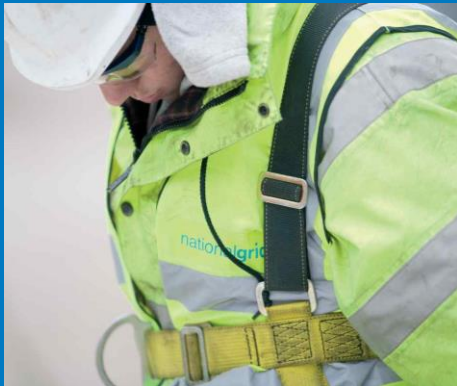


European Update



4th June 2015

1. General Update

Code Status Update

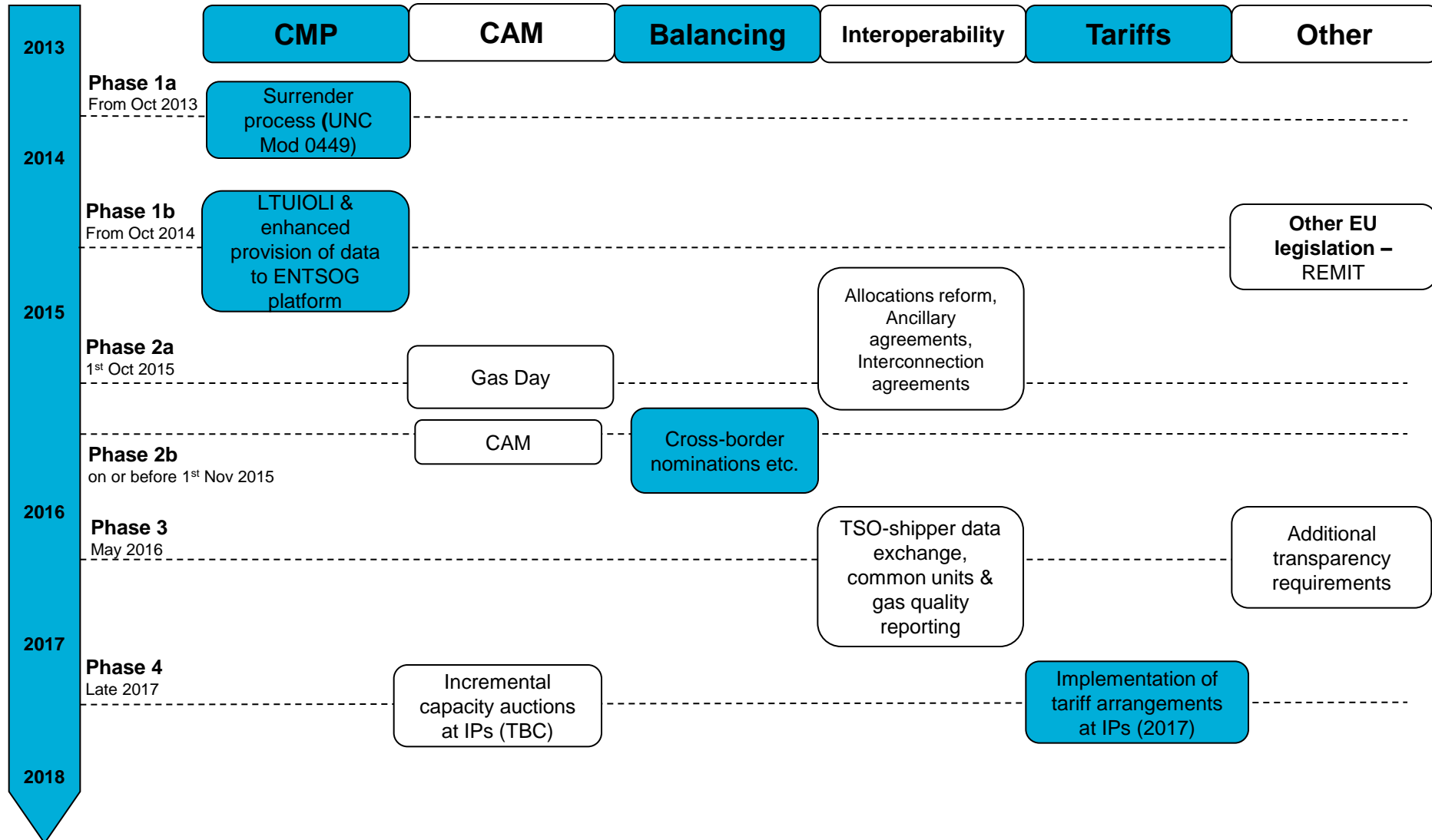
Code	Current Status	Implementation date
Congestion Management (CMP)	Implemented	1 st October 2013
Capacity Allocation Mechanism (CAM)	Approved for implementation at EU IPs	1 st November 2015
Gas Balancing (BAL)	Approved for implementation 26 th March 2014	1 st October 2015
Interoperability & Data Exchange (INT)	Code entered EU Law on 30 th April now Commission Regulation (EU) No 703/2015	Some deliverables planned for 1 st October 2015, others by 1 st May 2016
Tariffs (TAR)	Under development	Estimated earliest mid January 2017. Applicable from October 2017
Incremental Capacity	Under development	Applicable from March 2017

