

Joint European Stakeholder Group



Thursday 28 January 2016: Meeting 9

1. Introductions and Apologies

Barbara Vest

JESG Independent Chair

2. Review of Action Log

Sara-Lee Kenney
JESG Technical Secretary

JESG Standing Actions

ID	Topic	Lead Party	Source
S1	Continue to review the membership of the JESG and engage additional industry parties where appropriate.	JESG Chair	JESG S3
S2	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/Ofgem/DECC	JESG S1
S3	Share any intelligence about how other member states are approaching demonstrating compliance through information gained from other government departments, regulators or parent companies	DECC / Ofgem / Industry parties with European parent companies	ECCAF 3/2
S4	Stakeholders are requested to provide specific examples of inconsistent or problematic definitions in the Network Codes to Ofgem (natasha.z.smith@ofgem.gov.uk) and DECC (elena.mylona@decc.gsi.gov.uk).	All Stakeholders	JESG S6

JESG Open Actions

ID	Topic	Lead Party	Update
18	Check whether CACM methodologies once approved by NRAs will be required to go through Comitology to give them legal effect.	DECC	<p>DECC have discussed this with the European Commission, who advise that such methodologies (and terms and conditions) will become legally binding by merit of receiving approval by regulatory authorities under Art.9 of the CACM regulation. Once they have received regulatory approval, TSOs and NEMOs will be bound to follow them and regulatory authorities can enforce them under existing provisions in the third package. The Commission consider the intention of CACM is for these methodologies and terms and conditions to be implemented, and regulatory authorities (as well as the Member States) have a duty to ensure compliance. They do not consider further procedural steps to be necessary in respect of the binding nature of the methodologies and they do not plan for any either</p>

JESG Open Actions

ID	Topic	Lead Party	Update
19	Put Stakeholder committees onto slide for 6 month plan to see when JESG need to discuss issues to take to those Stakeholder Committee meetings. Circulate the documents when available in the weekly update.	NGET	Complete
22	Liaise with Barbara Vest for dates and meetings before next JESG (in relation to JESG Scotland Meetings)	NGET	See Action 26
23	Publish UK votes on CCR's following Market Committee meeting on 29 October via JESG weekly update	NGET	Published in weekly update Nov 2015 and available on the JESG Website .
26	Investigate if the Glasgow NGET Customer Seminar can be used as a date for JESG in March.	NGET	Glasgow NGET Customer Seminar scheduled Thursday 7 April. Stakeholders have requested to hold a JESG either side of this meeting. JESG Chair and Technical Secretary looking into the possibility of Friday AM on 8 April. Further information will follow in the JESG Weekly Updates

