

ECCAF – Meeting 1



Energy Networks Association
21 November 2013, 13:00 – 16:00

1. Introductions and Apologies

Ian Pashley (National Grid)

2. Brief overview of ECCAF

Paul Wakeley (National Grid)

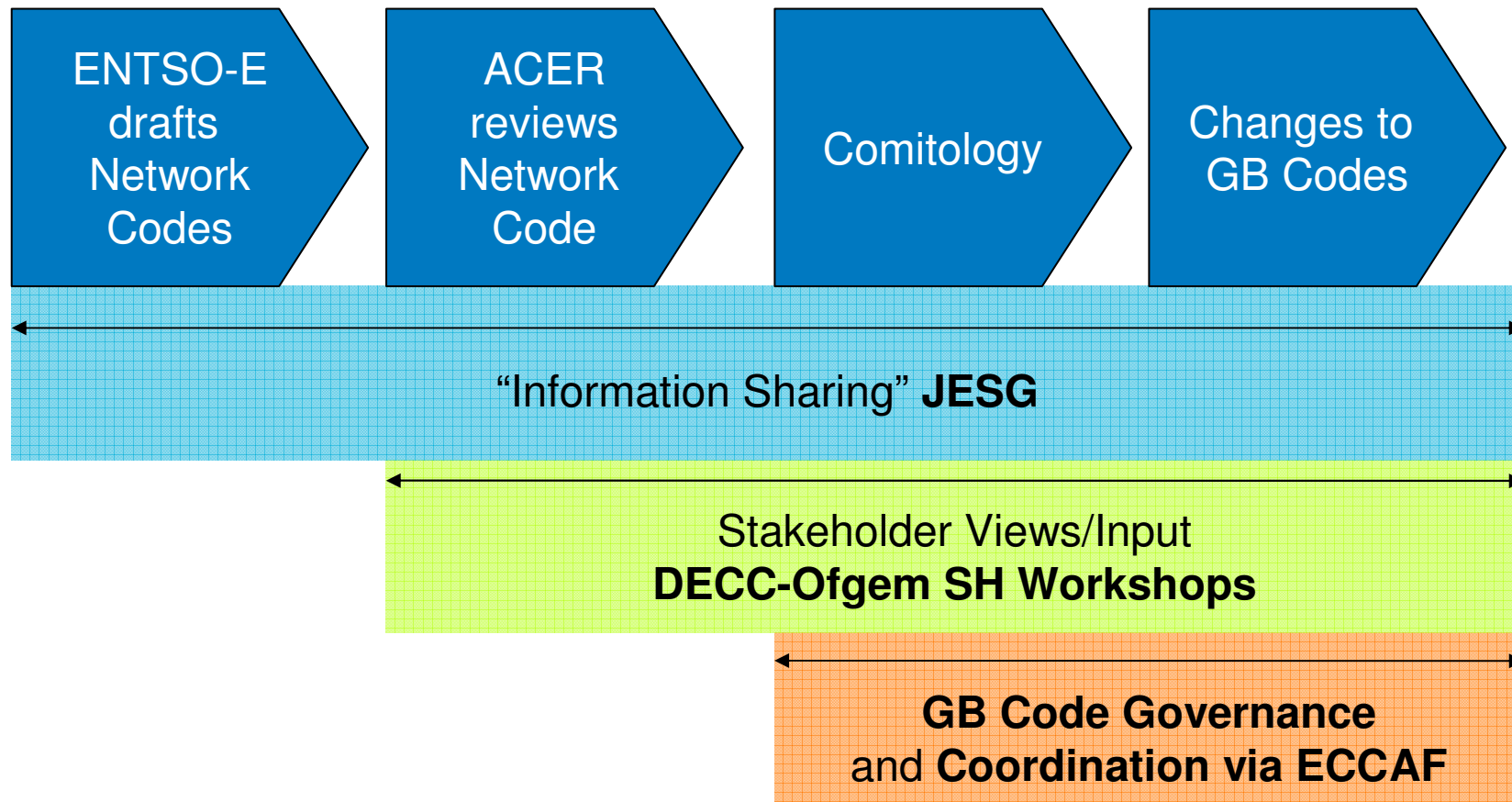
The Challenge

- There are 9 European Network Codes due to become law during 2014 in a phased manner.
- GB will have 18 months – 3 years to demonstrate compliance (varies code-by-code)
- Alignment with GB Codes will aid application and compliance
- GB Code panels will retain their role to make changes to individual codes – strong feedback from all parties to use existing processes
- **A complex programme with a significant risk, which needs cross GB code coordination**

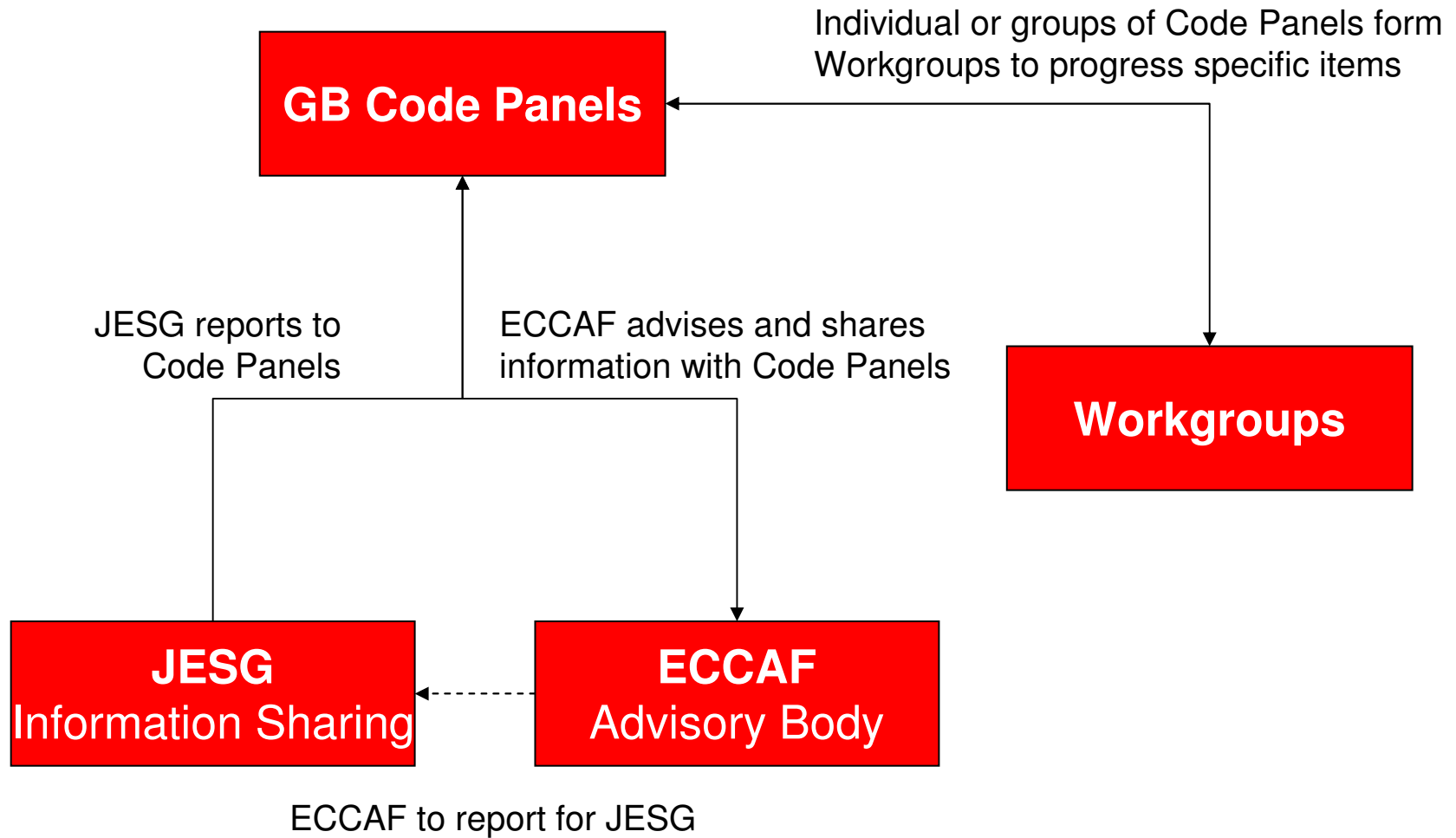
European Code Coordination Application Forum

- **Advises the Code Panels on matters of coordination of application of European Network Codes to GB Codes**
- No firm legal or governance role
- Constituted as a joint standing group of 7 code panels
 - Grid Code, CUSC, BSC, SQSS, STC, D-Code, DCUSA
- Membership:
 - 7 industry members representing Code Panels
 - National Grid, Consumer Futures, DECC, Ofgem
 - Chair appointed by members
 - Technical Secretary / Admin provided by National Grid

Where does ECCAF fit



GB Code Governance



3. Appointment of Chair

Facilitated by Fiona Navesey (DECC) and Abid Sheikh (Ofgem)

ECCAF Chair

- The ECCAF Terms of Reference states that
 - *(10) The ECCAF Chair shall be appointed by DECC and Ofgem.*
- DECC and Ofgem have indicated that they would consider it to be appropriate for the members of ECCAF to appoint the Chair.

