parties. These subgroups will report to ECCAF.
20. ECCAF shall develop and adopt its own internal working procedures and upon request will provide copies to the Code Panels.

Meeting Administration

21. National Grid will act as the administrator of ECCAF and will provide the Technical Secretary. National Grid will maintain a list of ECCAF members and an electronic distribution list.
22. Emails to ECCAF will be sent from a dedicated account (europeancodes.electricity@nationalgrid.com)
23. National Grid will circulate and publish meeting agendas prior to each meeting and a summary report, actions log and issue log after each meeting.
24. Meeting documentation will be published on a dedicated webpage, hosted on National Grid's website.
25. Where ECCAF requires instruction, clarification or guidance from the Code Panels, particularly in relation to their Terms of Reference, the Chair shall contact the Panel Secretaries.

Reporting

26. In executing functions defined in paragraph 6, the representatives of the Code Panels identified in paragraph 11.a shall report to their respective Code Panels. The ECCAF Chair shall also report to the Joint European Standing Group.
27. The ECCAF Chair shall ensure that reporting occurs in accordance with paragraph 26, and can delegate responsibilities to another ECCAF member if appropriate.

End of Terms of Reference

Paper (Agenda Item 6)
Strawman GB application / implementation of the European Network Codes

Strawman GB application / implementation of the European Network Codes, starting with the RfG NC.

Introduction

This paper is provided to ECCAF (and JESG) to stimulate a debate on the way that the application / implementation of the European Network Codes is done in a GB context.

The idea behind this strawman was raised at the October Joint DECC/ Ofgem European Electricity Stakeholder Group meeting during the presentation on ECCAF. Ofgem suggested the idea be worked up and discussed at ECCAF (on 21st November) and JESG (on 17th December) before returning to the stakeholder group early in 2014. A stakeholder consultation should also be explored to allow a wide range of views to be taken into account before the way forward for GB is 'set in stone'.

In light of the September GCRP paper[1] it may, on reflection, also be appropriate to flag this strawman to the GCRP to assist in their deliberations on the revised paper[2] to be discussed at the 20th November GCRP meeting.

The following parts of this paper sets out, at a high level, the key features of this strawman idea - more details could be worked up after the ECCAF and JESG discussions as well as any feedback from the stakeholder consultation.

In looking to implement the twelve European Network Codes; which is likely to start with the Requirement for Generators (RfG) code; into the existing GB electricity industry arrangements a number of options are being considered, some of which were highlighted in a presentation to the April 2013 JESG[3].

These options will be explored further at ECCAF in November, although the papers to the GCRP in September and November is based on incorporating the Network Codes into the existing GB codes etc., such as (in the case of the RfG) the Grid Code, Distribution Code, Engineering Requirements and CUSC. The reason for this stemmed from discussions held earlier this year between network operators and Ofgem.

However, other interested parties have not been invited to, or involved in, those discussions.

The way that the Network Codes are implemented in GB will have profound implications for stakeholders in the future. It is right therefore that other credible options are explored, and affected stakeholders consulted prior to a final position for GB being adopted

It is in this spirit that this strawman has been developed to help inform those ongoing deliberations on the implementation of the Network Codes in GB.

[1] http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/2013/18th+September/
[2] http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/2013/20th+November/
[3] http://www.nationalgrid.com/NR/rdonlyres/B22B28DB-7184-485B-92E2-393E0F657572/60196/JESGImplementationApril.pdf

Concept

At the heart of this strawman idea is the concept of starting 'afresh'. The Network Codes are new pieces of EU law that will introduce new legal obligations on GB (and all European) stakeholders which replace (where appropriate) whatever exists in the current GB electricity industry arrangements; such as the Grid Code, Distribution Code, Engineering Requirements, CUSC, SQSS, STC, DCUSA and BSC.

These GB codes etc., will have to change (if they conflict) to reflect the Network Codes requirements.

However, not all aspects of what is covered in each of these Network Codes necessarily fits (or can be 'shoe horned') into the existing GB electricity industry arrangements; which stem, in turn, from (GB) licence obligations (which flow, in turn, from Acts of Parliament) which were written before the Network Codes were developed.

This is illustrated, in the case of the RfG, by the understanding that this code might require changes to at least four of the existing GB electricity industry documents (the Grid Code, Distribution Code, Engineering Requirements and CUSC).

This would suggest that even if most of an individual Network Code could be accommodated into the existing GB electricity industry documents that certain obligations (in the Network Codes) would need to sit outside those codes in a separate, stand alone, document. Alternatively the 'vires' for the existing GB electricity industry documents would need to be altered (by Parliament, as there legality flows, via the licence(s), from the Acts?) to allow the 'orphaned' items to be picked up in the GB industry codes without them being found to be 'ultra vires'.

The strawman idea is that we take the whole RfG[4] and 'reproduced' it word for word.

To make it clear which parts of a GB code could change (and those bits which could not change) we could adopt the approach ENTSOe used with the FCA Network Code, where certain articles were copied from the CACM Network Code and shown in highlighted text (and thus could not be changed – everything not highlighted could be changed).

Each Chapter, Section, Article, Paragraph and Sentence of the RfG, as appropriate, is then 'expanded' into what could be described as "GB electricity industry code *language*" to put into practical effect the entire obligations / requirements etc., that the RfG sets out at a high level. This creates the **'GB RfG'**[5].

The first time this is done the GB RfG would, it is suggested, be 'designated' by the Secretary of State (as happened with some GB electricity industry codes with the introduction of NETA, and later BETTA).