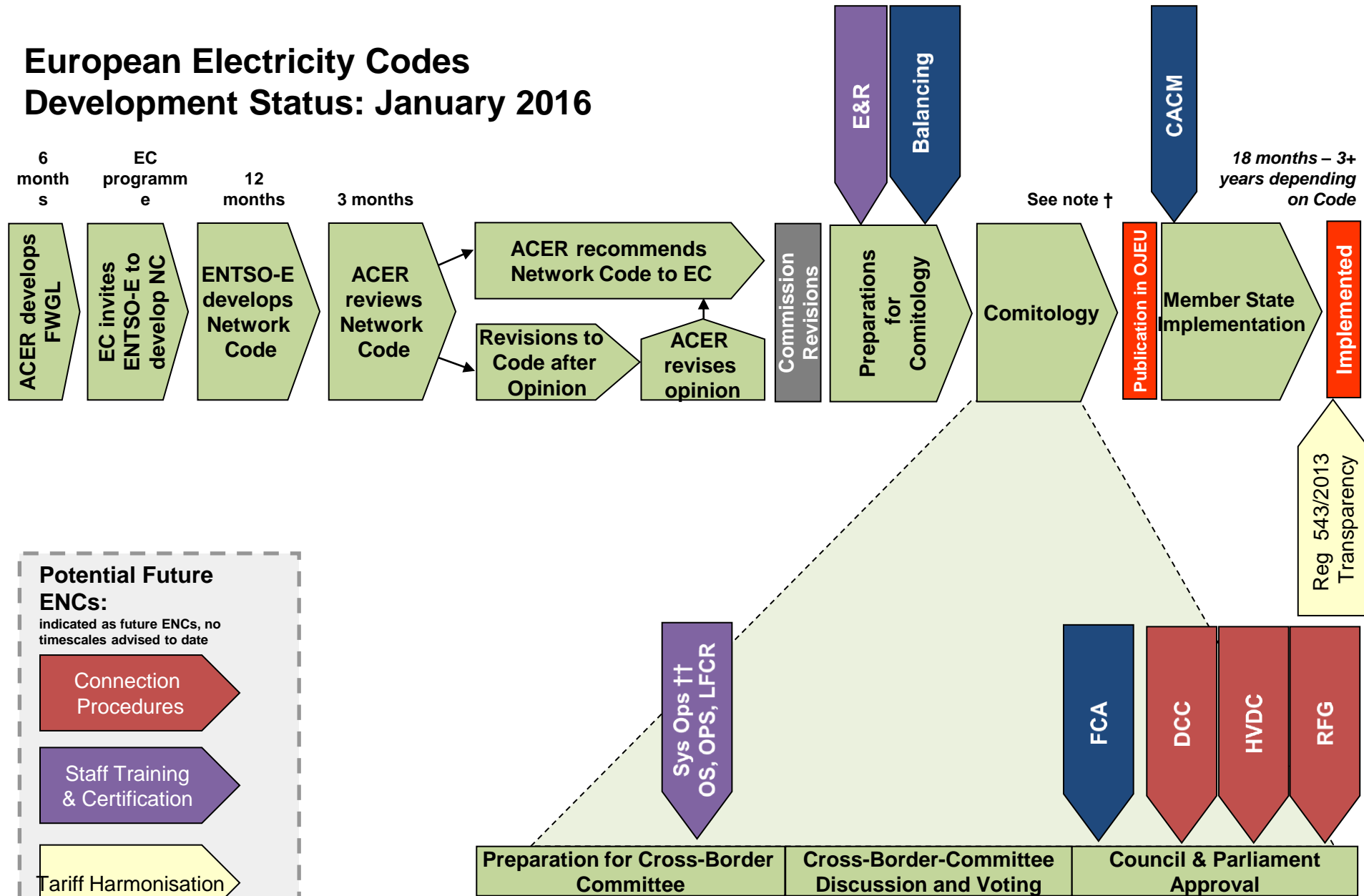
JESG Open Actions

ID	Topic	Lead Party	Update
27	Possibility to schedule a JESG meeting in late spring Brussels in 2016	Energy UK	Energy UK looking into possibility of 21 June for a JESG ahead of the 22 June Energy UK event.
28	Send comments regarding Stakeholder Engagement letter to ENTSO-E to Barbara Vest before week ending 20 November 2015	All	Complete
29	Add ISP CBA consultation date to stakeholder engagement plan	NGET	Complete
30	Open JESG registration earlier for those wishing to book early	NGET	Complete
31	Think about whether all TSO responsibility consultations bundled together or not	All Stakeholders	Ofgem advised based on practicality, consultations will be bundled together.

3. Summary Status of European Network Codes

Sara-Lee Kenney
JESG Technical Secretary

European Electricity Codes Development Status: January 2016

















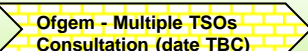












† Timescales for the stages of Comitology are not specified and under the Commission's control
 †† Current indications from the Commission is that OS, OPS and LFCR will be merged in to one single guideline.

