

## European Workgroup



European Workgroup  
3<sup>rd</sup> July 2014

# 1. General Update



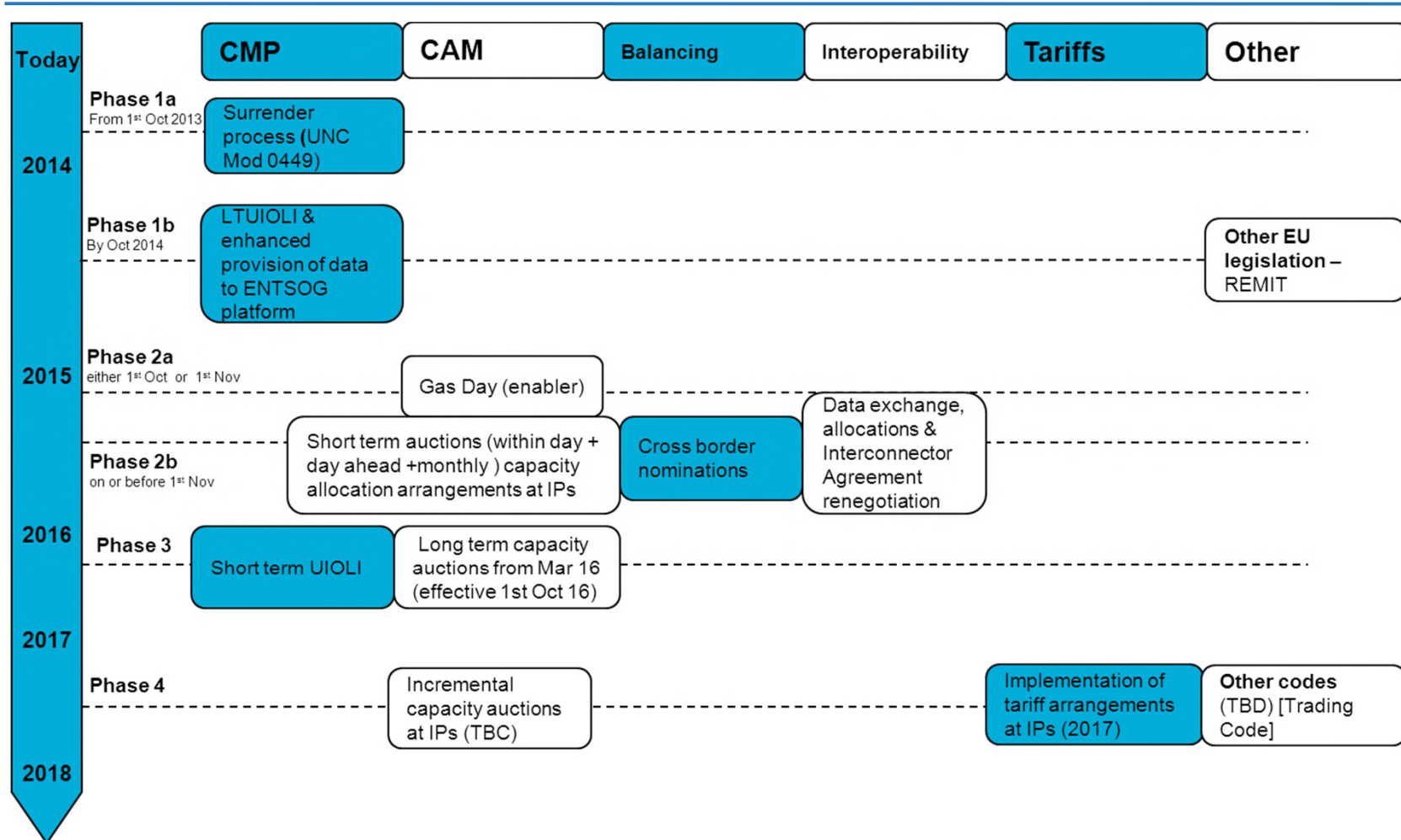
# Code Status Update

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Code	Current Status	Implementation date
Congestion Management (CMP)	Implemented	1 <sup>st</sup> October 2013 (Fixed)
Capacity Allocation Mechanism (CAM)	CAM approved for EU wide implementation at relevant EU IPs.	1 <sup>st</sup> November 2015 (Fixed)
Gas Balancing (BAL)	BAL approved for EU wide implementation 26 <sup>th</sup> March 2014 (Commission Regulation (EU) No 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks.)	1 <sup>st</sup> Oct 2015 (Fixed)
Interoperability & Data Exchange (INT)	Comitology meetings scheduled for 10 <sup>th</sup> July and 1 <sup>st</sup> /2 <sup>nd</sup> October 2014.	Compliance date of 31 <sup>st</sup> March 2016
Tariffs	Under development. Code to be submitted 31 <sup>st</sup> December 2014.	Estimated earliest mid January 2017. Applicable from October 2017.
Incremental Capacity	Under development. Incremental Capacity to be introduced via combination of new articles in CAM Network Code and via Tariffs Network Code. Code amendment to be submitted 31 <sup>st</sup> December 2014.	Applicable from March 2017



# Road Map



Notes: 1) Long term capacity auctions may need to be delivered in conjunction with short term auctions

## EU Gas Quality Harmonisation Update



EU Workgroup  
3<sup>rd</sup> July 2014

## Background

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- In 2007, the EC issued a mandate to CEN to develop a harmonised standard for gas quality
  - “the broadest possible range within reasonable costs”
- Phase 1: Combustion parameters - appliance testing
- Phase 2: Development of limits / ranges for non-combustion parameters
- The draft standard has now been published for public consultation to national standards bodies (BSI for UK)
- The proposed specification is similar to that developed by EASEE-gas

# Comparison of Gas Quality Specifications

Content or Characteristic	CEN Standard 16726:2014 on Gas Quality	Gas Safety Management Reg (GSMR) Value <a href="http://www.legislation.gov.uk/ukxi/1996/551/schedule/3/made">http://www.legislation.gov.uk/ukxi/1996/551/schedule/3/made</a>	Gas Ten Year Statement Value (A5.3.2) <a href="http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018">http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018</a>
Hydrogen sulphide (H <sub>2</sub> S) content	≤5 mg/m <sup>3</sup> (also includes carbonyl sulphide)	≤5 mg/m <sup>3</sup>	≤5 mg/m <sup>3</sup>
Total sulphur content (including H <sub>2</sub> S)	≤20 mg/m <sup>3</sup>	≤50 mg/m <sup>3</sup>	≤50 mg/m <sup>3</sup>