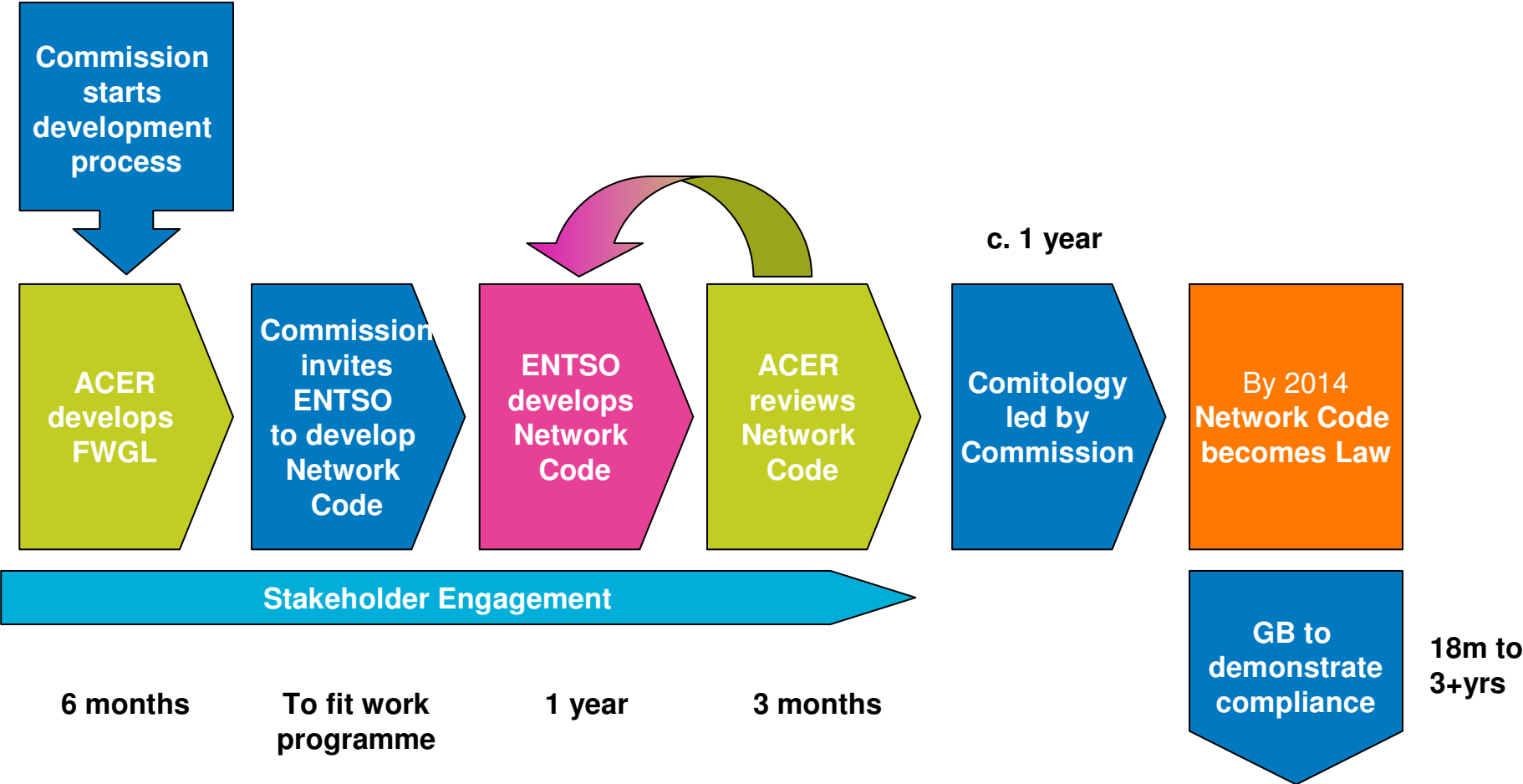
Barbara Vest

- I currently chair JESG as an independent Chair which I have done for over 18 months;
- I am independent of National Grid and the Network Operators, which I see as important as I would not gain in any way from any of the code proposals emanating from the Third Package unlike some of the members appointed to ECCAF;
- I was involved with the implementation of NETA and as such have closely handled major industry change with respect to codes.
- From the current ECCAF membership I believe that those representing Network interests could, at some point in time depending on which code is being discussed, be conflicted if they were to chair. As an employee of a trade association, who has National Grid as a member I believe I would be seen to be acting independently as I do now on JESG, BSC and Grid Code Panels.

4. Development process for ENCs and status of ENCs

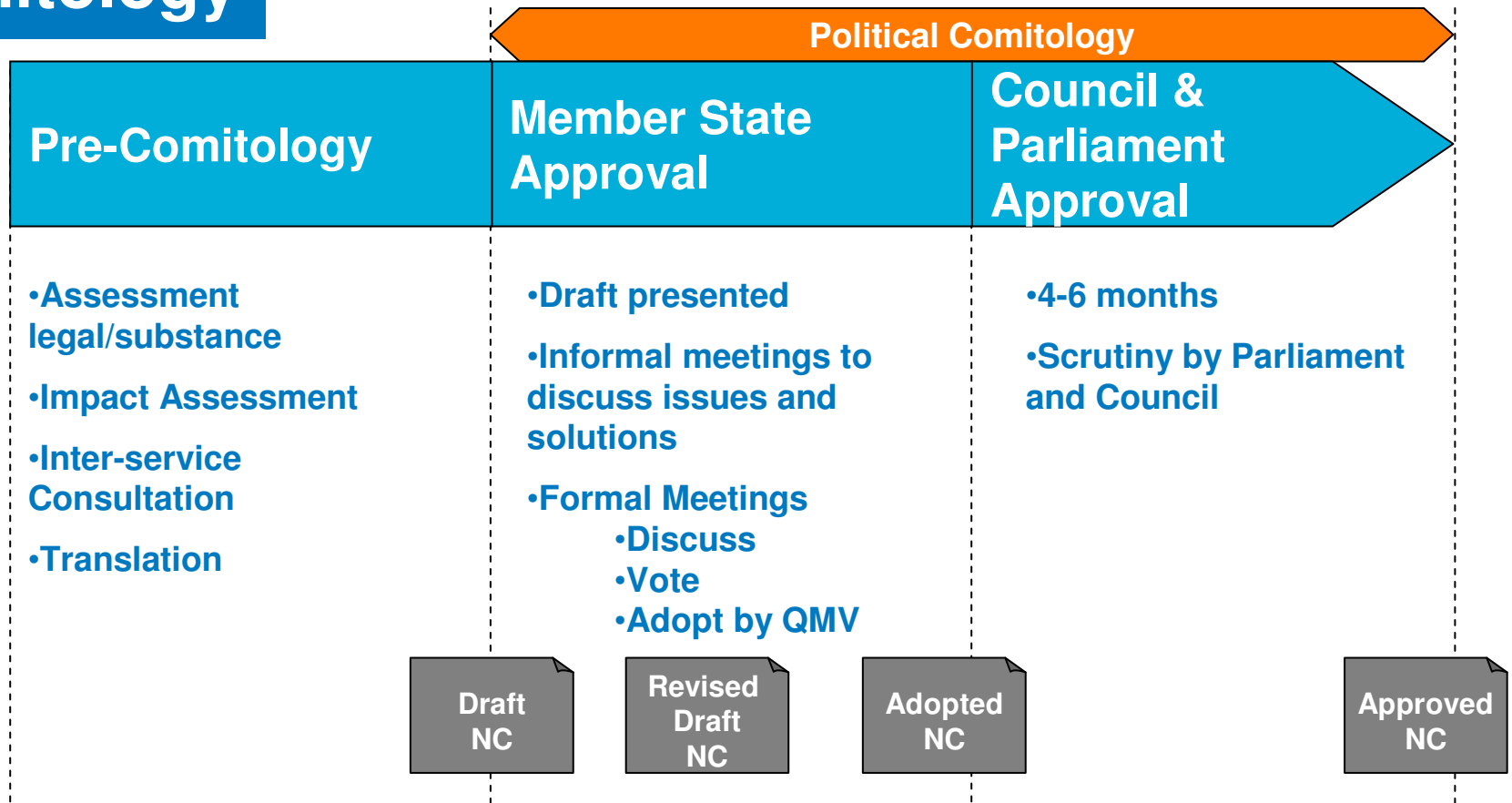
Paul Wakeley (National Grid)