All queries to: europancodes.electricity@nationalgrid.com

Stakeholder Engagement

Key:

-  GB Meeting
-  European Meeting
-  Potential European Meeting
-  Potential GB Meeting

Code	2016						
	Jan	Feb	Mar	Apr	May	Jun	
Capacity Allocation and Congestion Management							
Requirements for Generators	 RFG Workgroup	 RFG Workgroup	 RFG Workgroup	 RFG Workgroup	 RFG Workgroup	 RFG Workgroup	
Demand Connection Code							
HVDC	 DCC Workgroup				 DCC Workgroup	 DCC Workgroup	 DCC Workgroup
Forward Capacity Allocation					 Anticipated EIF		
Guideline on Transmission System Operation	 DECC/Ofgem Stakeholder Workshop						
Emergency & Restoration							
Balancing					 BSG	 BSG	
JESG Meetings	 JESG meeting	 JESG meeting	 JESG meeting	 JESG meeting	 JESG meeting	 JESG meeting	
Cross Code							
Stakeholder Committee – Market codes	 Committee meeting						

Other useful websites: DECC <https://www.gov.uk/government/organisations/department-of-energy-climate-change>
 Ofgem: <https://www.ofgem.gov.uk/>
 ACER: <http://www.acer.europa.eu/Pages/ACER.aspx>

EC : <http://ec.europa.eu/unitedkingdom/>
 ENTSOE : <https://www.entsoe.eu/Pages/default.aspx>

Relevant information regarding GB meetings can be found here [JESG Website](#)

Stakeholder Engagement

Code	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16
Capacity Allocation and Congestion Management		Consultation on Common Grid Model and Generation and Load Data Methodology (ENTSOE) runs 4 Feb to 4 March				
Requirements For Generators	12/13 January Monthly RfG Workgroup	10/11 February Monthly RfG Workgroup	9/10 March Monthly RfG Workgroup	6/7 April Monthly RfG Workgroup	11/12 May Monthly RfG Workgroup	14/15 June Monthly RfG Workgroup
Demand Connection Code	12/13 January Monthly DCC Workgroup			6/7 April Monthly DCC Workgroup	11/12 May Monthly DCC Workgroup	14/15 June Monthly DCC Workgroup
HVDC	12/13 January Monthly HVDC Workgroup			6/7 April Monthly HVDC Workgroup	11/12 May Monthly HVDC Workgroup	14/15 June Monthly HVDC Workgroup
Forward Capacity Allocation			Consultation on Multiple TSOs planned (Ofgem)	Anticipated Entry Into Force		
Guideline on Transmission Operation		DECC/Ofgem stakeholder Workshop (date TBC – Early Feb)				
Emergency & Restoration						
Balancing	ENTSO-E EISP Consultation running until April 16. CBA element has now closed.			BSG - 13 th April (CEER – Brussels) BSFG - TBC		BSG – 29 th June (ENTSO-E – Brussels) BSFG - TBC
JESG	28 th Jan	23 rd Feb	30 th Mar	27 th Apr	25 th May	21 st Jun
Cross Code						
Stakeholder Committee – Market Codes		3 rd Feb				

