

Joint European Stakeholder Group



Wednesday 24 August: Meeting 14

Shepherd & Wedderburn, Edinburgh 

1. Welcome & Introductions

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/DBEIS	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	DBEIS / 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 DBEIS (elena.mylona@decc.gsi.gov.uk).	All Stakeholders	JESG S6

JESG Open Actions

ID	Topic	Lead Party	Update
27	Possibility to schedule a JESG meeting in late spring Brussels in 2016	Energy UK	On hold At the April JESG, Stakeholders agreed value in holding a JESG in Brussels but suggested to place on hold and revisit later on in 2016.
41	DBEIS have under Stakeholder sessions on the view for the future Energy Market Design and took action at the April JESG to communicate to the JESG and through the JESG Weekly Updates the next planned sessions and updates so far. Also: How are GB views collated ahead of the Florence Forum meetings and is there a plan to hold a workshop ahead of the June Florence Forum?	DBEIS	13-14 June FF Meeting Information: https://ec.europa.eu/energy/en/events/meeting-european-electricity-regulatory-forum-florence DBEIS to provide update and close action at September JESG

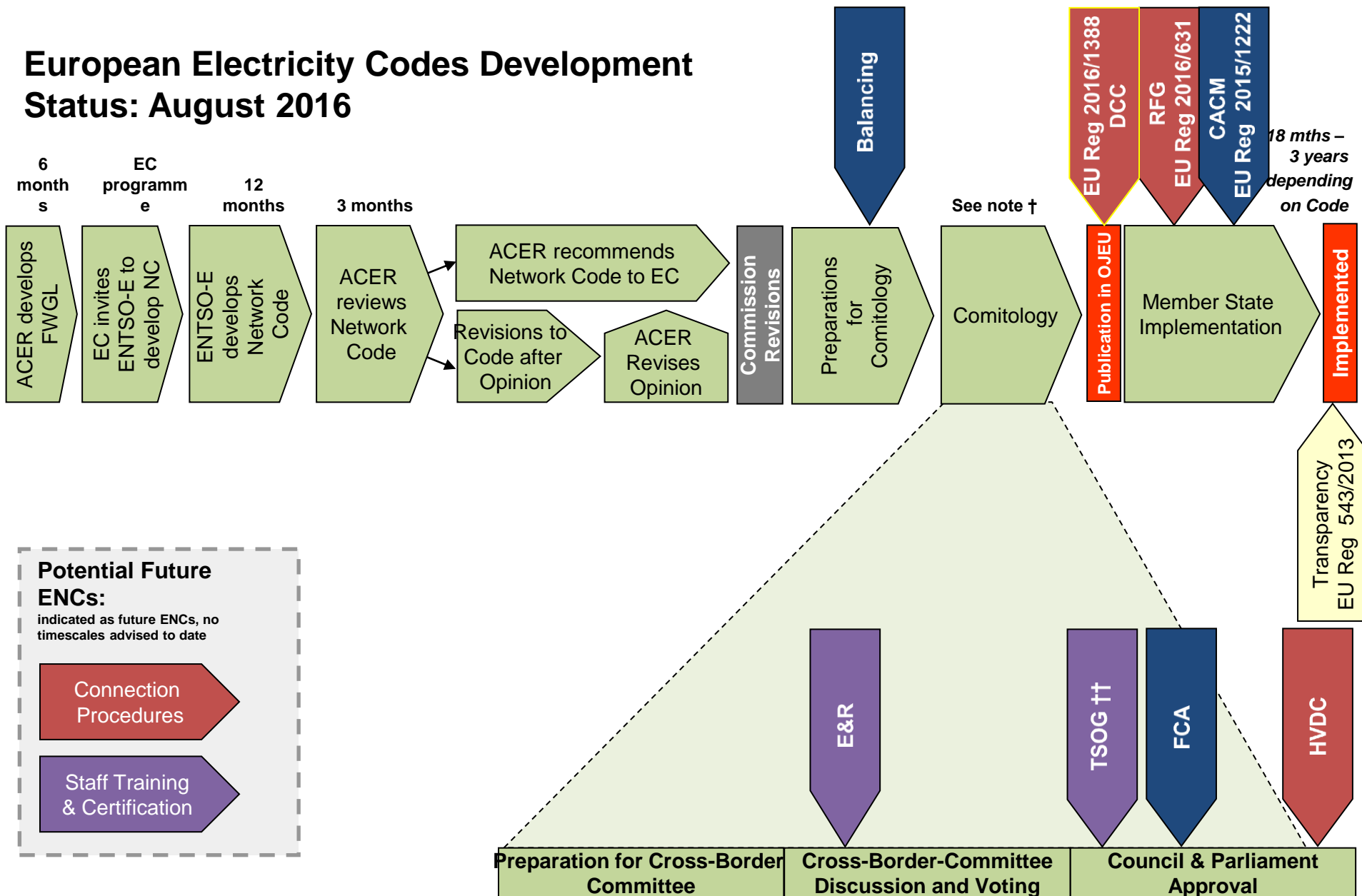
JESG Open Actions

ID	Topic	Lead Party	Update
42	Look to hold a Glasgow JESG either side of the Autumn NGET Customer Seminars (October).	Technical Secretary	On Hold - The structure, format and dates for future NGET Customer Seminars is currently being developed. Further information to follow pending this review.
45	Email GC0095 website link through JESG Weekly Update	Technical Secretary	Complete
46	Further details around the ENTSO-E associated groups for TSOG implementation and further details around the impact to GB users to be circulated through the JESG Weekly Update.	John Young NGET	To be covered at this meeting

3. Summary Status of European Network Codes

JESG Technical Secretary

European Electricity Codes Development Status: August 2016




† Timescales for the stages of Comitology are not specified and under the Commission's control
 †† OS, OPS and LFCR have been merged in to form one single Transmission System Operation Guideline.


All queries to: european_codes.electricity@nationalgrid.com


Stakeholder Engagement

Key:

 GB Meeting

 European Meeting

 Decision

 Potential GB Meeting

 Potential European Meeting



NOTES	Aug	Sept	Oct	Nov	Dec	Jan 2017
Capacity Allocation and Congestion Management						
Grid Connection Codes: RFG, DCC, HVDC						
Forward Capacity Allocation						
Transmission System Operation Guideline						
Emergency & Restoration			CBC meeting likely to shift from Sept to Oct			
Balancing			CBC meeting likely to shift from Sept to Oct BSG – 13/10 Ljubljana BSFG - TBC			
JESG	24 August Edinburgh	28 September - London	26 October - London	23 November – London	13 December – London	TBA
Cross Code						
Stakeholder Committee						

4. Requirements for Generators (RfG): Banding Thresholds Update

Richard Woodward **Via TCON**
(NGET)

JESG

August 2016
RfG Banding
Update

national**grid**

Richard Woodward

What is RfG ‘banding’ and how is it set?