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

Activities undertaken by European Commission

[illegible]

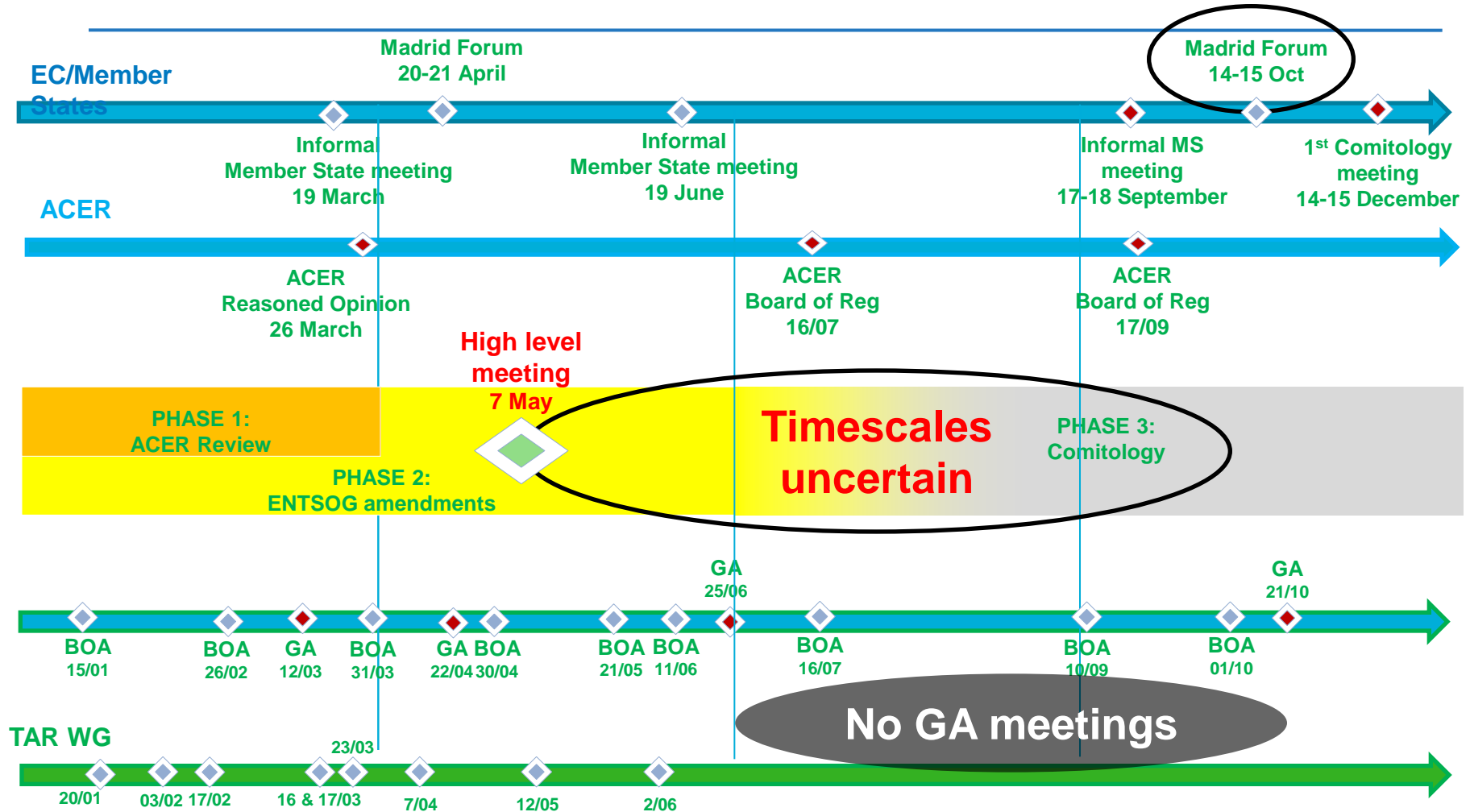
Road Map



2. EU Code Updates

EU Tariffs Code Update

EU Tariffs Code Timeline



EU Tariffs Code

- 7th May & 21st May: High level meetings between EC, ENTSOG and ACER agreed compromise on majority of issues re TAR NC
- 2nd June: ENTSOG Tariff WG
 - Revised draft text has been reviewed by ACER, EC and TSOs
 - Comments reviewed at meeting to agree requirements for final text

EU Tariffs Code (uncertain):

- Aim for approval by ENTSOG Board
 - Ideally on 25th June (unlikely as still some unresolved issues)
 - More likely to be 16th July
- GA approval in August
 - via written procedure
- 17th Sept: Approval from ACER's Board of Regulators?
- **Key deadline: Code to be complete for Madrid Forum 14th -15th October**
- First formal comitology meeting in December (possible 2nd comitology meeting required - end of Q1 2016)

Transmission and dedicated services

- Current draft definitions

- **“transmission services”** means the regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of transmission
- “dedicate services” renamed “non-transmission services”
- **“non-transmission services”** means the regulated services other than transmission services that are provided by the transmission system operator and the cost of which are either not caused by the cost drivers of both capacity and distance or not related to its regulated asset base

Option to offer Fixed Tariffs

- Agreed for price cap regimes
- Agreed for incremental
 - Floating and/or fixed price allowed
- Existing capacity (in revenue cap regime)
 - Floating and fixed price (subject to consultation)
 - The fixed payable price approach must avoid cross-subsidisation between network users where such an offer leads to an increase in under or over recovery of revenues.