4. DECC Consultation – Monitoring & Regulating NEMOs under CACM

DECC

5. TSO CCR Proposal

Ofgem and Energy UK

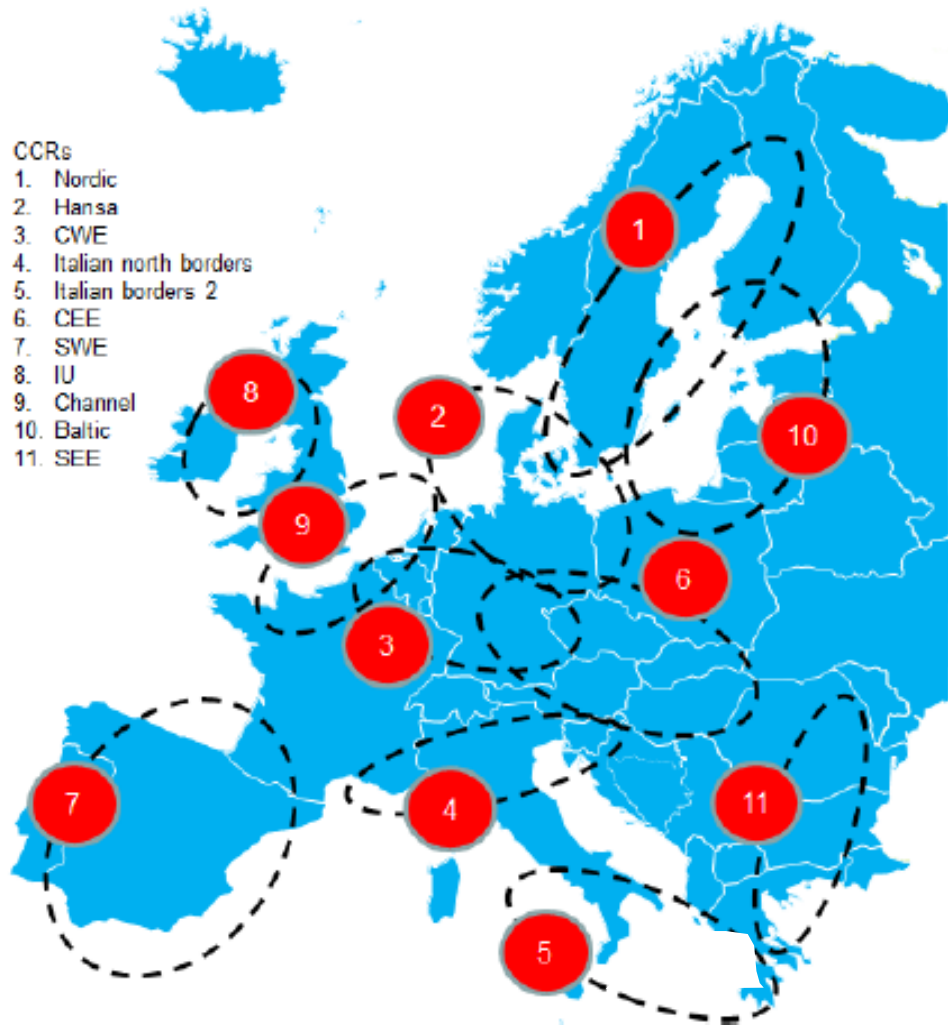
Capacity Calculation Regions

→ CACM requires regional TSO coordination to calculate cross border capacity. This will be done in regional groups (Capacity Calculation Regions) using the Common Grid Model.

→ The impact of cross border flows on one another must be considered.

→ **The aim is to optimise the capacity made available to the market, to maximise social welfare (economic surplus).**

All TSO proposal:



CACM- CCR methodology- some practical aspects

JESG meeting, 28 January 2016

Capacity Calculation Region approved- what does it actually mean?



This is one of 20 methodologies to be developed as part of CACM implementation

Developed by “all TSOs” ...

...and approved by “all NRAs”

Unlike CACM, the methodologies are not EU Regulations- they are “outside” CACM

Let's move to 2019...and imagine that we want to change the CRM configuration



To whom shall we address? Who is the administrator of that document- TSOs, NRAs or the Commission?

Who will be enforcing them?

How exactly will the amendment procedure look like?

What if it fails?

Any Questions

6. EU Connection Codes Implementation Approach 2016

Richard Woodward
(NGET)

EU Grid Connection Codes implementation approach + RfG Banding Update



Richard Woodward
Market Change Electricity

Existing EU Connection Code workgroup setup

■ **GC0048 for Requirements for Generators (RfG)**

- **Code Governance: Grid Code/D-Code**
- Chair: Rob Wilson
- Lead: Richard Woodward

GC0090 for High Voltage Direct Current (HVDC)

- **Code Governance: Grid Code**
- Chair: Alex Thomason
- Lead: Richard Woodward

■ **GC0091 for Demand Connection Code (DCC)**

- **Code Governance: Grid Code/D-Code**
- Chair: Rob Wilson
- Lead: Franklin Rodrick