- Technical requirements in the Requirements for Generators (RfG) Regulation 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**
- Banding levels are set on a national basis by TSOs, who nominate their proposed MW levels with **justification**, then consult with industry stakeholders, before submitting for regulatory approval

Maximum RfG banding levels permitted for GB:

Type	Connection Voltage	Power Generating Module 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:

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

Key dates for preparing a banding submission to Ofgem

Nov 2014-Dec 2015

- GC0048 workgroup discussed and formed proposals for the GB banding level

Jan-Mar 2016

- GC0048 workgroup report finalised. This summarised the activities above, and was converted into an industry consultation

Apr-May 2016

- Industry consultation

Jul-Aug 2016

- Additional evidence gathering to supplement consultation outcomes

Aug-Oct 2016

- Report to authority drafted based on information gathered above

What's happened to the GC0048 proposals post-consultation?

- **Three** options were proposed by GC0048 for consultation; **two** are being taken forward for Ofgem consideration (subject to evidence)

Type	<u>Option 1 - High</u>	<u>Option 2 - Medium</u>
A	800W – 1MW	800W -1MW
B	1-50MW	1-30MW
C	50-75MW	30-50MW
D	75MW	50MW+

- The High option is the maximum level written into the RfG text for use in GB
- The Mid option was proposed by NGET
- (A 'Low' option was dismissed as too onerous for implementation)

Summary of industry consultation responses

Party	GB Banding Preference:				TOTAL
	High	Medium	Low	None	
BSCCo				1	1
DNO	5	1			6
Large Generators	6		1		7
Medium Generators	2				2
Small Generators	1				1
Gen Trade Assoc.	2				2
TO		1			1
NETSO		1			1
Grand Total	16	3	1	1	21

Industry consultation headlines

- **21** responses is a great return on a Grid Code/D-Code consultation, so thanks to those who responded!
- Several parties reiterated that a CBA is not expressly required in RfG
- TSOG implementation widely flagged as a risk re. going with Medium/Low banding option
- Remuneration for new capabilities was deemed necessary to justify lowering the banding levels, especially when setting Type C
- Starting with low GB levels increases risk of stranding capabilities if they are reviewed and subsequently increased
- Most responses agree with a rolling three year review

Next steps

- **Banding report to the authority drafting is in progress**
- It will present Ofgem the justification gathered to decide between the **High** and **Medium** options
- The data gathering exercise in July-August sought to gather some additional CBA evidence to supplement the industry consultation and workgroup report
 - Thanks to Kate @ Energy UK for supporting this activity
- An early draft will be reviewed (fingers crossed!) at the GC0048 meeting on Tuesday 13th September
- The target for Ofgem submission is **mid-October 2016**

Any questions?

Richard.Woodward@nationalgrid.com

5. CACM Regulation: Market Coupling Operator Plan & Arrangements for more than 1 NEMO

David McCrone
(Ofgem)

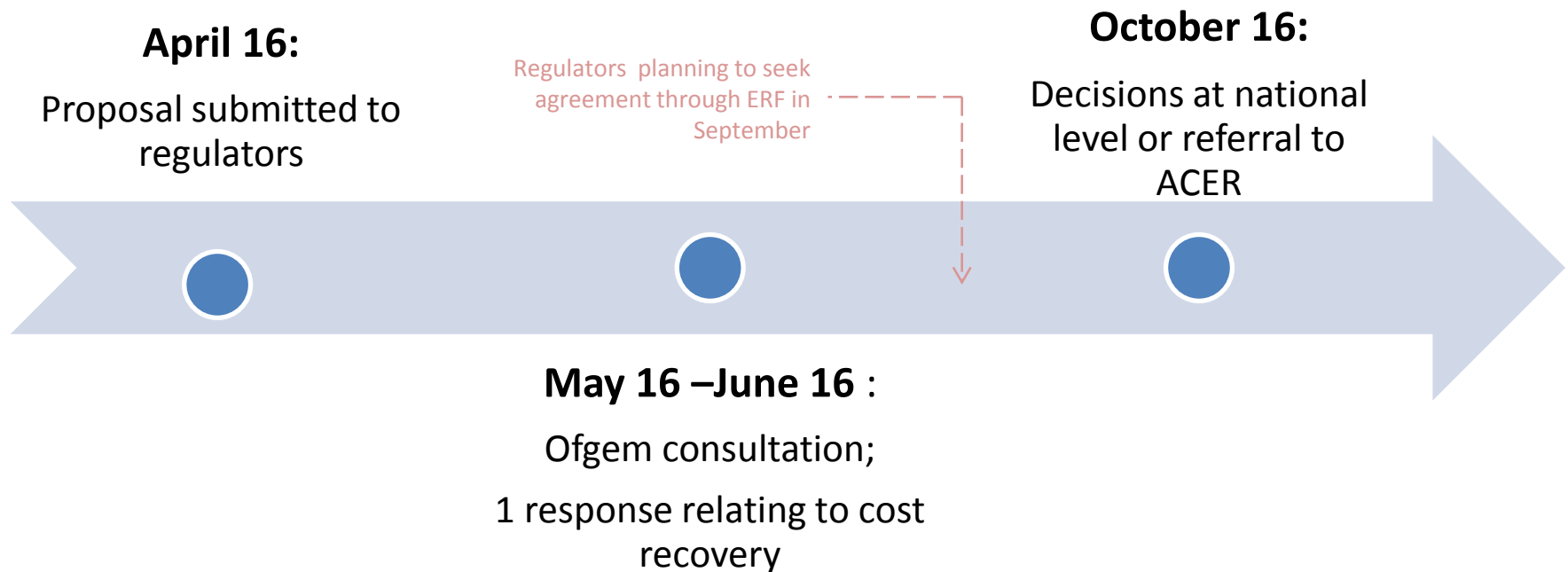
Market Coupling Operator Plan

Update to JESG

24/08/16

ofgem

All NEMO proposal outlining how they will jointly set up and perform the Market Coupling Operator Functions as required by Article 7.3 of CACM.



****** ERF is the 'Energy Regulators' Forum' established by regulators for the purpose of seeking unanimous agreement on terms, conditions, and methodologies that require agreement among all regulatory authorities under the ENC

It is likely that amendments will be needed, relating to the following areas:

- Timelines for implementation
- Costs
- Alignment with CACM
- Description of NEMO governance structure

CACM Article 45 and 57 – arrangements for more than one NEMO in a bidding zone

Update to JESG

David McCrone
24/08/16

ofgem

Summary

- Ofgem designated APX and NPS as NEMOs within GB in December 2015
- CACM requires interconnector TSOs to develop proposals for cross-zonal capacity allocation and other necessary arrangements where more than one NEMO exists in a bidding zone
 - TSOs submitted proposals for the day-ahead and intraday timeframes to Ofgem in accordance with CACM on 11 April 2016
- We need to approve the proposals or request an amendment by **11 October 2016**
- We intended to consult in order to help inform our decision, however we think the proposals currently lack enough detail to allow stakeholders to engage effectively

We intend to request that the interconnector TSOs (a) clarify certain aspects of the proposals, (b) consult with stakeholders and take their views into account, and (c) provide reasons why the chosen solution results in the best outcomes.

Timeline for an amendment

Ofgem publish
request for
amendment
11 Oct 2016

TSOs consult on
the proposals
Oct-Nov 2016

TSO resubmit
proposals to
Ofgem
11 Dec 2016

Ofgem decision
11 Feb 2017

Ofgem is the Office of Gas and Electricity Markets.

Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.

We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.

6. CACM Regulation: GLDPM Mapping Outputs

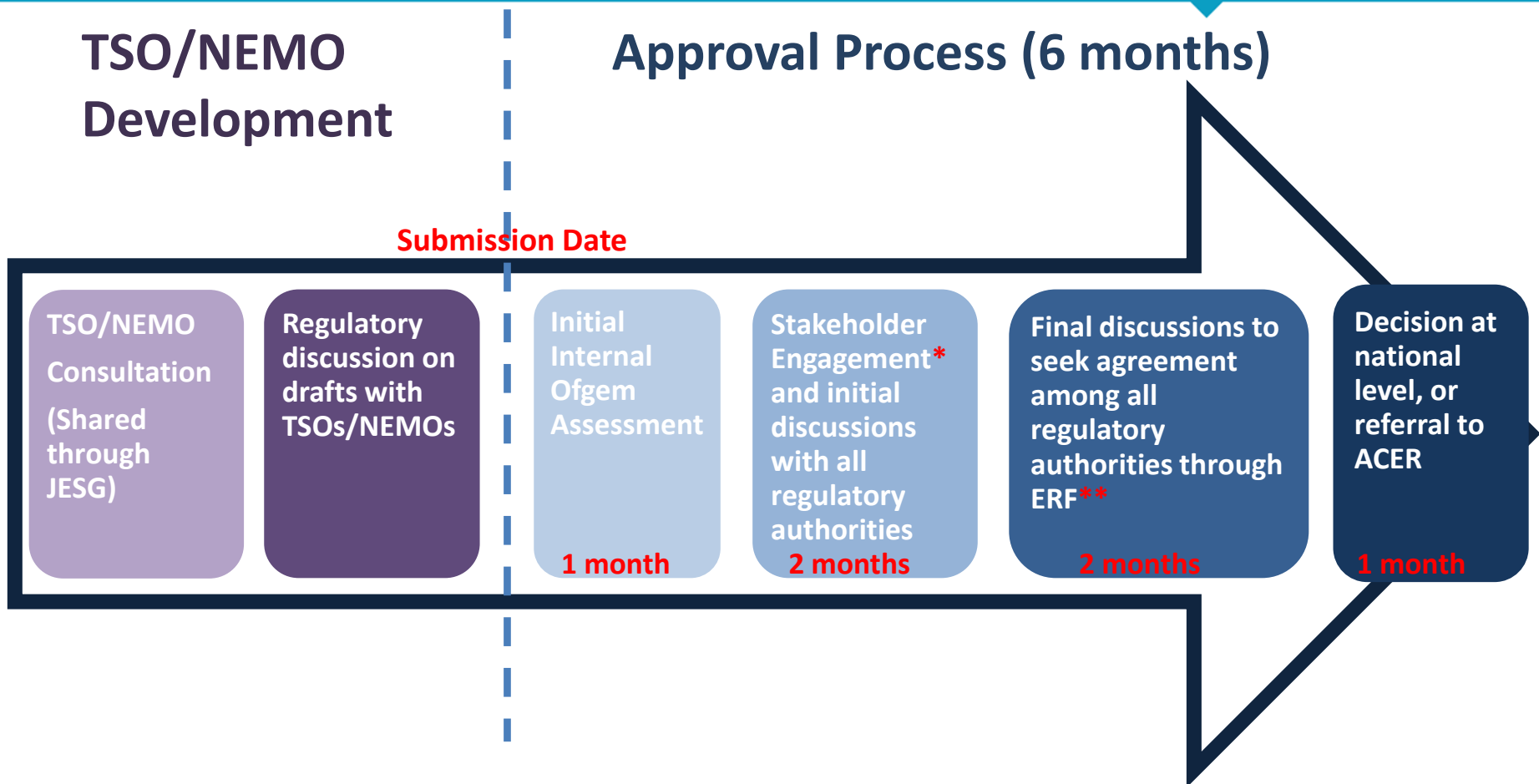
Natasha Smith
(Ofgem)

Indicative All Regulatory Authority Approval Process
Generation and Load Data Methodology (GLDM)
Common Grid Model Methodology (CGMM)

Update to JESG

ofgem

Indicative All Regulatory Authority Approval Process



* Through JESG, we may also consult on proposals in line with our Consultation Guidance.

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GLDM & CGMM: Status

- GLDM and CGMM set out data and processes required to create a common model of European network.
- Required by CACM Regulation to allow coordinated decisions on available cross-border capacity and cross-border re-dispatch and counter-trading.
- Proposals submitted by TSOs in GB on 14 June 2016 following public consultations in February 2016.
- Two JESG sub-group meetings held, 30 June and 12 August 2016, to do a line by line read through of the submitted GLDM and more general discussion of the CGMM.
- Expect approval required by all regulatory authorities by 14 December 2016 (deadline determined by date of receipt from last regulatory authority).

Summary of JESG Sub-Group discussions

GLDM

1. How are TSO requirements under GLDM and CGMM assigned to GB TSOs?
2. How will NGET confirm to relevant GB entities data required under the GLDM? Specific concern GLDM places complex and disproportionate requirements on DSOs, closed DSOs, and aggregators to provide modelled aggregate generation and load data, separated by generation and load.
3. How will 'implementation rules' required by GLDM for setting requirements for provision of data be established in GB? What is the process for delegation of data provision to another party, and what is the process for TSO agreement for any such delegation?
4. No other major concerns, but noted no explicit reference to inclusion of storage, and GLDM has close links to SO GL in terms of requiring data linked to regional security analysis.

CGMM

1. How are TSO requirements under GLDM and CGMM assigned to GB TSOs?
2. Concerns about scope of CGMM, with provision of new tasks to ENTSO-e and inclusion of processes for agreeing remedial actions which overlap with future decisions on capacity calculation, re-dispatch and counter-trading, and Intraday Cross Zonal Gate Timings.
3. Concerns about the oversight of the process by which TSOs will merge individual grid models including checking and substituting in data.

1. Final stakeholder views on GLDM and CGMM may be shared directly with Ofgem by Friday 2 September.

Our current working view is:

GLDM concerns can be resolved through national implementation:

- TSO obligations already assigned to TSOs and apply to GLDM and CCGM.
- Expect no data to be required by NGET under GLDM, and justification for any future data to be determined through our Industry Code processes. Implementation Rules also already in place through our Industry Code Process.
- GLDM requires 'modelled' data from DSOs, closed DSOs, and aggregators, leaving flexibility for type and level of data needed to be justified if beyond current GB requirements.
- Implications for GLDM will need to be considered as part of SO GL implementation. Do not consider GLDM poses direct issue for storage

CGMM

- likely to require amendment to remove areas out of scope, and ensure appropriate oversight of the merging of individual grid models.

2. Ofgem to finalise assessment in September to seek agreement with all regulatory authorities through Energy Regulators' Forum October / November. Formal Ofgem decision or referral to ACER in December.
3. National Grid to pull together conclusions of the sub-group mapping sessions to demonstrate how existing GB framework meets GLPM compliance. NG to consult on this over the Autumn with a session at the JESG CACM sub-group in November.