Hydrogen content	No value defined	≤0.1% (molar)	≤0.1% (molar)
Oxygen content	At network entry points and cross border points, max of 0.001% mol. At entry points where the gas entering will not flow to another member state's network through a cross border point, a higher national limit of up to 1% mol may be applied provided that the network is a dry network and not connected to installations sensitive to higher levels of oxygen, eg. underground storage systems.	≤0.2% (molar)	≤0.001% (molar)
Impurities	Shall not contain constituents to the extent that it cannot be transported, stored and/or utilised without quality adjustment or treatment	shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance (within the meaning of regulation 2(1) of the 1994 Regulations) which a consumer could reasonably be expected to operate	shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance within the meaning of regulation 2(1) of the Gas Safety (Installation and Use) Regulations 1998 which a consumer could reasonably be expected to operate



# Comparison of Gas Quality Specifications

Content or Characteristic	CEN Standard on Gas Quality	Gas Safety Management Reg (GSMR) Value <a href="http://www.legislation.gov.uk/ukxi/1996/551/schedule/3/made">http://www.legislation.gov.uk/ukxi/1996/551/schedule/3/made</a>	Gas Ten Year Statement Value (A5.3.2) <a href="http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018">http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018</a>
Hydrocarbon dewpoint and water dewpoint	Hydrocarbon dewpoint: Max of -2 °C at a pressure up to 7 MPa  Water dewpoint: Max of -8°C at a pressure up to 7 MPa	shall be at such levels that they do not interfere with the integrity or operation of pipes or any gas appliance (within the meaning of regulation 2(1) of the 1994 Regulations) which a consumer could reasonably be expected to operate	Hydrocarbon dewpoint ≤ -2° C at 85 barg Water dewpoint ≤ -10° C at 85 barg
Wobbe Number (WN)	min 46.44, max 54.00 MJ/m <sup>3</sup> (with qualifying wording)	(i) ≤51.41 MJ/m <sup>3</sup> , and (ii) ≥47.20 MJ/m <sup>3</sup>	(i) ≤51.41 MJ/m <sup>3</sup> , and (ii) ≥47.20 MJ/m <sup>3</sup>
Incomplete Combustion Factor (ICF)	No value defined	≤0.48	≤0.48
Sooting Index (SI)	No value defined	≤0.60	≤0.60
Carbon Dioxide	At network entry points and cross border points, max of 2.5% mol. At entry points where the gas entering will not flow to another member state's network through a cross border point, a higher national limit of up to 4% mol may be applied provided that the network is a dry network and not connected to installations sensitive to higher levels of carbon dioxide, eg. underground storage systems		≤2.5% (molar)