[4] and each of the other eleven Network Codes as they emerge from the comitology / Parliamentary approvals process.
[5] for the avoidance of doubt, the broad approach suggested in this strawman for the 'GB RfG' would also apply to all the 'GB' versions of the other eleven Network Code as well.

This assures the Member State that we have completed the whole task of transposing and implementing the entire RfG Network Code. There is, with the strawman, absolute clarity and evidence to show we have implemented the RfG (and all other Network Codes in due course) in full. This is not necessarily the case with the alternative approach being considered.

There is a risk with the alternative approach of RfG obligations 'falling between the cracks' given that parts of the RfG could be in Grid Code, Distribution Code, Engineering Recommendations and CUSC. With four separate places that an RfG obligation could be placed there is a danger that obligations could get 'lost'. This risk does not exist with the strawman.

It is also not clear to the new generator (who, after all, is the party bound by the RfG) what they have to comply with - from the RfG - and where it is buried in these four separate GB electricity industry codes, some of which are not freely in the public domain. This risk does not exist with the strawman.

All subsequent modifications to the GB RfG would go through a set change process (based on the CUSC modification process which incorporates Ofgem's latest code governance 'best practice' – see table 1 below).

The strawman idea, whilst based on starting 'afresh' also assumes that we do not 'reinvent the wheel'. Rather we should take 'best practice' from the existing GB electricity industry arrangements and 'copy & paste' into the 'GB RfG' (and the other eleven European Network Codes as they come to be implemented in GB[6]) including, as appropriate, the detailed technical requirements that exist in the Grid Code etc..

There would, with the strawman, be new chapters at the back of the GB RfG (and other 'GB' Network Codes) starting after the 'Entry into Force' article at the end of each Network Code. These chapters would cover the 'boiler plate' aspects of the codes including: (i) governance, (ii) the code modification process, (iii) disputes, (iv) general provisions and (v) list of parties to the code etc..

As noted elsewhere in this strawman proposal it is suggested that these 'boiler plate' aspects are taken from the equivalent parts of the existing CUSC. The idea behind this is to 'keep it simple' as these aspects of are well known and understood by stakeholders.

In terms of item (v) it is suggested that parties to the GB RfG could be all those parties licensed by Ofgem who are bound by the RfG. Non licensed parties would not be a party to the code but could, for example, be designated by Ofgem to allow them (or representatives on their behalf) to raise modification proposals (to the GB RfG) if appropriate (as happens today, under the CUSC, with certain modifications).

For example, on governance the strawman idea would take the existing CUSC code governance 'Section 8' as the model as it clearly complies with Ofgem's code governance 'best practice' (see table 1 below). It would, in essence, just change the word 'CUSC' for 'GB RfG' in Section 8 of the CUSC and then 'copy & paste' it into the new chapter(s) in the GB RfG.

[6] 'GB RfG' plus'GB DCC', 'GB HVDC', 'GB Connections Procedure', 'GB CACM', 'GB FCA', GB Balancing', 'GB OS', 'GB OP&S', 'GB LFC&R', 'GB Training' and 'GB E&R'.

Table 1 Code Governance 'best practice' *				
Attribute	Straw-man	None strawman		
		GC	DC	ER[7]
Independent chairman appointed by Ofgem (on Panel recommendation)	Yes	No	No	No?
Industry Panel members elected to position	Yes	No	No	No?
Licensed parties affected by the code able to freely access the full code on a website (no password protection or need to pay for documentation)	Yes	Yes	Yes	No?
Licensed parties affected by the code are freely able to raise Mods on all aspects of the code, which must be considered on its merits	Yes	Yes	Yes	No?
All none self governance Mods go to Authority for final decision (and Ofgem can call in self governance Mods as well)	Yes	Yes?	Yes	No?
Have a fast track[8] Mods route to speed up simple changes	Yes?[9]	No?	Yes?	No?
Have a self governance Mods route to speed up simple changes	Yes	No?	Yes?	No?
Have an urgent Mods process to address those that need quick action / change (subject to Ofgem agreement on urgency)	Yes	No	No?	No?
Consumer Focus representative on the Panel	Yes	No	Yes	No?
Consumer Focus can also raise Mods, which must be considered on its merits	Yes	No	Yes	No?
Principle of allowing none licensed parties to raise Mods (by Ofgem designating them[10]), which must be considered on its merits	Yes	No	No	No?
Difference between Ofgem and Panel majority vote – Competition Commission appeal route[11]	Yes	No	No	No

* the references to the respective parts of the Codes is shown in Annex 1.

However, in this regard there needs to be a recognition that various parties will be affected by the GB implementation of this (and subsequent) Network Code. Given this the strawman suggestion is that we adapt the CUSC governance arrangements (8.4.2 (a) and Annex 8A) by replacing the membership of the Panel elected from members drawn from across the industry and, instead, adopt the constituency principle from GCRP for electing the GB RfG Panel in order to recognise that different stakeholder groups will be affected by GB RfG obligations.

Given this, it is suggested that the GB RfG Panel membership could be made up of:-

[7] I'm not 100% certain of the Engineering Recommendation governance – I think it maybe the same as the Distribution Code (in which case the 'DC' column to the left of 'ER' would apply).

[8] to be clear this is separate from the 'urgent' mod route.

[9] The question mark here is that the Mod to implement this in the CUSC is currently being assessed under the CUSC change process.

[10] the wording in the CUSC applies to Modifications associated with charging - wording can be used to apply to parts (or all?) of GB RfG.

[11] this exists for the CUSC and its the strawman's proposal that this be included in the GB RfG (and other Network Codes).