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7. Transmission System Operator (TSOG) Update

John Young
(NGET)

TSOG Update

John Young

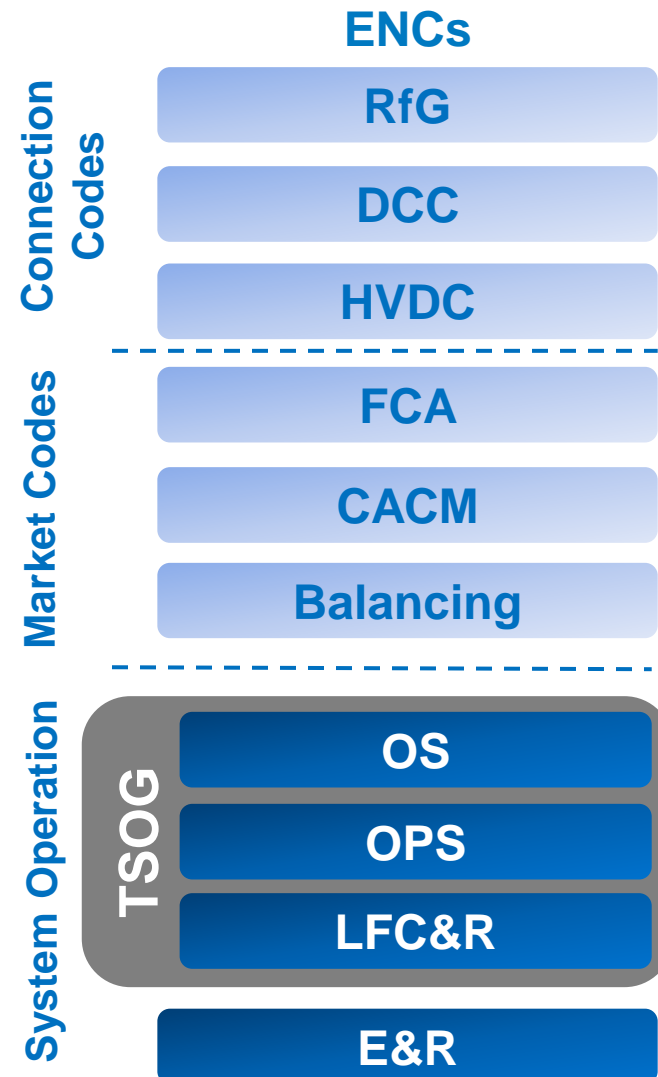
24th August

What is TSOG?

Purpose: setting minimum system security, operational planning and frequency management standards to ensure safe and coordinated system operation across Europe

TSOG – three components

1. **Operational Security, OS** - defining common minimum security standards for system operation
2. **Operational Planning & Scheduling, OPS** - introducing common and coordinated planning activities
3. **Load Frequency Control & Reserves** - providing a framework on which pan-European balancing markets can be built



TSOG - Key Areas & Implementation

Key areas: a number of new concepts and initiatives are introduced, for example:

- Requirements for data exchange between TSOs, DNOs and market participants
- Regional security coordinators (such as CORESO)
- More visibility and transparency in system operation procedures
- Processes for cross-border exchange and sharing of reserves

Timescales

Cross-border committee positive vote May 4th



6-9 months

Expected timescale for remaining comitology process, parliamentary vote and publishing in OJEU (Official Journal of the European Union)



Expect EIF Dec 2016/Jan 2017

What's been done so far?

Cross-border committee: Stakeholder sessions feeding into UK position

Grid code mapping: Flagging interactions - first pass completed

TSO allocation: Consultation conducted and minded to position upcoming

TSOG working group established: Entry into force articles priority area

GC0095 TSOG implementation workgroup

- Joint Grid Code and Distribution Code group to progress the GB application / implementation of TSOG.
- Contact grid.code@nationalgrid.com with nominations for workgroup membership
- Website link below

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0095/>

- Implementation timescales for the obligations under TSOG range from Entry into Force to 30 months later
- Next session afternoon of September 14th (Connections Code session in the morning)

What's the impact?

- Implementation group set-up to determine approach
- Some key areas for implementation are:

Operational Agreements

- Methodology/requirements to be defined for system operation
- Interactions with SQSS, Grid Code (BC)

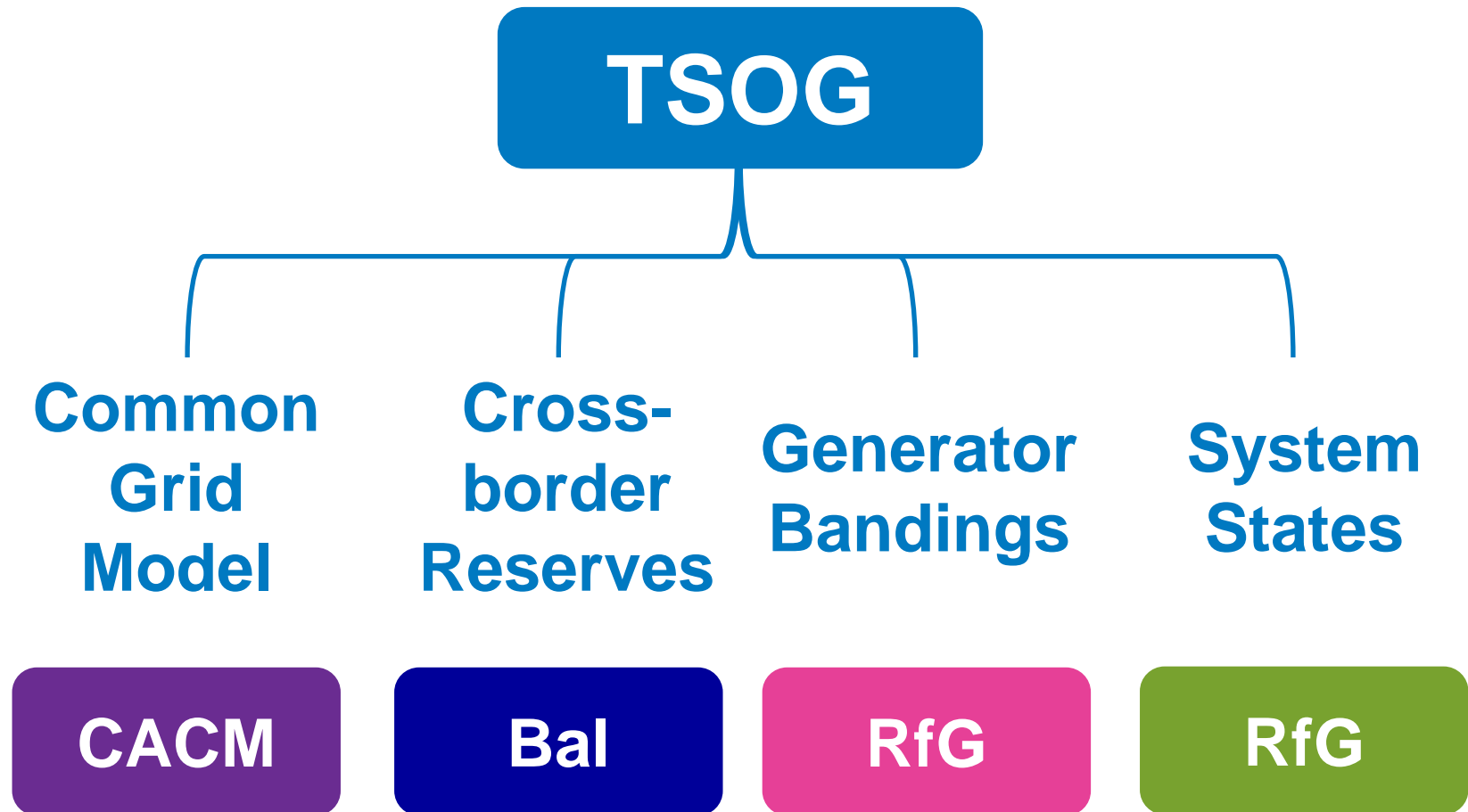
Data Exchange

- Common requirements between DSOs, SGUs etc. and TSOs
- Interactions with Grid Code (OC)

