

Joint European Stakeholder Group



Tuesday 13 March 2018
Meeting 30

London

Agenda

ID	Title	Lead	Time
1.	Welcome & Introductions	Chair	10:00 - 10:05
2.	BREXIT Scenarios Discussion	Mark Duffield (National Grid Interconnectors)	10:05 - 10:50
3.	National Grid Update:	Rob Selbie (National Grid)	10:50 - 11:20
4.	Ofgem Update:	Marcelo Torres (Ofgem)	11:20 - 11:35
5.	Review of Actions log	Andrew Hemus (JESG Technical Secretary)	11:35 - 11:40
6.	Future Meeting Dates & Agenda Items	Andrew Hemus (JESG Technical Secretary)	11:40 - 11:45
7.	Stakeholder Representation	Chair	11:45 - 11:50
8.	Any Other Business	All	11:50 - 12:00

1. Welcome & Introductions

Barbara Vest

Independent Chair

2. BREXIT Scenarios Discussion

Mark Duffield

National Grid Interconnectors

Brexit



JESG – 13 March 2018

National Grid Ventures

UK Regulated
Businesses

US Regulated
Businesses

National Grid
Ventures

- **National Grid Ventures (NGV)** operates in competitive markets outside of National Grid's core regulated activities in the UK and US. NGV is focused on developing, operating and investing in energy projects, technologies, and partnerships to help accelerate the development of a clean energy future for consumers.
 - Electricity Interconnectors
 - LNG Services
 - Traditional Metering
 - SMART Metering
 - US Energy Services

Brexit – NGV Strategy and Timeline



- Develop our overall strategy and preferred outcome around Brexit issues
- Deliver our key messages to key UK government stakeholders
- Establish risk assessments around key risk items:
 - Ongoing operations across interconnectors
 - Cross-Border Tariffs
 - Systems for selling interconnector capacity

- Increased Stakeholder engagement
- As scenarios of likely outcomes become more focussed deep dive into key issues
 - Initial focus on No Deal
 - When shape of future trading arrangements after transition / implementation known, further examination of impacts
 - This is not an assessment of likelihood, but preparation for all contingencies

2017

2018

2019

Brexit – NGV Strategy and Timeline

NGV View of Brexit

- UK participation in the Internal Energy Market has brought significant benefits to UK consumers
- A continued Europe-wide focus on coordinating energy markets will continue to deliver lower costs for consumers, higher security of supply and facilitate the integration of further renewables
- We believe that a Brexit outcome that delivers this should be the aim of the political negotiations
- **We therefore support a Brexit outcome that continues to preserve the benefits of the status quo**
- We have been promoting our view across UK government throughout 2017
- More recently NGV has been exploring our views with EU Member States and the European Commission. Our aim is to inform the debate on energy when the negotiations on the future free trade deal start later in 2018.

Brexit – Key Thoughts

Ongoing Operation of Interconnectors

- Our internal analysis, backed up by two separate external legal views has stated that there is no legal right for the interconnectors to be simply “switched off” post Brexit.
- The key factor is then the commercial arrangements used by the owners of those interconnectors to monetise their capacity, not the physical operation of the links.

Imposition of Trade Tariffs to Interconnectors

- Under a “No Deal” Brexit the UK will trade with the EU27 on “World Trade Organisation” and “Energy Charter Treaty” rules. The EU has pre-existing WTO tariff rates of 0% on electricity trades with third countries.
- We do not think that these tariff rates are likely to change due to the further impacts such a change would have under “Most Favoured Nation” WTO rules

Brexit – Key Risks

Commercial Systems for selling Interconnector Capacity

- Interconnector capacity is currently sold on a variety of platforms across different timescales (“Planned” denotes the plan notwithstanding the Brexit outcome)

Timescale	Current		Planned	
	Type	Platform	Type	Platform
Forward	Explicit	CMS	Explicit	SAP + RNP
Day Ahead	Implicit	MRC		
Intra-Day	Explicit	CMS	Explicit	SAP + RNP
			Implicit	XBID
Balancing	N/A	Bilateral	N/A	TERRE + MARI

- NGV has adopted a systems implementation plan that is robust to the two main credible Brexit outcomes, where we have access to the systems created by EU Regulation, and where we do not
- We continue to implement the move to the JAO operated Single Allocation Platform. We are confident that we may seamlessly switch our forward auctions to alternative JAO platforms if we lose access to SAP
- If access to MRC is lost we would move to an explicit day ahead product sold via JAO
- XBID implementation is being delayed until certainty of access to XBID is known. Explicit auction via JAO will continue in the interim.