- $P_{\text{fix}} = (P_{R,Y} \times \text{IND}) + \text{RP} + \text{AP}$

Multipliers at IPs

- No discounted pricing
 - Minimum multiplier of 1 (i.e. annual price)
- Quarterly/monthly multiplier of 1 – 1.5 of annual price
- Daily/within day multiplier of 1 – 3
 - Requirement of higher multiplier to be monitored
 - Reports after 3 years then another after 2 years
 - Will default from 3 to 1.5 if requirement not demonstrated

Reference Price Methodologies

- “Cost allocation methodologies” now renamed “reference price methodologies”
- Only “postage stamp” and “capacity weighted distance” methodologies described in code
- Other methodologies can be applied
 - To be compared with either CWD or PS
 - Methodology and comparison to be consulted upon
 - ACER to provide non binding opinion
 - NRA to approve

Alternative Transmission Tariffs

- Alternative transmission tariffs allowed
- For non-standard capacity products
 - Shorthaul, conditional firm capacity products
 - Set by applying discount to reference price

Binding Tariffs

- No change to the code required
- Outside of the code, further work to be considered on harmonisation of the tariff setting year
- Risk of harmonisation to 1st January

Grandfather Clause

- Grandfather Clause for contracts concluded before publication of TAR FG
- ‘This Regulation shall not affect the level of transmission tariffs foreseen in the contracts which are concluded **before 29 November 2013** where such contracts foresee no change of their level except for the indexation, if any.’

Interruptible Capacity

- Ex-ante discount only:
 - **$Di_{\text{ex-ante}} = Pro \times 100\%$**
 - $Di_{\text{ex-ante}}$ is the level of ex-ante discount
 - Pro is probability of interruption
- Non-physical backhaul priced as for interruptible

