European Workgroup







5th February 2015



1. General Update



Code Status Update

Code	Current Status	Implementation date
Congestion Management (CMP)	Implemented	1 st October 2013 (Fixed)
Capacity Allocation Mechanism (CAM)	CAM approved for EU wide implementation at relevant EU IPs	1 st November 2015 (Fixed)
Gas Balancing (BAL)	BAL approved for EU wide implementation 26 th March 2014 (Commission Regulation (EU) No 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks)	1 st Oct 2015 (Fixed)
Interoperability & Data Exchange (INT)	Code approved at second comitology meeting 3-4 November 2014. Expected to enter EU law by March 2015, compliance required by 1st May 2016.	Some deliverables planned for 1st October 2015, others by 1st May 2016
Tariffs	Under development. Code to be submitted 31st 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 31st December 2014	Applicable from March 2017



Gas Codes Timeline

Status of Development of European Gas Network Codes

Future dates are subject to change

Dates shown in italics are best approximations based on current understanding.

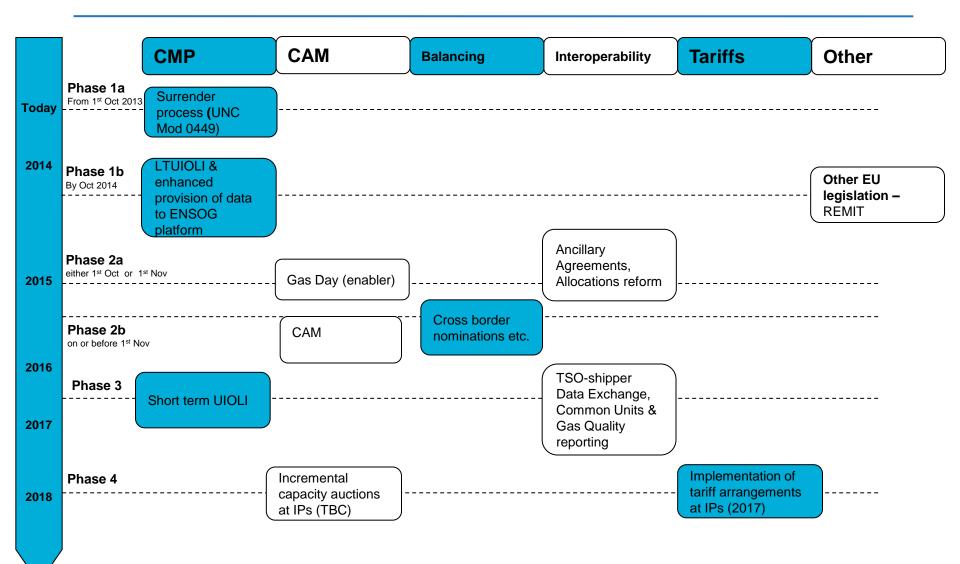
It has been necessary to 'round' some dates for the benefits of the diagram

KEY		
Activities undertaken by ACER		
Activities undertaken by ENTSOG		
Activities undertaken by European Commission		

		2012	2013	2014	2015	2016
Network Code / Guideline	Next Step	Mar Apr May Jun Jul Aug Sep Oct	Apr May Jun Jun Aug Sep Oct Nov	Dec Jan Mar Apr May Jul Jul Aug Sep Oct Nov Nov	Jan Apr May Jul Aug Sep Oct Nov Dec	Heb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Congestion Management Principles (CMP)	Implementation of CMP obligations for 1st October 2013	Comitology	Golive		1	
Capacity Allocation Mechanisms (CAM)	Post-Comitology	ACER Review revision of Code Review	Comitology		Go Live	
Balancing	Comitology Phase	ENTSOG Drafting Initial Cons drafti ng Ultati on Finalise drafting	ACER Review Comit	ology	Go Live	
Interoperability & Data Exchange	Comitology	ACER Develops Framework Guidelines on Interoperability	ENTSOG Drafting Consultatio n ACER Red	Comitology	до Гие	Complance
Tariffs	Stakeholder Workgroups	ACER Develops Framework Guidelines on Tariffs	FG Extension	Initial drafting Supplies and the supplies of	Comitology ACER Review (duration unknown)	
Incremental	Stakeholder Workgroups	ACER Develops Framework Guidelines on Tariffs	FG Extension	ENTSOG Drafting Solution Solution Finalise drafting	ACER Review (duration unknown)	



Road Map





2. EU Code Updates



EU Tariffs Code Update

EU Tariffs Code Update

- EC starting comitology in September, therefore
 - Code finalisation on very strict timetable
 - ACER reasoned opinion process being run in parallel with ENTSOG code finalisation
 - Target of "unqualified recommendation"
 - High Level meetings (EC/ACER/ENTSOG) coordinating both work streams
 - Creation of Issues List (changes restricted to this)
 - Code to be finalised in May
 - ENTSOG: GA approval 22nd April
 - ACER sign off: 6th May

