

## Headline Report

<b>Meeting name</b>	Joint European Standing Group (JESG)
<b>Meeting number</b>	17
<b>Date of meeting</b>	17 April 2013
<b>Location</b>	Elxon, London

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>.

### 1. Issues Log Review

The issues logs were updated, as required, as each Network Code was discussed. The current version of the issue log for each of the Network Codes being drafted by ENTSO-E is attached to this Headline Report.

### 2. Grid Connection Network Codes

#### ***Requirements for Generators (RfG)***

- The revised RfG Network Code was submitted to the Commission by ACER on 25 March 2013, accompanied by a revised opinion and a qualified recommendation.
- The areas of qualification in ACER's recommendation include:
  - Revisions to the significance test introduced for emerging technologies around the commercial viability of devices, and that the Relevant Network Operator not the manufacturers should report the installation.
  - Changes to the provisions relating to national scrutiny of requirements in cases where a TSO is granted decision making competence under the Network Code.
- The Code is now in the initial stages of Comitology, and an impact assessment is being undertaken by DNV KEMA. The Commission has indicated that they do not expect the approval part of the Comitology process to commence before Q4 2013.
- Further information can be found on the ACER website:  
<http://www.acer.europa.eu/Media/News/Pages/ACER-recommends-the-adoption-of-the-Network-Code-for-Requirements-for-Grid-Connection-Applicable-to-all-Generators.aspx>

#### ***Demand Connection Code (DCC)***

- The DCC Network Code was submitted to the Commission by ACER on 25 March 2013, accompanied by an opinion and a qualified recommendation.
- The areas of qualification in ACER's recommendation include:
  - A lack of clarity in the drafting;
  - The inclusion of DSR in the Network Code and how it aligns to other strands of work.
- GB Stakeholders noted that they still have concerns over the definition of significant grid user, and how this impacts on other Network Codes, for example, Operational Security which uses the DCC definition of significant demand.
- Further information can be found on the ACER website:  
<http://www.acer.europa.eu/Media/News/Pages/ACER-recommends-the-adoption-of-the-Network-Code-on-Demand-Connection-.aspx>

#### ***HVDC Network Code***

- The HVDC Network Code was not discussed at this month's JESG but is awaiting a formal mandate to commence drafting.

<sup>1</sup>

<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/JointEuroSG/>

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

#### ***Forward Capacity Allocation Network Code***

- The FCA Network Code has been issued for public consultation due to complete on 27 May 2013. A workshop will be held by ENTSO-E on 8 May to cover the FCA Network Codes in Brussels. Further information can be found at: <https://www.entsoe.eu/news-events/events/public-stakeholder-workshop-on-the-forward-capacity-allocation-network-code/>.
- The FCA was not discussed further at this month's JESG.

#### ***CACM Network Code***

- The CACM Network Code is now in Comitology. Initial preparation is ongoing including merging the Governance Guideline text (prepared by the Commission) in to the CACM Network Code.

#### ***Electricity Balancing Network Code***

- Drafting of the Balancing Network Code continues in advance of the public consultation in the summer. A workshop will be held by ENTSO-E on 7 May to cover the LFCR and Balancing Network Codes in Brussels. Further information can be found at: <https://www.entsoe.eu/news-events/events/load-frequency-control-and-reserves-and-electricity-balancing-network-code-public-stakeholder-workshop-7-may-in-brussels/>
- The Balancing Network Code was not discussed further at this month's JESG meeting.

### 4. System Operation Network Codes

#### ***Operational Security (OS) Network Code***

- The OS Network Code was submitted to ACER on the 28 February 2013, starting the three month review process for the Network Code. The OS Network Code was not discussed further at this month's JESG.
- A DECC-Ofgem prioritisation workshop on the OS Network Code was held on 9 April.

