Joint European Stakeholder Group



Tuesday17 November 2015: Meeting 8

1. Introductions and Apologies

Barbara Vest

JESG Independent Chair

2. Review of Action Log

Franklin Rodrick
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

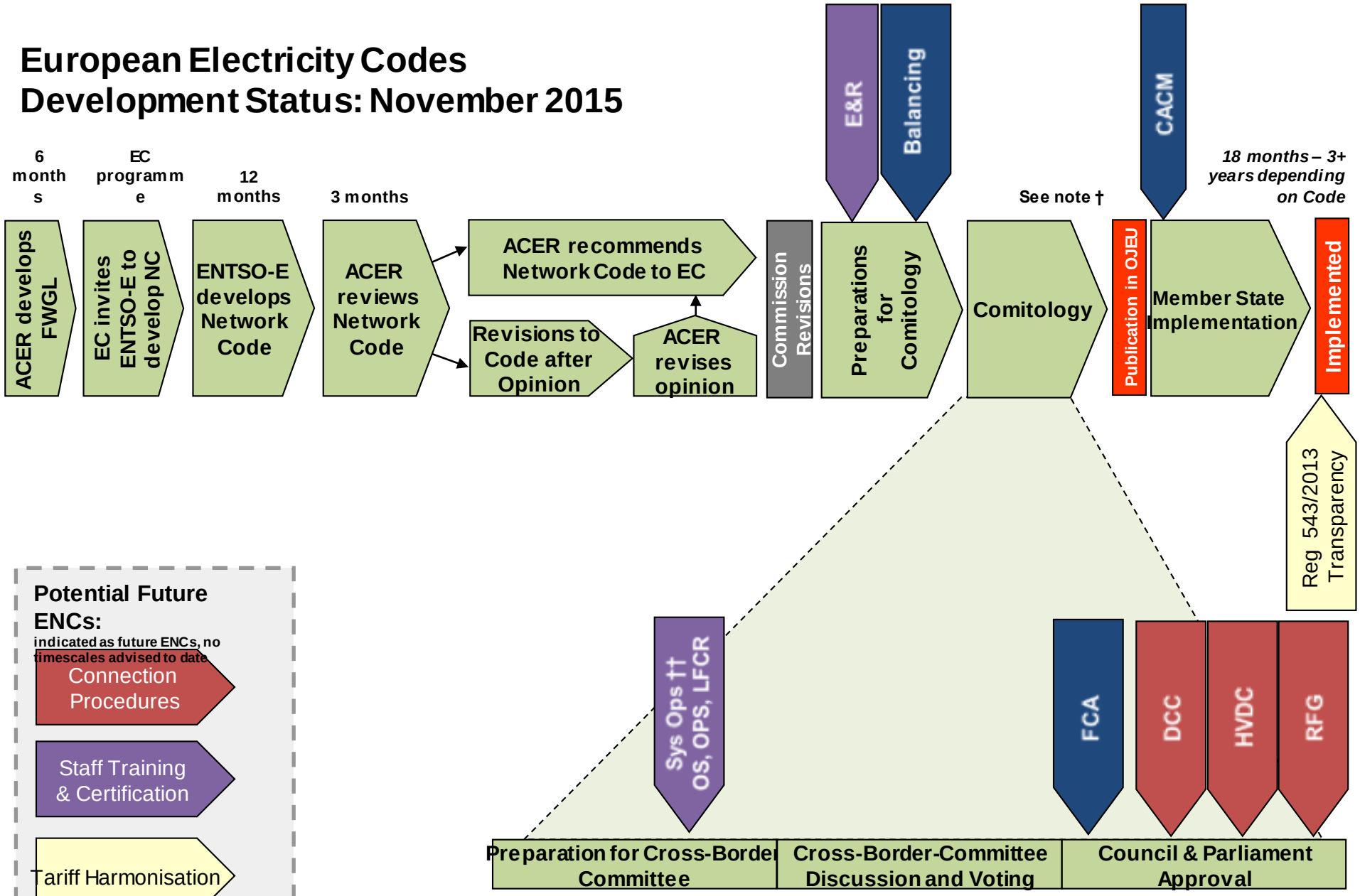
JESG Open Actions

ID	Topic	Lead Party	Update
22	Liaise with Barbara Vest for dates and meetings before next JESG with respect to NGET Customer Seminar in March 2016	NGET	New
23	Publish UK votes on CCR's following Market Committee meeting on 29 October via JESG weekly update	NGET	New
17	Provide visibility of responses sent to ENTSO-E on stakeholder engagement	NGET	New
18	Check whether CACM methodologies once approved by NRAs will be required to go through Comitology to give them legal effect	DECC	New
19	Put Stakeholder committees onto slide for 6 month plan to see when JESGs need to discuss issues to take to those Stakeholder Committee meetings. Circulate the documents when available in the weekly update.	NGET	New
20	Look at how to avoid turning away people who haven't registered people for JESG and arrive on the day	Elexon	New

3. Summary Status of European Network Codes

Franklin Rodrick
JESG Technical Secretary

European Electricity Codes Development Status: November 2015



† 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.