Table 2 – Strawman GD RfG Panel composition	
1 *(a)*	Independent Chair
1 *(a)*	From Ofgem (under CUSC 8.4.3 they can appoint a member to represent those not already reflected in the Panel composition.
1 *(a)*	From Consumer Focus
2 *(a)*	From the TSO designated according to Art 1[12] of RfG by Member State
2 *(e)*	From 'other' TSOs (onshore and offshore - but not interconnectors as they have no generation connected??)
2 *(e)*	From DNOs
2 *(e)*	From Type A Generators
2 *(e)*	From Type B Generators
2 *(e)*	From Type C Generators
2 *(e)*	From Type D Generators
[2] *(e)*	[From Suppliers (as consumer generation connections will be via contracts with suppliers?)]
[2] *(e)*	[From Significant Grid Users (where they are not covered by the Type A-D Generators?)]
17 [21]	[The case for 'Suppliers' and 'SGUs' needs to be explored – included here for completeness.]

(a) appointed / *(e)* elected

In addition to the Panel members there would be an Ofgem observer and, if appropriate, observer(s) from others codes.

This constituency principle would then apply to all subsequent Network Codes. Those Panel constituencies would be linked to those stakeholders bound by the Network Code in questions - generally TSOs, DSOs, Market Participants and Significant Grid Users. Thus the GB DCC Panel, for example, could also include aggregators and suppliers as well as SGUs, TSOs and DSOs and Consumer Focus.

However, we need to recognise that various parties could, legitimately, be categorised in a number of these constituencies due to their licensed operations. Given this it seems appropriate to require such parties to stipulate themselves which single constituency (out of all those they could legitimately 'join') they wish to join and they would then only be able to vote and stand for election in that single constituency (which they would chose prior to each two year Panel election cycle). The reason for this is that, over time, a party's business may change from being, say, Type A focused to Type A and B focussed.

[12] the latest public versions of both the Operational Security and Operational Planning & Scheduling Network Codes presented by ENTSOe introduce an ability for each Member State to designate a single TSO to perform multiple tasks on behalf of other TSOs (where those other TSOs do not perform those functions currently under the existing national arrangements). It is expected that this wording will be applied to the RfG during the comitology process (as the OS and OP&S wording was agreed by ENTSOe, ACER and the Commission).

For example a corporate entity with multiple types of power stations of, say, Types B, C and D would need to chose, prior to each Panel election cycle, one of these three constituencies they wished to be in.

Given this there could (and should) only ever be, at most, one Panel member from any one corporate entity. The exception to this, as per the CUSC governance[13], would be the two Panel members from the TSO designated by Member State. However, as per the CUSC governance[14], they would only have a single Panel vote (between two) and would have to inform the Panel Chair prior to the meeting as to which of them was exercising the vote at the meeting in question.

This strawman approach could see up to least twelve separate GB Network Code Panels – one for each Network Code. However, there may be merit in effectively grouping the twelve Network Codes together for efficiency purposes along the lines that is used by National Grid in its regular 'development status'[15] update.

There could, perhaps, be merit in a single Panel being established for each of the three Network Code groupings; 'Connection', 'Markets' and 'System Operations'. If this were to be the case then the suggested Panel constituencies set out in Table 2 would need to be amended to reflect the stakeholders from the other codes in the grouping. Thus, for example, the 'GB Connections Code Panel' would see, in addition to those RfG related constituencies shown in Table 2, constituencies for end consumers (DCC) and offshore generation and interconnectors (HVDC).

If the three Network Code groupings approach were to be adopted then, for example, the 'GB Connections Code' could have, say, four volumes (one each for RfG, DCC, HVDC and Connections Procedure) with all the governance, changes etc., to each volume covered by a single 'GB Connections Code Panel' (and so on for the 'Markets Code' – three volumes – and 'System Operations Code' – five volumes).

Benefits

One of the alternative approaches to implementing the Network Codes into the existing GB electricity industry arrangements (such as that set out in the September GCRP paper) is to incorporate the changes directly into, for example, the Grid Code or Distribution Code.

However, this has a number of drawbacks including that there will be a prolonged period of a year (or more) from spring 2014 to well into 2015 where we would have multiple versions of the (GB) Grid Code (and Distribution Code plus potentially the Engineering Recommendations) in existence at the same time.

This is because we will have the 'status quo' Grid Code (and DC plus ERs) which applies to existing users plus, in development and or partially implemented over time, the Grid Code changes for: RfG, DCC, HVDC, Connections, Operational Security, Operational Planning & Scheduling, Load Frequency Control & Reserve, Staff Training & Certification and Emergency & Restoration.

[13] 8.4.2 (c)
[14] 8.11.5
[15] http://www.nationalgrid.com/NR/rdonlyres/37A54263-4BC9-40BE-A1D9-50B9D38A030D/62626/ENCStatusOct13.pdf

There is a significant risk of confusion (as well as Member State infringement?) during this detailed transposition phase where early obligations placed in the Grid Code (or Distribution Code or Engineering Requirements) say for the RfG, are overwritten or deleted as the documentation is amended as a result of the implementation of later Network Codes. This risk would not exist in the strawman approach as each of the various Network Codes is dealt with separately as a stand alone 'GB' code.

A further risk of defining RfG obligations in up to four separate existing GB codes is the danger, inadvertently, of a 'land grab' where GB Code Panel X believes that Article Y of the RfG should 'reside' in 'their' code, whilst another GB Code Panel believes it should be in 'their' code. The converse is also true, where Panels wary of the burden that might fall on their users / funders might not wish to have an RfG obligation placed in 'their' code.