#### ***Operational Planning and Scheduling (OP&S) Network Code***

- The OPS Network Code was submitted to ACER on the 28 March 2013, starting the three month review process for the Network Code. The OPS Network Code was not discussed further at this month's JESG.
- A DECC-Ofgem prioritisation workshop on the OS Network Code was held on 17 April following the JESG.

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

- The LFCR completed its public consultation on 2 April 2013. In total 1382 comments were received, from 29 respondents. Articles of the Network Code which attracted the most comments were:
  - Article 2: Definitions
  - Article 3: Regulatory Aspects
  - Articles 9 and 10: Frequency Quality Parameters
  - Article 1: Mitigation Procedures
  - Article 18: Process Responsibility Structure
  - Article 20: Frequency Restoration Process
  - Articles 28-29: FCR Requirements and provision
  - Article 20-32 FRR dimensioning, provisions and operations
  - Article 33-34: RR dimensioning and requirements.
- ENTSO-E is working to revise the Network Code, and has indicated that the following areas will be redrafted: Several key areas will be redrafted: Frequency Quality, Rights of TSOs to restrict Ramping. Information Provision.
- A workshop will be held by ENTSO-E on 7 May to cover the LFCR and Balancing Network Codes.

## 5. Application of European Network Codes to the GB Framework

- A presentation was provided on work that has been ongoing between Ofgem, NGET and some DSOs to consider the options for application of the European Network Codes to the existing GB Framework.
- The work in applying the European Network Codes to the GB Framework has focused on the RFG Network Code (as this was the pilot Network Code), however, many of the findings may also apply to the other European Network Codes.
- It was noted that within the European Network Codes, there are i) mandatory requirements which apply directly, ii) non mandatory requirement where the principles are defined and iii) non-mandatory requirements where the parameters are defined. These will need to be treated differently. Stakeholders are expected to be involved in determining aspects where there is national choice.
- Six high-level options were considered for updating the Grid Code and the Distribution Code to capture the requirements in the RFG. Two of these options were considered for further analysis, specifically:
  - Write a new code to cover ENC requirements but retain the existing Grid Code as well.
  - Rewrite the Grid Code completely.
- Moreover, the types of generators in GB do not align with the RFG as highlighted in the table below.

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

*GB Grid Code categories*

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

*RFG Types*

- In GB all Types A, B and C generators will be connected to Distribution Networks, Type D generators will be connected in the Distribution and Transmission Networks depending on their connection voltage and capacity.
- A particular complexity of application in GB is that the RFG requirements are specified by generator type (based on connection point voltage and MW output) and the technical requirements that apply; whereas the GB Codes specify the technical requirements and then which types of generators they apply to.
- Three options were also considered for how RFG requirement could be placed in to GB Codes:
  - Option I: Place Types A, B, C and D requirements in the Grid Code. The D Code would refer to the Grid Code
  - Option II: Place Types A, B and C requirements in the D-Code or a standalone document, and Type D requirements in the Grid Code
  - Option III: Place all requirements in separate document(s), refer to them in the Grid Code and D Code.
- The advantages and disadvantages of these options are considered in the presentation.
- GB Stakeholder expressed a desire to see all requirements implemented and maintained in accordance with existing GB Governance processes, such as those in the CUSC and BSC.
- It was noted that the work done so far on implementation should be presented to each of the Code Panels (GCRP, BSC Panel and CUSC Modification Panel). The overall management of the code implementation and stakeholder engagement shall need to be also further considered.
- GB Stakeholder are requested to provide feedback on this presentation to [Robert.Wilson2@nationalgrid.com](mailto:Robert.Wilson2@nationalgrid.com).

## 6. NWE Market Coupling Update

- The third package envisages a single Internal Electricity Market by 2014. Several regions within Europe have already implemented market coupling.
- The NWE project was initiated in 2011 to replace the existing coupling system in CWE and Nordic region, and GB was invited to join.
- The NWE Market coupling project will create an interconnected day-ahead energy auction market across 13 countries, with annual consumption of 2300 TWh. Importantly this implements the Day Ahead element of the EU 'Target Model' for a single energy market and is planned to go live in 2013.
- The concept of market coupling is that individual power exchanges' energy orders, are combined with available cross border transmission capacity in a single day ahead market coupling algorithm to calculate Interconnector flows and PX prices across the whole region.