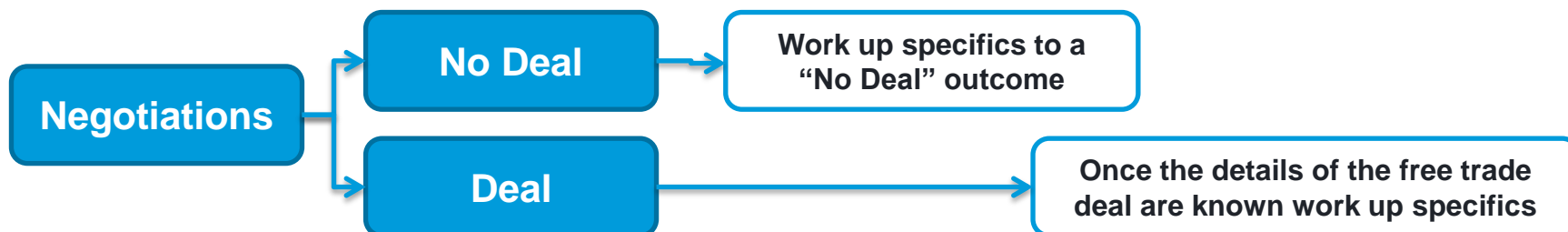
Brexit – Political Outcomes

- Both the UK government and the EU have signalled agreement regarding the structure of an enduring Brexit outcome.
 - A transition and withdrawal agreement
 - A free trade deal to commence at the conclusion of the transition / implementation period
- However political differences remain between the two sides with regards to the detail and so a “No Deal” scenario cannot be completely ruled out

Transition / Implementation

- The UK government has committed to following the full EU Acquis during transition / implementation so that business needs only implement one set of changes
- A transition / implementation period is important and valuable for cross-border electricity trade. It allows more time for any enduring free trade arrangements to be implemented while in the short term market arrangements remain as they are currently