A related risk of defining RfG obligations in up to four separate existing GB codes; such as the Grid Code, Distribution Code, Engineering Recommendations and CUSC; is that you end up with multiple definitions for the same thing in different places. This risk would not exist in the strawman approach as each of the various Network Codes is dealt with separately as a stand alone 'GB' code[16].

There is also a benefit in terms of cost recovery. Because the detailed way that each RfG obligation is to be discharged by the TSO or DSO is set out in the GB RfG; and this is either 'designated' by the Secretary of State or modified with the agreement of Ofgem; then when the TSO or DSO carries out the detailed task(s) set out in the GB RfG it's clear it is acting in a proportionate, reasonable, economic and efficient manner.

As with the current price control principles, once this has been approved then the costs are known and network charges flow directly from that. Parties know this is an open and transparent process - they are not being asked, in advance, to sign up to a 'blank cheque'.

A cost recovery risk with the non strawman GB RfG approach is that, say, the DSOs could set out for themselves, in the Engineering Recommendations, how they (or stakeholders) discharge the RfG obligation without Ofgem agreement prior to those costs being incurred (or imposed on stakeholders). This exposes end consumers to the risk of having to pay; indirectly via the network and other charges imposed by the DSOs to recover their costs or directly vis increased costs on them; for things that they perhaps should not have done, had another more efficient way been identified.

It also exposes the TSOs and DSOs to the risk that the way they discharge the RfG obligations is deemed, by Ofgem, disproportionate, inefficient etc., at a later date and the costs not passed on via network charges after they have incurred those costs. The strawman GB RfG approach should mitigate that risk.

There is also a risk for end consumers that TSOs and DSOs seek, inadvertently, to increase, for example, their RAB in terms of extra 'tasks' that they believe they should undertake to discharge the

[16] this assumes that there is, as ENTSOe envisage, a single definition across all the Network Codes for the same item – even if there were to be (regrettably) multiple Network Code definitions of the same thing, then this would be an issue for both the strawman and non strawman approaches to GB implementation.

RfG obligations. There would not be the same level of openness and transparency that you get with the strawman, where all the obligations (and the ways they are discharged) of the RfG will be set out (in the GB RfG).

These risks to end consumers were highlighted in responses to the Network Code consultations.

The strawman approach would also allow, via the open code change process, for ongoing developments, over time, of the way the RfG obligations are discharged via the GB RfG so that if a better way can be found by stakeholders to do something then a case for change can be freely made (in the case of the other options for GB implementation this could, in many cases, not formally happen unhindered).

In terms of development of the GB RfG in the short term (prior to its formal 'Entry into Force') we should do what we did with NETA, namely establish a cross industry workgroup to develop the detailed wording which would be presented to DECC for 'designation' (after its formal 'Entry into Force). Lots of work will need to be done, but we have done it before and, fundamentally, it's no different from what's being proposed in the GCRP paper – the actual details will need to be worked out of each Network Code obligation / requirement – its just a question of where and how is this done. In either case a lot of hard graft will be required to get it right.

Summary

Benefit to the Member State - clear demonstrable implementation / transposition of each Network Code.

Benefits for stakeholders - clear what they are bound by, no need to look at certain parts of the current multiples GB codes which do (or do not) apply to them to find the Network Code obligations on them.

Benefits for existing parties - the existing GB codes remain unchanged. Parties can change anything in those codes as now without 'conflicting' with the Network Code aspects of those codes (if they were incorporated, according to the alternative approach, into the GB codes).

Complies with Ofgem's code governance 'best practice' (see table 1 above).

It's clean, it's simple, it's straightforward, it's transparent and it's open.

Garth Graham, ECCAF 21st November 2013

Annex 1 Code Governance 'best practice' references				
Attribute	Strawman / CUSC[17]	None strawman		
		GC[18]	DC[19]	ER
Independent chairman	8.4.1 (b)	2.1 / 5.1 (a)	2.1 / 5.1(a)	No?
Elected Panel members	8.4.2 (a)	5.1 (c)	5.2	No?
Access the full code on a website	#[20]	#[21]	#[22]	No
Parties able to raise Mods	8.16.1	4.1.2 / GC 4.2?	4.1 (c)?	No?
Mods go to Authority for final decision	8.23.7	????	21 (f)	No?
Fast track Mods	CMP220[23]	No?	21 (c)?	No?
Self governance Mods	8.25	No?	21 (c)?	
Urgent Mods	8.24	No?	No?	No?
Consumer Focus on Panel	8.3.1 (b) (iv)	5.1	5.1 (d)	No?
Consumer Focus Mods	8.16.1 (a) (i)	4.1.2 / GC 4.2	4.1 (c)	No?
None parties able to raise Mods	8.16.1.(b) (iv)	4.1.2 / GC 4.2	4.1 (c)	No?
Competition Commission appeal route*	CC	CC	CC	CC

* The Competition Commission "Guide to Appeals in Energy Code Modification Cases July 2005[24]" sets out, at paragraph 2.5[25], that three electricity codes Modifications decisions by GEMA / Ofgem are subject to appeal; the BSC, CUSC and MRA.