European Network Code Development Process

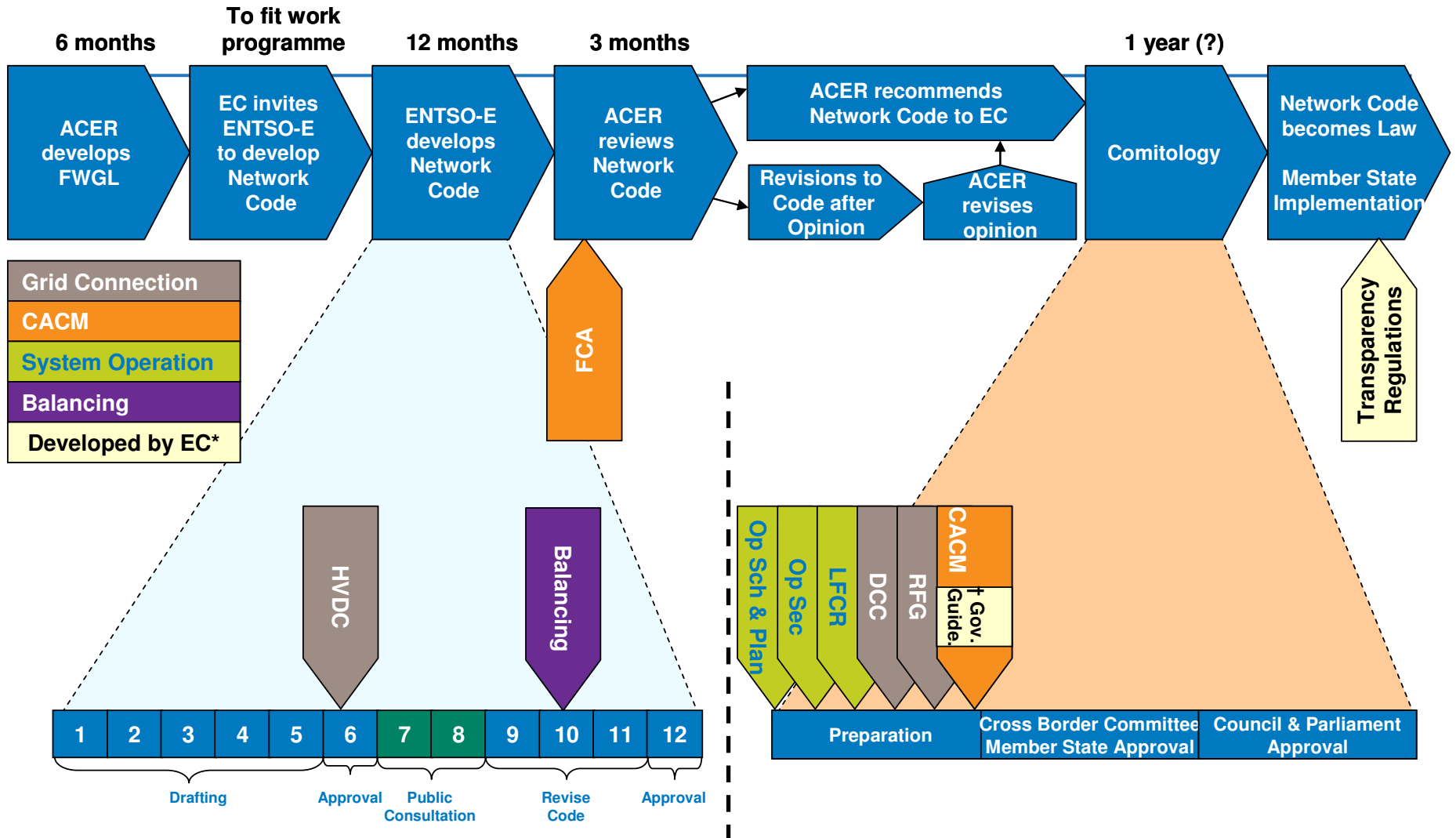


Phases of Comitology

Comitology



European Network Code Development Status: 18 November 2013



* Areas developed by EC follow a different development process and there are no Framework Guidelines.

† Governance Guidelines prepared by Commission are being merged with CACM NC.

5. Implementation in GB: Changes to the GB Framework

Fiona Navesey (DECC) and Abid Sheik (Ofgem)



Department
of Energy &
Climate Change

Electricity Network Code Implementation in UK

21 November 2013



Overview

- To complete the Internal Electricity Market the Third Package requires the development of a number of EU Electricity Network and Market Codes.
- These are currently being developed and most will be adopted in 2014.
- The UK must now prepare to implement these.



Nine Electricity Network Codes

Market Codes

Capacity Allocation &
Congestion
Management

Forward
Markets

Balancing

Connection Codes

Requirements
for Generators

Demand
Connection
Code

HVDC

Operational Codes

Operational
Security

Operational
Planning &
Scheduling

Load Frequency
Control &
Reserves

Network Code Development and Implementation Timelines



Department of Energy & Climate Change

Status of Development of European Electricity Network Codes 20 November 2013

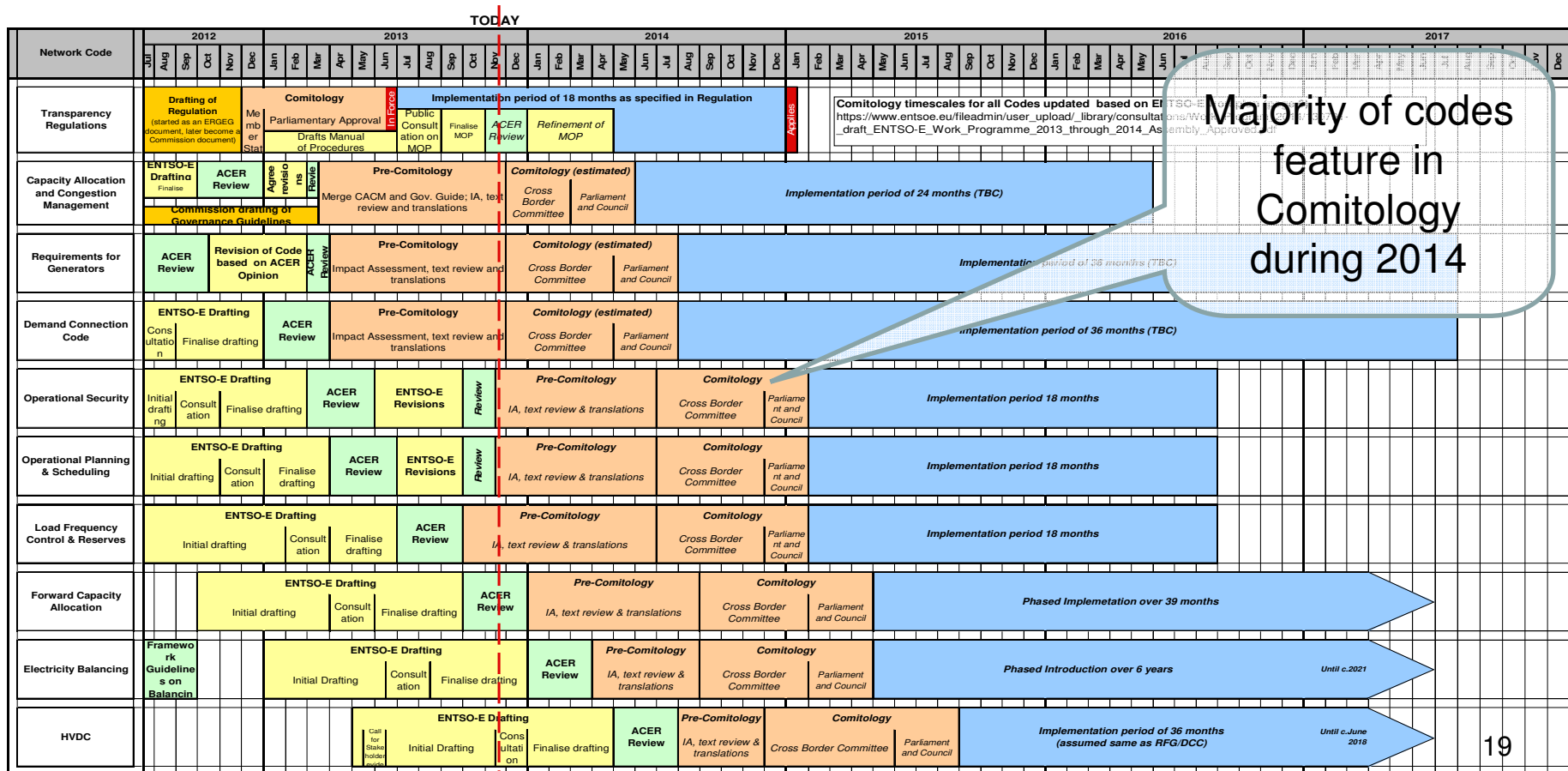
All Future dates are subject to change

Implementation Periods and Comitology dates are 'best guess' and subject to change through the code development / approval process. Dates shown in italics are best approximations based on current understanding.

It has been necessary to 'round' some dates for the benefits of the diagram.