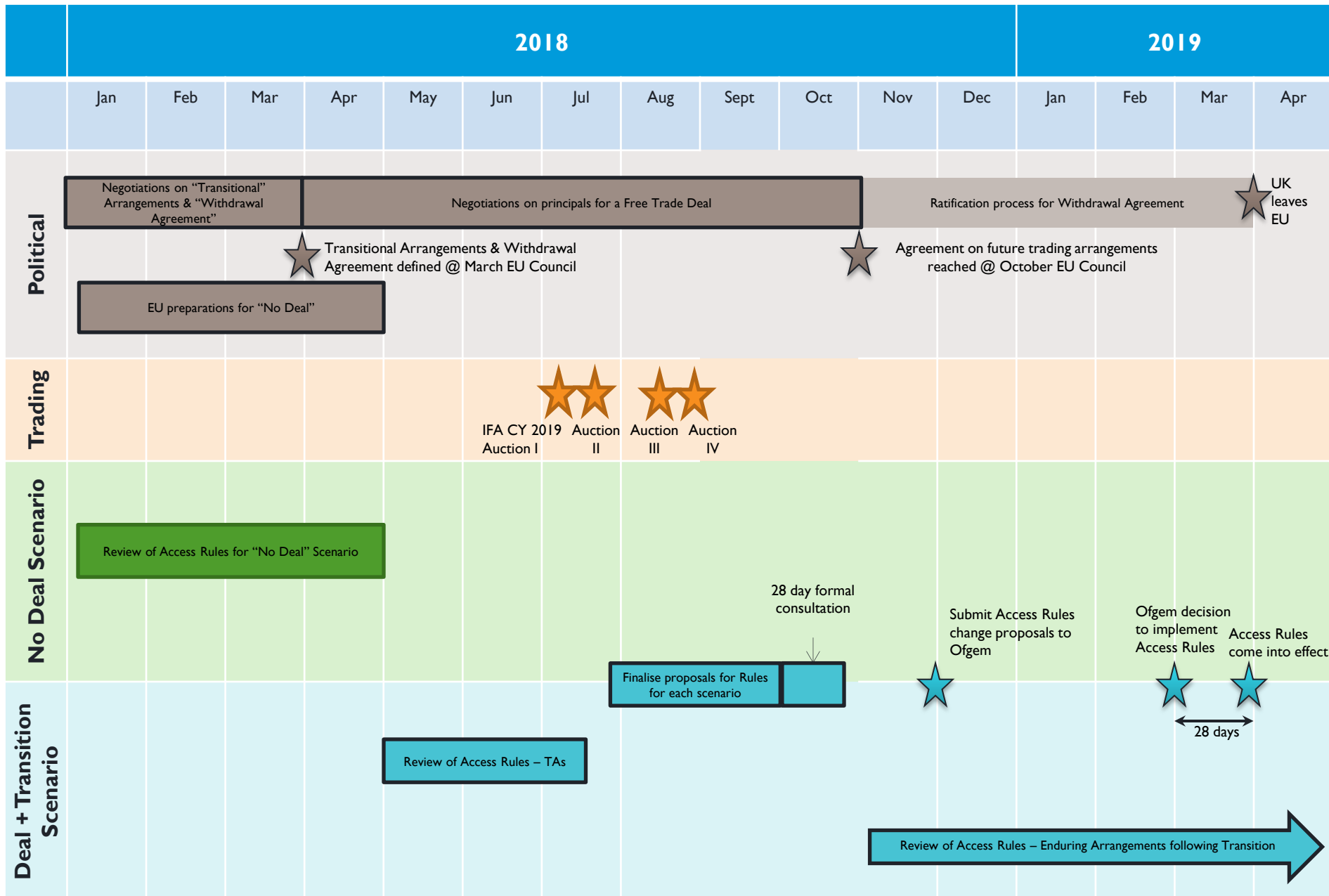
Brexit – Key work for 2018



- Our initial focus is on contingency planning for a “no Deal” Brexit.
 - Engagement with all of our JV partners, UK government and UK regulators and their European counterparts
 - We are examining the detailed legal and contractual specifics for each interconnector, both from a UK and non-UK perspective.
- The UK regulator Ofgem is currently consulting on a similar legal review. They have noted that in their consultation³ they have “*not identified any provisions which may prove to be legally inoperable on exit day*”. We will be taking forward any appropriate changes to Access Rules later in the year.
- Planning for the future trade deal will take place in late 2018 / early 2019 when these matters are negotiated fully by the UK and EU negotiating teams. We will continue to push for continued close cooperation on energy between the UK and EU post Brexit.

³ https://www.ofgem.gov.uk/system/files/docs/2018/02/preparing_for_eu_exit_-_implications_for_licences_and_industry_codes.pdf

Brexit Access Rules – Timeline 2018/19



28 days



Brexit – Conclusions

- Our analysis and our stakeholder feedback have led us to conclude that the continued successful operation of our interconnector portfolio is feasible regardless of the Brexit outcome
- We are not being complacent however, we are continuing our detailed analysis of the legal , regulatory and contractual frameworks as the Brexit negotiations progress to ensure that we do not miss anything, however minor
- We are ensuring that we continue to engage with all of our key partners and stakeholders as the Brexit negotiations advance

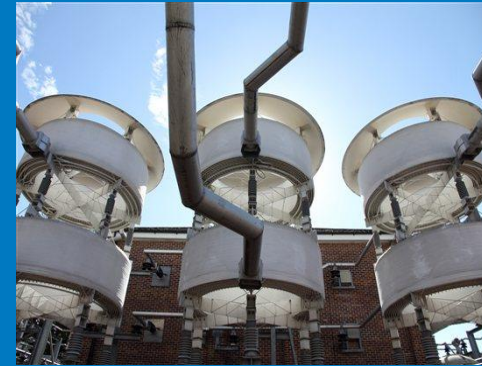
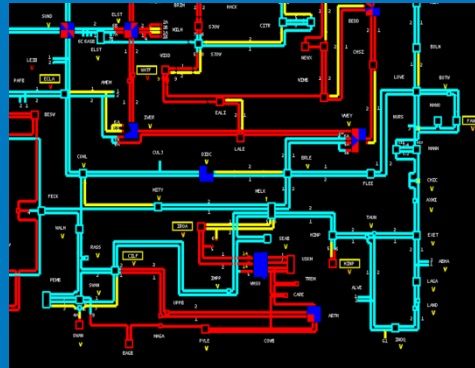
national**grid**
ventures

3. National Grid Update

Rob Selbie

National Grid

SOGL Data Exchange update



Key Organisation Requirements, Roles and Responsibilities (KORRR)

- 248 public consultation comments received from all EU DSOs, SGUs and consumers in December 17
- Highest number of comments concerning:
 - Definitions
 - General responsibilities
 - Implementation at national level

Final KORRR version takes into account:

Definitions

- Deleted 'aggregation' as it is subject to national definition
- Revised definition of 'modification' to align with other EU Network codes
- 'Significant' modification should be in accordance with national specifications
- Revised real time data definition

General Responsibilities

- All parties are responsible for quality of information they provide regarding their facilities or services to other parties
- Provision and exchange of data from SGUs to DSOs/TSOs can be decided at national level
- Responsibility for installation, maintenance and configuration of communication links

TSOs agree and coordinate with DSOs

- TSOs will coordinate on determining applicability and scope according to Article 40.5 SOGL
- TSOs will agree on formats, processes for provision and manage of data with DSOs according to Article 40.7 SOGL

Final KORRR version takes into account:

Who does KORRR apply to? Article 2.1 SOGL

- Demand connected at T
- Generation connected at T (B-D)
- Generation connected at D (B-D)
- Demand side response directly to TSO
- Aggregation of demand for redispatch
- Aggregation of demand side response directly to the TSO
- Aggregation of generation for dispatch
- Aggregation by CDSO
- Transmission connected CDSO
- DSOs
- HVDC

Other changes

- SGUs providing services to the system should comply with GB national prequalification rules
- Specific data characteristics and timing of data exchange are subject to national approval by regulators
- Exchange of updated DSO structural data in agreement with TSO
- All data between countries shall be exchanged only through TSOs
- Deleted Article on NEMOs

Grid Code modification (GC0106)

GC0106 is in progress to cover GB changes arising from SOGL Articles 40-53.