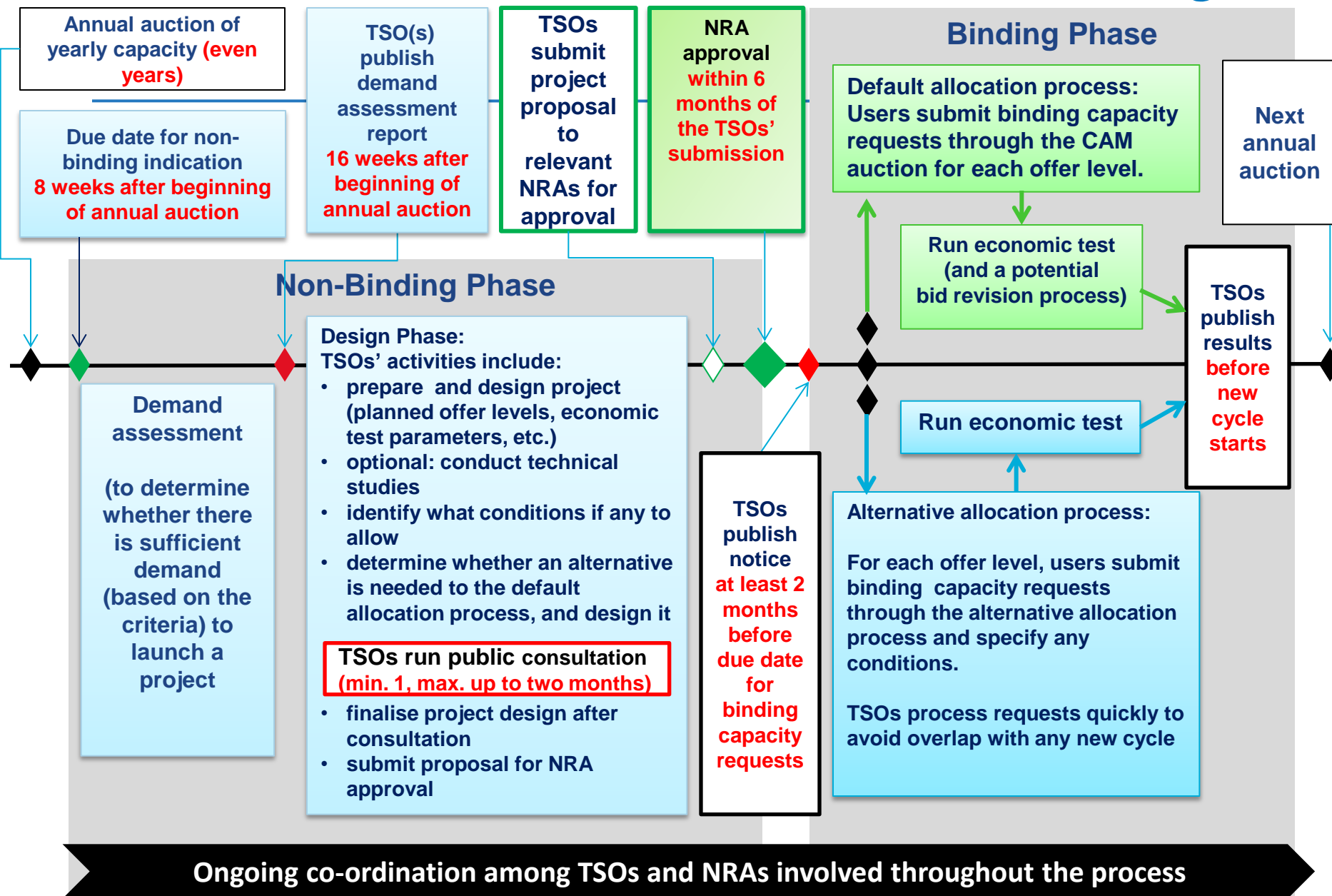
Storage

- EC requested an expanded text on storage in Tariff Code
 - Wanted explicit reference to Security of Supply
- ACER/ENTSOE of opinion that current formulation of “considering benefits” is sufficient
- EC/ACER/ENTSOE agreed that article on Storage should be removed from Tariff Code
- Storage to be dealt with separately
 - Perhaps as part of revision to SoS regulation

EU Incremental Amendment Update

CAM TF's New Process for Incremental Capacity Projects

nationalgrid



Incremental Amendment

- ACER has proposed streamlined version as proposal thought too complex and cumbersome by shippers
 - All incremental capacity projects are run as open season procedures and the CAM auction will be the default allocation mechanism.
 - The consultation is moved back, so that it is run during (not before) the design phase so stakeholders can participate and be informed of the relevant details (e.g. project design, economic test, charging, terms of access).
- ACER developing revised legal text
 - Will include other amendments to CAM to remove “inconsistencies” and change auction calendar

