

### **Headline Report**

Meeting name Joint European Standing Group (JESG)

Meeting number 25

**Date of meeting** 4 February 2014

**Location** Elexon, 4th Floor, 350 Euston Road, London, NW1 3AW

This note sets out the headlines of the most recent meeting of the Joint European Standing Group (JESG). The note is provided in addition to the presentations from the meeting which are available on the JESG website<sup>1</sup> and material in the presentations is not duplicated in the report.

#### 1. Issues Log Review

The current version of the issues log for each of the Network Codes being drafted by ENTSO-E is attached to this Headline Report. Issue logs for cross-code issues for drafting and application are also attached.

The priority lists of Stakeholder Key Issues captured during the DECC-Ofgem Stakeholder Workshops for the individual Network Codes which have completed the ENTSO-E drafting can also be found on the JESG website.

#### 2. Grid Connection Network Codes

#### Requirements for Generators (RfG)

- The RfG Network Code is in the cross-border committee stage of Comitology. An informal version of the text has been released by the Commission. These changes were to be discussed in the RfG stakeholder workshop on the afternoon of Tuesday 4<sup>th</sup> February.
- The European Commission published an informal code draft of the RFG on 14 January 2014.
   The changes made in general were not material in nature; the majority of additions were in the 'Whereas' preface to the main body of the Network Code and have no strong legal basis.
- The main body of the Network Code covers requirements for generators in order that they are fit for future developments, applying to generators of 800W and above. Generators are banded by size into categories from A to D; there was some discussion as to whether the GB banding was appropriate.
- The compliance timescales (article 63) have changed from three years after the Network Code comes into force to 'x' years. Further consistency and definitions checking is required, and a general improvement to the quality of the drafting compared to its current form. If there are any subjects that are of particular interest to stakeholders, DECC/Ofgem are open to be given a 'steer' on these subjects going into Comitology.
- Garth Graham raised a question on whether new generators would be required to comply with any Member State provisions beyond the RFG. Carole Hook (NGET) responded that Regulation 714 allows for Member States to have measures beyond those in the Network Codes where it does not affect cross-border trade.

### Demand Connection Code (DCC)

The DCC Network Code is in the pre-Comitology phase. A version of the text is being
prepared by the Commission and, according to the latest information that they have provided,
this is expected to be published in early 2014 but there has been no further update at this
time.

#### **HVDC Network Code**

 Darren Chan of NGET provided an update to JESG on the HVDC Network Code consultation, which concluded on 7 January 2014.

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Standing-groups/Joint-European-standing-group/

- Most comments related to the areas of power park module requirements, frequency issues (article 39) and voltage and reactive power (article 40). Many parties requested amendments or outright removal of many of the requirements for power park modules, as these were seen to be too stringent. ENTSO-E drafting will conclude on 30 April 2014, at which point the HVDC Network Code will be submitted to ACER for their review.
- ENTSO-E will publish in due course the general responses raised by stakeholders to each
  of the substantial issues

#### 3. Market Network Codes (CACM and Balancing Framework Guidelines)

#### **CACM Network Code**

- An "informal" draft of the CACM Network Code was published by the European Commission on 22 November 2013 and a further revised version on 14 January 2014. National Grid provided interested parties with a document outlining changes made since the publication of the final ENTSO-E version of the CACM Network Code (dated 27 September 2012).
- Based on the latest information provided by the Commission, the "formal" draft of the Network Code is expected in March 2014.
- The Cross-Border Committee, as part of the Comitology process, are still discussing the draft, and are expected to vote later in Q1/2014.

#### Forward Capacity Allocation Network Code

- Ofgem's Evridiki Kaliakatsou presented ACER's view on the FCA Network Code. ACER
  has completed its review and has asked ENTSO-E to make revisions to the Network Code
  on a number of areas, including firmness arrangements, cross zonal risk hedging, long
  term transmission rights remuneration and timescales.
- ACER is concerned with the long implementation timeline, and that the firmness rules are not
  in line with either the framework guidelines or the CACM Network Code. The design of
  compensation caps in case of curtailment and the long term capacity firmness deadlines also
  require further redrafting. The draft states that remuneration of transmission rights is 'based
  on' market spread, but DC transmission losses are not acknowledged.
- ENTSO-E is aiming to submit a new draft of the Network Code to ACER by the end of Q1 2014.