SOGL Flexibility

- Article 40.5 SOGL gives wide 'leeway' to apply the data requirements appropriately

Scope

- Existing GB codes
- Existing Ancillary service prequalification

Applicability

- TSOs, DSOs, Interconnectors
- Significant Grid Users (Article 2.1 SOGL)

KORRR and GC0106 timeline



- ★ KORRR Informal stakeholder workshop
- ★ System Operation Guideline EIF
- GC0106 raised
- ★ KORRR Public consultation
- ★ KORRR submitted to NRAs
- GC0106 workgroup consultation
- GC0106 final submission
- ★ Approval by NRAs
- ★ KORRR and GC0106 go live

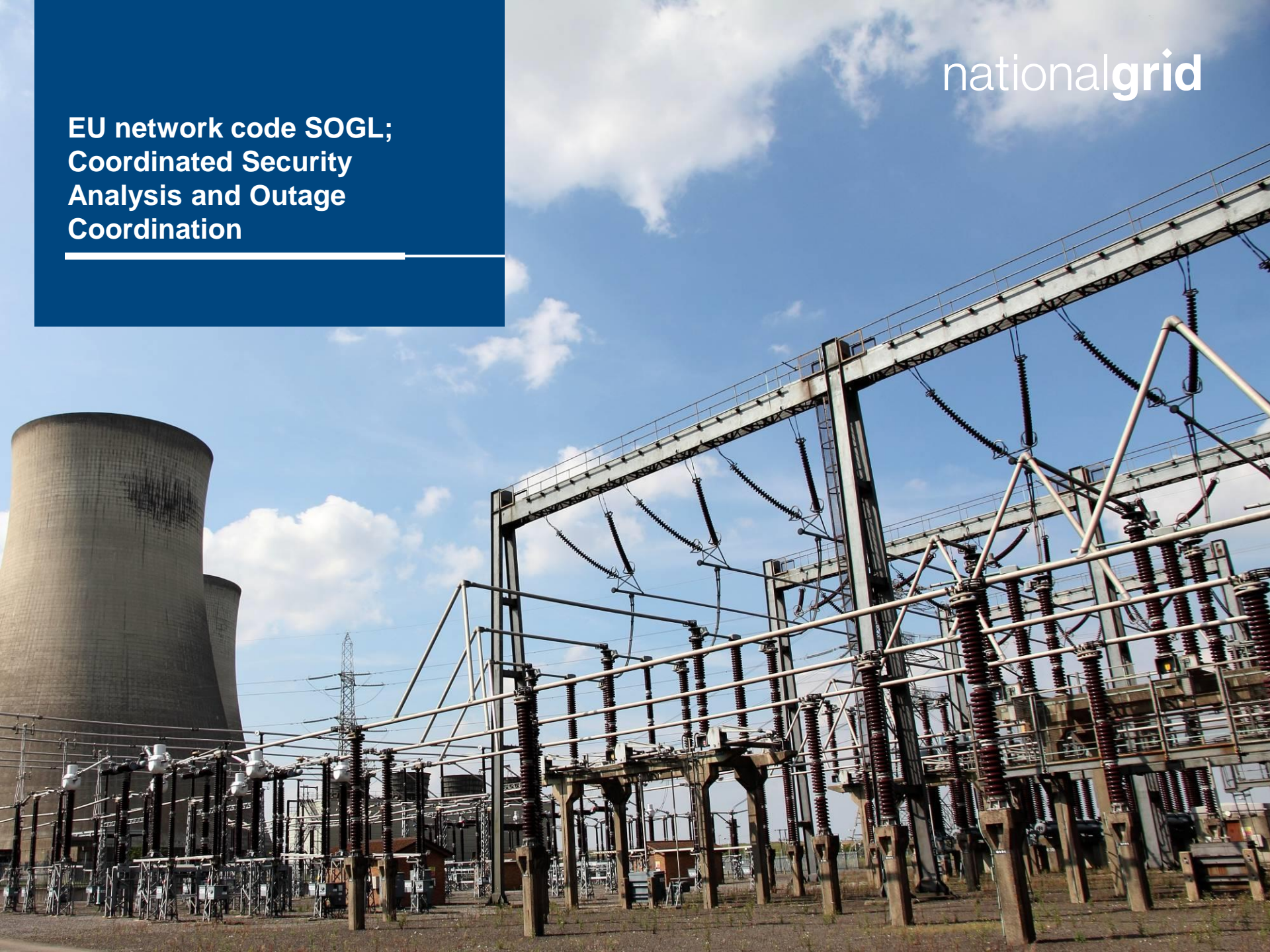
Impact on GB Codes

- Data exchange only has an impact on the Grid Code, more details on the code:

<https://www.nationalgrid.com/uk/electricity/codes/grid-code/modifications/data-exchange-requirements-accordance-regulation-eu-0>

- STC changes are not required as presented at the STC panel in January. This will now be deleted from the Elexon forward work plan.
- No further modifications are required for other codes.
- For any further information please contact Susan Mwape – susan.mwape@nationalgrid.com