Regional Security Coordination

- Methodology to be drafted on common security analysis
- Interaction with current planning processes

Interactions with European codes



Questions?

nationalgrid

John.Young4@nationalgrid.com

8. Electricity Balancing Guideline Update

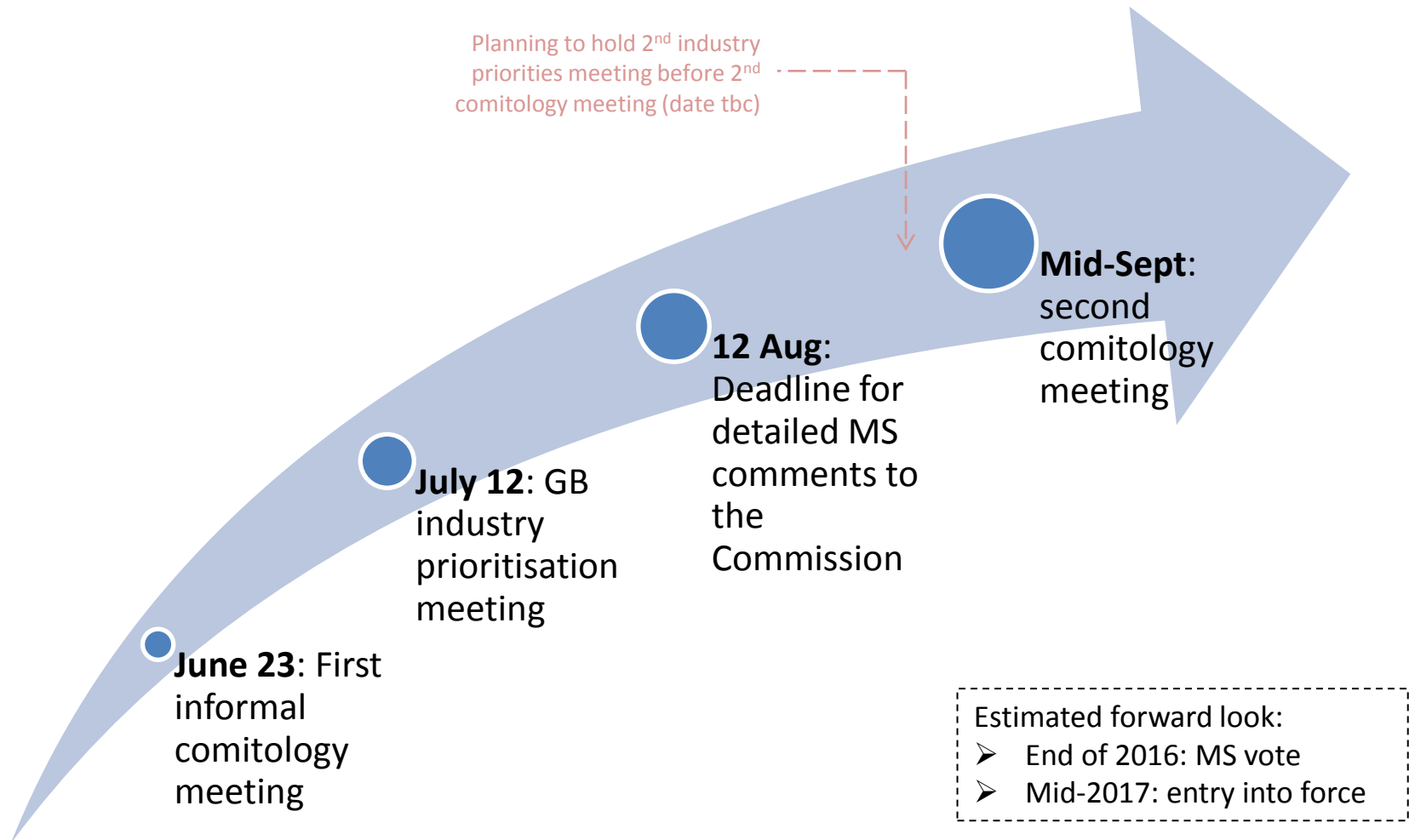
Ofgem

&

Chris Fox

(NGET)

Overview of the EB GL process



- Any change to imbalance settlement period would be significant
 - Nothing on this included in the latest version of the text.
Expect Commission proposal in the September version
 - Implementation timelines need to be realistic
 - Interactions with E&R NC need clarifying
 - TSO delegation decisions ought to be transparent
-
- Detailed GB issues log circulated via recent JESG weekly update emails

Balancing Update

Chris Fox

Electricity Balancing Guideline - Overview

Pan-EU Balancing Energy Market

- Development of pan-EU platforms for the exchange of standard balancing energy products
- 6 year implementation period
- RR / mFRR / aFRR / Imbalance Netting
- Specific products retained nationally

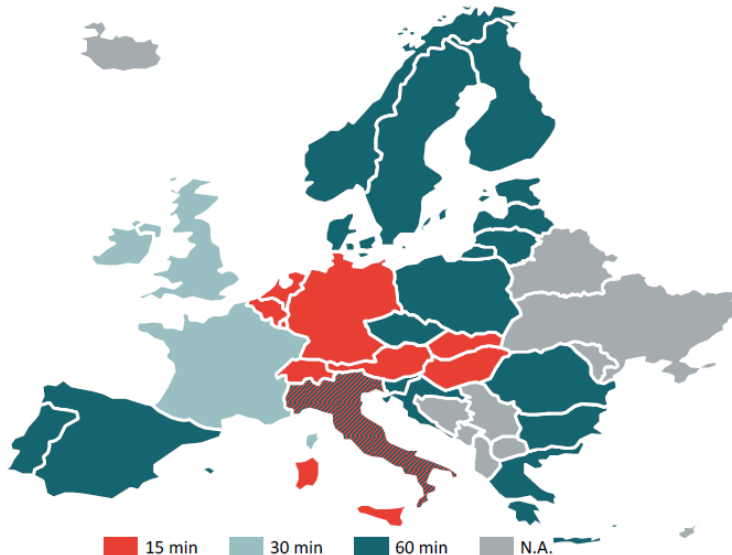
Harmonisation of Market Design & Settlement