# Comparison of Gas Quality Specifications

Content or Characteristic	CEN Standard on Gas Quality	Gas Safety Management Reg (GSMR) Value <a href="http://www.legislation.gov.uk/uk/si/1996/551/schedule/3/made">http://www.legislation.gov.uk/uk/si/1996/551/schedule/3/made</a>	Gas Ten Year Statement Value (A5.3.2) <a href="http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018">http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=30018</a>
Relative Density	min 0.555, max 0.70		
Mercaptan Sulphur without odourant	Max of 6 Mg/m <sup>3</sup>		
Methane number	Min of 0.65		

## What will the standard mean?

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- Legal / regulatory framework is unclear
- Main issue is the wobbe index range:
  - Too wide for some (UK, Germany), too narrow for others (Spain)
  - Hence qualifying wording is being proposed
- Key harmonisation issues
  - How to identify and deal with appliances not compatible with the proposed range
  - Appliance adjustment to expected ranges
  - ‘National assessment’ of how and when the standard will be implemented

## BSI initial views

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- Acceptance of the standard with comments on:
  - Wobbe Index wording
  - O2 and C02 wording
  - Comments on the technical annexes
- GB stakeholders may submit comments to BSI <http://drafts.bsigroup.com/Home/Details/53031>

## Next Steps for the CEN Standard

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- BSI is inviting comments by 31<sup>st</sup> August 2014
- BSI Committees GSE/33 and GSE/4 will review comments submitted
- National Grid NTS will inform the Workgroup of the proposed UK comments
- BSI submission of UK comments to CEN 8<sup>th</sup> October 2014
- 18-20<sup>th</sup> November – CEN working group will review the comments
- Mid 2015 – Standard published

## 2. EU Code Updates



# EU Tariffs Code Update



## EU Tariff Code Update

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- Draft Code and supporting document published
  - Consultation till 30<sup>th</sup> July
  - <http://www.entsog.eu/publications/tariffs>
  - ACER justification document:
    - [http://www.acer.europa.eu/Gas/Framework%20guidelines\\_and\\_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx](http://www.acer.europa.eu/Gas/Framework%20guidelines_and_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx)
- Stakeholder Workshop held 25<sup>th</sup> June
  - Based on early feedback the focus was on:
    - Mitigating measures (including discussion of one-off capacity reset), Capacity Allocation, Multipliers, Interruptible, Use of fixed prices at IPs



## EU Tariff Code Update – early feedback

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- Early ACER feedback:
  - Draft code not on line with FG and insufficient harmonisation
  - Role of ENTSOG “to translate FG into applicable provisions”
  - Proposed amendments must be based on objective analysis
    - Should not undermine internal coherence of overall package
  - Transmission services definition: “by-pass mechanism” neutralises FG efforts re harmonisation and transparency
  - Floating price maintains link with price of capacity at use and cost allocation methodology – fixed price breaks this link exposing some users to revenue reconciliation and not others or shifts charging uncertainty from capacity to commodity.
  - “open for discussion” on one-off reset of capacity (Commission thinks stakeholders have good arguments so want to hear counter arguments from TSOs)

## EU Tariff Code Update – early feedback

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- Early stakeholder feedback
  - Draft code too open with no harmonisation and little progress
  - Timely publication of reserve prices prior to auctions is essential
    - Aligning publication to tariff year fails to meet this requirement
  - Predictability of transportation pricing critical to well functioning market
  - Clarity/transparency needed for all tariff components including those excluded from definition of “transmission services”
  - Strong stakeholder push for one-off capacity reset but not universal view – i.e. some large end-users concerned that reset may lead to “cherry picking” by cancelling contracts that are “out of the money” leading to under-recovery and thus increases to exit tariffs.