**EU network code SOGL;
Coordinated Security
Analysis and Outage
Coordination**



Overview: Methodologies for Coordinated Security Analysis and Outage Coordination

- The methodologies for coordination of operational security analysis and identification of relevant asset for outage coordination were developed as required by SOGL in Article 75 and Article 84 respectively.
- The aim of these methodologies is to harmonise regional approach to operational security analysis and outage coordination in order to improve system security at a Pan-European level
- The methodologies were developed together due to their dependencies but have recently been separated in the final draft upon the request of the National Regulators

Key Headlines: Methodologies for Coordinated Security Analysis and Outage Coordination

These methodologies have been developed through the combined requirements set out in both article 75 and 84 of SOGL with focus on the following key areas;

- Influence computation method which quantifies the greatest effect of the outage of a transmission system element located outside of the TSO's control area and has been developed in both methodologies.
- Identification of observability area using either existing qualitative or new quantitative methods
- Identification of relevant assets for outage coordination using either existing qualitative or new quantitative methods
- Identification of external contingencies using either existing qualitative or new quantitative methods
- Coordination of remedial action with relevance to GB limited to set point changes on Interconnectors
- Inter-RSC Coordination which highlights the role of Regional Security Coordinators

Stakeholder consultation is now live and will run until 6 April 2018

Stakeholder workshop is also expected to hold on 21 March 2018 at the ENTSO-E premises in Brussels

Please follow the link below to view live consultations on the ENTSOE website;

<https://consultations.entsoe.eu/>

Current View of Elexon Forward Work Plan

Code	Change Ref	Title	Timeline Ref	S	Raised	Progression State	ENC
GC	Grid Code Potential Change 11	European SOGL Implementation - Regional Outage Coordination	GC - SOGL: Regional Outage Coordination	Estimated	07/03/18	Upcoming	SOGL
GC	Grid Code Potential Change 16	Regional Outage Co-ordination and Security Analysis	GC - SOGL: Regional Outage Co-ordination and Security Analysis	Estimated	07/03/18	Upcoming	SOGL
STC	STC Potential Change 3	European SOGL Implementation - Regional Outage Coordination	STC - SOGL: Regional Outage Coordination	Estimated	07/03/18	Upcoming	SOGL

NGET explanation for deferring potential modifications

- GB modifications were originally planned when we had no sight of the Pan-European methodology as they didn't exist at the time.
- We now have visibility of the draft Pan-European methodology which broadly aligns with existing GB framework therefore we do not believe that changes to the current GB framework is necessary at this point.

Next steps...

- Regional methodology for operational security coordination will be jointly developed by all TSOs in the IU & Channel Region in line with (Article 76, SOGL) following NRA approval of the Pan-European methodology which is expected in March 2019.
- All TSOs of the IU & Channel Region will be required to establish a single list of “relevant assets for outage coordination in line with (Article 85, SOGL). NRA will be notified but approval is not required for this list.
- All potential regional proposals are required to respect the Pan-European methodology in line with (SOGL Article 76 (1) and 84 (1))
- NGET expect the development of regional security analysis methodology to commence in September 2018.
- NGET will continue to engage stakeholders through the JESG and the Grid Code Panel as the methodology and list of relevant assets are both developed.

If you require any further clarifications, please contact me directly;