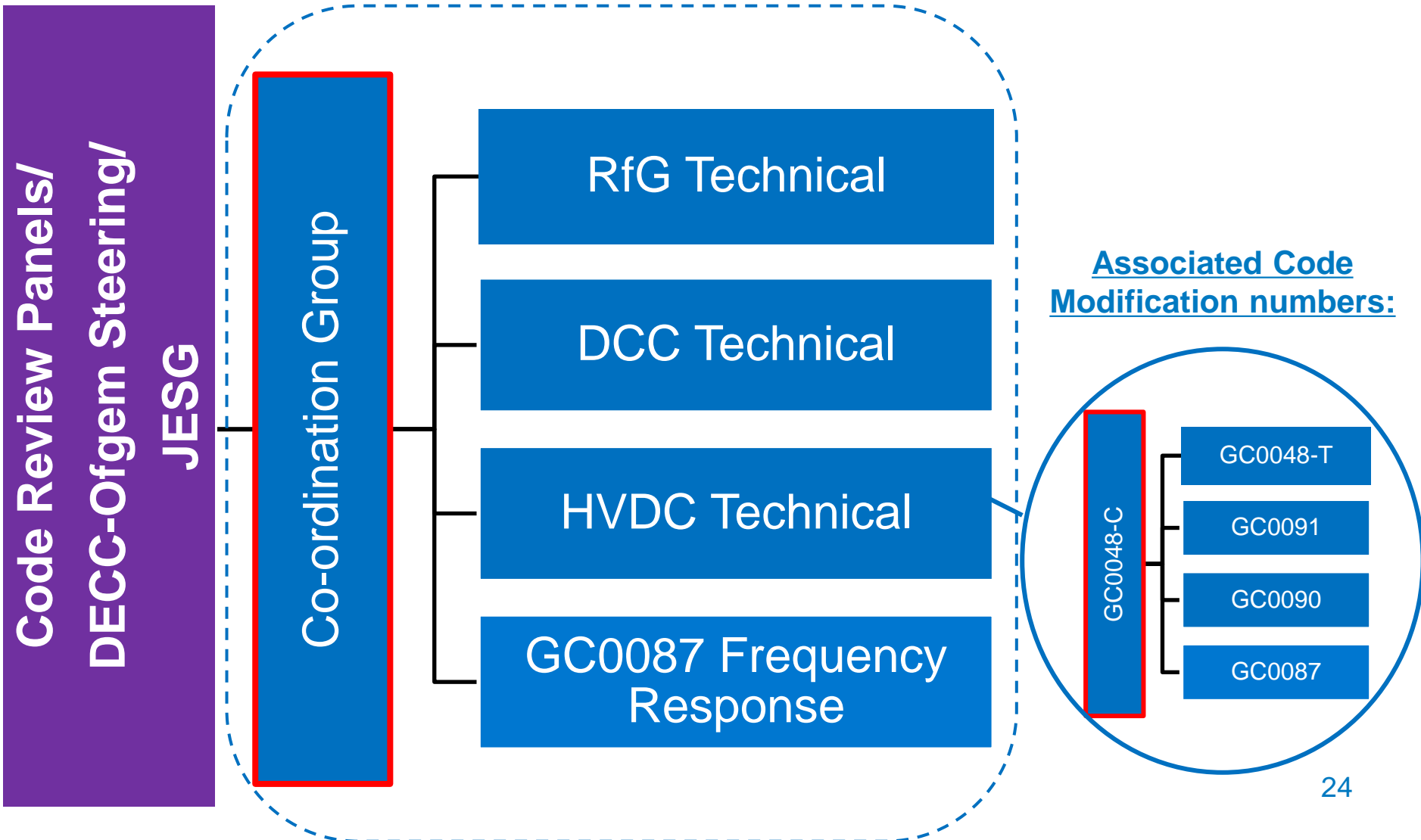
Limitation with x3 workgroup structure

- A. Consistent 'non-technical' requirements/processes are draft into all three codes
- B. Technical requirements are largely consistent in nature, albeit they apply to different users/equipment
- C. Industry representatives (including NGET) are represented across the three workgroups
- Managing the above in existing workgroup structure would lead to:
 - Duplication of effort/Lack of co-ordination
 - Working in silos
 - Meeting arrangement inefficiency - *clashes
 - *Resource constraints (attendance)