# EU Incremental Amendment Update



## EU Incremental Amendment Update

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- Draft Code and supporting document published
  - Consultation till 30<sup>th</sup> July
  - <http://www.entsog.eu/publications/incremental-capacity>
- Stakeholder Workshop held 24<sup>th</sup> June
  - Focus on: coordination & information provision, when to offer, open seasons, economic test principles, tariff issues.

# EU Incremental Amendment Update nationalgrid

## – early feedback

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- Early ACER feedback:
  - Fundamental principles aligned with ACER guidance
  - Legal text overly complex and lacks clarity
  - Open season needs refinement (too open – especially re alternative allocation methods).
  - Fixed payable price is a deviation (Tariff Code debate)
  - Accelerated depreciation (some sympathy but is a Member State issue)
  - Adjustment of reserve price shouldn't be moved downwards to simply pass test (should be more about moving from average cost to LRMC).

# EU Incremental Amendment Update nationalgrid

## – early feedback

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- Early Stakeholder feedback:
  - Push for greater transparency (current Open Seasons are flexible but not transparent)
  - Sympathy for shorter depreciation for new capacity (but assets must not be revalidated).
  - F-factor should be subject to consultation (not just NRA determined)
  - Economic test should be for guidance only as based on estimated prices (where floating)
  - TPA – new OSP capacity will easily lead to request for exemptions
  - Greater transparency re coordination between TSOs and NRAs
  - Yearly assessment of incremental requirements
  - Fixed prices have a value for incremental/new capacity

# Interoperability Data Exchange Code Update



## Interoperability & Data Exchange Update

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- Comitology was delayed but meetings are now scheduled: 10<sup>th</sup> July and 1<sup>st</sup> & 2<sup>nd</sup> October 2014
- ENTSOG version of the Code has been through EC review (inter-service consultation)
- Version for comitology has been sent to Member State representatives and to ENTSOG
- This presentation summarises the key changes from ENTSOG's draft



## Key Changes from ENTSOG version

Code Section	Nature of change
Recitals	Linkage of Gas Quality section to CEN Standard. ENTSOG drafted a clear separation, new text contemplates Code requirements as interim solutions before the CEN standard is adopted.
Definitions	New definition of “adjacent TSO” meaning each of the TSOs connected at an IP.
Interconnection Agreements	New Article requiring ENTSOG to develop a template of ‘default rules’ for the mandatory terms. Minimal impact expected subject to drafting clarification.
Interconnection Agreements	Interconnection Agreements and any amendments to mandatory terms to be sent to ENTSOG as well as NRAs. Rationale unclear, potential confidentiality implications.
Interconnection Agreements	In an exceptional event, Network Users to be informed about the possible impact on quantities and quality of gas that can be transported over an IP. ENTSOG draft contemplated Network Users only being informed about the possible impact on Confirmed Quantities.
Gas Quality (Managing Differences)	New obligation for NRAs to cooperate in reaching a decision about TSOs’ proposals to resolve a cross border gas quality issue. Obligation for TSOs to provide ongoing assessment of solution effectiveness removed.
Gas Quality (Data Publication)	Hourly Wobbe and CV data to be published on the ENTSOG transparency platform as well as TSO websites. (NG view remains not applicable for Bacton IPs as gas is subject to co-mingling with UKCS gas).

## Key changes from ENTSOG draft

Code Section	Nature of change
Odourisation	Default timescale of two years proposed for member states that odourise transmission to “shift towards” non-odourised gas, if other options fail.
Data Exchange	Scope in ENTSOG draft covered TSO-TSO and TSO-IP shipper data exchange. Proposed to include “network users active at virtual trading points, to the extent they engage in transmission between such virtual trading points”. Unclear whether this an extension to scope or not (a shipper moving gas from one VTP to another is by definition an IP shipper).
Data Exchange	TSOs to make all three data exchange types (document-based, integrated, interactive) available, but only implement / activate as may be necessary for particular business processes. Previous ENTSOG text contemplated a choice for TSOs of the most appropriate solution for each business process, with NG preference for web services technology (integrated Data Exchange).
Final Provisions	New obligations on TSOs to submit compliance information to ENTSOG by 31 May 2016, ENTSOG role to assess TSO compliance and report to ACER by 31 July 2016.
Entry into force	Compliance deadline for TSOs of 31 March 2016.