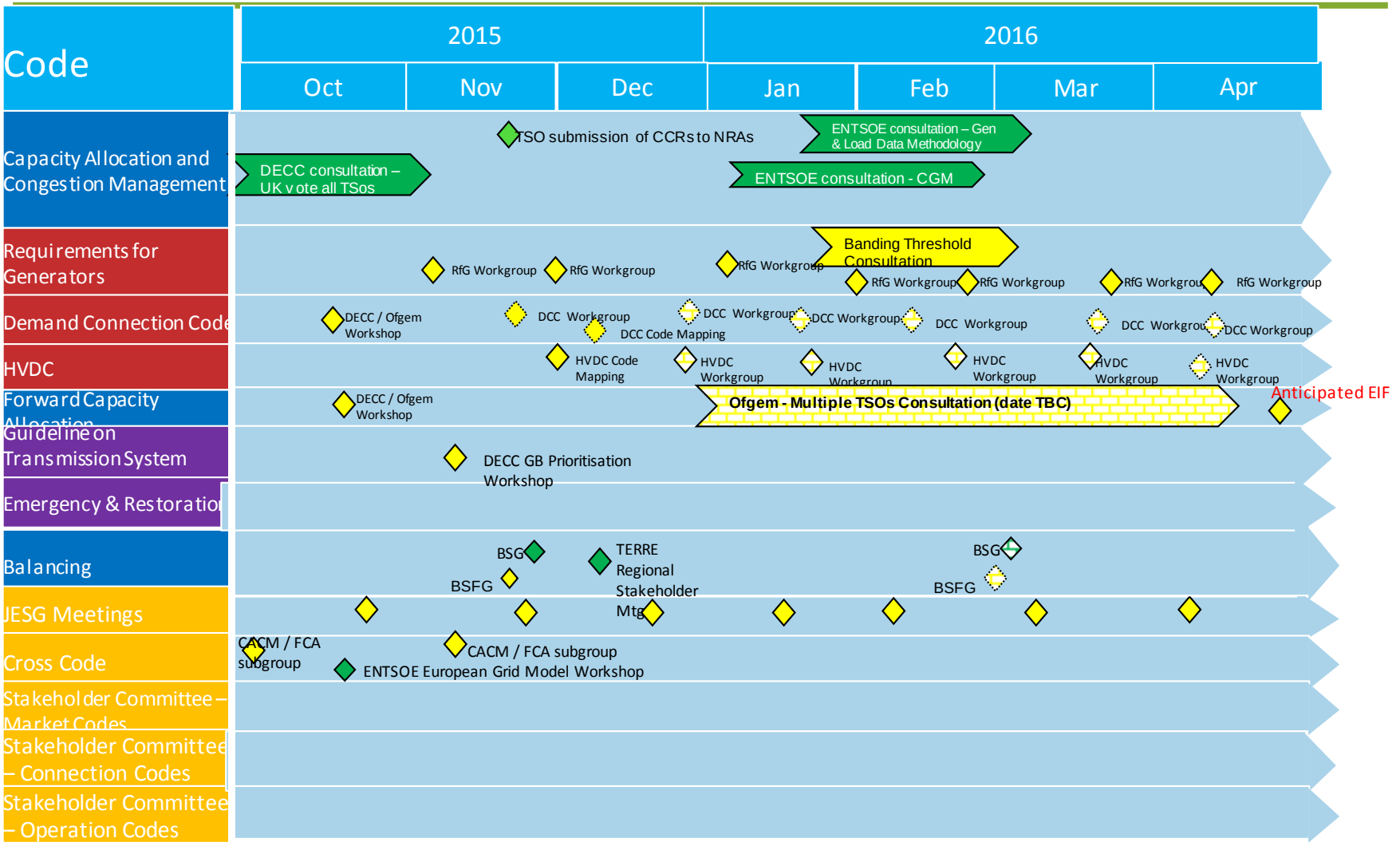
All queries to: europeancodes.electricity@nationalgrid.com