- Within GB, as we have two Power Exchanges (APX and N2EX), they will be linked together using a 'virtual' interconnector of infinite capacity, which will result in the two GB PXs clearing at the same price.
- The daily process that the market coupling will have a Gate Closure time of 12:00 CET for energy market orders submitted to the PXs. Results will normally be available by 12:45. If there are problems with the coupling process the fallback is to revert to explicit capacity auctions.
- Another potential change is to harmonise the market price cap implemented by the power exchanges – at the moment this is set individually by each exchange – having different caps in an integrated market can lead to perverse results in extreme scenarios.
  - The impact on GB parties is summarised as:
  - Interconnector Users: No longer able to trade day-ahead capacity (longer term auctions remain), Use-it-or-sell-it compensation will be based on day ahead energy auction spreads and there will be Interconnector Access Rules consultation in May
  - Power Exchange Members: Revised auction timings and Pooled GB & NWE liquidity.
- The next Stakeholder Meeting will be held on Friday 14 June at the Sheraton, Heathrow Airport.
- Further information can be found on the website of the participating GB Power Exchanges: <http://www.nordpoolspot.com/How-does-it-work/European-Integration/NWE/>  
<http://www.apxgroup.com/services/market-coupling/nwe-price-coupling/>

## 7. Implementation of REMIT and Transparency in GB

### REMIT

- Regulation on Wholesale Energy Markets Integrity and Transparency (REMIT), (No 1227/2011) has been in force since 28 December 2011. REMIT is aimed at preventing market abuse in wholesale energy markets, by providing a consistent EU-wide framework.
- Implementation is ongoing, and the implementation Acts are expected to be finalised this Autumn which is the trigger for the next stages of the overall implementation.
- There is already an ongoing modification for the BSC (P291) which seeks to make the necessary changes to the BSC framework to comply with aspects of REMIT.

### Transparency

- The Transparency Regulation is currently going through Comitology, and has been discussed at previous JESG meetings. Ofgem restated their desire to see the normal Code governance process used to apply the changes to the GB Framework wherever possible (rather than their third package powers).
- Initial discussions are being held between NGET, Ofgem and Elexon on the approach to application to the GB Framework and consistency with REMIT.

## 8. Reflections on working within ENTSO-E

James Bradley (National Grid) gave a short presentation on his experiences of his six-month secondment working within the ENTSO-E secretariat. The slides are available online.

## 9. Forthcoming events/workshops

Please refer to the calendar on the JESG website:

<http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/JointEuroSG/>

Details of forthcoming JESG events and relevant public events for ENTSO-E, ACER and Ofgem 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>

## 10. Review of Stakeholder Representation

It was noted that the JESG distribution lists includes 491 unique email addresses from around 260 companies. Many of these email addresses are actually 'distribution lists' or mailboxes, so the actual circulation may be greater.

## 11. Next meeting

The next scheduled meeting for the JESG is 16 May 2013 at Elexon, London.

The actions log and issues logs follow this report.

## Generic Issues Log

New items are marked in grey.

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.	<b>Implementation:</b> Can areas of the GB Network Code changed to comply with the ENCs be modified through the normal GB governance arrangements, provided it does not affect compliance with the ENCs?
18.	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?
19.	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?