## 3. UNC Modification Plans



# Phase 2 UNC Modifications

## Potential Timescales

EU Network Code	Area of change	Panel Submission	Workgroup Development	UNC Consultation
Gas Balancing (BAL)	Information Provision	March 2014	2 Months	June 2014
	SMP Buy & Sell	April 2014	1 Month	June 2014
	Nomination Process at IP's	April 2014	6 - 9 Months	Q4 -2014
Capacity Allocation (CAM)	CAM / CMP Compliant Capacity Auctions	Q2 - 2014	6 - 9 Months	Q4 - 2014
Interoperability & Data Exchange (INT)	OBA's / allocations	Jul/Aug 2014	6 Months	Q1 - 2015
	Interconnection Agreements/Contract Changes (facilitating Modification )	Q1 - 2015	3 Months	Q2 - 2015
	Data Exchange	Q3 - 2014	3 Months	Q4 - 2014

## 4. System Developments

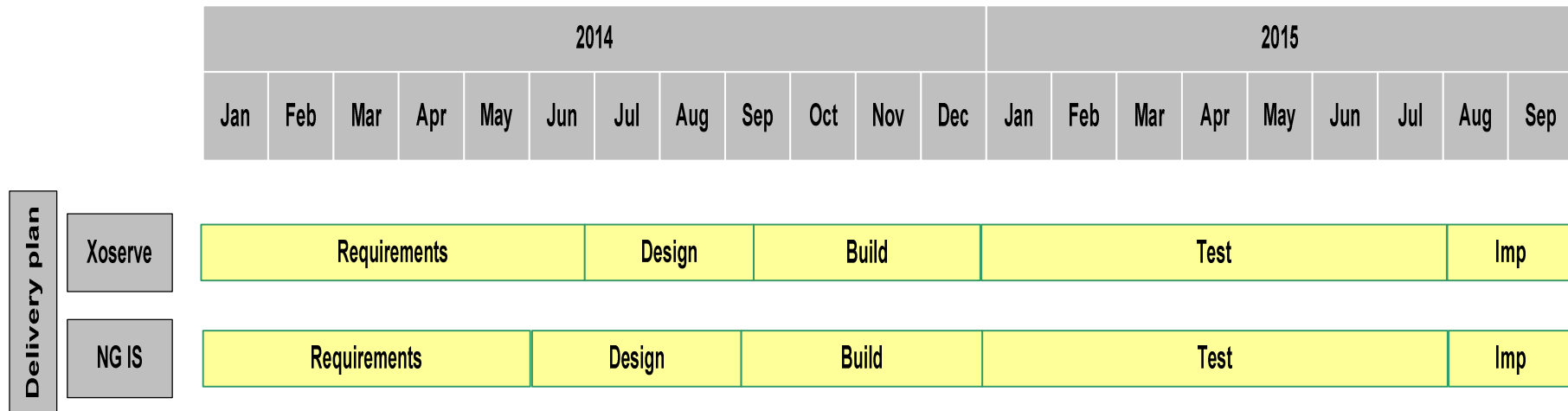


# EU Implementation Programme - System Developments Update



3<sup>rd</sup> July 2014

# Phase 2 Delivery Plan



- System implementation timescales beyond Design are estimated at present

## Overview of Key System Delivery Stages

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- Requirements

- Business process definition, screen prototypes



- Design

- Technical design, security

- Build

- Write system code, test individual components

- Testing

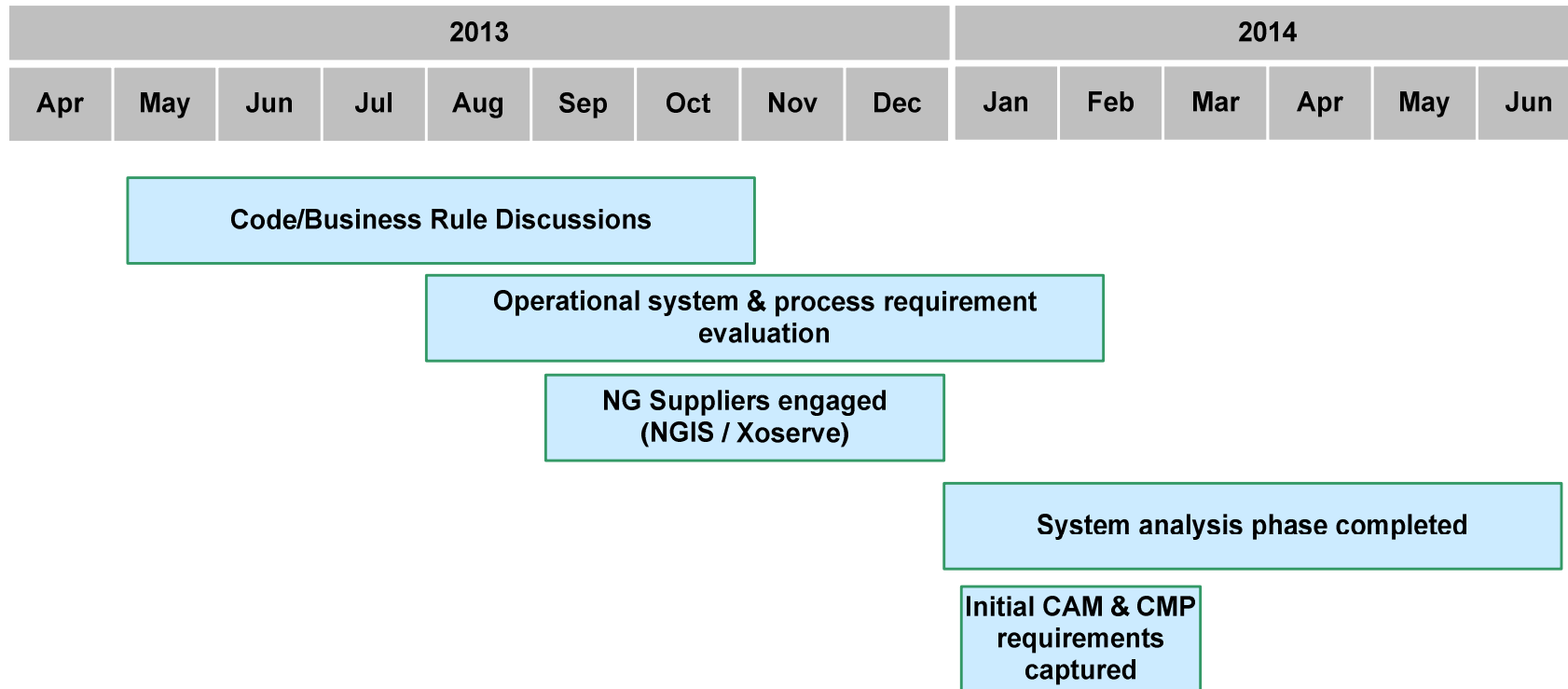
- Supplier, UAT, external parties, performance, interface