- Harmonised Gate Closure Time for standard products
- Potential Harmonisation of ISP
- Harmonisation of imbalance arrangements (preference for single imbalance pricing)
- Harmonisation of reserve procurement arrangements

Cross Border Capacity Reservation

- Opens the possibility for TSOs to reserve XB capacity for the exchange of balancing energy
- Cooptimisation with market timeframes
- TSOs to develop detailed methodologies

Harmonisation of ISP

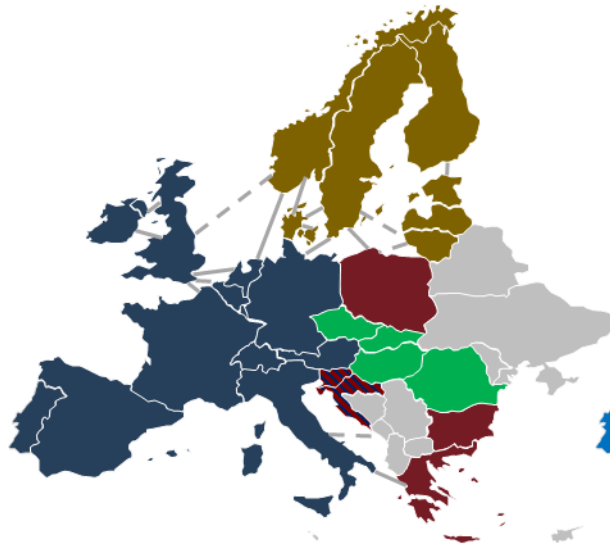


- CBA performed by Frontier Economics submitted to EC April 2016
- Least worst scenario was planning case 3 with a range of €0.5bn to -€1.1bn, if not profiling then the CBA becomes significantly more negative
- EC requested additional planning case where all countries moved to 15mins except GB & IRL. Results Broadly comparable to PC3.
- We are expecting targets to be set on a Synchronous Area basis
- EC to propose targets as part of new release of EB GL ahead of next CBC meeting expected in Oct

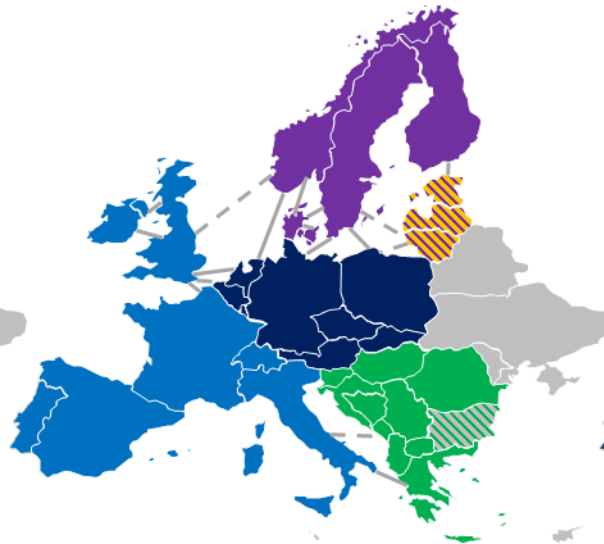
Approach to the European Target – Old Approach

Original CoBA Proposals

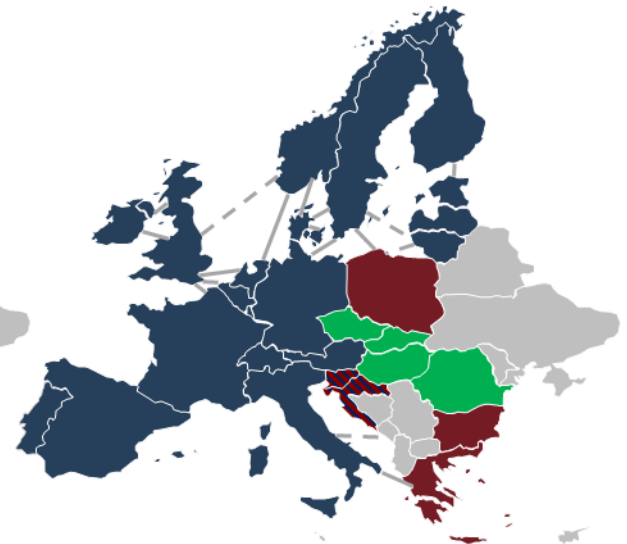
Central CoBA proposal



Five CoBA proposal



PLEF++++ proposal



Challenges

- CoBA discussions have been very difficult and tended to be more political than technical
- Large RIM CoBAs challenging (RIM = EIM)
- Merging CoBAs could mean changing twice
- How to involve TSOs in design who are not joining at the start?
- Arbitrary splitting of Europe will potentially block collaborations between projects
- Relationships between different processes

Solution

- Rather than defining RIM CoBAs in terms of geographical regions, focus instead on the two levels of implementation – EU and National
- Different levels of implementation can go at different speeds – no blockers
- Multiple separate regions can be optimised in parallel by the same platform