Stakeholder Engagement

Relevant information regarding GB meetings can be found here
JESG Website

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

Key:
- GB Meeting
- European Meeting
- Potential European Meeting
- Potential GB Meeting



Stakeholder Engagement

Code	Oct 15	Nov 15	Dec 15	Jan 16	Feb 16	Mar 16
Capacity Allocation and Congestion Management		14th November TSO submission of CCRs to NRAs		Consultation on Common Grid Model	Consultation on Generation and Load Data Methodology (ENTSOE)	
Requirements For Generators	28th October Monthly RfG Workgroup	19th November Monthly RfG Workgroup	17th December Monthly RfG Workgroup	tbc Monthly RfG Workgroup	tbc Monthly RfG Workgroup	tbc Monthly RfG Workgroup
Demand Connection Code	12th October DECC / Ofgem Stakeholder Workshop	20th Monthly DCC Workgroup	8th & 9th DCC Workgroup and Code Mapping	tbc Monthly DCC Workgroup	tbc Monthly DCC Workgroup	tbc Monthly DCC Workgroup
HVDC		10 & 11 HVDC Workgroup and Code Mapping	tbc Monthly HVDC Workgroup	tbc Monthly HVDC Workgroup	tbc Monthly HVDC Workgroup	tbc Monthly HVDC Workgroup
Forward Capacity Allocation	12th October DECC / Ofgem Stakeholder Workshop					Consultation on Multiple TSOs planned (Ofgem)
Guideline on Transmission Operation		3rd & 4th November DECC GB Prioritisation Workshop				
Emergency & Restoration						
Balancing		27thNovember Balancing Stakeholder Group; 24th Balancing Stakeholder Focus Group	1st December TERRE Regional Stakeholder Meeting			
JESG	20th October	17th November	2nd December	10th Jan	tbc	tbc
Cross Code	26th October ENTSOE Building a European Grid Model Workshop 28th October CACM FCA Subgroup					
Stakeholder Committee - Market Codes						
Stakeholder Committee – Connection Codes						
Stakeholder						

4. Balancing Network Code Update

David Bunney
(NGET)

EU Balancing Code Update

- Topics to cover:
  - NC EB Trilateral Meetings
  - Early Implementation Deliverables
  - Project TERRE
  - Stakeholder Engagement Activities

NC EB Trilateral Meetings

- ENTSO-E advocacy work commenced following the receipt of ACER's QR
- National Grid are leading this work on behalf of ENTSO-E
- First Trilateral meeting with ACER & EC held 22/10 with the next meeting planned for 10/12
- Key Issues for NG:
  - Prevention of alert/emergency state
  - Sharing all standard products
  - Management of internal congestion
  - Use of specific products
  - Lack of sophistication / narrow focus of EU algorithms