#### Electricity Balancing Network Code

• The Network Code was submitted to ACER in December 2013; their review of the Network Code against the Framework Guidelines is due to be released by the end of March 2014.

## 4. System Operation Network Codes

# Operational Security (OS) and Operational Planning and Scheduling (OP&S) Network Codes

- On 12 November 2013, ACER published its recommendation for the adoption of the OS and OP&S Network Codes, following the resubmission of both Network Codes to ACER on 24 September.
- Both Network Codes will now pass on to the pre-Comitology phase for consideration by the European Commission.
- The OS and OP&S Network Codes were not discussed further at this month's JESG.

#### Load-Frequency Control and Reserves (LFCR) Network Code

- The Network Code has entered the pre-Comitology phase for consideration by the European Commission; a Cross-Border Committee meeting is expected to take place in Q2 2014.
- The LFCR Network Code was not discussed further at this month's JESG.

#### 5. ENTSO-E Balancing Pilot Projects Update

- Graham Hathaway of NGET provided an update on the ENTSO-E Balancing Pilot Projects, which are designed to help test the feasibility of the Balancing Network Code, in particular around imbalance netting and replacement reserves.
- Groups of TSOs have been formed to create nine separate locally-managed balancing pilot projects The projects are all at a very early stage of development. GB is involved in projects four ('TERRE'; IFA) and eight (BritNed), which both seek to make available to TSOs replacement reserves on the same timescales as STOR and BM Start-up. Timescales: TERRE members are aiming to sign a Memorandum of Understanding by July 2014, after

- which Terms of Reference will follow detailing cost sharing arrangements, operational protocol, IT systems, and potential ways to involve interconnectors. Discussions between NGET and Ofgem on TERRE are on-going.
- Several stakeholders raised the concern that they will need to know well in advance if any IT systems changes will be required to comply with either project. Graham responded that the intention within both projects is that any solution will be built so that no changes need to be made to existing external interfaces with the EBS systems. As the projects progress further information will be shared with stakeholders through the JESG.

#### **ECCAF Update** 6.

- Paul Wakeley, ECCAF Technical Secretary, presented an update from the second ECCAF meeting, held on 30 January 2014.
- The first main area of discussion revolved around potential structural alternatives to the GB Network Codes. The two options were to either: broadly retain the existing GB codes and to include any new requirements from the European Network Codes within these, or: to adopt a more unified approach requiring a minimum number of new codes. ECCAF's provisional recommendation is to use the existing codes to envelope the requirements of the Connection Codes (RfG, DCC, HVDC) which mainly impact the Grid and Distribution codes. Any future proposed change of structure or decision to treat any other code differently should not be precluded by this.
- The second main area of discussion was on proposals for the form of work flow, detailing how each Network Code should be examined, mapped to current GB code requirements and how information should be shared with other parties/organisations.
- Further details will be published in the ECCAF Headline Report<sup>2</sup>.

#### 7. Forthcoming events/workshops

Please refer to the calendar on the JESG website:

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Standing-groups/Joint-Europeanstanding-group/

Details of forthcoming JESG events are listed in the calendar and available on individual websites:

- ENTSO-E: https://www.entsoe.eu./resources/network-Network Codes/
- ACER: http://acer.europa.net
- Ofgem: http://www.ofgem.gov.uk/Europe/stakeholder-group/Pages/index.aspx

#### 8. **Next meeting**

The next scheduled meeting for the JESG is 12 March 2014 at Elexon, London. Further details will be included in the draft agenda for the meeting.

The actions log and issues logs follow this report.

<sup>&</sup>lt;sup>2</sup> Please refer to: http://www2.nationalgrid.com/uk/industry-information/electricity-codes/standing-groups/. The ECCAF webpage is due to go live shortly; in the meantime please refer to the JESG website.