Proposed Setup for 2016 onwards

1. ****NEW** GC0048 (C) Co-ordination Group
(spanning x3 EU Connection Codes)**
 2. **GC0048 (T) - RfG Technical Group**
 3. **GC0090 - HVDC Technical Group**
 4. **GC0091 - DCC Technical Group**
 5. **GC0087 – Frequency Response**
- The above structure was approved at the January GCRP; it will be submitted for similar consideration by DCRP

EU Connection Code Workgroup reporting structure



1. Co-ordination Group – “GC0048 (C)” scope

- Oversight of all the implementation work for the x3 codes
- Co-ordination of the resulting modification activities:
 - Review workgroup reports + proposed legal text
 - Industry consultations
 - Report to NRA
- The workgroup for managing ‘general’ requirements for the three GCCs
- Oversight of impact from the System Operation Guideline and EU Market Codes
- Consideration (but not delivery) of any consequential changes to other GB frameworks (e.g. STC)
- Consideration of any Licence changes

1. Co-ordination Group – “GC0048 (C)” deliverables

Implementation of ‘general’ legal/procedural requirements consistent across RfG, HVDC and DCC:

- Code definitions
- Code scope (e.g. New vs Existing; Exclusions)
- Application to heavily 'modified' existing users
- Cost Benefit Analysis + consultation process
- Emerging Technologies carve out [RfG only]
- Consistent processes for managing Compliance (Operational Notifications)
- Conclusion of ‘Multiple TSO(s)’ work

Connection Codes Meeting Dates

2016 Meeting Dates

- ~~Tuesday 12th-Wednesday 13th January~~
- Wednesday 10th-Thursday 11th February
- Wednesday 9th-Thursday 10th March
- Wednesday 6th-Thursday 7th April
- Wednesday 11th-Thursday 12th May
- Tuesday 14th-Wednesday 15th June
- Tuesday 12th-Wednesday 13th July
- Tuesday 9th-Wednesday 10th August
- Tuesday 13th-Wednesday 14th September
- Tuesday 18th-Wednesday 19th October
- Tuesday 8th-Wednesday 9th November
- **December TBC**

2016 Meeting Dates – 3rd day suggested dates

- **Wednesday 2nd March – RfG Banding**
- April N/A (x2 day meetings in first week of the month)
- Wednesday 4th May
- Wednesday 1st June
- Wednesday 6th July
- Wednesday 1st August
- Wednesday 7th September
- Wednesday 5th October
- Wednesday 2nd November
- Wednesday 7th December

Agenda for next meetings

	February		March		April	
Group:	Day 1 – Weds 10 th	Day 2 – Thurs 11 th	Day 1 – Weds 9 th	Day 2 – Thurs 10 th	Day 1 – Weds 6 th	Day 2 – Thurs 7 th
GC0048 (C) – Co-ordination Group	Y	N	N	Y	TBC	
GC0048 (T) – RfG Technical	N	Y	Y	N		
GC0090 – HVDC Technical	N	N	N	N		
GC0091 – DCC Technical	N	N	N	N		

- HVDC and DCC paused to allow prioritisation of RfG
- Registration managed via Eventbrite to an EU Connection Codes distribution list
 - This needs to be extended wider – JESG mailing list?

7. RfG Generator Banding update

Richard Woodward
NGET

Requirements for Generators: Banding Setting Progress



RfG Latest

- Joint Grid Code/D-Code workgroup GC0048 has been meeting to progress implementation since early 2014
- Code text was adopted by EU Member States on 26th June 2015. It is expected to 'Enter Into Force' (EIF) in Q1/Q2 2016
- Code determines users as 'New' or 'Existing' depending on when they procure main plant items. From two years after EIF onwards, RfG applies (user is 'New')
- GC0048 are looking to conclude GB implementation in 12 months to maximise lead-time for manufacturers and developers to understand new requirements
- **Immediate priority is agreeing RfG banding levels**