EU Tariffs Code Update

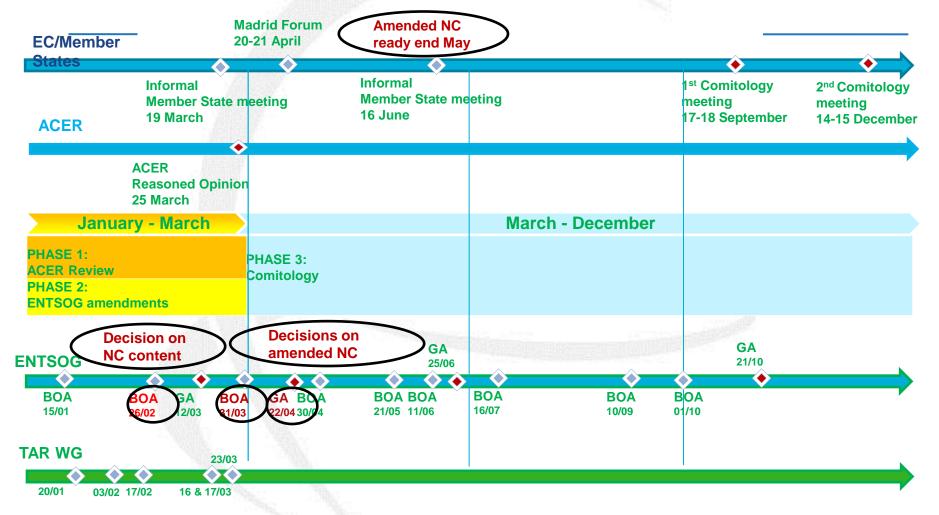
- High Level Meeting on 15th January increased issues list to 16
- EC to deal with 4 issues in comitology
- ACER to revise "backhaul" section
- ENTSOG to revise remaining issues

Who Is Doing What

No.	Issue Name	TAR NC Article	Action for
1.	Provision of binding tariffs prior to auctions	Article 27	ENTSOG
2.	Option to provide fixed long term tariffs	Article 42(1)(b)	ENTSOG
3.	Higher multiplier cap	Article 29(2)	ENTSOG
4.	Transmission and dedicated services definitions	Article 3(3) & (12)	ENTSOG
5.	Application of cost allocation methodology within a	Article 5(4)	ENTSOG
	multi-TSO entry-exit system		
6.	Non-physical backhaul pricing	Article 32(2)	ACER
7.	High-transit exemption –	Articles 2(5) and 15	EC
	Partial non-application of cost allocation		ENTSOG
	methodology & Volume risk for high transit systems		LIVIOOO
8.	Cost allocation methodologies and subsequent tariff	Articles 10 to 15	EC
	adjustments		
9.	Cost allocation methodology counterfactual	Article 21(1)(a)(iv)	n/a
10.	Commercially sensitive information	Article 24(2)	ENTSOG
11.	Ex-post interruptible pricing in combination with ex-	Articles 32(1)(b) &	ENTSOG
	ante	34	
12.	Mitigating measures and transitional provisions	Articles 48 and 49	ENTSOG
13.	Protection of existing contracts with a fixed price	Article 50	EC
14.	Implementation and interaction with Article 26 of	Article 50	ENTSOG
	CAM		
15.	One-off reset and stop-loss	Article 48	EC

ionalgrid

TAR NC Timeline for 2015





Issue 1: Binding Tariffs

- Code now likely to require binding tariffs for first year
- Auction calendar likely to move to June/July
- ENTSOG may discuss with ACER
 - if binding tariff may be a "maximum" tariff which could be lowered
 - if TSO can set aside a portion of revenue to buffer against future under recovery due to "early setting" of tariffs
 - Should it only apply to IPs?

Issue 2 Fixed Price (for existing capacity)

- Principles agreed at High Level meeting
 - TSO takes risk of under-recovery if fixed is lower than floating tariff
 - TSO takes reward for fixed being higher than floating tariff
 - Need to offer fixed in conjunction with floating
 - Assumption: fixed tariffs can be indexed with a risk premium added
- ENTSOG developing a proposal
 - How to determine if fixed tariff is higher or lower
 - Need to consider impact on reconciliation
 - Is CRRC still required?

Issue 2 Fixed Price (for existing capacity)

- Questions for ACER
 - Is risk sharing acceptable?
 - Cap and Collar (to be determined by NRA)
 - Sharing factor between TSO and Users
 - Alternative proposal to consider:
 - ■TSO is neutral
 - Instead, the auction premium (in addition to the risk premium) be used to off-set the risk for stakeholders (e.g. some years stakeholders gain by reduced tariffs and some years they experience higher tariffs)

Issue 2 Fixed Price (for incremental capacity)

Principles

- TSO offers fixed tariff for incremental capacity
- Fixed tariff is offered for the duration of the incremental capacity (up to 20 years)
- Any future under or over recovery is socialised onto floating tariffs
- Assumption: fixed prices for incremental can be indexed (using a public index).
- Assumption: fixed prices are an option.