Issue No	Issue
20.	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. ENTSO-E is considering how to address this issue.
21.	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).
22.	<p><b>Common definitions.</b> A working group has been established by ENTSO-E to look at definitions across the Network Codes.</p> <p>It is understood that while common definitions are desirable the same term could be defined differently in different Network Codes. Consideration is to be given to the establishment of a separate cross-codes definitions document.</p>

## JESG Actions

Last Updated: 15 April 2013

### Open and ongoing Actions

Action No	Action	Lead Party	Status	Update
42	For each Network Code a comparison document between the Network Code and existing GB Codes will be produced.	NGET	Ongoing	
67	Clarify with Sue Harrison what input DECC expects to need during Comitology for the RFG Network Code <u>Addition 19 Sep:</u> Discuss with DECC how the pre-Comitology stage might be taken forward	BV	Ongoing	BV continues to have an dialogue with DECC to determine the process.
96	Contact large industrial customer regarding the DCC to ensure they are involved, including Chemical Industries Association, Mineral Products Association, Energy Intensive Users Group, Major Energy Users Council, EEF, BEAMA, SEDC. <u>Update (6/12):</u> Continue to engage with contacts at EIUG (Andrew Bainbridge) and MEUC (Jeremy Nicholson)	BV	Ongoing	Ongoing contact is made with a variety of organisations.
114	Depending on the Outcome of Action 113, Chair to offer that JESG can either meet with DNV KEMA Consultant and or provide written comments to feed in to the Impact Assessment Process.	Chair	Ongoing	
120	Provide an update to JESG on a future Network Code on Tariffs	Reuben Aitkin	Open	The issue of tariffs and incentives is included in the EC Priority list for 2014 which is currently being consulted upon. An update will be provided to a future JESG.
121	JESG to consider providing input in to defining the future governance regime for the European Network Codes proposing a mechanism based on the GB model of transparent governance.	Chair	Ongoing	
123	At the BSC Panel, raise the option for establishing a BSC Issue Group to pre-empt the required work on implementing the Transparency Regulations.	BV	Open	To be raised at BSC Panel in May.
124	Report to a future JESG on the work being undertaken by the ENTSO-E 'taskforce' on addressing the TO/SO vs TSO concept in Network Codes.	Mark Copley / NGET	Open	Awaiting further information form ENTSO-E.



### **New Actions Captured at April JESG Meeting**

Action No	Action	Lead Party	Status	Update
125	Provide feedback to ENTSO-E on the use of webinars for meetings (Stakeholder would like to be available, and to be used more effectively), and on the need for a 'Master Definition List' against which all codes are based.	NGET	New	This information has been feedback to ENTSO-E
126	Prepare an advice note to the JESG, on the expected size of 'carve out' for new generations under the transitional arrangement for emerging technology in the RFG.	NGET	New	
127	Provide any useful information, data etc., to Ofgem which Stakeholders think may be beneficial to DNV KEMA as part of the assessment process for the RFG Network Code (Within two weeks)	All	New	
128	Provide a link to further information on the NWE Coupling Project.	NGET	New	Further information can be found on the Nordpool Spot Website: <a href="http://www.nordpoolspot.com/How-does-it-work/European-Integration/NWE/">http://www.nordpoolspot.com/How-does-it-work/European-Integration/NWE/</a>
129	Present the 'RFG Implementation' presentation to each of the Code Panels (GCRP, BSC Panel and CUSC Modification Panel)	NGET	New	
130	Consider options for the governance of the application process for ENCs to GB including the role of a cross-code group, and the JESG.	NGET and All	New	
131	Circulate the worked examples for possible code changes, used in developing the GB Application of the RFG Network Code presentation	NGET	New	
132	Stakeholders to provide feedback on the application of European Network code to the GB Application of the RFG Network Code given at April JESG, to <a href="mailto:Robert.Wilson2[at]nationalgrid.com">Robert.Wilson2[at]nationalgrid.com</a>	All	New	

### **Actions Closed at April JESG Meeting**

Action No	Action	Lead Party	Status	Update
105	Provide an update on the potential implementation mechanism for the Transparency Regulations including the possible interaction with REMIT	Ofgem	Closed	Clémence Marcelis (Clemence.Marcelis[at]ofgem.gov.uk) is leading on this for Ofgem. An update will be provided at a future JESG meeting, however, views are welcomed from GB parties including Interconnectors. An updated will be provided at the April JESG Meeting.