Approach to the European Target – New Approach

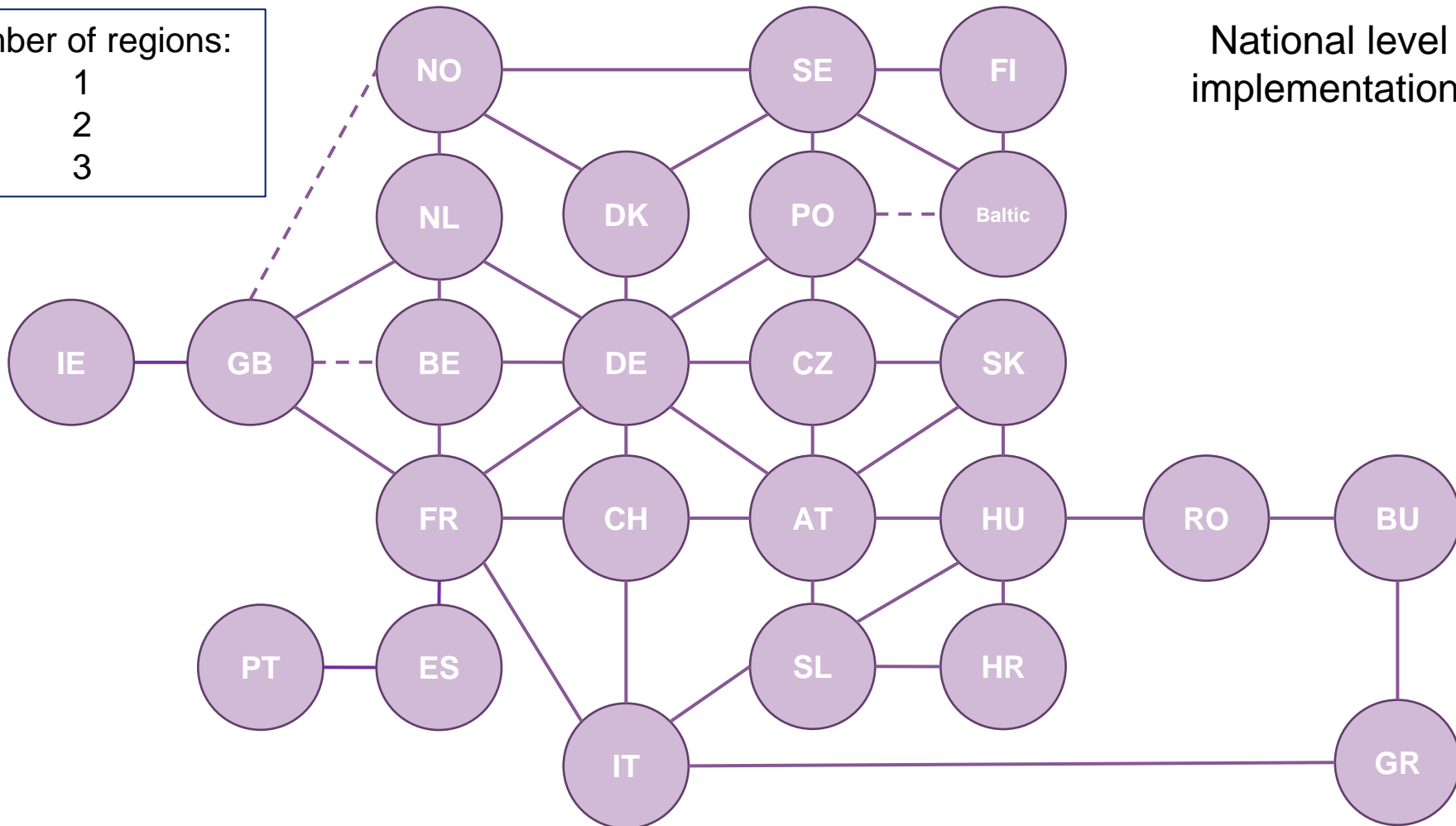
EU Platform

EU **level**
implementation

Number of regions:

1
2
3

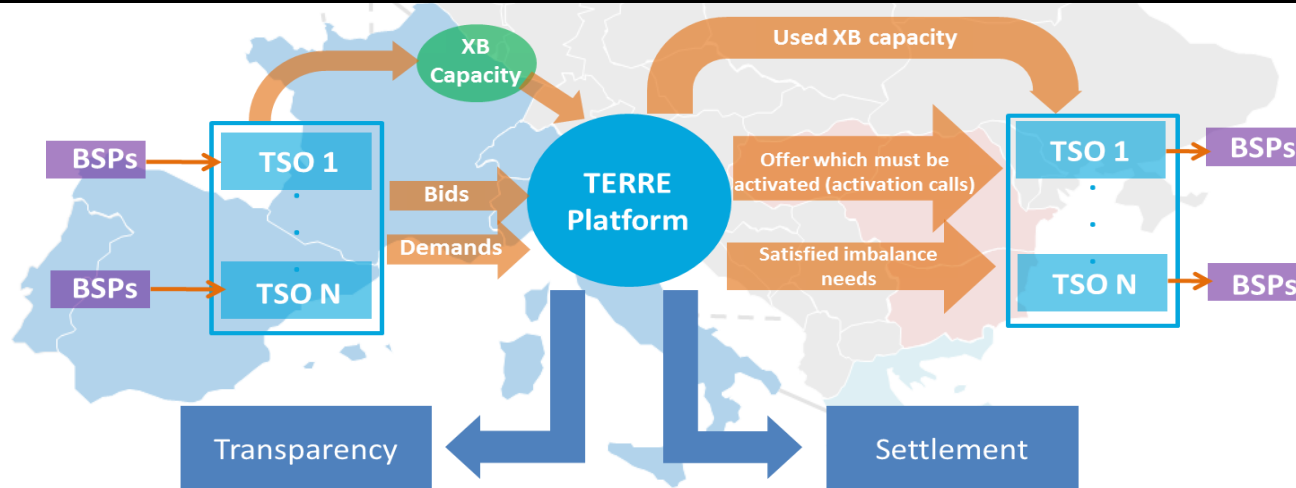
National level
implementation



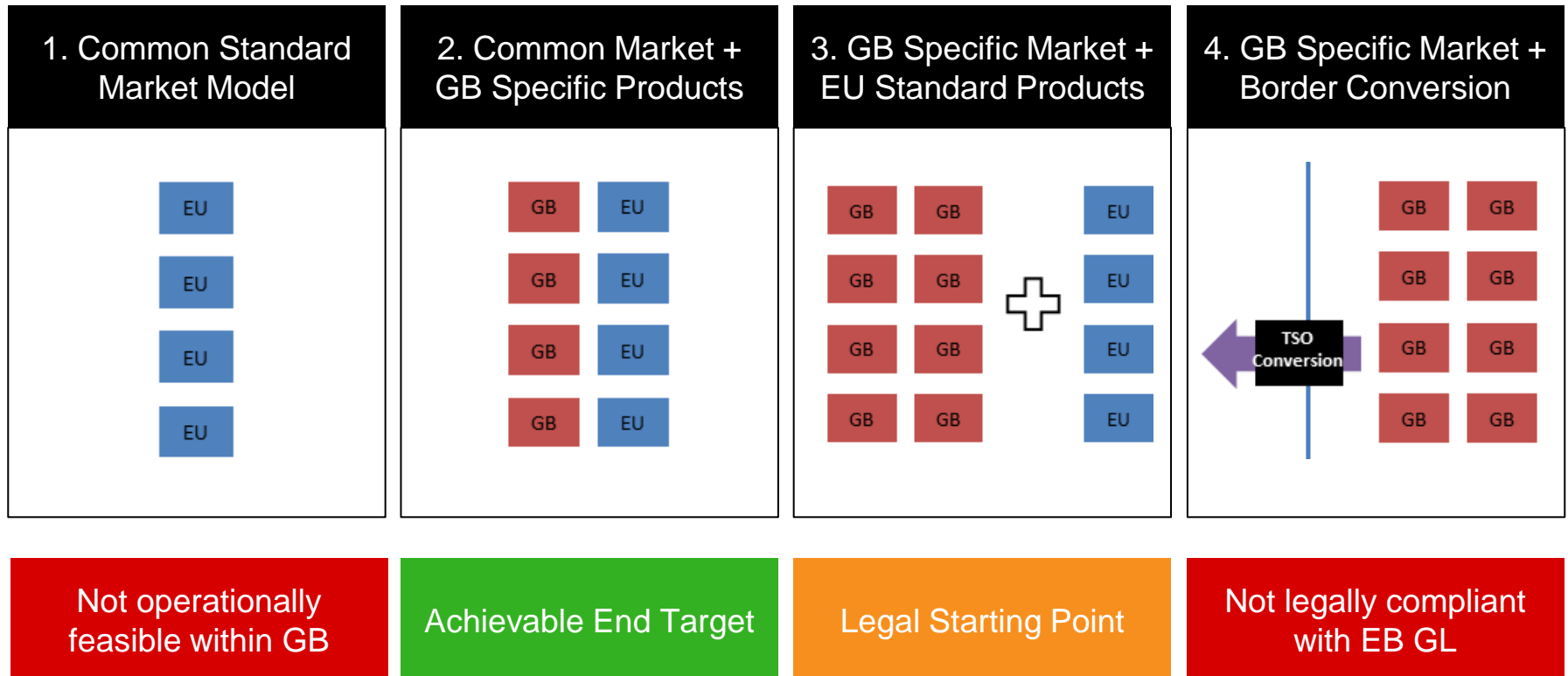
Project TERRE – Overview

Product	Algorithm	Settlement
<ul style="list-style-type: none"> 30min Full Activation Time No defined ramping period (max 30mins) Scheduled 15min block which can be linked together Max duration is 1hr Block settled & exchanged Large variety of bid formats 	<ul style="list-style-type: none"> Single clearing Netting of TSO needs Elastic TSO demand Counter-activations permitted Social welfare maximisation Similar to DA algorithm No detailed network model 	<ul style="list-style-type: none"> Pay as cleared One price for upwards & downwards activations No caps/floors (negative price) XB Bal Energy Marginal Pricing Focus on TSO-TSO balancing energy Congestion rent generated