Issue 2 Fixed Price (for incremental capacity)

Detailed considerations

- How do you determine what is incremental capacity and what is existing capacity?
- Is this a one off offer or ongoing?
 - Unsold incremental become "existing" capacity
- How is the regulatory sub-account managed (including the premium)?
 - Do we need to calculate over / under recovery that would have occurred?

Questions for ACER

Can fixed prices be offered on their own (without the offer of floating)?

Issue 3: Higher Multiplier cap

Principles

- Use 'gliding path' of a higher multiplier cap as follows: 3.5 for the 1st year after the application date, 2.5 for the 2nd year and 1.5 for the 3rd year
- After the 3rd year, ENTSOG is to produce a report on pipeline utilisation based on which the multiplier cap will be evaluated
- ACER may be asked to consider if 3.5 allowed for 3 years then review
 - Some concern from TSOs that end in 1.5 with glide path c.f. keeping it at 3.5 them demonstrating if required

Issue 4: Transmission & Dedicated nationalgrid Services Definitions

Principles

- Develop a refined definition of transmission and dedicated services based on the principle that costs are attributed to transmission services by default with dedicated services being the exception
- Dedicated services should be defined by certain specific criteria
- For dedicated services, a list of dedicated services should not be developed...but all costs should be visible and controllable
- ACER suggest 'delineating' definitions of transmission services and dedicated services

Issue 4: Transmission & Dedicated nationalgrid Services Definitions

Additional questions

- Can transmission services definition be redefined so that it implies default costs (and dedicated services by exception)?
- Does this require to consult and/or provide transparency around dedicated services charges?

High level design

- Balancing services should be excluded from dedicated services as they are dealt with in a different way
- Transmission services should be linked with only capacity products (what about CRRC?)

Issue 5: c/a/m in a multi-TSO e/e system

- High Level Meeting conclusions
 - Look into the need for ITC and how ITC could work
 - Need to demonstrate that the separate application of all cost allocation methodologies is possible in a multi-TSO entry-exit system
- Other aspects being considered
 - can a separate application be used for all c/a/m or is it restricted to certain ones (e.g. "Postage stamp" is possible but not "Distance to Virtual Point A").

Issue 7: asset split instead of 5th c/a/m

- High Level Meeting conclusions
 - Substitute the 5th methodology with the pre-asset split which is to be fair, transparent and non-discriminatory
- High level design
 - Art 15 divided into asset cost split, then rest of article deleted
 - Amendment to the equalisation secondary adjustment to set out derivation of final reference prices

Issue 10: Commercially Sensitive Information

- High Level Meeting conclusions
 - Preference for deleting the clause
 - Possible to keep the clause only if it indicates a limited list of items which are considered to be commercially sensitive and if a sufficient number of TSOs is concerned by this clause
- Approach
 - Rather than delete sentence it shall be narrowed and allow information in art. 25 to be classified as commercially sensitive as per national law.

Issue 11: ex-post discount in combination with ex-ante

- High Level Meeting conclusions
 - EC and ACER preference is to delete the combination approach from the TAR NC
- Way forward
 - Board to decide if ex-post discount removed

Issue 12: Mit. Measures & Trans. Provisions

- High Level Meeting conclusions
 - To redraft for clarity of the mitigating measures deadline and conditions for requesting
- High level approach
 - Text being refined for clarity
 - Transitional period to be clarified as no longer than 24 months
 - ACER to be questioned re mention of "gas year" as it is redundant

Issue 14: Implementation and Art. 26

- High Level Meeting conclusions
 - The EC to consider that all the provisions of Article 26 of the CAM NC are eventually covered by the TAR NC
 - To check the interaction with Article 49 of the TAR NC
 - Both the EC and ACER claim that Article 26 will be deleted
- Way forward
 - Key issue is if TSO at an IP has delay due to transition provisions and other TSO doesn't
 - Best resolved in comitology

Issue 16: Storage

- High Level Meeting conclusions
 - EC wants more detail
 - EC want to know if any discount is simply a secondary adjustment
- Aspects being considered
 - New text may be inserted re "double charging"
 - "Whether an entry tariff has been paid before entering the relevant transmission network and whether an exit tariff will be paid upon exit therefrom, and if so, whether those tariffs reflect any additional costs or benefits imposed on the network by gas storage".