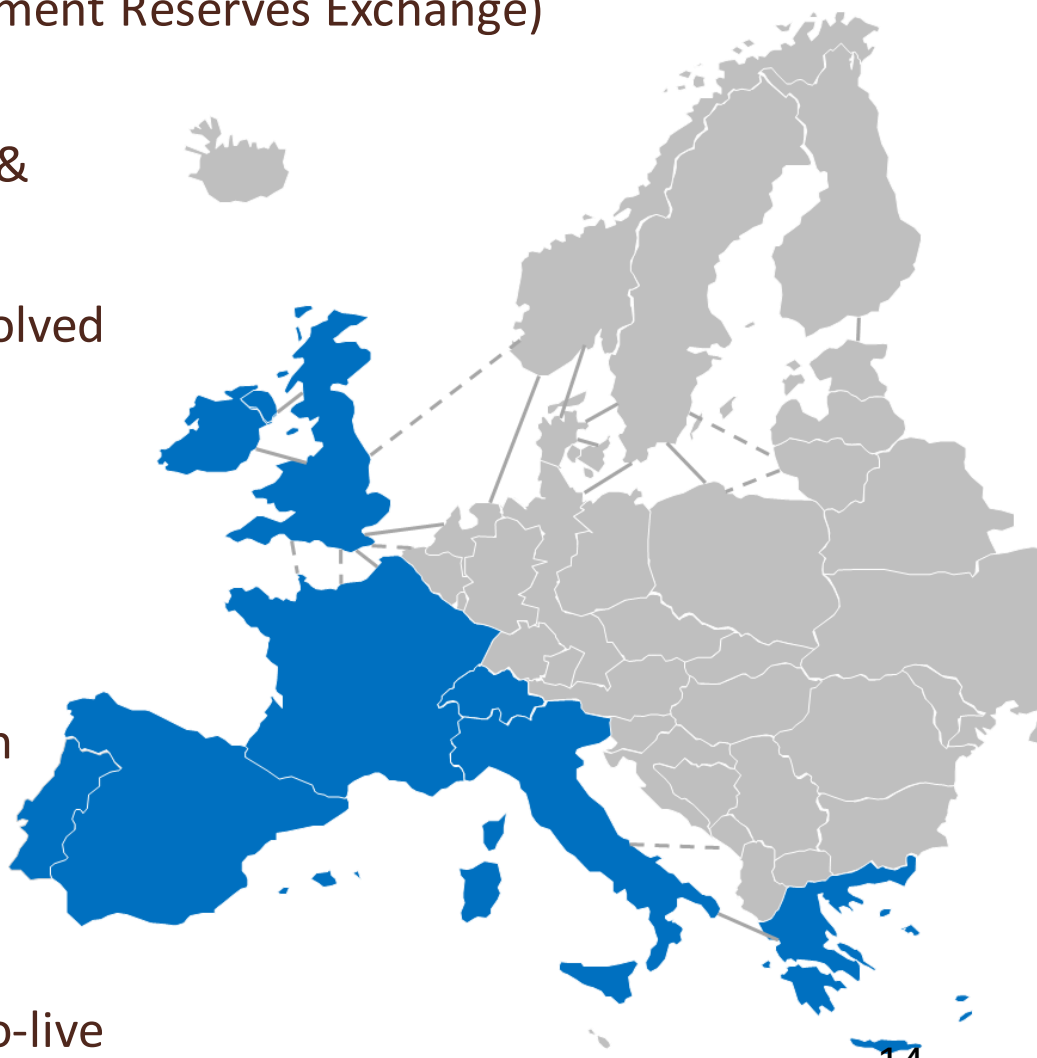
Early Implementation Deliverables

- ENTSO-E are working on a number of early implementation deliverables under the ToR of the Balancing Stakeholder Group
- Balancing Stakeholder Focus Group used to keep GB stakeholders up to date on latest progress – next meeting 24/11

Task Name	Deadline
Draft CoBA proposals for all processes	Nov 15
Draft EU Roadmap from RIM to EIM	Feb 16
Draft proposals for mFRR & RR products for energy	Nov 15
Draft proposals for mFRR & RR products for capacity	Feb 16
Outcomes of aFRR Study	Feb 16
Draft proposals for aFRR products for energy	Jun 16
Draft proposals for pricing methodology	Jun 16
CBA Methodologies & Criteria	Nov 15
Final ISP CBA	Apr 15
Draft list of activation purposes of balancing energy bids	Nov 15
Draft high level principles for balancing algorithm	Jun 16

Project TERRE – General Update

- TERRE (Trans-European Replacement Reserves Exchange)
- Currently 8 TSOs involved with interest from Bulgaria, Romania & Hungary
- All French & Irish I/Cs will be involved
- Implementation Group meetings held between TSOs & NRAs
- Inter-regional stakeholder event planned for 01/12 in Madrid
- Project nearing the end of design phase, detailed planning on implementation phase started
- Public consultation on high level design expected Q1 2016 with go-live now expected Q2 2018



Stakeholder Engagement Activities

- There many activities being currently being managed in parallel in relation to NC EB development and implementation
- Keeping stakeholders involved at both a national and EU level is critical, to this end NG is involved the following up coming events:
  - ISP CBA Industry Information Day – 16/11/15
  - BSFG allowing GB stakeholders to input into BSG – 24/11/15
  - Project TERRE regional stakeholder event – 01/12/15
  - Project TERRE public consultation planned Q1 2016
- Feedback on stakeholder engagement across the board range of activities in this area is most welcome..

5. Frontier Economics Methodology Update

A review of the purpose, elements and timeline of the Imbalance Settlement Period, Pan-European Cost Benefit Analysis for reducing and harmonising ISP durations

David Bunney
(NGET)

Harmonising the Imbalance Settlement Period (ISP)

*"**Imbalance Settlement Period** means time units for which balance responsible parties' imbalance is calculated"*