Action No	Action	Lead Party	Status	Update														
117	Flag the issue of European Network Codes to colleagues in the Isle of Man to ensure they are aware and are not inadvertently being caught by the requirements	Mike Kay	Closed	This issue has been flagged with the relevant parties on the Isle of Man.														
122	Provide a list of GB representatives on the various ENTSO-E committees / board.	Mark Copley / NGET	Closed	<div>In the table below, are the NGET representatives on the ENTSO-E Assembly, Board and Committees. Please note that although the table below is valid at the moment, ENTSO-E elections will be taking place shortly and some representation may change as a result.</div> <table><tr><th>ENTSO-E Committee</th><th>National Grid Member</th></tr><tr><td>Assembly</td><td>Nick Winser</td></tr><tr><td>Board</td><td>Graeme Steele</td></tr><tr><td>System Operations Committee</td><td>Duncan Burt</td></tr><tr><td>System Development Committee</td><td>Phil Sheppard</td></tr><tr><td>Market Committee</td><td>Ian Pashley</td></tr><tr><td>Research &amp; Development Committee</td><td>Ian Welch</td></tr></table>	ENTSO-E Committee	National Grid Member	Assembly	Nick Winser	Board	Graeme Steele	System Operations Committee	Duncan Burt	System Development Committee	Phil Sheppard	Market Committee	Ian Pashley	Research & Development Committee	Ian Welch
ENTSO-E Committee	National Grid Member																	
Assembly	Nick Winser																	
Board	Graeme Steele																	
System Operations Committee	Duncan Burt																	
System Development Committee	Phil Sheppard																	
Market Committee	Ian Pashley																	
Research & Development Committee	Ian Welch																	

## Load-Frequency Control and Reserves Issues Log

**Last updated:** 21 March 2013

Issues numbered 7 to 23 were captured at the JESG LFCR Technical Workshop on 19/20 March 2013.

Issue No	Issue	NGET View
1.	How will the LFR&C Network Code implement sharing of reserves between Synchronous Areas?	The LFR&C Network Code will specify the exchange capability and limits for exchange between synchronous areas and will apply to all HVDC links. The products, market structure and any financial vehicles will be defined in the Balancing Network Code.
2.	Are criteria for determining a credible loss to be included in the Network Code?	The Code places an obligation on the TSO to publish high level methodology statements for determining reserve dimensioning and holding; the current NETSO's operational approach of continual assessment of holding based on risk/cost is expected to continue.
3.	Does this code use the term "Significant Grid User" and what are the obligations on providers in terms of for example categories of generator defined in the RfG?	This Code does not use the term 'Significant Grid User' it uses "Reserve Provider". For some reserve categories there are obligations, for example in terms of detailed information for those units which are reserve providing units greater than 1MW in size. The determination of who qualifies or whether the service is mandatory or optional is not defined in this code. There may be some changes in the data items and frequency of data provision within the code.
4.	Which Grid Users will be captured as being required to comply with the requirements of the LFR&C	The term 'Reserve Provider' is used. There is a prequalification process and items are inferred from the RFG and DCC, but it is acknowledged that it is not explicitly defined. As in Q3 above, the code does not define any obligations and this is left to either the balancing code, local implementation considerations.
5.	Implementation in GB. Appropriate terminology needs to be found in the Network Code to either reflect the single NETSO / multiple TSO arrangement in GB, or to ensure the wording is sufficiently high level to allow the GB model to operate within the constraints of the Network Code.	Noted. National Grid agrees with the position of the JESG.  This is a common issue with many Codes & it may be better to be considered by GB at a higher level to achieve a single cross-codes position.  Solutions could be: <ul style="list-style-type: none"> <li>- Satisfy with text in the code</li> <li>- Address during national implementation</li> <li>- Seek a generic solution across all codes</li> </ul>
6.	When will detailed methodology statements for the principles outlined in the code Articles be developed?	There is a requirement from ACER for the code drafting teams to develop high-level methodology statements in parallel to the code drafting and supporting document development. In practice due to the time constraints this will not be done until after the public consultation. It is not clear at this time how detailed or how publicly visible these statements will be. NG expects and hopes that there will be room to develop appropriate local methods in conjunction with industry and regulator.