EU Incremental Amendment Update

Key dates

- Start of ACER consultation 29 January
- High level meeting on 3 February
- Meeting on EC impact Assessment 5 February
- Trilateral Telcos EC/ACER/ENTSOG 10/24 February
- Close of ACER consultation 25 February
- Trilateral Telco EC/ACER/ENTSOG 5 March
- 1st informal member states meeting on INC and TAR on 19 Mar
- ACER Reasoned Opinion on TAR NC to be provided until 26 Mar



Incremental Discussion issues (1)

Issue	ENTSOG position	ACER position	Stakeholders' position
Fixed tariff option for incremental capacity Art. 20 (b) 9; Art. 20 (c) 3	Fixed (+index) price option is and should be included	ACER concerns, mostly on fixed price on existing capacity and less on incremental capacity	Stakeholders support a fixed price option. Support in SSP for fixed price as default for incremental
Allocation mechanism in open seasons Art. 20 (f) CAM NC	CAM auctions not designed to conditional commitments – but two step procedure is included: 1. CAM auction; 2. if economic test fails an a case-by-case procedure will be applied	CAM auctions should be default, alternatively prorata	Stakeholders concerned on compromise due to non-transparent and complicated procedure



Incremental discussion issues (2)

Issue	ENTSOG position	ACER position (expected)	Stakeholders' position
F-factor (the level of upfront commitments underwriting the investment Art. 44 TAR NC	ENTSOG included provisions that explicitly address the under-recovery risk of non-committed part (1-f) of incremental capacity investment.	of scope – but that it is evident and sees no	·
Tariff adjustment Art. 47 TAR NC	Dedicate adjusted (increased) tariffs revenues from incremental capacity to the future under-recovery risk of the respective investment. Requires NRA approval – TSOs consider mentioning of the option needed on EU level.	ACER sees this being out of scope of FG and to be left to NRAs.	Some stakeholder support after mentioning that in case under-recovery doesn't occur, excess revenues will be used to reduce tariffs at respective IP

- EC position on INC topics generally not outspoken so far.
- On the issue of tariff adjustment they have questioned the need for including the adjustable depreciation rate seeing it as an allowed revenue issue and therefore a national issue



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	July 2014
	Nomination Process at IPs	April 2014	6 - 9 Months	Nov 2014
Capacity Allocation (CAM)	CAM / CMP Compliant Capacity Auctions	May 2014	6 - 9 Months	Nov - Dec 2014
Interoperability & Data Exchange (INT)	Reform of Allocations (0510)	August 2014	6 Months	March 2015
	Harmonisation of Reference Conditions (0519)	November 2014	3 months	March 2015
	Interconnection Agreements & Ancillary Agreements	February 2015	3 Months	June 2015

Summary – Capacity - UNC Mod Proposals

SUBJECT	UNC Mod	STATUS
CAM	500	Mod development completed. Workgroup Report submitted to Panel 20/11/14 with Legal Text. Representation closed out 19/12 – 5 responses received all in support. FMR & recommendation to implement sent to Ofgem
501		Mod development completed. Workgroup Report presented to Panel 15 January 2015. Draft Modification Report issued for consultation - close out for responses is 12th February 2015. UNC Panel Modification recommendation 19th February .
Bacton 'splitting' alternates	501A	Mod development completed. Workgroup Report presented to Panel 15 January 2015. Draft Modification Report issued for consultation - close out for responses is 12th February 2015. UNC Panel Modification recommendation 19th February .
	501B	Mod development completed. Workgroup Report presented to Panel 15 January 2015. Draft Modification Report issued for consultation - close out for responses is 12th February 2015. UNC Panel Modification recommendation 19th February.
	501C	Mod development completed. Workgroup Report presented to Panel 15 January 2015. Draft Modification Report issued for consultation - close out for responses is 12th February 2015. UNC Panel Modification recommendation 19th February.



4. System Development Update

European Implementation Programme

- System Developments Update





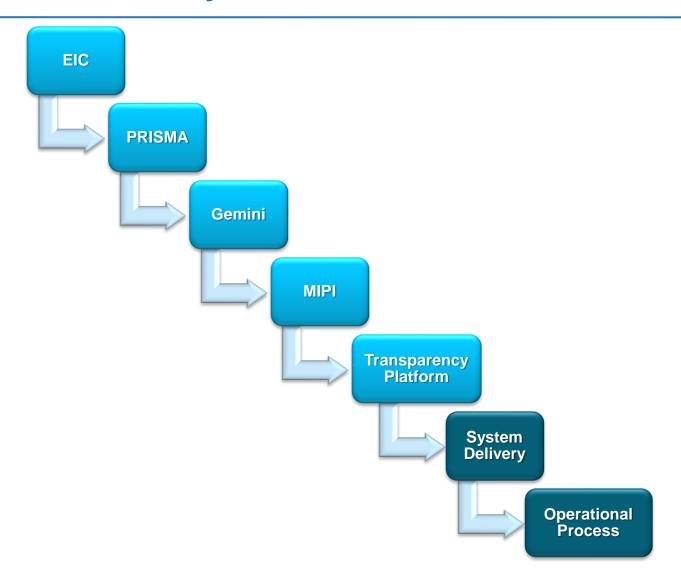


5th February 2015

EU Gas Codes Implementation Workshop

- A workshop was held on 23rd January, with the aim of providing an overview of the changes that we'll be implementing this year, and to give attendees the opportunity to speak directly to colleagues from National Grid and some of our partners from Xoserve, PRISMA, IUK and BBL
- The full presentation pack has been published on the National Grid website (w/c 2nd February) http://www2.nationalgrid.com/UK/Industry-information/Europe/Industry-Material/
- The following slides are an extract from this event, to provide you with the latest system developments affecting the UK Interconnection Points

Overview of a Day in the Life



What is an Energy Identification Code (EIC)?