Contact Name: Francis Dike

Contact Email: francis.dike@nationalgrid.com

System Operation
Guideline (SOGL)
Load Frequency
Control Reserve
agreements

nationalgrid

SOGL - Load Frequency Control

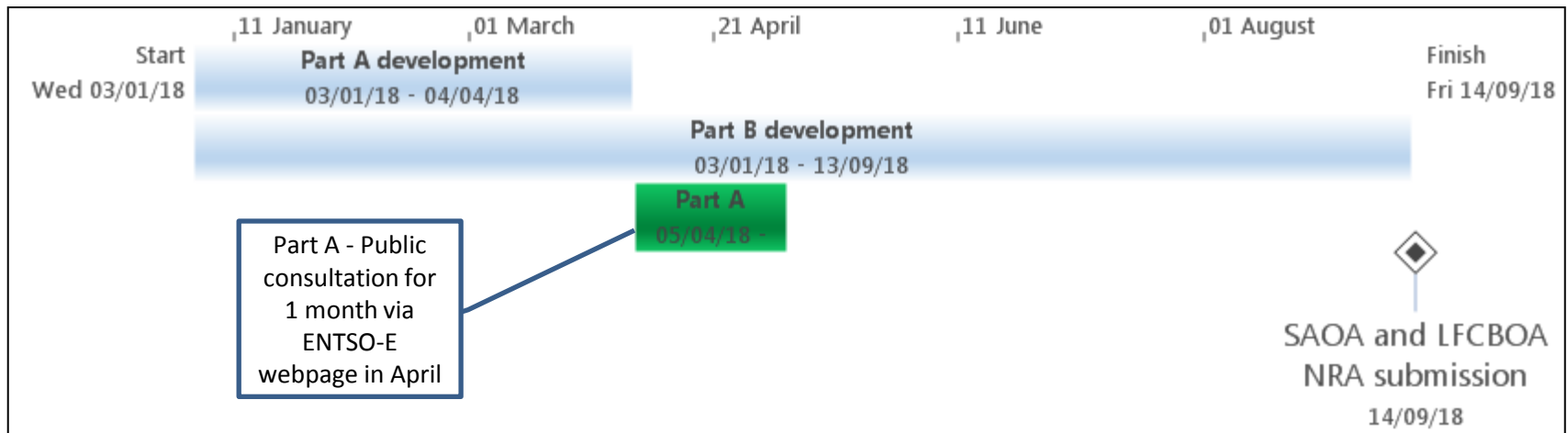
Reserve agreements

- Advance notice of public consultation from 6th April 2018 via the ENTSO-E website
 - Forthcoming (Part A) methodology texts for GB from SOGL article 118 (synchronous area operating agreement – SAOA) and SOGL article 119 (Load Frequency Control Block Operating Agreement – LFCBOA)
- The remaining Part-B texts from A118 & A119 will be made available after NRA approval .

SOGL Part IV and forthcoming methodologies

- SOGL Part IV “LFCR” codifies the frequency quality target parameters; the necessary control architecture and processes of the “Load Frequency Control Structure” and the specific services delivered by active power reserve providers as part of that process, including the cross-border balancing processes and security rules.
- SOGL requires the development of methodologies, procedures and agreements: this is because of inherent differences linked to the physics of the electrical systems and the need to adapt system quality target parameters, control processes and services over time. SOGL requires a sub-set of these to be presented for public consultation and to receive approval from one or more National Regulatory Authorities.
- Articles 118 and 119 have a number of methodologies specific to the GB synchronous area and GB LFC Block and a sub-set will be put out for consultation as mandated by the regulation.
- 12 elements that are referenced for NRA approval in articles 6(3) and 6(4) are then cited in article 11 for public consultation. This will be during April and May 2018. The other methods in articles 118 and 119 will become publicly available after NRA approval in 2019. The consultation will be via the ENTSO-E network codes consultation webpage. An opportunity to discuss and raise questions will be provided through the JESG in April.
- GB framework is already consistent with SOGL with the GB codes and industry practice already embodying the objectives of these methods. For this reason and to maintain simplicity of regulation within GB, the proposed methods will therefore either directly cite the GB industry codes or describe how the GB codes achieve the aim of the method. No new regulatory obligations or activities are expected as a result of the SAOA and LFCBOA methodology texts.

Timeline for SAOA and LFCBOA



Articles 118 (SAOA) and 119 (LFCBOA) have a sub-selection of methodologies which are earmarked for public consultation by the regulation in article 11. A month long consultation via the ENTSO-E EU codes consultation webpage. Those methodologies will be in Part A.

All article 118 and 119 methodology texts (both Parts A and B) will be submitted to OFGEM for approval by 14th September 2018.

The document structures

1. Operational Framework Doc : The GB operational agreements will comprise a general header document with 'whereas' clauses.
2. SAOA Doc: Part – A and Part – B legal text (1 doc)
 - 2a) accompanying descriptive narrative doc
3. LFCBOA DOC : Part – A and Part – B legal text (1 doc)
 - 3a) accompanying descriptive narrative doc

The Synchronous Area Operational Agreement (SAOA) document will be published via ENTSO-E according to the requirements of article 184 (and a hyperlink provided on the NGET Electricity Codes webpage). The Load Frequency Control Block Operating Agreement (LFCBOA) will be published in NGET Electricity Codes webpage).

Part As of the SAOA and LFCBOA will be consulted upon in April 2018

Elements to be expected in Public Consultation

- Article 118(1) SAOA part-A sub-paragraph references
 - a, b, c, m, t, x, z, aa
- Article 119(1) LFCBOA part-A sub-paragraph references
 - c, h, q, r