3. UNC Modification Plans

Phase 2 UNC Modifications

Potential Timescales

EU Network Code	Area of change	Status	Next Steps	UNC Consultation
Gas Balancing (BAL)	Information Provision (489)	Ofgem approved	Implementation	Complete
"	Nomination Process at IPs (493)	With Ofgem	Ofgem decision	Complete
"	SMP Buy & Sell (494)	Ofgem approved	Implementation	Complete
Capacity Allocation Mechanism (CAM)	Gas Day change (461)	Ofgem approved	Implementation	Complete
"	CAM / CMP Compliant Capacity Auctions (500)	With Ofgem	Ofgem decision	Complete
"	Bacton split (501V / 501A V / 501BV / 501CV)	With Ofgem	Impact Assessment	Complete
Interoperability & Data Exchange (INT)	Reform of Allocations (0510)	Final Workgroup Report to Panel	Mod Panel decision due 21 st May	Referred to Workgroup
"	Harmonisation of Reference Conditions (0519)	Final Workgroup Report to Panel	Ofgem decision	Complete
"	Enabling EU Compliant Interconnection Agreements (0525)	In development	Complete development May 2015	June-July 2015

4. AOB

Planning for Phase II Implementation of the EU Network Codes



Where are we today

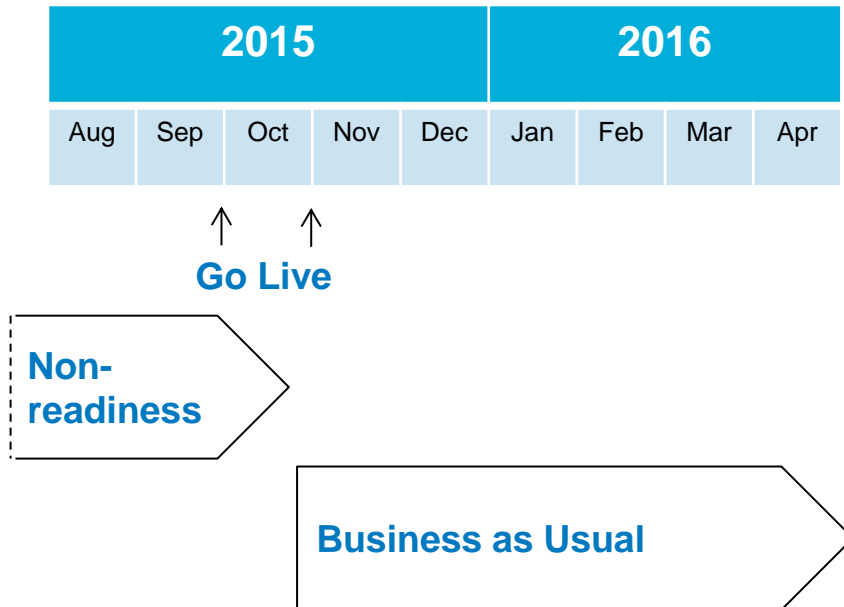
- National Grid (NG) has been working on its obligation to implement phase II of the EU Network Codes for a number of years
- The work has required close collaboration with stakeholders throughout the GB regime, as well as adjacent TSO's and regulators
- By 1st October 2015, GB and adjacent transmission systems aim to begin “go live” with changes which will ensure compliance with the BAL, CAM and INT EU Codes
- Full phase II implementation will require a number of items, from a wide range of stakeholders, to come together successfully
- NG as a prudent operator is leading the industry's contingency planning, to ensure that the ‘operability’ of the regime is maintained

Why develop contingency arrangements?

- Together, the GB industry and its adjacent stakeholders are aiming to deliver:
 - Changes to processes & procedures
 - Changes to IT systems
 - New / amended contracts
- Plans should be in place in case that one or multiple parties may be unable to deliver some or all of the above by 1 October
- Post 1st October, measures should also be in place to handle any potential issues which may arise
- Stakeholder readiness (both GB & adjacent jurisdictions) will play a crucial role in overall GB readiness

Two 'Categories' of Contingency

Non Readiness & Business as Usual



- GB stakeholder readiness manifests itself in a wide range of areas:
 - TSO/TSO Agreements
 - Framework Mods to Codes
 - IT systems delivery
 - Procedures
- Post 'go live', each TSO will have its own Business As Usual contingencies for:
 - IT systems issues
 - Procedural failure or error