[17] http://www.nationalgrid.com/NR/rdonlyres/8B81E9A0-F1B1-47B7-906D-41DA0DB69167/51434/CUSCSection8_v122CMP198_31Jan_12.pdf
[18] http://www.nationalgrid.com/NR/rdonlyres/8176DEFE-6459-4C0A-A7C1-376F0130E7BB/56327/_CR250612.pdf
[19] http://www.dcode.org.uk/assets/files/GBDCRP%20Constitution%20and%20Standard%20Procedures%20February%202011.pdf
[20] http://www.nationalgrid.com/NR/rdonlyres/BC4FA6D1-F3C6-4ECE-8FF6-73297C302A71/63156/CompleteCUSC_01_Nov13_CMP217.pdf
[21] http://www.nationalgrid.com/NR/rdonlyres/67374C36-1635-42E8-A2B8-B7B8B9AF2408/63179/00_FULL_GRID_CODE_I5R5.pdf
[22] http://www.dcode.org.uk/assets/files/dcode-pdfs/Distribution%20Code%20v%2020.pdf
[23] CMP220 was submitted to Ofgem on 15th October 2013 and based on the Authority's KPI a decision is expected by 19th November 2013

[24] http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/rules_and_guide/pdf/cc11.pdf

[25] 2.5 The Order designates the following codes, the first three of which are concerned withthe electricity industry and the second three concerned with the gas industry:

(a) the Balancing and Settlement Code ('the BSC');

(b) the Connection and Use of System Code ('the CUSC') ;

(c) the Master Registration Agreement ('the MRA')

Paper (Agenda Item 7)
Requirements for Generators European Network Code GB Application

Requirements for Generators European Network Code GB Application

Introduction

1. The Network Code on Requirements for Generators (RfG) is seen as one of the main drivers for creating harmonised solutions and products necessary for an efficient pan-European (and global) market in generator technology. Its purpose is to bring forward a set of coherent requirements in order to meet these challenges of the future.

2. In GB several codes contain requirements placed upon generators connecting to the system, principally including the Grid Code, Distribution Code and also Engineering Recommendations G83/2 and G59/3. The CUSC, BSC and STC also contain some relevant requirements.

3. There are many areas where the RfG requirements are similar to those in the GB codes, or are subject to national choice meaning that this can be achieved if appropriate. However, elements in RfG are also in contradiction to the GB codes; and there are other areas where the GB code requirements exceed those in RfG or there is no RfG equivalent.

4. Once the RfG code enters into force it will become European Law and therefore will take precedence over all existing GB codes and law. It would therefore not be strictly necessary to reflect its requirements into the GB codes for it to apply within GB. However, if a process of alignment with the GB codes is not carried out, it would be difficult for users to see what the requirements upon them were, for the administration of the system, and for compliance to be demonstrated.

5. Compliance with RfG will be required by a point three years after its entry into force. By default RfG will apply only to 'new' generators, defined as those which are not connected to the system two years after the European Network Code is enacted, or for projects in construction which have not let contracts for major plant items at this point. In any code structure going forwards this means that accommodation needs to be given to two sets of Users, those that are 'caught' by the code and those that are not.

6. The default position is that RfG will not apply retrospectively to existing generators, although this is allowed where a positive cost benefit can be demonstrated on a societal basis and subject to NRA (National Regulatory Authority – so for GB, Ofgem) approval.

7. A final draft of the RfG code was submitted by ENTSO-E to ACER in March 2013. ACER then onwards submitted this to the Commission on 27th March 2013. The Commission are still taking the code through pre-comitology, where comitology is the process by which it will be written into European Law. A Technical Impact Assessment has been written for the Commission by the Consultants DNV Kema and their latest aim is to produce code text shortly (during November 2013) with an ambition of completing comitology in Q1 2014.

Banding of Requirements

8. The codes that GB generators currently are required to comply with are a function of the generator size. This has regional specificity within GB and is defined in the Grid Code as:

Generator Size	Direct Connection to:		
	SHET	SPT	NGET
Small	<10MW	<30MW	<50MW
Medium			50-100MW
Large	10MW+	30MW+	100MW+

9. Large Generators, or any generators directly connected to the transmission system, defined as assets at 275 or 400kV in England and Wales and 132kV or above in Scotland, are required to comply with all of the Connection Conditions in the Grid Code. Medium Generators in England & Wales have to comply with a limited selection of Grid Code conditions. Small Generators, and any other generators connected to the distribution system, are required to comply with the relevant sections of the Distribution Code and also by reference within this to Engineering Recommendations G83/2 for generators connected at 240/415V with a capacity of less than 16A/phase (equating to 3.68kW-1ph and 11.04kW-3ph) or G59/3 for those over this threshold.

10. RfG fundamentally changes the banding of requirements under the Grid Code. In RfG generators are banded from A to D. The requirements in the code are cumulative, so a band B generator also has to comply with the band A requirements, and a band D generator has to comply with all requirements in bands A-D.

RfG Type	Generator Capacity	Connection Voltage
A	800W-1MW	<110kV
B	1-10MW	<110kV
C	10-30MW	<110kV
D	≥30MW	>110kV

11. In summary, and considering the impact of this banding in the structure of any vehicle by which RfG can be applied within GB:
    - Requirements apply much lower down the scale (from 800W) than is currently the case for the GB Grid Code (which is from the details above generally from 50MW+) meaning that a whole different set of users with much less ability to interact or interpret code requirements will be caught.
    - The cumulative nature of the band A-D requirements means that the code vehicles chosen need to be mindful of the cross-band requirements and the need to minimise the number of separate documents that will need to be referred to.

Application to GB Codes – Options

12. High level options for implementing RfG into the GB Grid Code have been proposed in a paper prepared by Cameron Mckenna LLP with input from National Grid. These options can, by extension, be applied generically to the other ENCs and GB codes.