- The Energy Identification Coding scheme provides a unique identification of the market participants and other entities active within the Energy Internal European Market (IEM)
 - It is widely used in the Electronic Document Interchange
 - The EIC is a code scheme and is not a right or authorisation to trade energy

How does a Market Participant obtain an EIC?

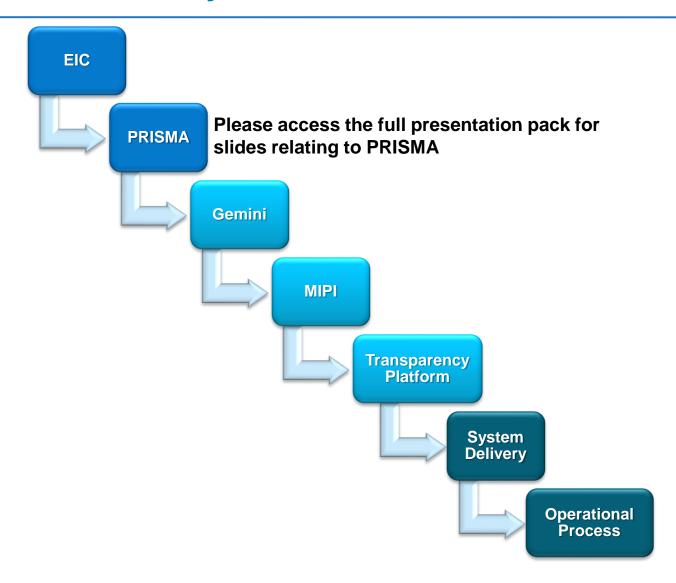
- National Grid became a Local Issuing Office (LIO) for Great Britain in 2014, and is authorised to issue International and Local EIC codes
- An EIC is required when using PRISMA
- Please visit the 'Local Issuing Office' page on the National Grid website to access the
 - Request Form

Process the

request

- EIC Library
- http://www2.nationalgrid.com/UK/Industryinformation/Europe/Local-issuing-office/

Overview of a Day in the Life



CAM Auctions Timetable 2015

- As Capacity Allocation Mechanism Network Code is not legally binding until 1st November 15, any auctions referring to dates earlier than this are nonbinding on TSOs
- The below dates only refer to auctions that are selling a product relevant to the GB regime
- Firm Annual Yearly
 - 2nd March 2015 08:00 GMT
- Firm Annual Quarterly
 - 1st June 2015 09:00 BST

CAM Auctions Timetable 2015

Firm Rolling Monthly

- 9th March 2015, 13th April 2015, 11th May 2015, 8th June 2015, 14th July 2015, 12th October 2015
- GB PRISMA Go Live 1st November 2015
- 9th November 2015
- 14th December 2015
- 11th January 2016
- 8th February 2016