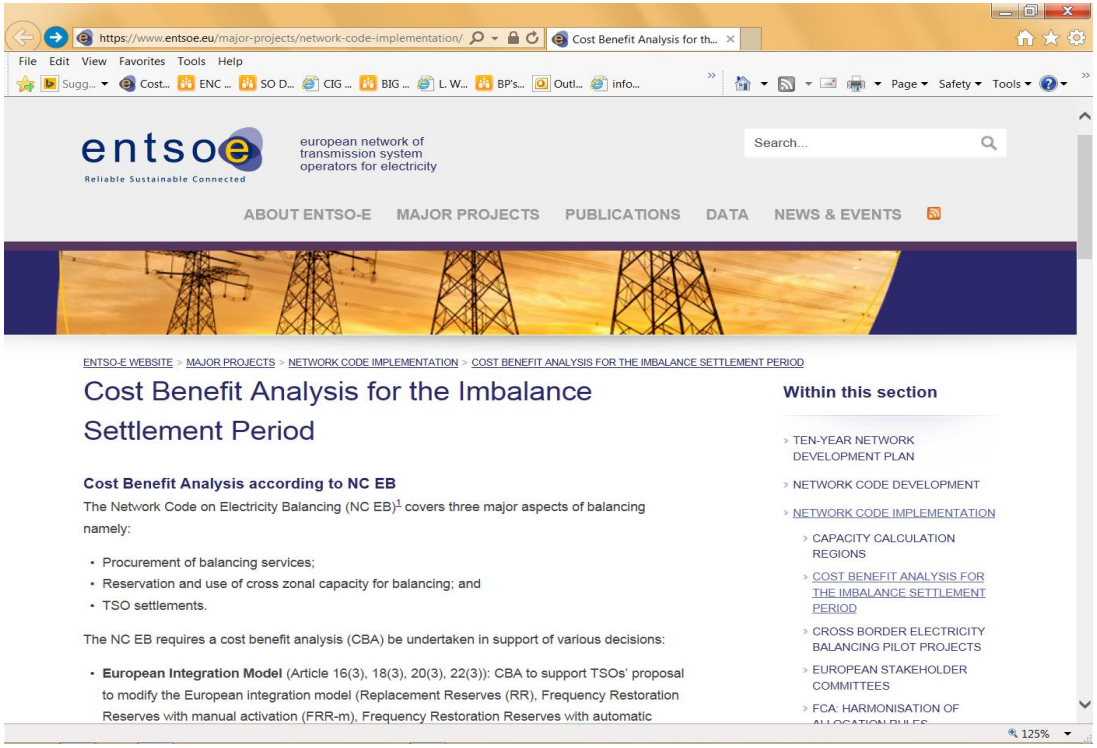
ACER Framework Guidelines (2012)
"ENTSO-E shall carry out a cost-benefit analysis on whether the imbalance settlement period shall be harmonised across Europe and report its results to the Agency. The imbalance settlement period shall not exceed 30 minutes. However, in case a TSO provides a detailed cost-benefit analysis to its NRA, the NRA may decide to have a longer imbalance settlement period."

ACER Recommendation (2015)
"…the Agency proposes that the Network Code explicitly defines the length of the harmonised imbalance settlement period. Such a length would provide a clear target for all TSOs and stakeholders. Given that the need for shorter imbalance settlement period has been defined by the Framework Guidelines (i.e. no longer than 30 minutes), the Agency is of [the] opinion that that an harmonised duration equal to 15 minutes is a natural choice"

Background

- **Imbalance Settlement Period** harmonisation relates to standardising the duration of ISPs.
- **Why a CBA?** As part of the European harmonisation and standardisation framework set forth in the Balancing Network Code it is a requirement to determine the harmonisation aspects needed for RR, mFRR and aFRR COBAs.
- **What is being considered?** It is the minimum technical change required to declare that Imbalance Settlement Periods are aligned.
- **Why such tight timescales?** The timeline between November 2015 and January 2016 are driven by the need to collect data, analyse it and inform the European Commission of the results before Comitology and the finalisation of the text in the Balancing Code.
- **What if results are not presented before Comitology?** The default position of ACER in the absence of any CBA results is to advise the EC to change the Balancing Code all countries in the EU + others implementing the 3rd energy package to move to a common 15-minute ISP; as it is assumed this will deliver the objectives of the 3rd package.

https://www.entsoe.eu/major-projects/network-code-implementation/cba-imbalance-settlement-period/Pages/default.aspx