    - **Option 1** - write a new code to cover ENC requirements but retain the existing grid code as well. *The end result of this approach would be two parallel documents to maintain. As a positive point, it would be easier to interpret for both new (captured) and existing (non-captured) users.*
    - **Option 2** - amend the GB Grid Code to include ENC requirements. *This sits between options 1&4 but has no separate advantages.*
    - **Option 3** - remove all ENC-related provisions from the GB Grid Code and create a stand-alone EU relevant document. *In terms of the final position this will be similar to option 1 but with a messy realisation.*
    - **Option 4** - rewrite the Grid Code completely ie without leaving a 'frozen' current version. *This is a neater overall solution while being potentially more time-consuming at the start and also making it more difficult to see which requirements will apply to new and existing users.*
    - **Option 5** - combine the GB Grid Code and GB Distribution Code. *Could be used in conjunction with any of the other options.*
    - **Option 6** - amend the GB Grid Code to cross-refer directly to the RfG ENC. *Potentially workable in conjunction with one of the other options although ease of use could be an issue. The advantage of this is in keeping to a minimum solution and avoiding replication but given the required Member State specificity contained within the ENCs application it would be complex.*

13. National Grid, Ofgem and Distribution Network Operators discussed this options paper in October 2012. They concluded that Option 1 - keep the GB Grid Code as is for existing Generators and start a new code aligning with ENC requirements to apply going forwards; or Option 4 - re-write the GB Code to directly apply ENC requirements, were to be developed further through the use of examples drawn from the RfG code.

14. In effect options 1&4 are the same in terms of the initial work to be carried out in translating the ENC requirements, and ultimately they will converge once any existing users have moved across to the new version of the code, which will eventually happen as new equipment is commissioned and existing equipment is either decommissioned or modified. Option 1 has the advantage of greater clarity for existing users but produces two parallel code documents; option 4 while resulting in just one document, which could be easier to manage, will be more complex given that this will have to apply to new and existing users.

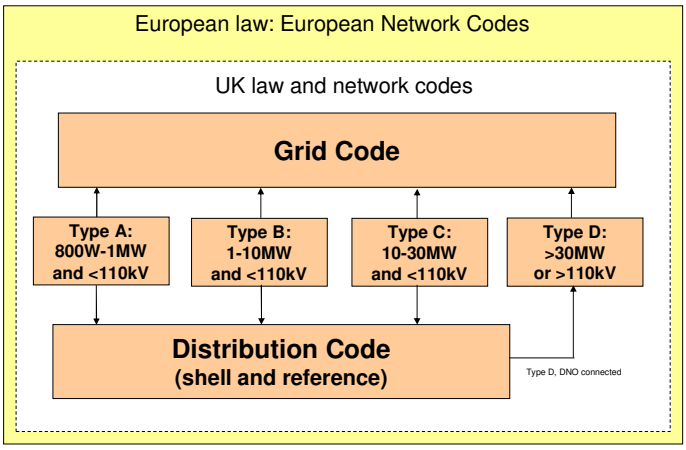
Structures within GB

15. Option 4 from the above was considered in more detail by the working through of examples, and particularly to assess the basic structural alternatives within the GB codes. While these are not exhaustive, and a hybrid approach may also be pragmatic, the following were proposed:

    (i) Place all the Type A – D RfG requirements in the GB Grid Code
    (ii) Place all the Type A – C RfG requirements in the Distribution Code / Engineering Recommendations and all the Type D RfG requirements in the Grid Code
    (iii) Place Type A – D RfG requirements in a set of Engineering Recommendations and reference Grid Code and Distribution Code to this

    All options assume that the current Codes would need to be frozen for existing Generators.

(i) Place all requirements in the Grid Code



Advantages:

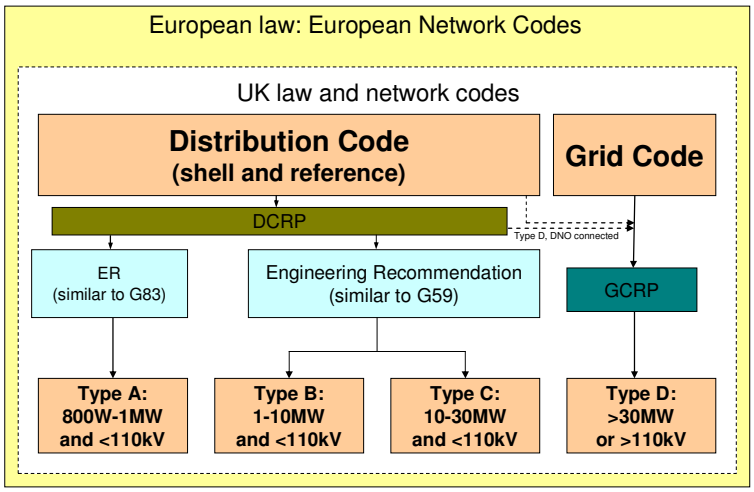
- Clarity. All Type A – D RfG requirements will reside in one document, and all Users will have only have one document to refer to.
- The structure of the Grid Code will remain largely unchanged.
- This approach of placing all requirements into a single GB code could be applied to other European Codes as well.
- Regional differences with Scotland are removed.

Disadvantages:

- A large number of smaller users that previously had no need to interface with the Grid Code would now be required to do this and ensure their compliance. Many of these would lack the capability or experience for this and would need assistance which would become a complex and administrative burden.