Issue No	Issue	NGET View
7.	NRA approval should be required for each area of the code to be further defined on a national level after entry into force.	NG has no issue with this. Might be neater to do as a blanket clause in the general provisions chapter rather than on each instance in the text.
8.	Putting GB / member state specific numbers into the code means that amending these could only be done by amending the code. Needs to be a clear mechanism for affecting changes to the code.	Agreed. This again is an issue with all codes and also represents the conflict between putting detail into a code and leaving it out.
9.	Performance against the numbers given in the code would be useful.	There are some statistics to monitor (eg arts 10, 12) but could be drawn out in supporting documents. Performance against the numbers does drive investment in the network and operational costs.
10.	Can you highlight the values in art 9 table 1 that are already in GB codes and where?	The values do generally come from current practice. Details to confirm.
11.	The parameters in the code(s) will be used to specify equipment with a 40-60 year life. In some instances the information is not sufficient and in art 9(4) the ability to change frequency quality parameters needs clarification and should mention CBA & NRA approval.	More detail will be provided during national implementation (see pt 8 above). CBA is inherent in all retrospective application. NRA approval – see pt 7.
12.	Art 9(4)(d) Excludes IRE & GB. Why & what equivalent covers GB ?	This is because other areas take a very different approach to reserve holding with these being evaluated much more coarsely on an annual basis rather than continually as in GB. A 1 in 20 year approach does not work for GB.
13.	Applicability – the code needs to clarify application to different generator types in RfG and DCC terminology, also application to new and existing.	Agreed on RfG and DCC. Retrospectivity will only apply with CBA.
14.	Art 15 – Mitigation procedures. Poor drafting in this article which appears to place lower obligations on TSOs compared to Grid Users.	Feed into redrafting from GB will look at: <ul style="list-style-type: none"> <li>- Enforceability</li> <li>- TSO obligations</li> <li>- Payments for services</li> <li>- Technical feasibility of actions</li> </ul>
15.	TSO roles – requirement for clarity to resolve where requirements are on a NETSO and where on a TSO. (and see pt 5 above)	Solutions could be: <ul style="list-style-type: none"> <li>- Satisfy with text in the code</li> <li>- Address during national implementation</li> <li>- Seek a generic solution across all codes</li> </ul> Mark Copley suspects way round this may be through designation from member states.
16.	Will GB use ACE or LFC error? Needs alignment and consistency. (see arts 20 & 10)	GB does not use ACE or k-factor. NG operates the system on the basis of controlling frequency deviation.
17.	Can all obligations on providers be put in a particular place?	Probably not practical to achieve this – a list of references could be provided in the supporting documents.
18.	Art 27 – State figure for reference incident.	Likely to be in supporting document; for GB this will be 1800MW (single largest infrequent infeed loss).

Issue No	Issue	NGET View
19.	Art 28 – FCR Technical Minimum Requirements. Can this be aligned with RfG? GB users did not support this article as drafted which also seems to exclude domestic providers and smaller generators.	For GB, time categorisations are all within the activation time. There could be requirements for a range of products across timeframes; rather than breaking these down the code specifies a minimum requirement but has not factored in current & future provisions and is written around larger generators. GB is market based for these services whereas in Europe there may be statutory obligations.
20.	Art 30 – FRR. What are the figures based on?	To put in supporting documents.
21.	Art 33 – RR What are the RR dimensioning rules? Also, how do you activate RR? (no equivalent of arts 29 / 32 for FCR and FRR respectively).	To follow up.
22.	Art 37 – Exchange of FRR and RR. Could this sterilise interconnector capacity? Needs NRA oversight to ensure this is not used up.	Needs to facilitate sharing but define limits to assure security. Needs a mechanism to demonstrate social welfare – which is in Balancing.
23.	The TSOs should have an obligation to: <ul style="list-style-type: none"> <li>○ measure the quality of supply and report on it</li> <li>○ control the rate of change of frequency, to avoid and protect against large/significant variations in system frequency.</li> </ul>	TBC

## Forward Capacity Allocation

**Last updated:** 22 March 2013

New Items are highlighted in grey.