National Grid is supporting industry readiness

- Activities we are supporting:
 - Engagement via Transmission Workgroup
ONGOING
 - Supporting industry queries via email “dot boxes”
ONGOING
 - EU Code Implementation Workshop
COMPLETE
 - Ops Forum up-dates
ONGOING
 - Shipper trials
PLANNED

The deliverables are extensive

■ Contracts

- Inter TSO arrangements

GB/RoI/NI tripartites,
Interconnection Agreement

GB/IUK & GB/BBL
Interconnection Agreements

Connection Agreements

GB/RoI/NI Transportation
Agreements

■ Codes

- UNC Mods to implement EU Codes, as well as enabling Mods
- Mods in other jurisdictions

■ Systems

- NGG, GNI(UK), GNI, PTL, IUK, BBL, DNO, Edig@s and Prisma systems

■ Processes

- NGG, GNI, GNI(UK), PTL, IUK and BBL processes

iGMS & Gemini systems readiness

- Both iGMS (integrated Gas Management System) and Gemini are implementing together in readiness for 1st October 2015
- Robust integrated testing and deployment regime:
 - Prior to August - system testing, system integration testing & user acceptance testing
 - During August - several 'dress rehearsals' to confirm implementation plans and minimise the risk of faults
 - 6th September - Main code drop planned
 - 13th & 20th September - Contingency dates in the event of faults during 6th Sept implementation
 - "go live" for 1st October

Moffat Potential Contingency

	Changes Required	Pre 1st Oct Contingency Arrangement	Key Dates
Contracts	<ul style="list-style-type: none"> Amended Interconnection Agreements (IA) and tripartites including consultation 	<ul style="list-style-type: none"> If no agreed IA, NGG could: <ul style="list-style-type: none"> Continue without IA Put in place Memorandum of Understanding Seek “letter of comfort” from Ofgem 	<ul style="list-style-type: none"> Consultation July Ofgem approval in Sept
Gemini and iGMS	<ul style="list-style-type: none"> Various changes to iGMS and Gemini Need to work closely with GNI, GNI (UK) & PTL to align systems integration testing 	<ul style="list-style-type: none"> As mentioned previously – significant contingency code drop dates built into timeline Moffat agent activities continue Manual processes for matching 	<ul style="list-style-type: none"> n/a

Bacton Potential Contingency (1 of 2)

	Changes Required	Pre 1st Oct Contingency Arrangement	Key Dates
Interconnection Agreements	<ul style="list-style-type: none"> Amendment and restatement of Interconnection Agreements (IA) including mandatory consultation 	<ul style="list-style-type: none"> If no agreed IA, NG could: <ul style="list-style-type: none"> Continue with existing IA Put in place Memorandum of Understanding Seek “letter of comfort” from Ofgem 	<ul style="list-style-type: none"> Consultation July Ofgem approval in Sept
Ancillary Agreements for Removal of Agent	<ul style="list-style-type: none"> Mod 525 facilitates removal of Bacton Agent in favour of TSO/TSO processes Need Ofgem approval prior to 1st October 	<ul style="list-style-type: none"> Given known timescales, NG have worked closely with all parties throughout development to ensure a positive Ofgem decision Alternative arrangements post 1st October 	<ul style="list-style-type: none"> n/a
Gemini and iGMS	<ul style="list-style-type: none"> Various changes to iGMS and Gemini Need to work closely with IUK & BBL to align systems integration testing 	<ul style="list-style-type: none"> As mentioned previously – significant contingency code drop dates built into timeline 	<ul style="list-style-type: none"> n/a

Bacton Potential Contingency (2 of 2)