CAM Auctions Timetable 2015

Firm Day Ahead

1st March 2015 through to 29th February 2016 at 15:30 GMT / 16:30 BST

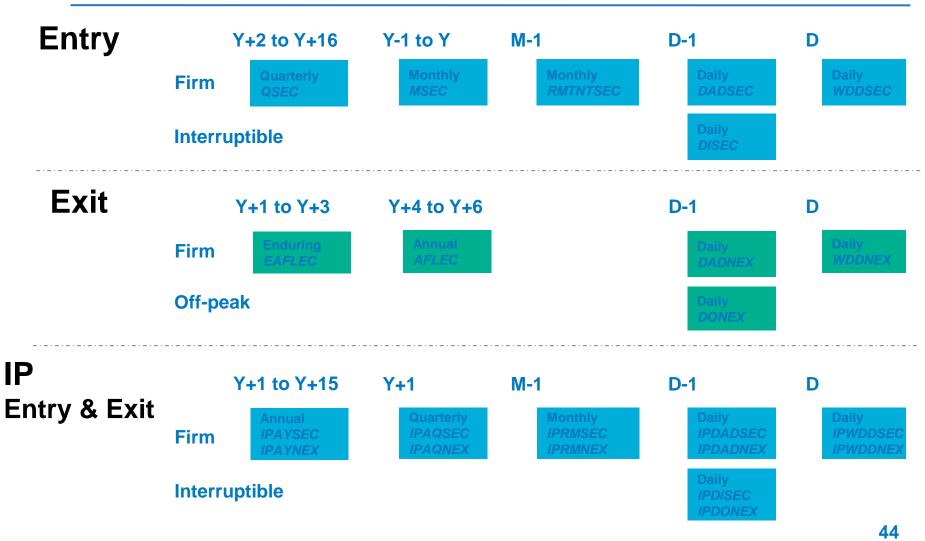
Interruptible Day Ahead

1st March 2015 through to 29th February 2016 at 16:30 GMT / 17:30 BST

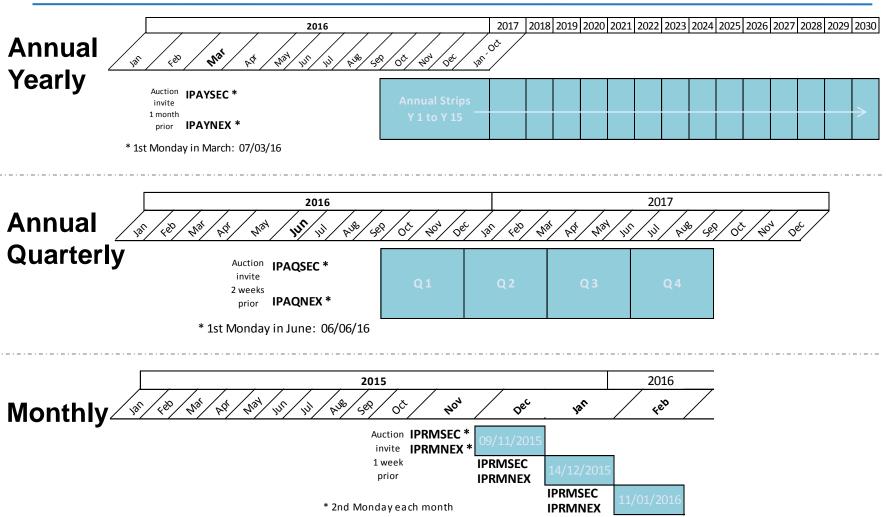
Firm Within Day

Subject to capacity being made available, a within-day capacity auction shall be held every hour during gas day.

When capacity is sold



IP Entry & Exit Long Term Auctions – Firm Capacity



Results available via MIPI and Transparency Platform

TSOs are obliged under EU law to publish data on a Union-wide central platform. ENTSOG launched their new Transparency Platform on 1st October 2014. The platform currently includes data on the following:

Indicators

- Nomination (kWhd/d)
- Re-nomination (kWh/d)
- Allocation (kWh/d)
- Physical Flow (kWh/d)
- Gross Calorific Value (kWh/M3)
- Capacity: Firm Technical, Booked and Available (kWh/d
- Capacity: Interruptible Total, Booked and Available (kWh/d)

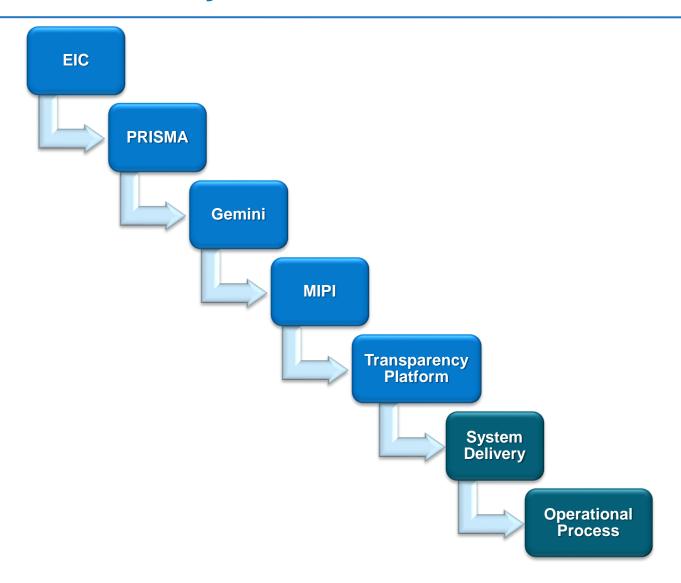
There are 47 operators on the platform from 25 different countries. National Grid provides data on 170 connection points consisting of:

- Distribution Points
- Production Points
- o Storage Sites
- Interconnectors
- Power Stations Aggregate
- Industrial Offtakes Aggregate

Future reporting will include:

- New Congestion Management Reports for Interconnection Points
- Bacton Split information
- Additional Short Term capacity information
- MIPI data and report explorer http://www2.nationalgrid.com/uk/industry-information/gas-transmission-operational-data/
- Transparency Platform https://transparency.entsog.eu/