KEY			
	Activities undertaken by ACER		Activities undertaken by ENTSO-E
	Activities undertaken by European Commission		Comitology process - led by Commission
	Entry into Force / Applicability of Requirements		Implementation Period (details TBC)

Prepared by:
nationalgrid
europencodes.electricity@nationalgrid.com

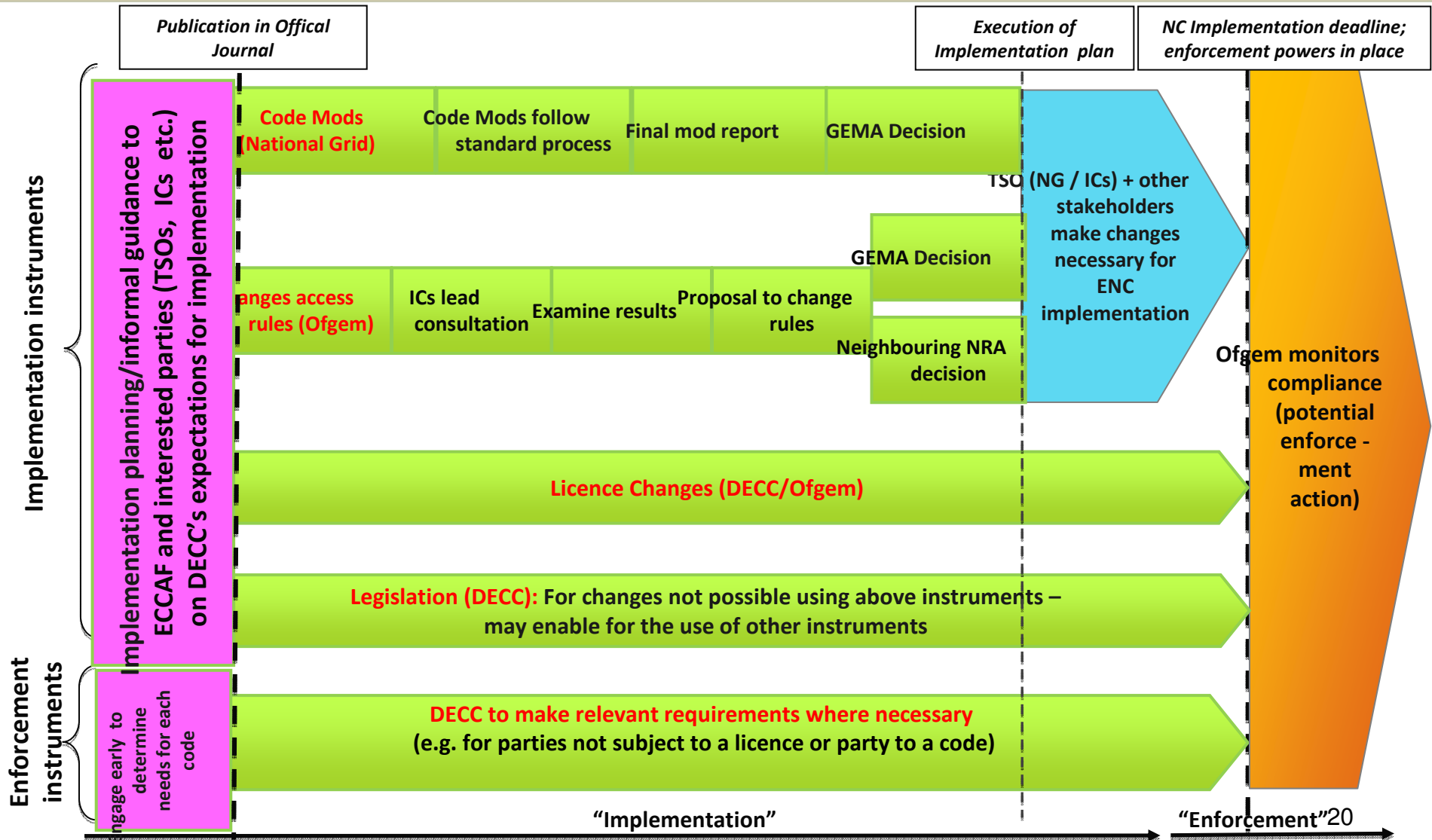


Majority of codes feature in Comitology during 2014

Implementation Instruments



Department of Energy & Climate Change



Implementation Approach



- Network Codes will be contained in Regulations which – unlike Directives – are directly applicable and legally binding
- Therefore it is generally unnecessary to make changes to domestic law to implement Regulations
- In practice, however, there are three main reasons why changes may be required :
 - i. there are likely to be a number of conflicts with existing requirements;
 - ii. some requirements need supplementary provision to make them workable, e.g. clarity on procedures;
 - iii. requirements will need to be appropriately enforceable at the domestic level.
- UK policy requires Departments where possible to implement EU measures through alternatives to regulation.
- Government expects to legislate only if implementation through industry codes or licences is insufficient.

Codes will need case-by-case consideration.

Compliance Approach

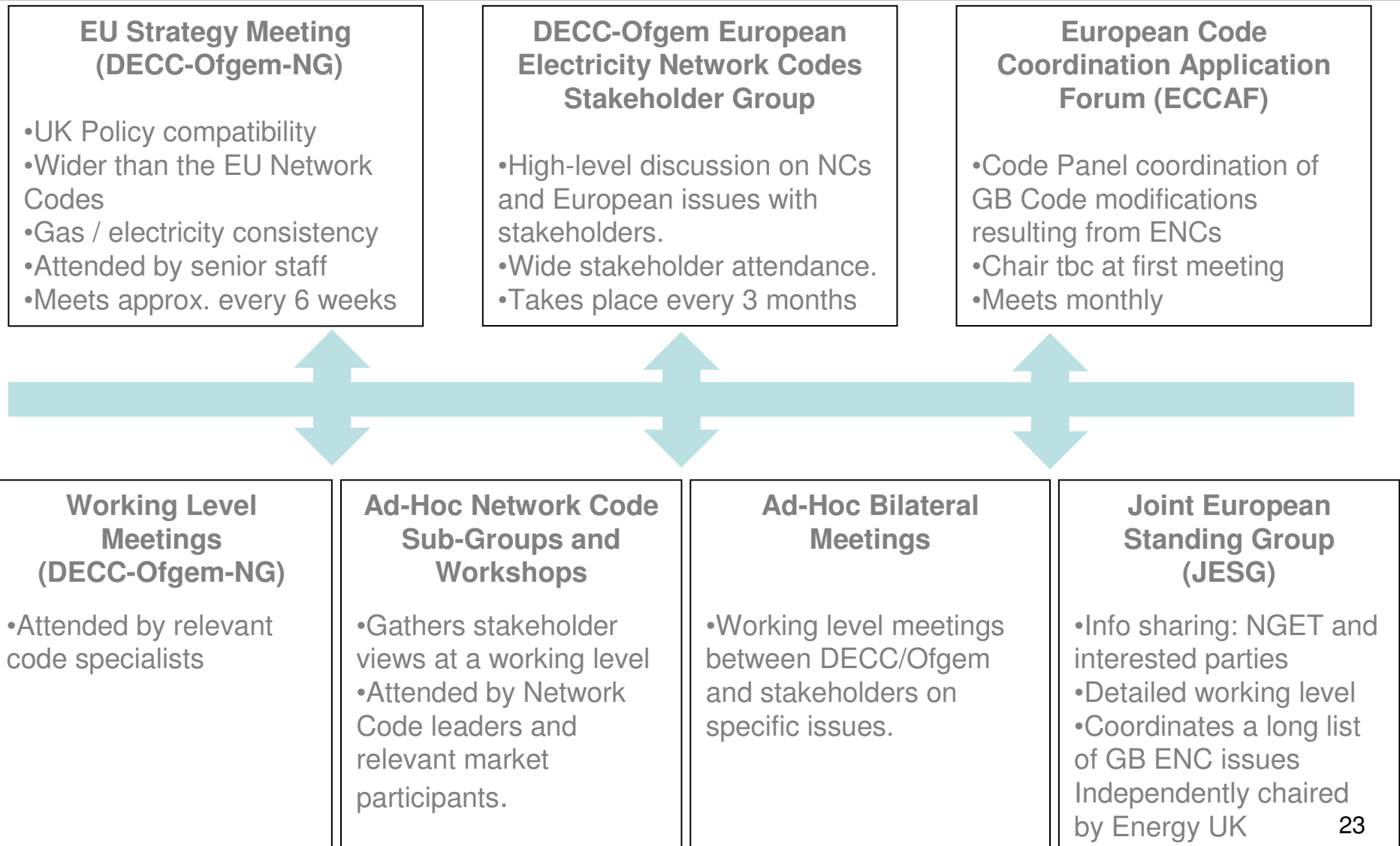


Department
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Climate Change

- Where industry codes/arrangements do not provide sufficient enforceability, regulation may be necessary to ensure the measures can be enforced and appropriate penalties applied.
- Where regulation is required, testing will be needed on whether enforceability is achievable by modification of licence conditions.
- Legislation to secure compliance may be needed where the provisions in the European Codes:
 - also apply to licence exempt companies;
 - apply to activities that are not currently licensed.
- In relation to provisions that apply to licence exempt companies or to activities that are not currently licensed relevant requirements could be introduced through legislation.
- We will consult with industry on the implementation routes through the usual processes

Codes will need case-by-case consideration.