# **Generic Issues Log**

Issue No	Issue
1.	How do the Network Codes align with the individual Framework Guidelines?
2.	Concerns over the mechanism for the publication of data under REMIT
3.	The potential for different definitions of significant across Network Codes
4.	The implementation of the RfG could conflict with CACM as they are at different stages in the Network Codes process
5.	What is contribution of each Network Code to resolve issues? Need a strategic view of the Network Codes but not sure which is the best place to do this.
6.	How is consistency and interoperability being ensured across the Network Codes?
7.	Can the final Network Code to be produced be used to correct errors / inconsistencies in earlier Network Codes?
8.	What is the expected frequency for changes to the Network Codes once implemented? The minutes of the Operational Security Network Code Public Workshop (20/4/12) indicate that a 'frequency of 4-5 years' 'might be needed'.
9.	There should be a general clause in each of the Network Codes to require consultation and NRA approval for elements which are to be defined after the Network Code has entered in to force. Such a condition has been included in the CACM Network Code.
10.	The definition of TSOs in the Network Code may lead to ambiguity due to the certification of additional companies in GB as TSOs (e.g. Interconnectors and OFTOs)
11.	There are various data and information flows defined in various Network Codes which are not obviously consistent. This remains a major concern for the Industry due to changes to processes and infrastructure that will be required to provide this data.
12.	What happens when notifications are provided to the TSO / Relevant Network Operator. Does the TSO have a duty to act upon the notifications? What if they do not comply?
13.	The contractual / market impact of demand side response for domestic customers has not been considered. The DCC and LFR&C Network Codes both deal with capability without outlining how the market will work in practice. Who is the most appropriate part in the UK to have a relationship with the customer for demand side response.
14.	Supplier may be moved to an 'out of balance' position by demand actions taken by the Aggregator / DSO / TSO. This impact on the balancing arrangements will need to be considered.
15.	There are different definitions for 'Significant Grid User' in a number of the Network Codes, so the applicability of the Network Codes to individual users is not clear.
16.	If the term 'Transmission Connected' is used within the Network Codes this will led to discrepancies within Europe and within the UK, and there is no single voltage above which Networks are considered Transmission (e.g. within GB, Transmission in Scotland is at or above 132 kV, whilst in England and Wales it is at or above 275 kV)
17.	There are various different terminologies for geographic areas used in the Network Codes. It is not obvious what each definition refers to and this leads to confusion. Examples are bidding zone, control area, responsibility areas, observability area, LFC control area, member state etc.
18.	The Cost Benefit Analysis methodology considers socio-economic often on a pan-European basis. There is a concern this will lead to one member states constantly subsidising another member state, or one market party being unduly affected (such as GB merchant Interconnectors).
19.	<b>Common definitions.</b> A working group has been established by ENTSO-E to look at definitions across the Network Codes.
	It is understood that while common definitions are desirable the same term could be defined differently in different Network Codes. Consideration is be to be given to the establishment of a separate cross-codes definitions document.
20.	Alignment of requirements and payment. There is a need to ensure that requirements specified in one Network Code, and the payment mechanisms outline in the Balancing Network Code are aligned so that services are delivered recompensed on the same timescales.
21.	Consideration by Ofgem to be made on whether to reconvene the former FUI (France-UK-Ireland) regulatory group, or potentially set up a new GB regulatory balancing group, as a means to engage with stakeholders.

# **GB Application / Implementation Issue Log**

Issue No	Issue	NGET View
1.	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.	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.	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.	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.

## **JESG Action Log**

### **Standing Actions**

Action No	Action	Lead Party
S1	Prepare a commentary / comparison document between the Network Code and the existing GB arrangements at appropriate stages in the Code development for each Network Code.	NGET
S2	Engage with DECC and Ofgem to ensure appropriate and timely input can be provided from GB Stakeholders in to the Comitology process.	JESG Chair
S3	Continue to review the membership of the JESG and engage additional industry parties where appropriate.	JESG Chair
S4	Provide update on future Network Codes and incentives being developed as and when appropriate.	NGET/Ofgem/DECC
S5	If required by the Commission, facilitate an industry-wide read-through of the Network Codes once they are released by the Commission . (formerly Open Action 135)	JESG Chair/Ofgem/DECC
S6	Stakeholders are requested to provide specific example of inconsistent or problematic definitions in the Network Codes to Ofgem ( <a href="mailto:reuben.aitken@ofgem.gov.uk">reuben.aitken@ofgem.gov.uk</a> ) and DECC ( <a href="mailto:will.francis@decc.gsi.gov.uk">will.francis@decc.gsi.gov.uk</a> ). (formerly Open Action 140)	All