Overview of a Day in the Life





Gemini Changes

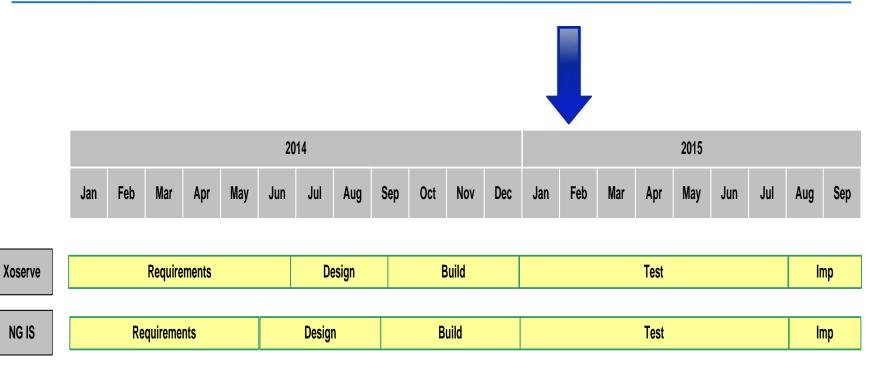
Name	Number of Gemini Entry Changes	Number of Gemini Exit Changes	Total
Changed screens	66	32	98
New screens	30	15	45
Changed file formats	36	16	52
New file formats	5	3	8
Changed APIs	0	0	0
New APIs	3	1	4
Changed reports	34	14	48
New reports	6	4	10

What are the System Impacts?

- What systems are changing?
 - Gemini screens
 - Gemini Exit screens
 - File formats UK Link Committee gave its approval for the changes
 - APIs
 - Interfaces with National Grid's 'MIPI' and ENTSOG's new 'Transparency Platform' – Professional Data Warehouse System (PDWS)
 - iGMS

Phase 2 Delivery Plan

Delivery plan



Overview of Key System Delivery Stages

- 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, deployment, support

Testing Stages

- What are the stages of testing?
 - Supplier
 - User Acceptance Testing
 - Connected System Integration
 - System Performance
 - User Trials

Connected System Integration

- What do I need to know about the new Gemini and Gemini Exit Connected System Integration?
 - There is a requirement to create new interfaces with adjacent TSOs and these require testing
 - The PRISMA interface to National Grid systems will also be tested to ensure it is fully robust prior to GB IPs going live on the system
 - The new ENTSOG Transparency Platform Professional Data Warehouse System (PDWS) is now live, changes will need testing to ensure we continue to meet our transparency reporting obligations

User Trials

- What are User Trials?
 - An opportunity for Gemini and Gemini Exit Users to explore the system using a testing environment
 - The testing environment will contain the intended changes e.g. updated or new screens
- User Trials are planned for August 2015
- Based upon the Industry feedback received, we are working with our Service Providers on the detail of these User Trials

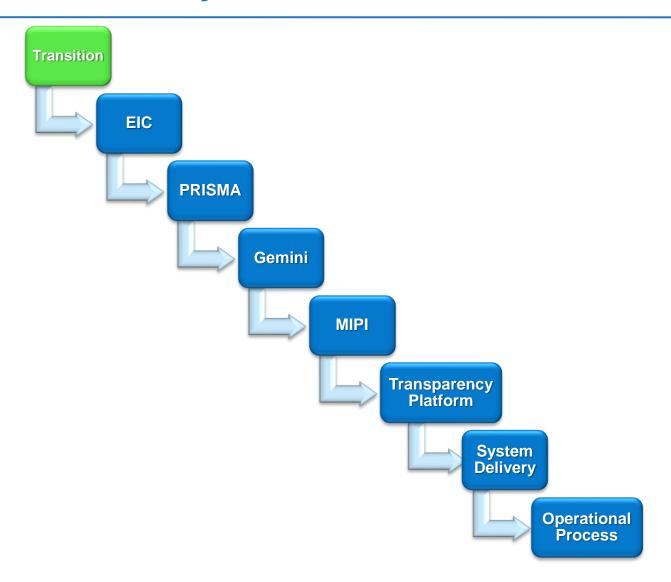
Training Proposal

- Gemini and Gemini Exit screen changes
- Gemini and Gemini Exit e-training package
- PRISMA downloads are available <u>https://platform.prisma-</u> <u>capacity.eu/center/download.xhtml</u>
- Based upon the Industry feedback received, we are currently working with our Service Providers on the training details