Stakeholder Engagement - Electricity





Next Steps

- For every Network Code the right UK instrument(s) need to be identified through which the Network Code can be implemented.
- Subsequently DECC, Ofgem and industry will facilitate the implementation.
- Stakeholders will be engaged in accordance with best practices.

6. Long term structures of GB Codes: A strawman

Garth Graham (SSE)

7. RFG: Implementation through GB Codes

Rob Wilson (National Grid)

Progress and Timescales for RfG

- RfG was the first of the European codes to be developed (started in 2009) and has provided a pilot for the process.
- ENTSO-E drafting finished in June 2012; some additional changes made up to March 2013.
- On 27 March 2013, ACER issued a recommendation to the European Commission to adopt the [Network Code on “Requirements for Generators” \(NC RfG\)](#).
- Consultants (DNV KEMA) appointed by Commission to carry out technical impact assessment. Report has now been released.
- Guidance note on national application to be produced by ENTSO-E.
- Comitology to complete Q1 2014.

Once RfG becomes European Law

- Takes precedence over existing GB codes.
- 3 year compliance period (likely 2014-17).
- Code applies to ‘new generators’; defined as those that have not let contracts for major plant items by 2 years after the code’s entry into force.
- Need to align GB codes with RfG. Will mean changes to:
 - Grid Code
 - Distribution Code
 - Engineering Recommendations – distributed generation connection guides:
 - G83/2 single/multiple premises (connection at 230V single phase/400V 3-phase; capacity 3.68kW single phase, 11.04kW 3-phase)
 - G59/2 (connection above these values)

<http://www.energynetworks.org/electricity/engineering/distributed-generation/distributed-generation.html>

Application of RfG to GB

- Overriding principles for GB application:
 - Fit for purpose to cover future developments (move to increased non-synchronous generation)
 - Assumes GB remains as a synchronous area
 - Extensively replicates GB Grid Code requirements – little change for larger generators
- Main points for GB:
 - 'Banding' of generators changes
 - Applies requirements to smaller, embedded generation (now from 800W rather than 50MW in England & Wales)
 - Operational notification process for all Embedded Plant allocated to Relevant Network Operators
 - Retrospective application?

Changes in Generator Banding

- Replaces current Small/Medium/Large classifications with type A-D bandings
- Removes Scottish specificities
- Applies requirements to smaller, embedded generation (now from 800W rather than 50MW in England & Wales)

Current Grid Code banding:

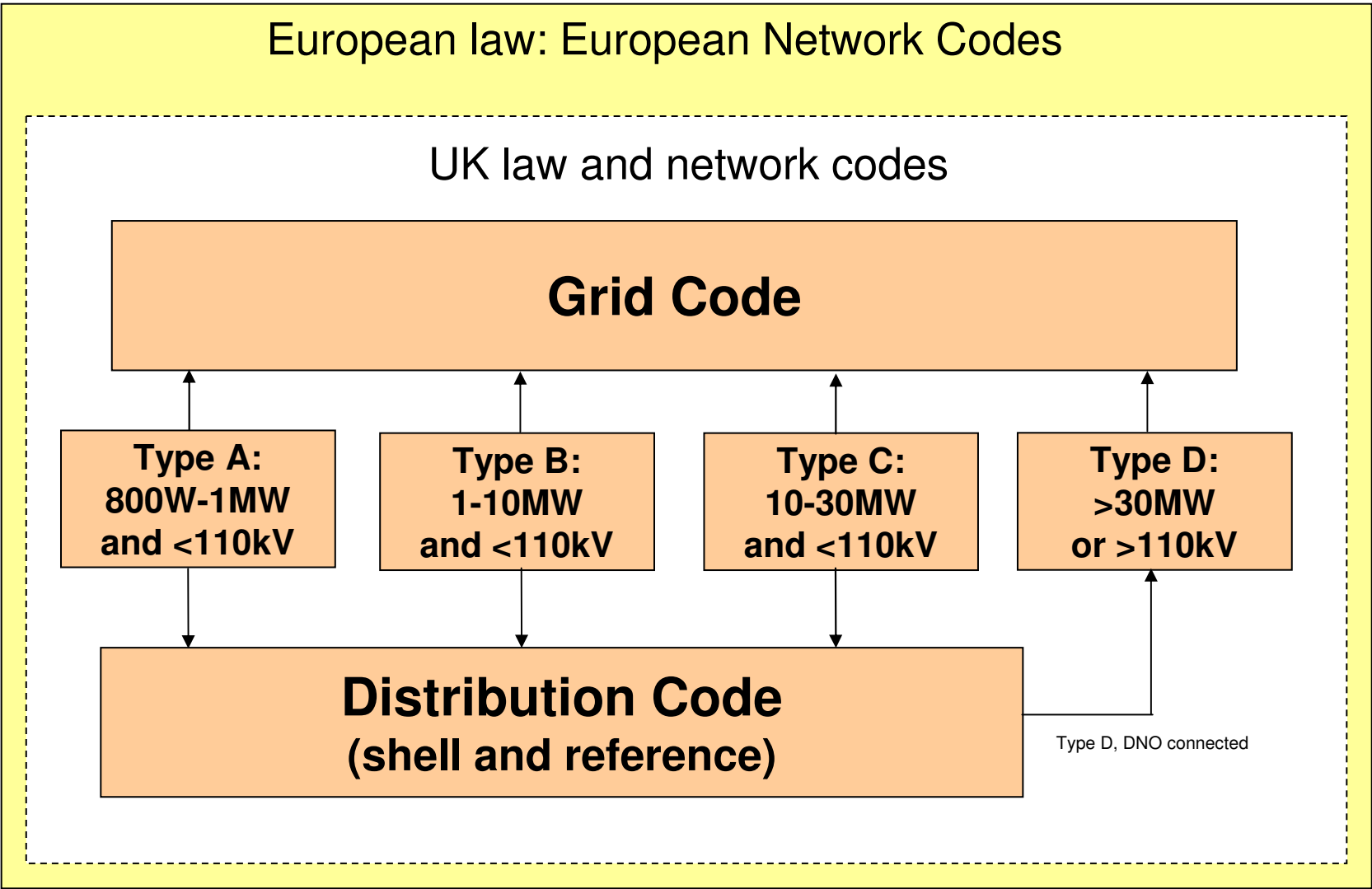
Generator Size	Direct Connection to:		
	SHET	SPT	NGET
Small	<10MW	<30MW	<50MW
Medium			50-100MW
Large	10MW+	30MW+	100MW+

RfG banding:

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

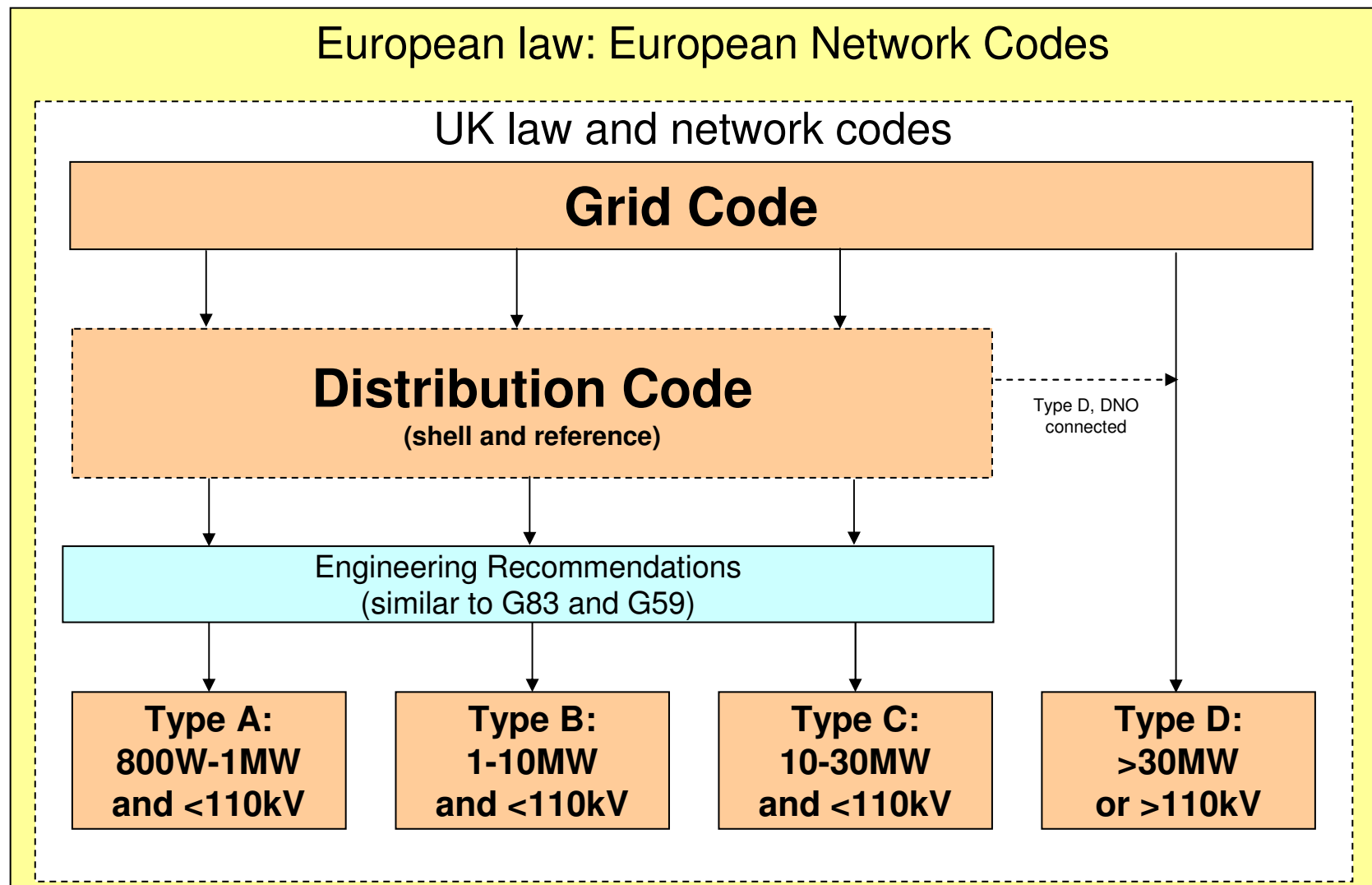
Option I

Place all requirements in Grid Code



Variation on Option I

Place all requirements in Grid Code. D Code operates as shell and reference to ERs



Option I

Place all requirements in Grid Code

■ Advantages

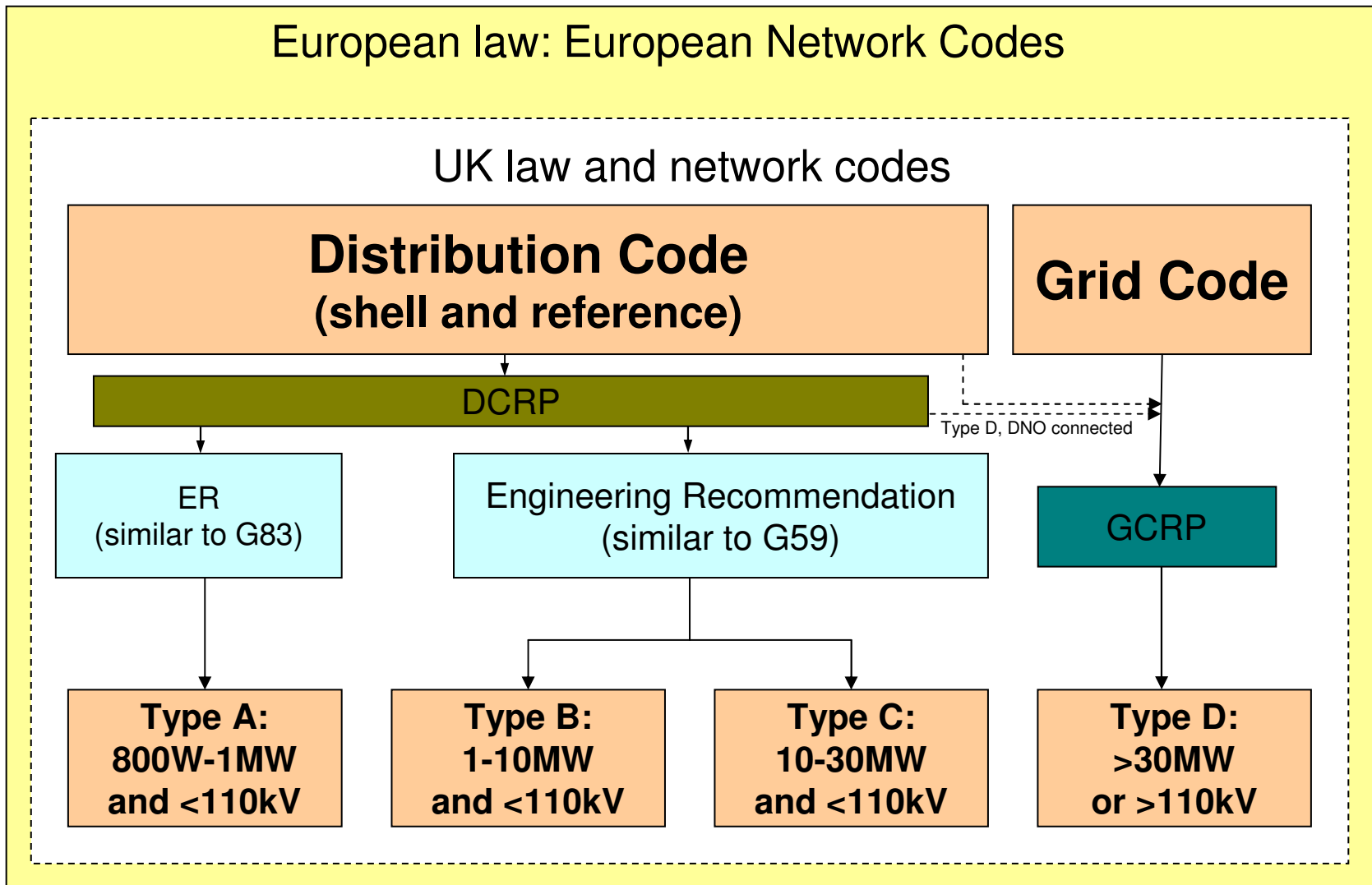
- All Type A – D RfG Requirements reside in one document
- Retain structure of existing GB Code and amend Generator clauses to ensure consistency with RfG
- Approach could be applied to other European Codes (eg HVDC and DCC)
- Removal of Regional Differences with Scotland

■ Disadvantages

- High volume of current Small Power Stations would need to access the Grid Code and other industry codes, resulting in complexity and high administrative burden
 - Contractual complexity
 - Grid Code becomes very cumbersome
 - Interaction with DNO's requires further examination
- Legal text has been developed for a number of examples associated with this Option

Option II

Place Type A - C requirements in D Code / ER and Type D in Grid Code



Option II

Place Type A - C requirements in D Code / ER and Type D in Grid Code

■ Advantages

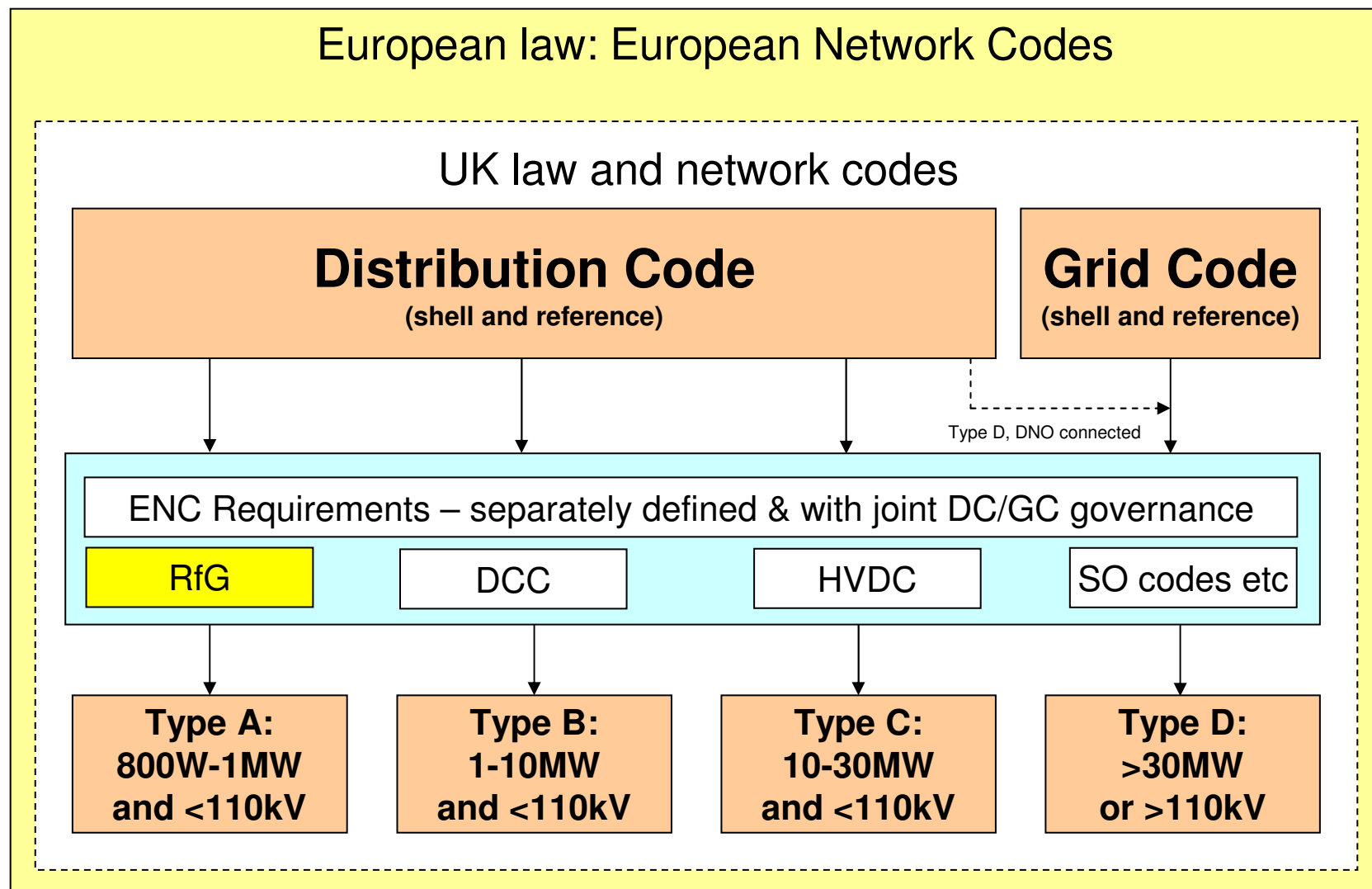
- Retain structure of existing GB Code and amend Generator clauses to ensure consistency with RfG
- Approach could be applied to other European Codes (eg HVDC and DCC)
- Removal of Regional Differences with Scotland
- Contractual structure remains similar to current arrangements
- Clear definition of which code applies to which party