For any further information please contact
David Bunney

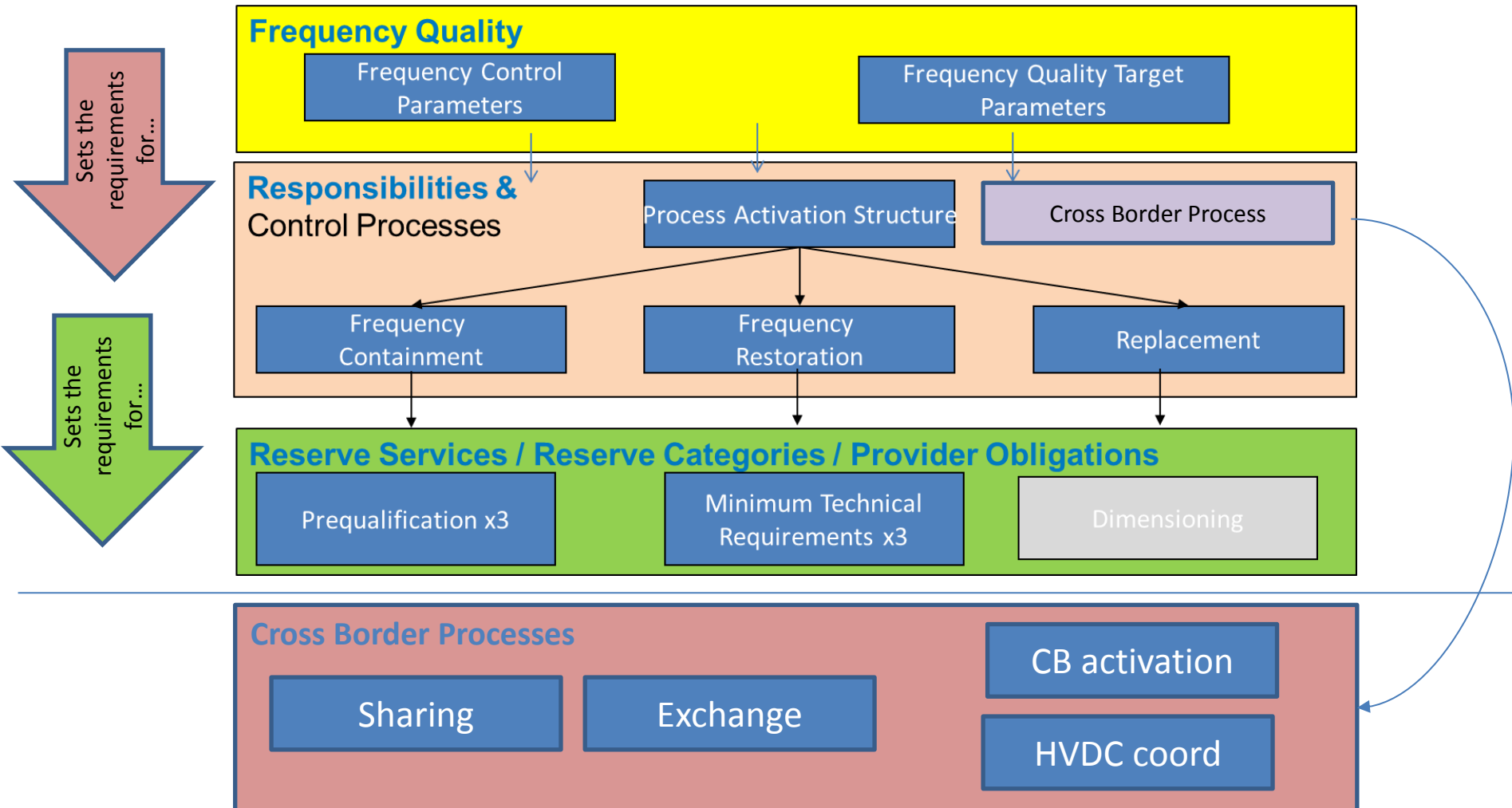
david.bunney@nationalgrid.com

Appendix

Supplementary Materials



A quick tour of the structure of SOGL section IV: LFCR



Articles 118 and 119 require the development of GB methodologies across the spectrum of LFC&R by cross-referencing a number of articles in this section.

EB GL Implementation Project consultations

■ Replacement Reserves Implementation Framework (RR IF)

- As required by A 19.1 of EB GL, RR IF document gives details of how the platform for exchange of the RR product will be implemented, including high level design of the platform, roadmap and timeline for implementation and rules for governance and operation.
- The consultation on this document is now open and can be found [here](#). Closing date is 4th April 2018.
- The TERRE project have also organised a stakeholder workshop on 19th March to go through the RR IF in detail with stakeholders. Further information and registration can be found [here](#)

■ Manual Frequency Restoration Reserves (mFRR) consultation results: Stakeholder workshop

- Project MARI are holding a stakeholder workshop to discuss the results of the recent consultation on the design of the mFRR platform and product.
- 27th March 10:00 – 16:00 at ENTSO-E premises, Brussels
- For more information and If you would like to attend, please contact tom.freeman@nationalgrid.com or Martin.Vencelik@cz.ey.com

4. OFGEM Update

Marcelo Torres
Ofgem

Update on CACM & FCA Methodologies

Presentation to JESG

Marcelo Torres
March 2018

Marcelo.torres@ofgem.gov.uk

ofgem

CACM

Proposal	Received by Regulatory Authorities	Regulatory Decision	Deadline for ACER decision	Comments
All TSO: Intraday capacity pricing methodology (IDCZCP)	14/08/2017	14/08/2018 (updated Deadline)	N/A	Following request from NRAs a 6 month extension was granted from ACER. The extension was provided due to links to other methodologies which have not been adopted yet, namely Capacity Calculation & Intraday CZ Gate Times
All TSO: Amended Intraday cross zonal gate times (IDCZGT)	27/08/2017	27/10/2017	26/04/2018	ACER public consultation closed in February 2018
All NEMO: Amended Algorithm Proposal	13/11/2017	01/02/2018	01/08/2018	Forwarded to ACER for Decision
Regional: Channel and IU Coordinated Capacity Calculation Methodologies (CCMs)	15/09/2017	15/03/2018 (IU) 20/03/2018 Channel)	N/A	Regulatory position due shortly
All TSO: Scheduled Exchanges Calculator proposal (Scheduled Exchanges)	27/02/2018	27/08/2018	N/A	Under regulatory review