- Implementation

- Dress rehearsals, implementation, support



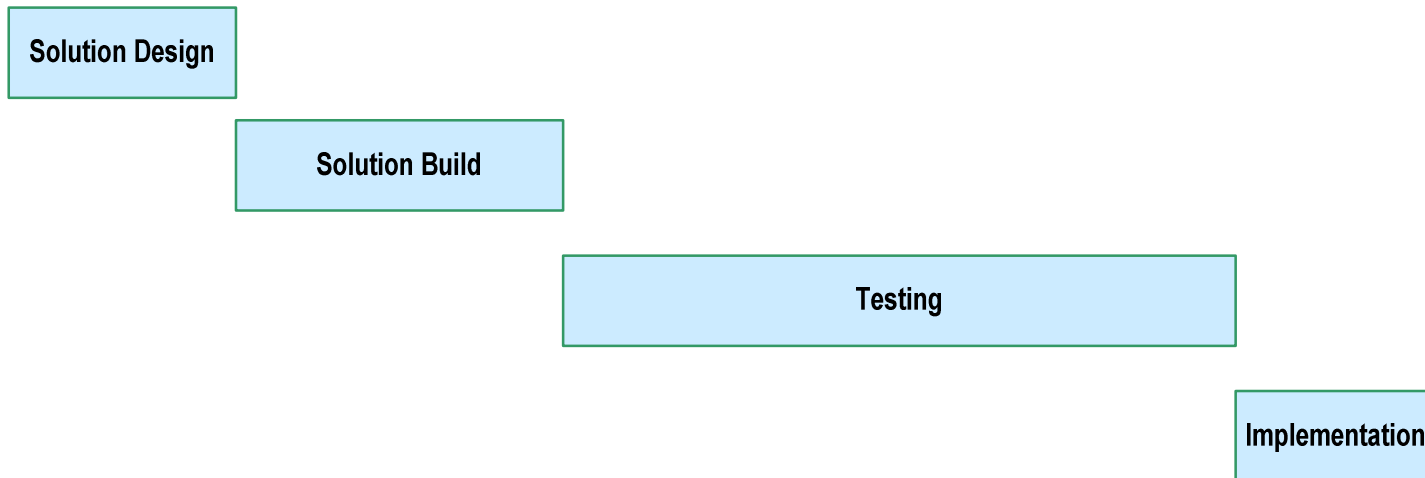
# Progress to Date



# Next Steps

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2014						2015										
Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov



## Business and Systems Delivery Team

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### Contact details

- Bill Goode - Gemini Implementation Lead
- John McNamara – iGMS & Consequential Change Implementation Lead
- Chris Gumbley – EU Programme Delivery Manager
  - Contact number: 01926 654071
  
- Team email: [box.gasops.businessc@nationalgrid.com](mailto:box.gasops.businessc@nationalgrid.com)

## 5. Draft Modifications



## Reform of gas allocations regime at Interconnection Points – proposed UNC Modification



EU Workgroup  
July 2014

## Code provisions and stakeholder views

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- TSOs must agree a nomination matching rule/process and for this to be included in the Interconnection Agreement (IA)
- UNC Mod 0493 covering nominations at IPs is in development
- ‘allocate as nominate with Operational Balancing Account (OBA)’ allocation rule envisaged, and for the allocation rule to be included in the IA\*
- OBA favoured by IUK, BBL and supported by Gaslink – NG working with adjacent TSOs to facilitate OBAs (retaining NG’s residual balancing role)

\* under the Interoperability Code if 1 adjacent TSO wants an OBA the other is obliged to cooperate

## Aims of the UNC Modification

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- To introduce TSO-shipper allocation at the IPs
- To facilitate 'allocate as nominate' at the IPs
- Changes to TPD Section E<sup>1</sup> envisaged
- Interconnection Agreements to contain the detailed OBA 'management rules'
- UNC Modification on allocations at IPs could be submitted to July Panel, subject to July EU Workgroup meeting views

**1** An option is to introduce a separate section/document on Interconnection Points - to include allocation rules/principles

# Allocations and OBA Framework Development – National Grid’s initial views

Item	Description	IA	UNC
Allocation Principle	‘Allocate as nominate’ – National Grid allocates shippers at the IPs equal to their Confirmed Quantities but may in some circumstances need to allocate proportionally to measurement.	X	X
Steering Difference	The difference between aggregated Confirmed Quantities for the Gas Day and measured gas flow for the Gas Day	X	
Cumulative Steering Difference	The sum of the Steering Difference carried over from D-1 and the Steering Difference for the current Gas Day	X	
Steering Tolerance	The allowed tolerance on the Cumulative Steering Difference (to be agreed between the adjacent Transporters), i.e. the allowed difference between Confirmed Quantities and actual gas flow	X	
Options for Steering Tolerance breaches	<ul style="list-style-type: none"> <li>• ‘Minor’ breaches within Day that can be steered back within the Steering Tolerance; and</li> <li>• ‘major’ breaches such that gas flow cannot be steered back within the Steering Tolerance due to a constraint and/or would require NGG to take a balancing action</li> </ul>	X	
OBA management	How day to day responsibility for recalculating the Cumulative Steering Difference, and communicating it to the adjacent TSO, is assigned	X	
Cumulative Steering Difference breach (after the Gas Day)	If the Cumulative Steering Difference is identified [unexpectedly] to be outside of the Steering Tolerance after the gas day, then ‘allocate as measured’ may apply.	X	X



## Summary and next steps

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- Changes will be required both to the Interconnection Agreements and UNC
- We are engaging with our adjacent TSOs to develop the OBA design and agree appropriate parameters
- Interactions with other aspects of the GB regime will also be explored to assess whether the scope of the proposal needs to include other rules (e.g. constraint management, meter reconciliation)
- Mod to be raised in time for either July or August Panel