■ Disadvantages

- Some Users would need to access both G Code and D Code as per current arrangements, but small number of Users believed to be affected.

Option III

Place Type A - D requirements in ER and G Code / D Code operate as a Shell / Reference



Option III

Place Type A - D requirements in ER and G Code / D Code operate as a Shell / Reference

■ Advantages

- Avoids some Generators from having to read both G Code and D Code

■ Disadvantages

- Places both the G Code and D Code as a shell in respect of Generator Requirements. This is current D Code practice but not G Code.

Pros and Cons

Issue	Approach		
	(i) Place all Requirements in GC	(ii) Place Type A - C requirements in DC / ERs, Type D stays in GC	(iii) Place all Type A - D requirements in ERs; GC / DC operate as Shells / Reference
Ease of use - users	Small generators have to refer to GC with high costs and admin	Clarity of which doc applies to which party will be OK	Probably easier for users
Ease of use - TSO/DNOs	DNOs need to refer to GC	Little change to current	Harder - as multiple docs to maintain and coordinate
Number of documents	Single document - and removes need for DC references	Small number of users (type D, DNO connected) would need to refer to both DC/GC	Multiple documents but does keep all users in either DC or GC
Retains existing codes structure	Yes, but GC becomes more cumbersome through extension to more users	Yes	No. Fundamental changes and multiple documents
Retains contractual structure	Increases complexity for D-connected gens	Yes	Makes it simpler in principle
Could application of other ENCs follow the same principles?	Yes, although multiple changes will be reqd	Yes, close to an as is solution using existing processes	Yes, and can build in more annexes to DC/GC 'shells' fairly simply although number of separate documents is a concern
DNO/SO/TO interactions require examination	Yes - to cover D-connected users	Yes - but requirements should cascade fairly neatly	Interactions probably straightforward and covered in DC/GC 'shells'
Removes regional differences with Scotland	Yes	Yes	Yes
Administration	Simple in principle. Becomes led by existing GC processes	Close to existing administration in principle, but complicated due to cumulative requirements across A-D bands	Uncertain how this would be administered and who would own suite of ERs
Could application to other GB codes follow the same principles?	Yes. Single code is the simplest overall solution for users with the capability to interpret this	Yes, close to an as is solution using existing processes	Following this route for other codes as well becomes untenable due to number of documents

Colour code:

Red – difficult or increases complexity

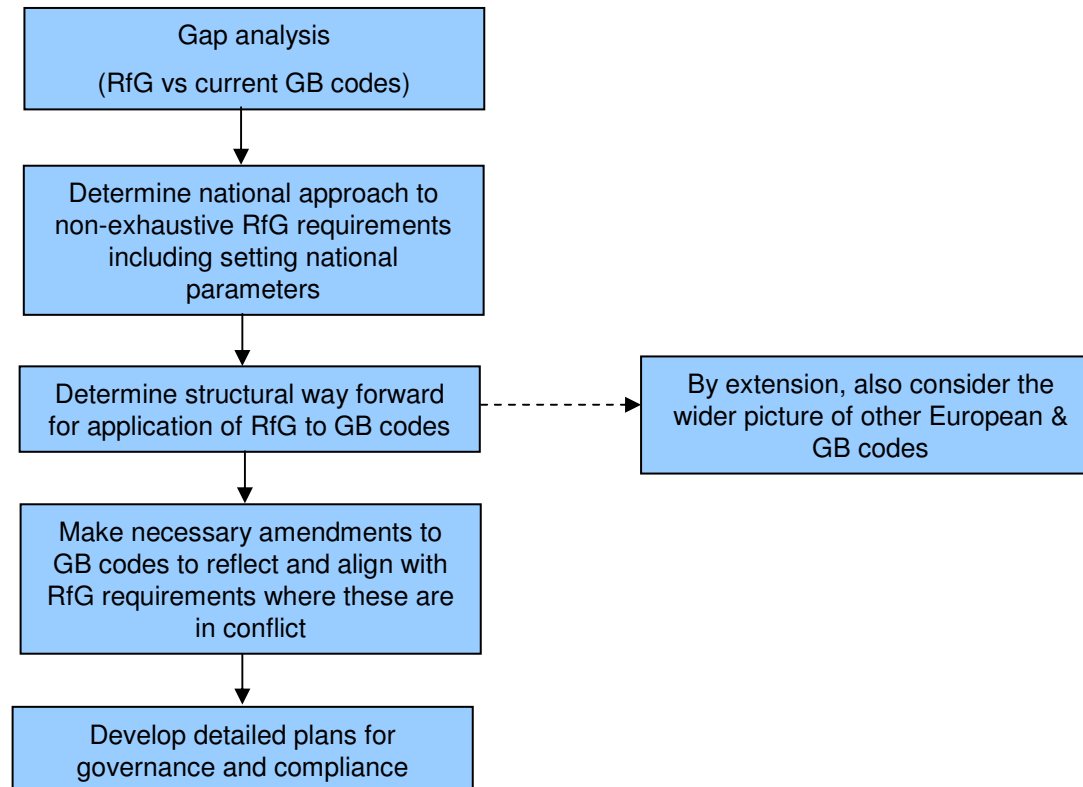
Amber – some issues

Green - straightforward

Feedback from Code Panels

- Use existing processes as far as possible
- Range of GB codes/instruments to take into account clearly needs careful coordination across the codes
- Staggered nature of ENC drafting while understandable makes achieving an aligned, efficient solution harder
- Very challenging timescales
- ...possibly compounded by resource issues (from all parties)
- Need for consultation during national application/implementation
- Cost recovery is a common theme; codes clarify this for TSOs (subject to NRA approval) but not other stakeholders
- Should not simply be a raising of the bar – review and align with existing requirements
- Retrospectivity needs to be understood (particularly for generators)
- The process for future code revisions needs clarification

GB Application Process – Key Steps



Governance and Compliance

Governance:

- Use existing processes as far as possible – GCRP and DCRP
- Codes continue to develop for domestic issues not in conflict with ENCs
- ENC change mechanism?

Compliance:

- Non-compliance comes under two headings:
 - A failure to apply or properly enact the European code(s) correctly.
 - A failure of national parties to comply with the code(s) despite their correct national application.
- Larger generators – existing processes
- Smaller generators (especially type A) – through installers, type testing and a more product standard-based approach

Advantages of Using Existing Codes/Processes

- Can be easily recognised by all parties as similar to existing processes and with established routes for governance.
- Can achieve a more timely solution.
- Can be extended to application across the full range of GB and European codes.
- Closer structures and processes for existing and new Users. No need for very different but parallel governance.
- Can be tested for the correct or complete mapping of RfG requirements.
- Will work across the full range of Users and confers no clear advantage to any group.

8. Risks and Issues for Implementation

Adam Hipgrave (National Grid)

JESG Issue Log

- The JESG has been maintaining an issue log on individual Network Codes, cross-code issues and implementation issues
- The current issues captured by JESG for implementation are as follows.
- Further issues will be captured and recorded in an ECCAF Issue log going forward.