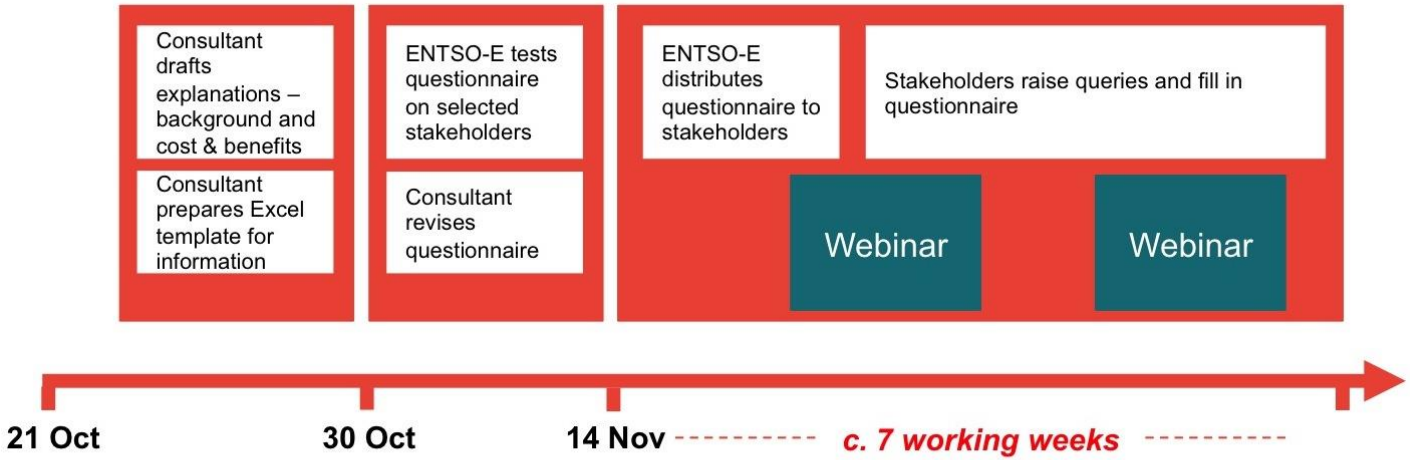


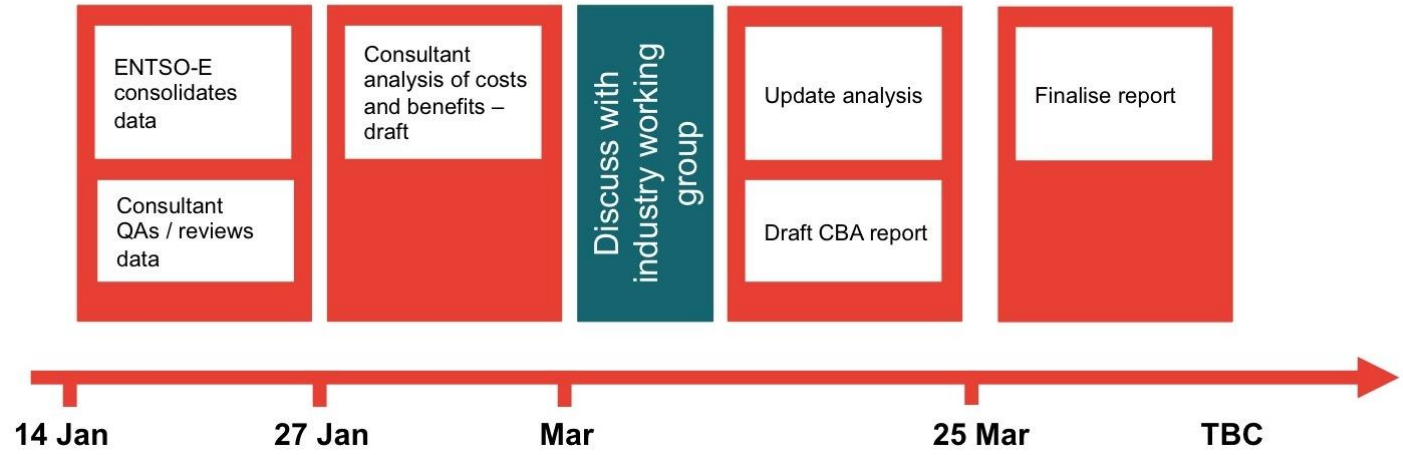
cbaisp@entsoe.eu

Guidebook - Cost Benefit Analysis for Imbalance Settlement Period Harmonisation

Download - Questionnaire

Stakeholder Response Timeline = 14-nov to 14-Jan





Quick commentary on Planning Cases

Case 0) Status-Quo / Counter-factual : A description of current and already planned changes to ISP, metering, software systems etc	Used as the as-is [zero-delta] counter-factual cost basis for assessment at all levels
Case 1) All areas move to 15-minute ISP duration and MTU (but no other aspects of market design change	The default change position preferred by ACER/EC.
Case 2) Those areas with 30-minute ISPs remain unchanged and those with 60-minutes change to a) 30-minutes and b) 15-minutes	Highlights whether indeed there are benefits from the harmonisation rather than largest common reduction in ISP.
Case 3) All move to 5-minutes	Looks at the limiting case where everyone changes ISP and MTU to 5-minutes. However gate closure times and gate-closure durations remain unchanged as do other factors of contracting and settlement.