### New and Open Actions

Action No	Action	Lead Party	Status	Update
138	Consider the need for how to best capture stakeholders' most recent priority issues before and during the Comitology process, in particular for the RFG, DCC and CACM Network Codes as the codes develop in the pre-comitology phase.	DECC	Open	Workshops have been scheduled for CACM (Dec), RfG (Jan) and DCC (Feb). Feedback from these sessions will support the enduring approach to capturing stakeholder issues in the Comitology stage.
147	Establish if the provision in the HVDC Network Code on distribution connected HVDC links will have any impact on GB, by ascertaining if there are any existing links or any are planned.	NGET	Open	
148	Stakeholders would like a further update on any progress on Project TERRE at the March JESG.	NGET	Open	

### **Recently Closed Actions**

Action No	Action	Lead Party	Status	Update
139	When appropriate, circulate the 'Implementation guidance document' being prepared by ENTSO-E for the RFG Network Code	NGET	Closed	Grid Connection Codes Implementation Guidelines published in JESG Weekly Update on 25 October 2013.
142	National Grid to produce a signposting document, offering a layman's guide to European Network Code development to aid industry parties in understanding the Network Codes.	NGET	Closed	A draft of the document has been developed, and will be published on the JESG website imminently.
145	Ofgem to provide an overview on the ACER's approach to evaluating Network Code amendment proposals	Ofgem	Closed	James Earl of Ofgem to provide an overview at December's JESG

Action No	Action	Lead Party	Status	Update
146	National Grid to provide JESG members with insight into the Balancing Network Code pilot projects as mentioned in December's JESG.	NGET	Closed	National Grid delivered a presentation to the JESG informing them on the purpose of and progress made in the pilot projects on 4 February 2014.

# **HVDC Issues Log**

Last updated: 12 February 2014

ID	Issue NGET View					
Issi	Issues captured prior to the JESG Technical Workshop					
1.	Why do the requirements for PPMs only extend to those connected Offshore? There is potential for Onshore PPMs to be connected only via HVDC	Drafting is at a very early stage and consideration of this and other issues will be taken by the drafting team. Onshore HVDC connected PPMs are now included				
2.	How will a small island be considered, if it is connected to the Synchronous Area only by HVDC? In the extreme case, GB is an island connected via HVDC to the European Synchronous Area, so a form of words need to be found to ensure requirements are placed on the right parties	Drafting is at a very early stage and consideration of this and other issues will be taken by the drafting team.  The Code is drafted to place technical requirements on HVDC, irrespective of who the owner is. The issue of TSO owned HVDC and obligations, responsibility for ensuring compliance, etc is tied in with the definition of "TSO"; this is still being addressed by the LRG to get a harmonised approach to all Codes. It may be necessary to define "island" and "synchronous area" appropriately so as to capture this issue.				
3.	Consideration needs to be given to the various configurations of PPMS and HVDC networks, to ensure that obligations are fair and transparent.	Drafting is at a very early stage and consideration of this and other issues will be taken by the drafting team.  All obligations and responsibilities will be fair and transparent irrespective of ownership (see above comment)				
4.	The code needs to deal with situations where the configuration of the HVDC changes, e.g. if a link previously connecting different synchronous areas becomes an embedded link if a parallel AC line is added.	Drafting is not expected to preclude changes or new configurations.  The Drafting Team is aware of potential configuration changes; this issue will be addressed.				
5.	If the Code is written to the technology non- specific, there is a risk that some of the functionality of certain technologies may not be fully utilised.	Being technology non-specific means the Code does not preclude future technologies.  The Code is a minimum requirement so additional items, provided they are compatible with the Code, are permitted.  Technology neutrality is on the Agenda; it is recognised that capabilities of particular technology should not be ruled out. While there is EU pressure to harmonise requirements, certain requirements may have to be left to the local TSOs to specify.				