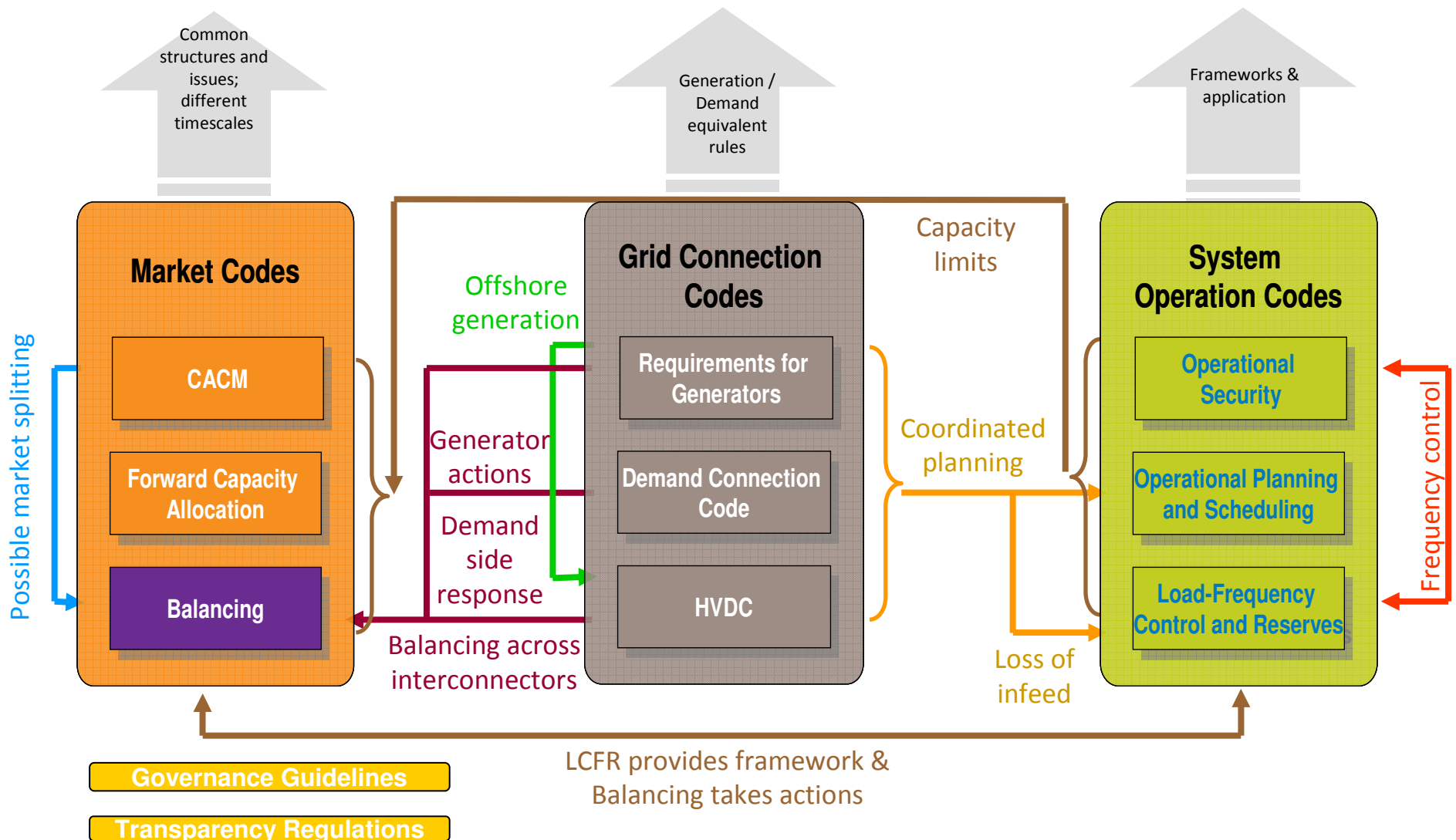
Issues for GB Application / Implementation

Issue No	Issue	NGET View
1.	Implementation: Can areas of the GB Network Code be changed to comply with the ENC's be modified through the normal GB governance arrangements, provided it does not affect compliance with the ENC's?	Governance arrangements of GB Codes are not expected to change by implementing the ENC's. However, GB must demonstrate compliance to the ENC's or risks being found in breach and fined.
2.	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?	Once published in the OJEU, the definitions became law. The Transparency Regulation have been published are Regulation 543/2009 amending Annex I of Regulation 714/2009. The interaction of future definitions is not yet fully understood.
3.	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?	It is expected that existing standard Code Governance will be used where possible, however, Ofgem have powers to make changes to the GB Codes to ensure compliance with European legislation.
4.	Further details of the modification process for GB Codes as a result of the ENC's need to be defined, for example, how will raise modifications, can alternatives be proposed etc.	Noted.

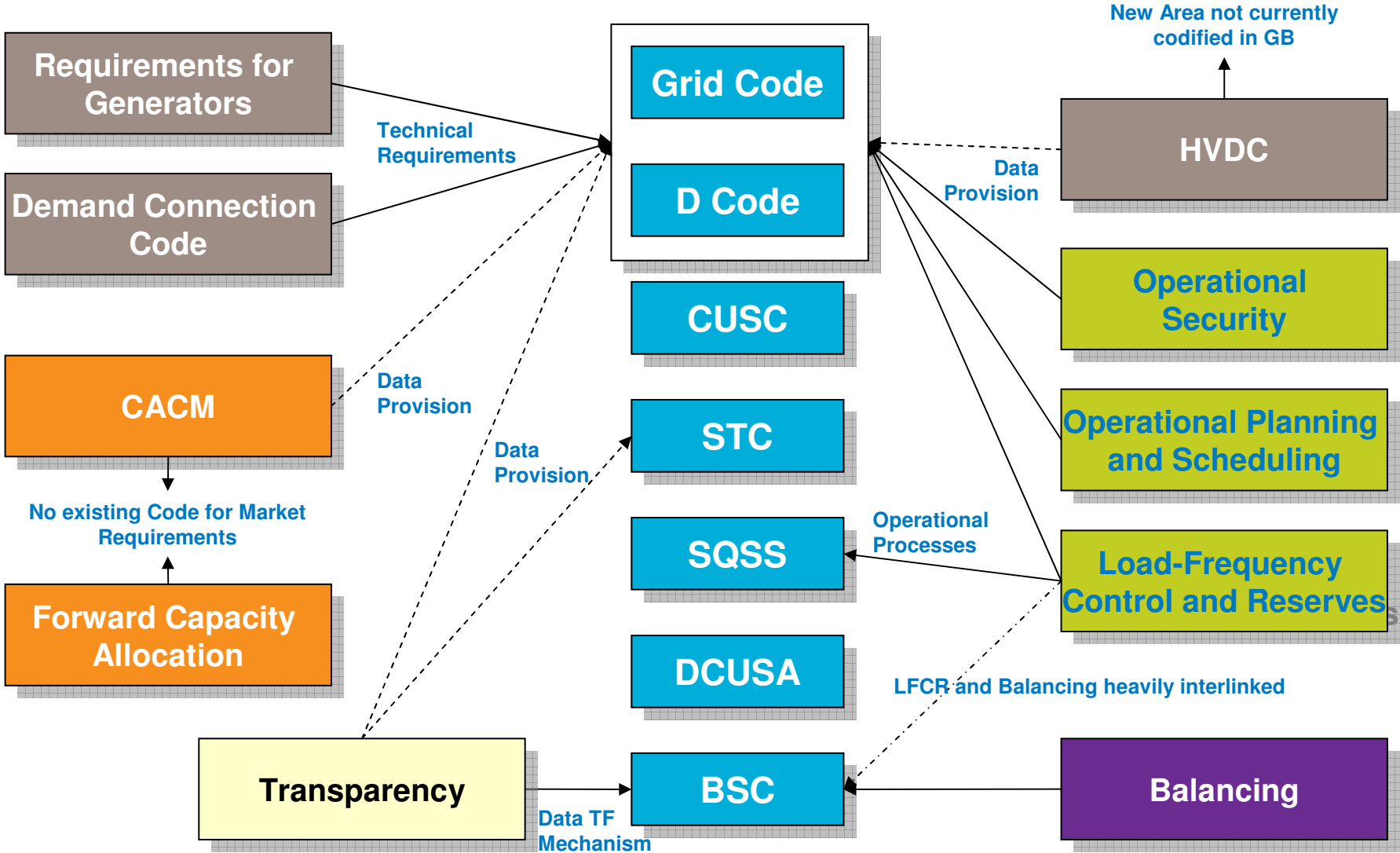
9. High-level mappings of ENCs to GB Codes

Paul Wakeley (National Grid)

High Level Interactions between Codes



High-level 'natural' mapping of ENC's to GB Codes



10. Future meeting dates, venues and agenda items

Chair

Proposed Approach

- **Frequency:**

- Proposed monthly meetings from January 2014
- Is there a preferred time of the month?

- **Venue:**

- London – likely Elexon
- Teleconference facilities available

Proposed Approach

■ Agendas:

- Focussing on the pertinent topics as part of the development process as discussed the ECCAF Chair:
 - January:
 - Code Structure discussion (including criteria)
 - Process for application and engagement (high-level strategy)
 - Cross code consistency
 - ECCAF Workplan to drive future agenda items
 - ?Q1: CACM, RFG and DCC
 - ?Q2: OS, OPS, LFCR
 - In parallel: Initial thoughts on Balancing

11. AOB

Chair