Factual and Counterfactual

EU28 + others implementing EU NCs …

	Description	Timeline for change	Regions with ISP changes
Counterfactual - All ISP remain as of today	• All regions remain with today's ISP (as modified by changes *already decided on*)	• None	• None
All regions go for 15 min ISP	• Countries with 15 min ISP remain untouched • All other countries change to 15 min ISP	• Change needs to be effective by 1 July 2019	• UK, FR, ES etc.
Other planning cases (factuals) ?	• Min. change (60 -> 15 min, 30 min unchanged) • Min. change and max harm. (60 ->15 or 30 min.) • Shorter ISP Harmonisation . (all -> 5) min.)		

The other planning cases will consider options where GB and FR remain on 30-minutes and other 60-minute ISP countries harmonise to either 30 or 15 minutes.

A further case where everyone moves to 5 minutes is considered

We start by defining a number of benefit categories from potential results of shorter ISP

Reduced balancing costs	Lower holdings of reserve capacity by TSOs as a result of BRP action* and reduced x-b inefficiency (net of BRP capacity holding, incl. x-b)
	Reduced use of balancing energy by TSOs as a result of BRP action and reduced x-b inefficiency (net of BRP self balancing pre gate closure, incl. x-b)
	Entry of BSPs as a result of wider access to BMs for existing plant
Increased secondary trading volumes	Increased DA / ID liquidity as a result of BRP actions (incl. x-b trading)
	Increased DA / ID liquidity as a result of greater uniformity of information
Improved investment outcomes	More efficient BRP plant investment as a result of shorter term price signals being more efficient than those price signals provided by TSOs (through BMs and imbalance prices)
	More efficient BRP plant investment as a result of improved liquidity in DA / ID markets

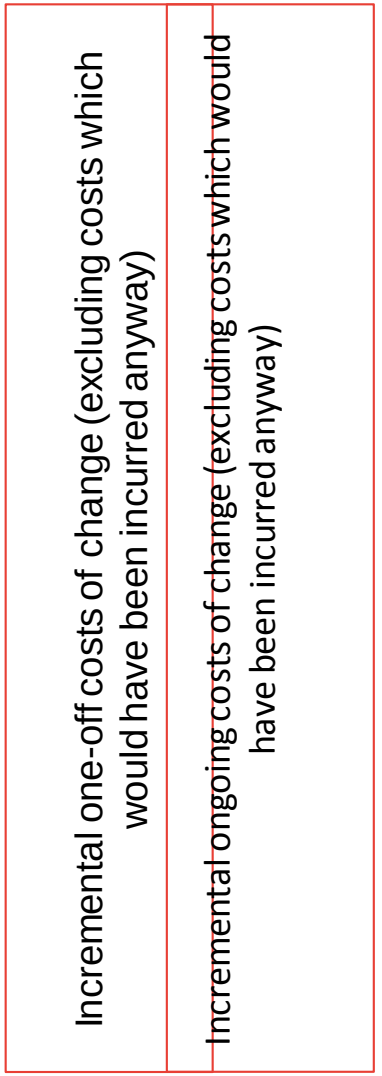
* Including in relation to large changes in position at the boundary between ISPs – implication for frequency quality

On costs, we first consider direct costs of change, again grouped by categories

Trading platforms	Update to systems and processes to support trading systems
Metering and allocation systems	Incremental change to metering systems and processes to provide shorter timeline data
	Change to systems and processes used to allocate volumes associated with non-ISP based metering to ISPs
Settlement systems	Change to systems and processes to calculate and settle imbalances to deal with shorter ISP, and change to participant systems which interact with these
	Change to systems and processes to facilitate settlement of trades (bilaterally and on exchange) on a shorter ISP basis
Billing systems	Change to systems and processes to facilitate billing of customers based on shorter ISP basis (where relevant)
BRP forecasting, trading and scheduling	Change to systems and processes to facilitate forecasting and trading on a shorter ISP basis
Documentation	Change to market documentation, ongoing contracts etc.