- Contractual complexity
- Grid Code becomes very cumbersome
- Interaction with DNO's requires further examination
- Legal text has been developed for a number of examples associated with this Option

(ii) Place Type A - C requirements in D Code / ER and Type D in Grid Code



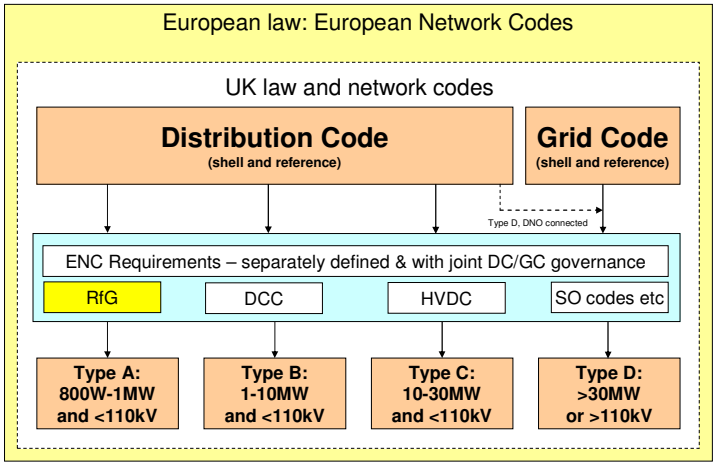
Advantages:

- Retain structure of existing GB Code and amend Generator clauses to ensure consistency with RfG
- Approach could be applied to other European Codes (eg HVDC and DCC)
- Removal of Regional Differences with Scotland
- Contractual structure remains similar to current arrangements
- Clear definition of which code applies to which party

Disadvantages:

- Some Users would need to access both Grid Code and D Code as per current arrangements, but small number of Users believed to be affected.

(iii) Place Type A – D RfG requirements in a suite of documents and reference Grid Code and Distribution Code to these



Advantages:

- Avoids some Generators having to read both Grid Code and D Code
- Avoids smaller parties having to comply directly with codes

Disadvantages:

- Makes both the Grid Code and D Code into shells with respect to Generator Requirements. This is current D Code practice but not Grid Code.

Summary of Pros/Cons

Issue	Approach		
	(i) Place all Requirements in GC	(ii) Place Type A - C requirements in DC / ERs, Type D stays in GC	(iii) Place all Type A - D requirements in ERs; GC / DC operate as Shells / Reference
Ease of use - users	Small generators have to refer to GC with high costs and admin	Clarity of which doc applies to which party will be OK	Probably easier for users
Ease of use - TSO/DNOs	DNOs need to refer to GC	Little change to current	Harder - as multiple docs to maintain and coordinate
Number of documents	Single document - and removes need for DC references	Small number of users (type D, DNO connected) would need to refer to both DC/GC	Multiple documents but does keep all users in either DC or GC
Retains existing codes structure	Yes, but GC becomes more cumbersome through extension to more users	Yes	No. Fundamental changes and multiple documents
Retains contractual structure	Increases complexity for D-connected gens	Yes	Makes it simpler in principle
Could application of other ENCs follow the same principles?	Yes, although multiple changes will be reqd	Yes, close to an as is solution using existing processes	Yes, and can build in more annexes to DC/GC 'shells' fairly simply although number of separate documents is a concern
DNO/SO/TO interactions require examination	Yes - to cover D-connected users	Yes - but requirements should cascade fairly neatly	Interactions probably straightforward and covered in DC/GC 'shells'
Removes regional differences with Scotland	Yes	Yes	Yes
Administration	Simple in principle. Becomes led by existing GC processes	Close to existing administration in principle, but complicated due to cumulative requirements across A-D bands	Uncertain how this would be administered and who would own suite of ERs
Could application to other GB codes follow the same principles?	Yes. Single code is the simplest overall solution for users with the capability to interpret this	Yes, close to an as is solution using existing processes	Following this route for other codes as well becomes untenable due to number of documents

Colour code:
Red – difficult or increases complexity
Amber – some issues
Green - straightforward

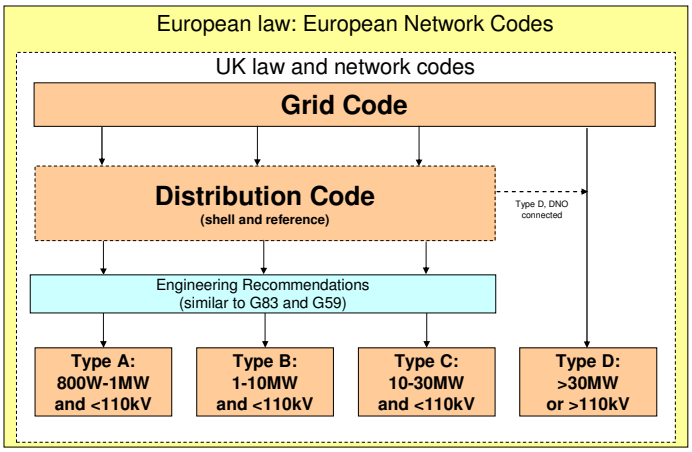
These proposals and the accompanying analysis were presented to JESG and subsequently all of the GB code panels in April-June 2013.

Variation on Previous Options

Taking into account the feedback received, a variation on the above examples would be to:

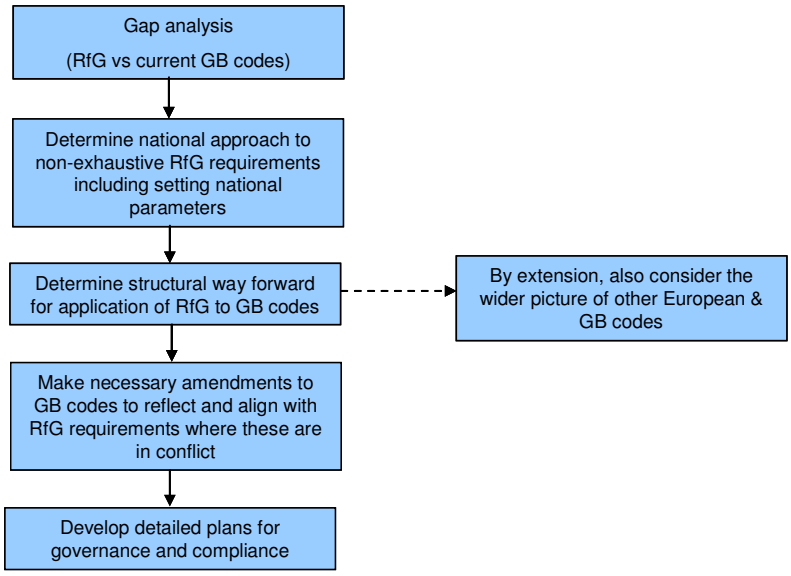
- Apply all changes required by RfG to the Grid Code.
- Bearing in mind the cumulative nature of the requirements against generators in bands A-D, replicate the appropriate sections of the Grid Code dealing with generators in bands A-C selectively in the Distribution Code, Engineering Recommendations or other supporting documents.

There is still a judgement to be made about what to have in a core document and what to write into a subordinate, but more focussed, document aimed at different classes of Users but effectively this is a combination of the options detailed above maximising simplicity and ease of use. In replicating requirements it does make the codes package more cumbersome to effectively administer but should also make it more user friendly.



Step by Step Application Process

For illustrative purposes stages in the process to determine the structure and progress this will be:



Reflecting this in more detail for the variation to (i) above gives the following steps required:

- Gap analysis of RfG code against Grid Code. A preliminary version of this has been completed but will need updating once final code text is available.
- Rewrite the Connection Conditions section of the Grid Code to align with RfG, including in this all of the requirements for all bandings of generation.
- Put only very limited structural RfG requirements into the Distribution Code. Use this to refer on to Engineering Recommendations for type A-C generation and as a 'redirect' to the Grid Code for type D generation that is distribution connected.
- Replicate RfG requirements for types A-C as added to the Grid Code into Engineering Recommendations.
- Rewrite Engineeering Recommendations G59/3 and G83/2 to include all band A-C requirements. Usability could be increased by splitting these further into specific technology types if considered necessary.

NB While Engineering Recommendations are referred to as a familiar model, a similar end could be achieved by means of alternative supporting documents.

Codes that each band of generator will then need to reference will be as follows:

- Type D – Grid code only (both Transmission and Distribution connected)
- Types A-C – Distribution code, largely as onwards reference structure to suitable Engineering Recommendations

Administration and Governance

The governance around changes to the code would work by ensuring that the cascaded requirements detailed in the Distribution Code and Engineering Recommendations were for information only, so being effectively guidance on the application of the Grid Code requirements with no actual governance.

GCRP

The GCRP would remain in place and would deal with subsequent changes to both the existing (nominally frozen but in fact continuing to develop as at present) Grid Code and the new European version of this in parallel.

DCRP

It is likely that the Distribution Code would follow the same pattern as the Grid Code with a frozen and current version both needing to be maintained by the DCRP to cover both existing and new user requirements plus onwards reference Engineering Recommendations or other supporting documents.

Engineering Recommendations

The copyright of these is owned by the Energy Networks Association (ENA), but for governance purposes they are owned by the DCRP. The original creation of G83 and G59 is remembered as having been complex. Consideration should be given to what the best route going forwards will be for both existing and new users, and what form the documents for reference by these two user groups take.

Compliance

Compliance with the code will be tested by the Commission on a member state basis; the GB party for whom compliance will be sought will be DECC. Non-compliance is possible under two main headings being:

- A failure to apply or properly enact the European code(s) correctly.
- A failure of national parties to comply with the code(s) despite their correct national application.

The Commission may levy sanctions for non-compliance on a national basis. Licence holders within GB (Transmission, Distribution, Generator and Interconnectors therefore) will be in contravention of their licences if they do not comply with the European Codes as these are one of the requirements of the 3rd Energy Package which has already been applied within GB law and has resulted in licence modifications to this effect.

For the first part, the requirement to demonstrate that the code has been correctly applied, this will require a mapping of clauses in RfG to their location in the appropriate modified GB code. This must influence the decisions made in terms of structure since it is apparent that placing all requirements into a single location must be preferable.

For the second part, compliance testing of larger generators under RfG will be similar to at present for the Grid Code. Going forwards, the bilateral connection agreements for larger users will reference what they are required to be compliant with referring to any relevant European legislation or its translation into new versions of GB codes and supporting documents.

Smaller parties, and band A generators in particular, have less ability or resource to interact actively with any ongoing compliance requirements. The application to these parties is likely to follow more of a product standard route and/or through compliance at the point of installation as checked by the installer and certified through provision of a type test certificate. This is essentially how the existing ERs G83/2 and G59/3 are applied currently. There is likely also to be a requirement upon DNOs to determine the volume of each generation type in the smallest categories connected to their systems.

Conclusions

The objectives of application of RfG within GB must include the following:

- Timely and demonstrable compliance.
- Ease of use – for all users, which must be factored in to any structural decisions. Key factors to consider here are the number and appropriate complexity of vehicles for code requirements and the treatment of existing users.
- Strong feedback received from all GB parties consulted to use existing processes as far as possible.

With these points in mind, the proposal described above to structure a solution based on putting all the requirements into the Grid Code and then replicating these to the Distribution Code or Engineering Recommendations achieves a solution that:

- Can be easily recognised by all parties as similar to existing processes and with established routes for governance.
- Can be tested for the correct or complete mapping of RfG requirements.
- Will work across the full range of Users and confers no clear advantage to any group.
- Could potentially be extended to application across the full range of GB and European codes.