FCA

Proposal	Received by Regulatory Authorities	Regulatory Decision	Deadline for ACER decision	Comments
All TSO: Generation and Load Data Provision Methodology (GLDPM)	05/09/2017	05/03/2018	N/A	Decision published - approved https://www.ofgem.gov.uk/publications-and-updates/decision-approve-fca-generation-and-load-data-provision-methodology-and-request-amendment-fca-common-grid-model-methodology
All TSO: FCA Common Grid Model Methodology (CGM)	15/09/2018	05/03/2018	N/A	Decision published - request for amendment https://www.ofgem.gov.uk/publications-and-updates/decision-approve-fca-generation-and-load-data-provision-methodology-and-request-amendment-fca-common-grid-model-methodology
Regional: Channel Region Long Term Transmission Rights nomination rules (Nomination Rules)	13/10/2017	13/04/2018 (Deadline)	N/A	Regulatory position due shortly.
Regional: Long Term Transmission Rights proposal (Channel LTTRs)	18/12/2017	18/02/2018 (Deadline)	N/A	https://www.ofgem.gov.uk/publications-and-updates/ofgem-decision-approve-channel-regional-design-long-term-transmission-rights-proposal-under-fca

5. Actions log

Andrew Hemus

JESG Technical Secretary

JESG Standing items

ID	Topic	Lead Party
S1	Continue to review the membership of the JESG and engage additional industry parties where appropriate.	JESG Chair
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 / BEIS
S3	Share any intelligence about how other member states are approaching demonstrating compliance through information gained from other government departments, regulators or parent companies	BEIS / Ofgem / Industry parties with European parent companies

JESG Open Actions

ID	Topic	Lead Party	Status	Update
68	Andrew Hemus (AH) to facilitate with EirGrid to attend a future meeting to provide an update on ISEM impact on interconnectors.	EirGrid	Open	No correspondence from EirGrid received as to when they can bring the update on ISEM to JESG.
84	Standing Item S4 to be removed (TJ) to send note on reasoning.	(AH)	Open	S4 Removed.
85	NGET to check dates for Grid customer forums (London and Glasgow)	(RS)	Closed	
86	ENC for Emergency and Restoration meeting Slide pack slide12 – check the mechanism for email notification?	(RS)	Open	
87	ENC for Emergency and Restoration meeting Slide pack slide 12 - Query 100% vs 5% partial shutdown	(RS)	Open	
88	Clean Energy Package (CEP) to ask BEIS to update future JESG meeting	(TJ /)	Open	
89	Provide update to slide 10 of meeting 29 slidepack with the source of the quote in bold.	(RS)	Closed	
90	Write to JESG distribution list with the current existing practices for the distribution code and grid code. (with reference to Article 85 SOGL)	(RS)	Open	
91	Where are NGET up to with Restoration and Defence plans - update for next JESG	(RS)	Open	

JESG Open Actions

ID	Topic	Lead Party	Status	Update
92	(Algorithms, Products, Backup) slide to be updated – agency has 6 months to make a decision on the algorithm proposal.	(TJ)	Open	
93	How many methodologies are likely to be outstanding in terms of approval post 29 March 2019	(TJ)	Open	
94	What methodologies would be approved up to 29 March 2019 and what methodologies would be developed post 29 March 2019.	(RS)	Open	
95	Could NGET confirm in the existing voting rules set out in the codes whether NGET would have any roll in approving methodology's at ENSO(E) before they go up to ACER or NRSA's post 29 March 2019 for approval.	(RS)	Open	
96	Update on draft proposal for balancing guideline - terms and conditions for balancing service providers and terms and terms and conditions for balancing responsible parties	(RS)	Open	

6. Future Meeting Dates & Agenda Items

Andrew Hemus

JESG Technical Secretary

Future JESG Meetings (London)

- As always registration is required and will be opened through the JESG Weekly updates.
- Stakeholders are invited to put forward agenda items for the forthcoming JESG meetings:

Date	Proposed Agenda Items
Tuesday 10 April 2018	SAP implementation (FCA), Regional nomination platform (RNP) (NGIC), CACM NEMO Proposals and Methodologies (NEMO's)
Tuesday 8 May 2018	
Tuesday 12 June 2018	
Tuesday 10 July 2018	
Tuesday 14 August 2018	
Tuesday 11 September 2018	
Tuesday 9 October 2018	
Tuesday 13 November 2018	
Tuesday 11 December 2018	

7. Stakeholder Representation

All

8. AOB