For each direct cost, we would consider one-off and ongoing *incremental* costs

- Update to systems and processes to support trading systems
- Incremental change to metering systems and processes to provide shorter timeline data
- Change to systems and processes used to allocate volumes associated with non-ISP based metering to ISPs
- Change to systems and processes to calculate and settle imbalances to deal with shorter ISP, and change to participant systems which interact with these
- Change to systems and processes to facilitate settlement of trades (bilaterally and on exchange) on a shorter ISP basis
- Change to systems and processes to facilitate billing of customers based on shorter ISP basis (where relevant)
- Change to systems and processes to facilitate forecasting and trading on a shorter ISP basis
- Change to market documentation, ongoing contracts etc.



6. CACM/FCA Implementation Subgroup Update

Bec Thornton
(NGET)

CACM/FCA Subgroup

- Last meeting 28th October 2015
  - UK Voting Rules – DECC/DETI Decision
  - Capacity Calculation Regions Proposal to NRA
  - JESG website
    - Subgroup area for agenda, headline report, useful documents and links
- Next meeting 17th November 2015

7. Grid Connection Code: Multiple TSOs Update

David Freed
(Ofgem)

Multiple TSOs Clause

Article 8
Multiple TSOs

1. Where more than one TSO exists in a Member State, this Regulation shall apply to all those TSOs.

2. Member States may, under the national regulatory regime, provide that the responsibility of a TSO to comply with one or some or all obligations under this Regulation is assigned to one or more specific TSOs.

- Each of the connection codes (RfG, DCC & HVDC) includes an article requiring Member States to set TSO responsibilities where more than one TSO exists in that member state (as shown for RfG – DCC & HVDC similar)
- In each code there are also references throughout to requirements placed upon a 'relevant' TSO or 'relevant' system operator
- Which TSO or system operator these requirements refer to needs to be determined by the Member State
- GB is in a unique position having a number of TSOs but with very different roles

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BETTA Rules of Thumb

These were used in determining SO and TO responsibilities during BETTA implementation

SO activities

- Frequency Management / frequency elements
- Dynamic Performance
- Voltage control / Reactive capability
- Fault Ride Through
- Dynamic System Monitoring, ASB Monitoring, PMU
- Communications facilities
- Models and Simulations
- Operational metering
- Contracts
- CUSC obligations

- **TO Activities**
- Asset related issues
- Protection
- Earthing
- Quality of Supply
- Electrical Standards at the point of connection
- Intertripping
- Synchronising
- Auto close schemes
- Interlocking

TO activities could be characterised as local issues to do with the stewardship of assets rather than potentially impacting cross-border trade/system operation)

There are also a number of areas where joint SO and TO requirements are necessary listed as in the SO camp but are also a TO area of interest – eg Control Telephony, Operational Metering and simulation models/data.

Assumptions/ground rules:

Applied in first pass of responsibilities & requirements

- Future offshore windfarms could be AC connected and therefore RfG does need to consider these (rather than all offshore PPMs being DC connected and hence covered under the HVDC code).
- A future OFTO or in theory interconnector could be AC or DC. This leads to a more inclusive list of TO responsibilities under RfG than would otherwise be the case if OFTOs and interconnectors were assumed to be DC.
- An offshore windfarm could be connected via an OFTO or (in theory) an interconnector.
- HVDC assets could be at sub-110kV levels (perhaps particularly if there is a growth in larger scale battery storage projects), so could be DNO connected.
- DSR is generally a service that would only be employed by the SO as it is seen as an aid to operating the system. It could potentially also be used in constraint management, which could also be useful to a DNO. This area is not really well thought out as yet.
- In each of the codes there are many instances where a requirement comes in two parts, being an action on the relevant System Operator to be fulfilled in coordination with the relevant TSO. In most of these cases the initial view is that the relevant TSO is NG but the relevant system operator is frequently any of the candidates. Also frequently there is a requirement upon whichever party holds a connection agreement – which is therefore the SO or (if distribution connected) the DNO.

8. Future meeting dates

Franklin Rodrick

JESG Technical Secretary

Forthcoming Meetings: ENTSO-E

Project TERRE open stakeholder meeting, Madrid: 1 December 2015

This event will give stakeholders an opportunity to hear about the latest status of the project, currently in its design phase, and allow them to provide input.

European Stakeholder Committee - Meeting 2, Brussels : 3 December 2015

ENTSO-E's European Stakeholder Committee meeting will give the 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:

Wednesday 2 December 2015 – 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 17th November – Elexon, London

Registration closed

europeancodes.electricity@nationalgrid.com

9. Future JESG Agenda Items

Franklin Rodrick

JESG Technical Secretary

10. Any Other Business

2 December JESG Meeting – Barbara Vest

JESG Website Layout Change – Franklin Rodrick

Lunch: 12:00