ID	Issue	NGET View			
6.	The added services required by the Code could make merchant Interconnectors less viable. The GB merchant model is designed for the transfer of Active Power, the draft specification for HVDC NC goes beyond this.	The Code can apply retrospectively depending on the decision by the NRA according to the provisions on retrospective application. For Interconnectors in development, transitional arrangements will be specified in the Code, similar to RFG and DCC.			
		The code is not tasked with the provision of "added services" – just capabilities. Some of these capabilities, e.g Frequency Response, can be met with little or no extra cost. These capabilities can enable HVDC to offer "added services" for which presumably merchant Interconnectors may agree commercially to provide to the relevant TSOs			
Key	Issues captured at JESG Technical Works	shop on 11 / 12 December 2013.			
7.		Code applies to those deemed significant under the explicitly note the parties that are significant. The			
8.	from another Network Code as it does not co	e are either not defined or the definition is inherited ver HVDC specific terminologies. There is also the ngle set of definitions across the Network Codes			
9.	Structure of the Network Code. The Network Code is poorly drafted in terms of which requirements apply to which parties. More thought should be given to acknowledging the difference between requirements on Interconnector HVDC and HVDC used to connect offshore Power Park Modules.  Acknowledging that Converter Stations connected to the offshore grid and those connected to				
	the onshore Transmission Grid have different requirements in distinct chapters.	t requirements. This could be achieved by having			
10.		ation by TSOs in the Network Code should be spects of the Network Code do not require this.			
11.	<b>Discrimination – HVDC Interconnectors vs generation</b> . The Network Code places more onerous requirements (frequency, voltage etc) on HVDC Interconnectors than on onshore generators. This places merchant Interconnectors at a disadvantage in providing power in the market. The additional requirements required in the HVDC are not justified.				
12.		erators— Why are requirements on DC connected connected PPMs. This is an unfair distortion of the			
13.	an open market, as they do not have to go th				
14.	Network Code on existing systems and PPM	Code needs clarifying to reflect the impact of the s. ENTSO-E stated at their 4 December workshop sting plant without a CBA: the wording does not ed.			
15.		bout requirements applying to modernisation of CBA to ensure that any additional changes required at is proportionate and appropriate.			
16.		timescale for plant to be considered if they have let HVDC or offshore wind. The planning timescales in J.			

ID	Issue NGET View
17.	Existing Plant – Main Plant. The terminology used to categorise existing assets as 'main plant' is ambiguous, and does not reflect the complex planning arrangements and development lead times of HVDC and offshore power grids.
18.	Scope – Offshore Grids. Offshore PPMs and offshore converter stations. The Network Code places requirements on the remote end of HVDC link, requirements on the AC offshore grid and requirements on the offshore Power Park Modules. This is an area of evolving technology and to place specific requirements (frequency, voltage etc) may stifle innovation and the development of a cost effective solution. It is right to place requirements at the connection point to the Transmission Network but on the onshore grid.
	It was proposed that Chapter 3 (requirements on remote end converter stations and PPMs should be either i) removed entirely placing no obligations on the remote end elements, ii) the same as the requirements on AC connected PPMs specified in the RFG, or iii) be a modified version of the AC connected PPM RFG requirements tailored to suit offshore DC connected PPMs but with no more onerous requirements than that for AC connected PPM.
19.	<b>Scope – Remote End Converter Stations.</b> The Network Codes should not place significant requirements on remote end converter stations; these are not part of the integrated grid and therefore should be free of onerous requirements which do not support the requirements on the onshore converter station's connection to the transmission network.
20.	<b>Technology neutral.</b> As drafted the Network Code is not always technology neutral. Some of the requirements (e.g. Article 20 Reactive Power Control Mode) would preclude LCC technology as mandatory requirements can not be provided by LCC. Clarity also needed so as not to rule out LCC in Article 17 for example.
21.	<b>Relevant TSO.</b> The term Relevant TSO is used (this is a defined term in the RFG). In the case of offshore or multi-terminal HVDC it is not clear who this always is, or in the case of offshore developments as in GB OFTOs are certified as TSOs.
22.	<b>Dispute resolution.</b> No process is given for the situation when multiple TSOs, or TSOs and industry parties fail to agree on the development of parameters / methodologies etc which are defined in this Network Code. Without a dispute resolution the situation could reach an impasse.
23.	<b>Mandatory vs Non-Mandatory.</b> There should be a consistent and rigorous convention to define Mandatory and Non-Mandatory. If the former is 'shall' and the latter is 'have the rights', then these should be defined and used consistently.
Key	/ Issues captured after JESG Workshop on HVDC Network Code
24.	<b>Power Park Module Provisions.</b> If Power Park Modules requirements are removed from the HVDC code, these need to be accommodated in another code, possibly RfG.

HVDC code, these need to be accommodated in another code, possibly RfG.