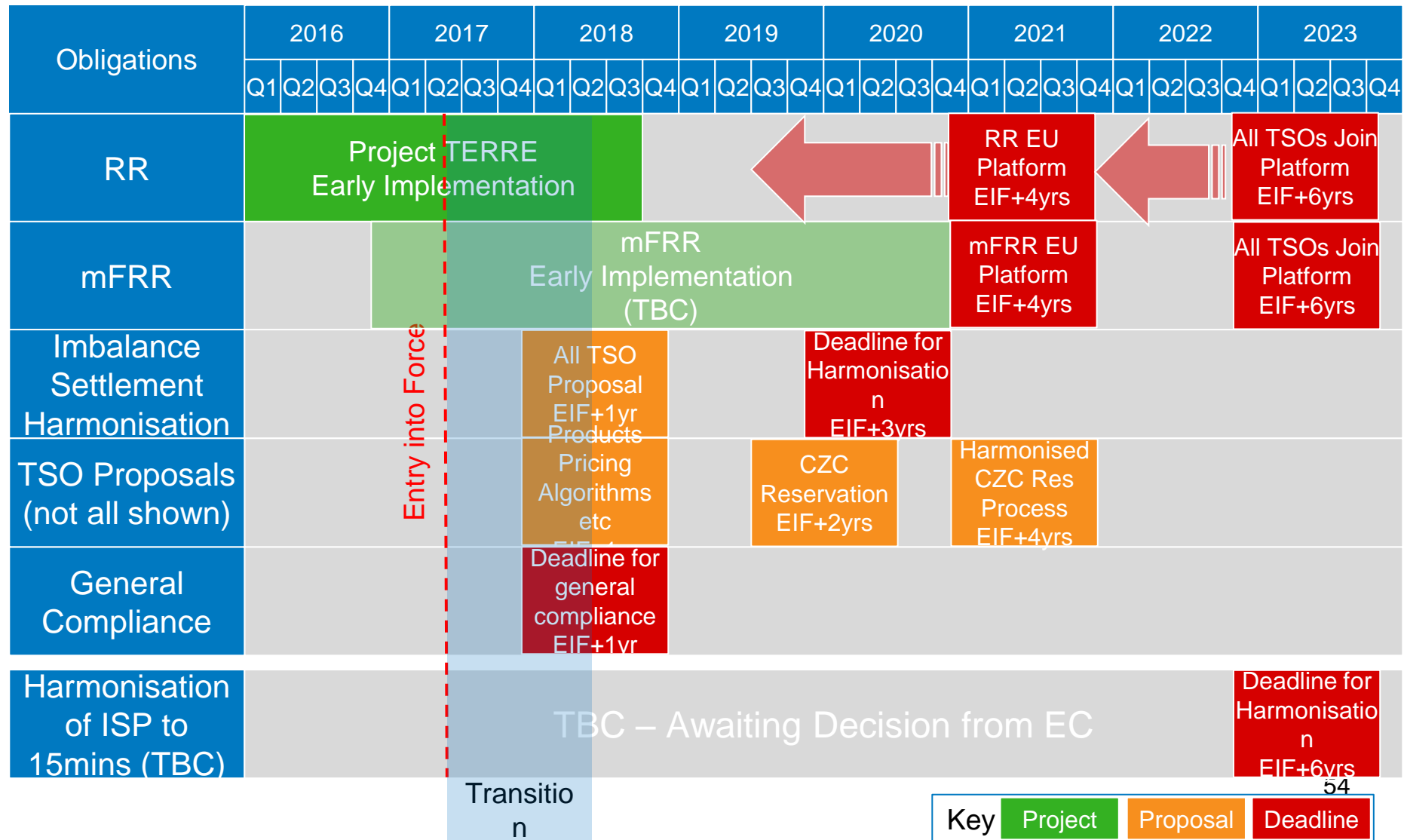
Process



GB Implementation Approach



Electricity Balancing Guideline – Expected Timescales



Questions?

Christopher.Fox@nationalgrid.com

9. Future Meeting Dates & Agenda Items

Sara-Lee Kenney
(JESG Technical Secretary)

ENTSO-E Forthcoming Events\ Workshops

SEP **Market European Stakeholder Committee 7/09/2016**

07

07 September 2016

ENTSO-E, Brussels

SEP **Grid Connection European Stakeholder Committee 08/09/2016**

08

08 September 2016

Brussels, Belgium

SEP **Workshop on Connection Network Codes Implementation
guidance documents**

13

13 September 2016

ENTSO-E, Brussels

Visit ENTSO-Es Website for further information:

www.entsoe.eu/news-events/events

Forthcoming Events/Workshops:

ACER:

<http://www.acer.europa.eu/media/events/Pages/default.aspx>

Applicable events to the ENC Programme will also be advertised through the JESG Weekly Updates

2016 JESG Meetings

Date	Description	Venue
Wednesday 28 September	JESG Meeting	Elxon, London
Wednesday 26 October	JESG Meeting	Elxon, London
Wednesday 23 November	JESG Meeting	Elxon, London
Tuesday 13 December	JESG Meeting	Elxon, London

JESG Website: The full dates and details can be found on the [2016 Meeting dates on the JESG Website](#)

As always registration is required and will be opened through the JESG Weekly updates.

europeancodes.electricity@nationalgrid.com

Future Agenda Items Suggestions

Stakeholders are invited to put forward agenda items for the forthcoming JESG meetings:

- September
- October to December

10. Stakeholder Representation

Barbara Vest/ All

11. Any Other Business

All

Technical Secretary:

- Post Meeting Survey
- JESG Technical Secretary Changes

Post Meeting Survey: How can we improve?

- We are continuously trying to improve and build upon how we engage with you.
- In order to do so we would greatly appreciate your feedback on the JESG Meeting today.
- **W/C 30 August** you will be contacted by **Explain Market Research** who facilitate the Customer & Stakeholder Satisfaction Surveys on behalf of National Grid.
- These are telephone surveys, take about 10 minutes and National Grid donates £10 for every completed survey to charity.
- If you would prefer not to be contacted for the purposes of providing this feedback, please let Sara-Lee know.

New JESG Technical Secretary

- Effective from 31 August 2016
- Christine Brown (NGET)
- european_codes.electricity@nationalgrid.com



Lunch: 13:30

(Opportunity to network & further discussions)