Background #1

- Technical requirements in RfG are arranged into x4 **Types** based on a user's connection voltage and MW capacity
- Type A and B requirements are close to a **product standard**
- Type C and D requirements need **active generator management**
- Thresholds must be set on a national basis by the designated TSO, based on sound justification. This is then ratified by industry consultation and regulatory approval; a cost benefit analysis is **not** mandated
- **This process is ongoing in GC0048 at the moment!**

Maximum RfG banding levels permitted for GB:

Type	Connection Voltage	Capacity
A	< 110kV	800 W – 1 MW
B	< 110kV	1 MW – 50 MW
C	< 110kV	50 MW – 75 MW
D	> 110kV	75 MW +

Current GB Definitions:

Generator Size	SHET	SPT	NGET
Small	<10MW	<30MW	<50MW
Medium			50-100MW
Large	>10MW	>30MW	>100MW

Background #2

- Pertinent topics that follow on from setting the thresholds are:
 - New **Fault Ride Through** requirements which apply at Type B[†] and above
 - Mandatory **Frequency Response** for Type C and above[†]
 - National choice of **parameters** affecting all Types, where ranges are specified in RfG:
 - Voltage + Reactive Power
 - Frequency
 - Control + Protection
 - Process for new compliance testing and monitoring
- General conditions such as the criteria for new vs existing, processes for cost-benefit analysis and derogations also have to be done

Banding key points #1

- In RfG maximum/starting levels were drafted by ENTSO-E to be proportional to the size of each synchronous area
- GB values started lower than CE block, but were amended to be the same as these due to GB stakeholder pressure. They can be lowered if justified
- Three options considered and consulted on within the workgroup for GB:

Type	<u>Option 1 - High</u> Max GB levels	<u>Option 2 - Medium</u>	<u>Option 3 – Low</u> (Similar to Irish levels)
A	800W – 1MW	800W -1MW	800W – 1MW
B	1-50MW	1-30MW	1 – 5 MW
C	50-75MW	30-50MW	5 – 10MW
D	75MW	50MW+	10MW+

- Mid option was proposed by NGET, focused primarily on reducing the wide band of Type B (1-50MW) and achieving some more frequency response capability. Low option is close to Irish values, and continues theme of consistency to a neighbouring synchronous area
- All member states are currently considering reductions

Way Forward

- **Workgroup agreed to focus assessment of the ‘high’ option**
- Based on current predictions of generator connections little benefit in pushing for the medium position (only affects generators of 30-50MW capacity connecting at <132kV. Hardly any of these)
- Further engagement with Scottish TOs critical
- Grid Code legal text changes for banding will explicitly refer to a SO three-yearly review of the levels (as allowed by RfG)
- Imperative that no more time is spent debating banding – implementation timescales for Connection Codes very tight
- RfG bandings are not a panacea; lots of issues for SO managing existing sub-1MW generation which RfG bandings do not affect! NGET will consider solutions to managing this outside RfG

Any questions?

8. Future Meeting Dates

Sara-Lee Kenney
JESG Technical Secretary

Forthcoming Meetings: ENTSO-E

For Information Only:

European Stakeholder Committee - Meeting 3, Brussels: 3 February 2016

ENTSO-E's European Stakeholder Committee meeting will give stakeholders a platform to share general views on Network Code implementation and also contribute to a more informed decision making process for the methodologies and rules still to be developed.

Source: www.entsoe.eu/news-events/events

Forthcoming Meetings: JESG

JESG Meetings:

Tuesday 23 February – Elexon, London

[2016 Meeting dates can be found on the JESG Website.](#)

Registration is required and will be opened through the JESG Weekly updates.

CACM & FCA Implementation Subgroup Next Meeting:

Tuesday 23 February – Elexon, London *

***Potential Date Change – To be communicated through JESG Weekly Updates**

europencodes.electricity@nationalgrid.com

9. Future JESG Agenda Items

Sara-Lee Kenney
JESG Technical Secretary

10. Any Other Business

Lunch: 12:00