	Changes Required	Pre 1st Oct Contingency Arrangement	Key Dates
Mod 493	<ul style="list-style-type: none"> Ofgem approval required to enable compliance with BAL, INT & CAM codes 	<ul style="list-style-type: none"> Ofgem decision expected imminently 	<ul style="list-style-type: none"> Mod 493 decision - May
Mod 500	<ul style="list-style-type: none"> Ofgem approval required to enable compliance with CAM code 	<ul style="list-style-type: none"> Ofgem decision expected imminently 	<ul style="list-style-type: none"> Mod 500 decision - May
Mod 501V's	<ul style="list-style-type: none"> Ofgem approval of one Mod required to facilitate compliance with CAM code 	<ul style="list-style-type: none"> If 501CV approved, a manual process will be required from 1 Nov 	<ul style="list-style-type: none"> Decision needed by 21 July
Mod 510	<ul style="list-style-type: none"> Ofgem approval required to implement "allocate as nominate" 	<ul style="list-style-type: none"> Retain "allocate as measured" arrangements Could delay to May 2016 in line with Code requirement 	<ul style="list-style-type: none"> tbc
Mod 525	<ul style="list-style-type: none"> Ofgem approval required to enable compliant IA's from 1st Oct 2015 	<ul style="list-style-type: none"> Given known timescales, NGG have worked closely with all parties throughout development to ensure a positive Ofgem decision 	<ul style="list-style-type: none"> n/a

Gas Day Potential Contingency

	Changes Required	Pre 1st Oct Contingency Arrangement	Key Dates
UNC Mod 0461	<ul style="list-style-type: none"> • Gemini and non-Gemini system changes • Other system and process changes (Transporters, Shippers, Traders, Market Operator, End Users, Storage, LNG etc...) 	<ul style="list-style-type: none"> • Not applicable <ul style="list-style-type: none"> • Xoserve progressing with delivery of industry system changes for 1st October • Assumption that all impacted UNC parties will make necessary changes to their processes and systems 	• n/a
NTS-DN Interface	<ul style="list-style-type: none"> • Numerous system interfaces and file transfers between NTS and the RDNs e.g. SCADA systems 	<ul style="list-style-type: none"> • Temporary manual contingencies being developed should they be required 	• n/a
Network Entry A'ments (NEAs)	<ul style="list-style-type: none"> • NEAs to be renegotiated for sub-terminals to provide NG with 5-5 DFNs and 5-5 EoD values • 5-5 data also required for the successful operation of the industry solution that manages different upstream / downstream gas days (Option A) 	<ul style="list-style-type: none"> • NG need firm view from sub-terminals whether they will be in position to provide 5-5 data by latest 15th June • If they are unable to, NG will seek to utilise its telemetry to calculate an EoD value for those sub-terminals. An urgent UNC Mod may be required to facilitate this 	• tbc

Summary & way forward

- NGG will continue to assess contingency arrangements alongside other relevant stakeholders
- “Business as Usual” (BaU) contingency (post 1 Oct) is effectively limited to IT system failure regarding which NG is engaging its adjacent TSOs
- Contingency arrangements between TSOs retain a reciprocal element, ie one TSO’s contingency requirement may result in the other TSO needing to invoke its own contingency
- To the best of our knowledge, TSOs are on track for systems delivery and are aligned in terms of delivery milestones
- In some areas there may be no feasible contingency
- Resource requirements to be considered for systems failures which result in increased manual processes
- NG would appreciate stakeholders sharing their contingency plans with us in case these need to be actioned

Your feedback is important to us

- You can always contact us to ask questions, provide feedback or tell us how we are doing, particularly in relation the topics discussed today:
 - Phil Hobbins (Technical Code Development Manager)
 - Office Tel: 01926 653432, Mobile: 07966 865623
 - E-mail: philip.hobbins@nationalgrid.com
- Or email:
 - .Box.GasOps.BusinessC@nationalgrid.com
- You can also provide feedback online if you wish:
<http://www2.nationalgrid.com/uk/services/transmission-customer-commitment/contact-us/>

National Grid Gas Customer Seminar



Gas Customer Seminar - 2015

In advance of this years Gas Customer Seminar we would really appreciate some feedback on what areas you would like to see covered by Transmission.

Some examples of areas covered previously are;

- Future Energy Scenarios
- System Operator Incentives Review
- Network Development Process
- Commercial Change Horizon
- Connecting to the NTS
- Commercial Change Horizon
- Network Development Process
- Background to Capacity & PARCA
- Industrial Emissions Directive
- National Grid reports – feedback requested

**Please send any suggestions to Abby.Hayles@nationalgrid.com
or Claire.Gumbley@nationalgrid.com**

Future Topics

Future Topics

Topic Area	Provisional Date
Tariffs Code	Monthly updates whilst progressing through comitology
Incremental Code	Monthly updates whilst progressing through comitology