Implementation Stage

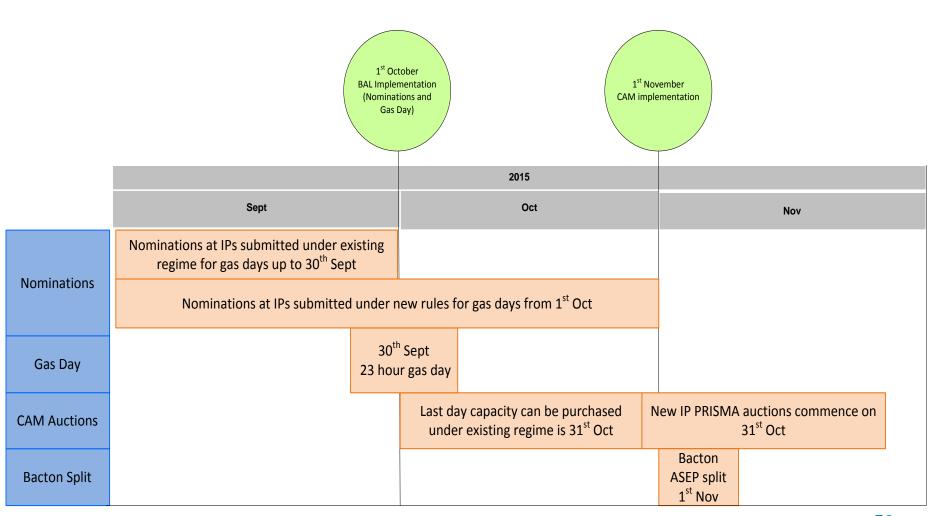
- What activities are within the implementation stages?
 - Dress rehearsals
 - Implementation (during an agreed outage window)
 - Post implementation support
- An implementation date for the code deployment in Gemini and iGMS is planned for 6th September 2015, in readiness for 1st October

Overview of a Day in the Life



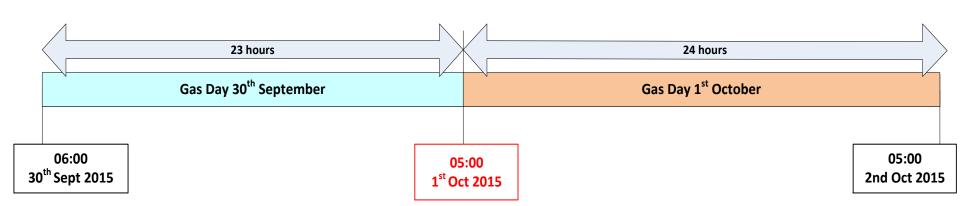


Transition – Cutover Timings for IPs



Gas Day Transition – Cutover Timing

- Gas day for 30th September 2015 = 23 hour day
- Gas day for 1st October 2015 = 24 hour day
 - Commences at 05:00 hours



Gas Day Transition – Historical Data

- There is an assumption that all historical data pre-1st
 October 2015, will be retained for a 6-6 gas day
- Any retrospective action or review (e.g. meter error reconciliation) will be calculated for a 6-6 gas day
- There is an expectation that all industry parties will adopt this approach as agreed through the UNC Modification workgroup

Gas Day Transition – Implementation

- We are working on the assumption that all GB parties impacted by the gas day legislation will align to a 5-5 gas day in time for implementation on 1st October 2015
- Some UKCS sub-terminals have identified that they are unable to change to a 5-5 gas day in time for 1st October 2015
 - DECC are chairing an industry workgroup to develop a solution to manage this

EU Business and Systems Delivery Team

Want to know more? Please contact a member of the team for further information or to provide us with feedback:

- Chris Gumbley EU Programme Delivery Manager
- Bill Goode Gemini Implementation Lead
- John McNamara iGMS Implementation Lead
- Kay Haycock Business Deliverables Co-ordinator
- Ethel Afrane Training and Communications Coordinator
- Team email: box.gasops.businessc@nationalgrid.com

Planned UK Link Downtime and IP Renominations Process from October 2015







Background

- New IP Renomination process spans the period 15:00 on D-1 to 02:00 on D
- Planned UK Link Downtime (GHKW) between 03:00 and 05:00 – system unavailable for renominations
 - Interoperability Code 'minimise system outages'
 - is current GHKW compliant?
- Options presented to September 2014 EU WG
 - "No change" preferred
- Concerns that views of wider stakeholders should be sought

Consultation

- Consultation document issued 26th November 2014, closed out 24th December 2014
 - Option 1: no change (existing GHKW retained)
 - Option 2A: routine outage for 2 hours + non-routine extended outages as required
 - Option 2B: non-routine outages as required
 - Option 3: 24/7 availability
- Option 1 flagged as our "minded to" position based upon EU WG feedback

Consultation Responses

3 responses

- E.ON Supported Option 1
 - "...a high level of system reliability ...is more important to us that full system availability..."
- Centrica Supported Option 1
 - "...[increased availability] has to be balanced against ...uncertainties and costs associated with the other options described"
- RWE Supported Option 2B
 - "All options can be interpreted to comply [however] obligation to minimise ought to be taken as an aspiration to do better than simply retaining current"

Outcome

- National Grid NTS decision: Option 1 (no change)
 - Based upon EU WG feedback and majority (2/3) of respondents to consultation
- Ofgem has not raised any concerns with National Grid NTS decision
- Decision Document to be published after this meeting



Future Topics



Future Topics

Topic Area	Area of change	Provisional Date
Update on Moffat IP Issues		March 2015
REMIT		March 2015
Gas Target Model Update		March 2015
Tariffs		Monthly updates whilst progressing through comitology
Incremental		Monthly updates whilst progressing through comitology