Issue No	Issue	NGET View
1.	Do the data submission requirements for FCA overlap with the OP&S code?	The current ENTSO-E view is that yes they do. This has been highlighted to the lead of the capacity calculation drafting team and will be factored in when writing the data methodology specification.
2.	The 'Capped Market Spread' identified as a potential compensation principle in the firmness regime relates to what market prices; that at D-1, that at the time of curtailment or something else?	Based on market spread of Day Ahead market.
3.	What are the timescales for the market parties to use the common platform being proposed? Market Parties need time to make the necessary changes to their IT systems etc., after the system has been implemented centrally.	The network code will provide the timescales for implementation and include consultation with stakeholders and NRA approvals.
4.	It is fundamental for existing GB Merchant Interconnectors that they are able to calculate and control capacity, or else they do not have a future business model. This Network Code may detrimentally affect how capacity is calculated and controlled.	This issue is closely correlated with generic issue 10 (certification status of TSOs in GB).

## Balancing Issues Log

**Last updated:** 22 March 2013  
New items are marked in grey

Issue No	Issue	NGET View
1.	There is a need to understand the implication of the Framework Guidelines on the current GB market and ongoing changes.	Now the Framework Guidelines have been finalised, the Network Code is being developed. Once the requirements in the Network Code become clearer, it will be possible to determine further the implications for the GB market.
2.	Which definition of 'Control Area' is the Balancing Network Code expected to be used. Is it the market definition in CACM, or the technical definition in LFR&C, as the Balancing Code interacts with both of these Codes.	Drafting is at an early stage, and consideration will be given by the Drafting Team to ensure the appropriate definitions are used in the Balancing Network Code.
3.	<b>Recompense for services in other Network Codes.</b> The Balancing Network Code sets out a high-level mechanism for payment through balancing service providers such as aggregators. Whereas the DCC places obligations on individual domestic consumers. There is a perceived mismatch between the obligations (placed on individuals) and the compensation (placed on aggregators).	DCC sets capability and Balancing provides mechanism for recompense. This does not appear to be a mismatch.
4.	<b>Merchant Interconnectors.</b> The merchant model for GB Interconnectors needs to be represented in the Balancing Network Code. Capacity on a merchant interconnector has a value to the owner and this should be reflected in any decision to curtail or use capacity through this Network Code.	The code has been drafted on the basis that what is not prohibited is allowed. NGET is a member of the drafting team and is representing itself. Opportunity for all stakeholders to engage with the development of the Code will form part of the development process for the Network Code, in particular during the public consultation.
5.	<b>Imbalance calculation.</b> The imbalance calculation in the Network Code may be different to that in the current GB market, which would have implications for GB as it provides different signals to market parties. GB Energy imbalance = Contracted & vs. Metered Volume (physical imbalance) Balancing NC calculates Imbalance Volume from Allocated Volume and notified Position – it's not clear this is consistent with GB practice (e.g. it could be interpreted as something more akin to GB Information Imbalance)	TBC
6.	<b>Coordination Balancing Areas (CBA).</b> What is the timescales for the determining the CBA.	Formally, the Network Code states that they will be determined after entry into force. However, through the ENTSO-E pilot project, we would expect initial views to be formed fairly soon and prior to the code's entry into force.

## HVDC Issues Log

**Last updated:** 15 January 2013

Issue No	Issue	NGET View
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.
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.
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.