## Proposed timeline

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<b>Task</b>	<b>Timeline</b>
Develop terms with adjacent TSOs to facilitate OBAs	Qtr 2 – Qtr 4 2014
EU Workgroup discussions	May – June/July 2014
UNC Mod raised	July /August 2014
UNC Mod development	Qtr 3 2014 – early Qtr 1 2015
Ofgem decision	By end Qtr 1 2015

## Common Units



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3<sup>rd</sup> July 2014

## Introduction

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- It is currently assumed that the Interoperability Code will require use of 0/25 reference conditions for:
  - Shipper capacity bookings at IPs
  - TSO capacity obligations at IPs
  - Shipper nominations at IPs
  - Transparency data publication
  - Gas quality data publication at IPs (currently assumed not applicable to GB)
- This presentation provides a proposal for 0/25 compliance at the IPs, while keeping other GB processes whole at 15/15

## Current Arrangements

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- IUK and BBL currently manage the difference in reference conditions on their side of the Bacton IP
- No issue currently at Moffat as Ireland operates to 15/15 conditions
- Difference between energy quoted at 15/15 and 0/25 conditions is small ( $\sim 0.999$  conversion factor)
- A pragmatic approach to compliance is therefore recommended
- Clarity and consistency is needed on how the difference will be managed TSO-TSO and TSO-shipper

## Issue 1: Current Shipper IP Bookings

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- Should current shipper bookings at the IPs be converted in Gemini to 0/25 conditions?
  - If converted, shippers would see a slight reduction (eg. 20 GWh (15/15) = 19.98 GWh (0/25))
  - Extra work in systems for NG
  - If no conversion (existing holdings restated on a 0/25 basis) shippers would gain a very small increase in capacity
- Proposal: No conversion, restate current IP bookings at Moffat and Bacton (post split) to be on a 0/25 basis from November 2015

## Issue 2: Future Shipper IP Bookings

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- NG will be obliged to offer capacity on PRISMA on a 0/25 basis
- Should future bookings be converted to 15/15 at the Gemini interface?
  - Conversion may generate confusion
  - Overruns should be judged based on the 0/25 booking
- Proposal: No conversion, Gemini reflects 0/25 bookings made on PRISMA

# Capacity

## Issue 3: Baselines

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- Should the new EU Bacton ASEP and Moffat CSEP baselines be converted to 0/25 conditions?
  - Negligible effect on current obligations (< 3 GWh for Bacton, 0.4 GWh for Moffat) and incentive risk
  - No conversion would mean a slight increase to NG obligations
- Proposal:
  - Retain existing baselines, no conversion
  - Note: Would require a change to MIPI for transparency reporting



## Issue 1: Nominations

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- Shippers should nominate equal figures either side of an IP for matching purposes
- Shippers should nominate on a 0/25 basis (i.e. below their 0/25 capacity booking to avoid overrun)

# Energy

## Issue 2: Allocations

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- Shipper allocations need to be assessed against 0/25 IP bookings for capacity overrun determination
- An allocation equal to the shipper's nomination (confirmed quantity) should be used for this purpose
- However, allocations are also needed at 15/15 to keep GB shipper balancing whole
  - Eg. Shipper allocation of 100,000 kWh (0/25) IUK entry would mean the shipper is entitled to dispose of 100,100 kWh (15/15) at the NBP
- Proposal: IP shippers receive two allocations: one for overrun assessment, the other for balancing purposes

# Common Units – Summary Proposal

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## Capacity

- Restate current shipper IP capacity bookings on a 0/25 basis (no conversions in Gemini)
- Restate IP baselines on a 0/25 basis (no conversion)
- Future shipper IP bookings made on PRISMA (at 0/25) not converted when downloaded to Gemini

## Energy

- Shippers nominate at 0/25 either side of the IP
- Two allocations per shipper per IP per day:
  - 0/25 allocation for capacity overrun assessment
  - 15/15 allocation for shipper balancing purposes

## UNC & Licence Impact – Initial Views

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- 15/15 reference conditions are specified in UNC, therefore a UNC mod would be needed to:
  - Recognise that the IPs will operate to 0/25
  - Facilitate separate allocations for capacity overrun and imbalance purposes
- Licence currently makes no mention of reference conditions therefore no change envisaged

## Proposed way forward

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- Seek views from the Workgroup today
- Clarify the need for and scope of a UNC Modification
- Assess the systems impact