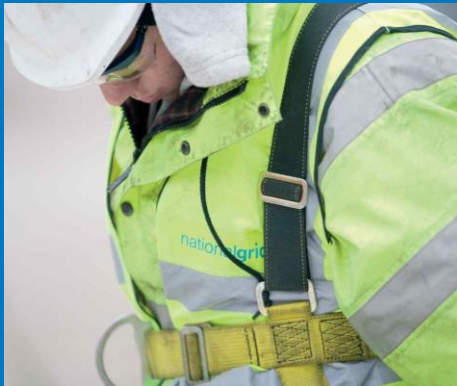


European Update



5th November 2015

1. General Update

Code Status Update

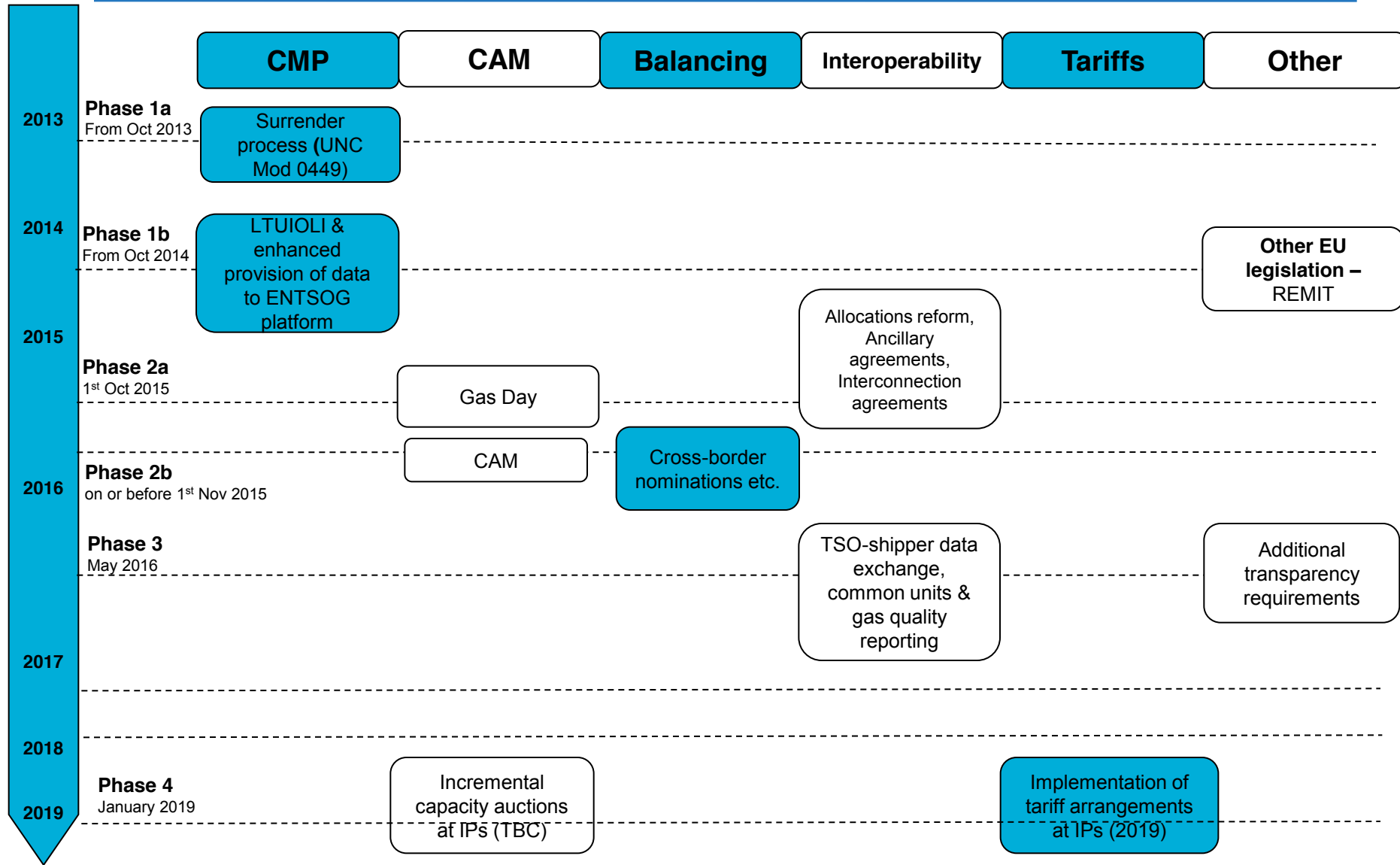
| Code | Current Status | Implementation date |
|--|--|---|
| Congestion Management (CMP) | Implemented | 1 st October 2013 |
| Capacity Allocation Mechanism (CAM) | Approved for implementation at EU IPs | 1 st November 2015 |
| Gas Balancing (BAL) | Approved for implementation 26 th March 2014 | 1 st October 2015 |
| Interoperability & Data Exchange (INT) | Code entered EU Law on 30 th April now Commission Regulation (EU) N0 703/2015 | Some deliverable planned for 1 st October 2015, others by 1 st May 2016 |
| Tariffs (TAR) | Under development | Applicable from January 2019 |
| Incremental Capacity | Under development | Applicable from January 2019 |

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

Activities undertaken by European Commission

[illegible]

Road Map



EU Tariffs Code Update

November 2015

EU Tariffs Code Update

■ **14-15 October:** Madrid Forum

- No presentations given on TAR NC due to ACER not agreeing a Recommendation
- EC still to proceed with comitology process on TAR NC in Q1 2016
- EC shall take account of opinions of ACER, ENTSOG and Stakeholders but as no “Recommendation” EC believe that they are not bound by any previous compromises they have made

EU Tariffs Code Update

- **14-15 October:** Madrid Forum
 - EC stated:
 - Code should be as ambitious as possible but also realistic
 - Transparency is the key issue from stakeholders
 - Timescales for development to remain the same
 - Will involve ENTSOG and ACER in further development

EU Tariffs Code Update

- **20 October:** Informal Member State Meeting
 - Due to ACER non-recommendation no presentations given from ENTSOG or ACER
 - PwC/Strategy& Impact Assessment was presented
 - Discussion on content of the TAR NC
 - No interventions from stakeholders requested
 - Member States asked to outline their concerns
 - EC will look at “10 main issues”

EU Tariffs Code Update

■ **20 October:** Informal Member State Meeting

■ EC next steps:

- Look at proposals to be included over next few weeks
- Aim for revised code text for beginning of December
- IMSM in December may be used to present revised code to Member States
- Comitology meetings in March & May 2016 to proceed as planned

■ CAM Amendment Interaction

- ACER propose deletion of Article 26
- Need to ensure no “gap” post Art.26 deletion and TAR NC implementation

EU Tariffs Code Update

- **Impact Assessment now published**

- https://ec.europa.eu/energy/sites/ener/files/documents/20151008_IA%20-%20TAR%20Gas_Final_Report_vf.pdf

- Study done for EC by Strategy&/PwC

- Preferred policy options in study closely align with TAR NC

- EC will create separate IA based on this but may prefer different policy options

- EC IA should be complete by December

Impact Assessment: Preferred Policy Options

| Topics | Option 2 – basic level of harmonization |
|--|---|
| 1. Reference Price Methodology | <p>Choice of the reference price methodology:</p> <ul style="list-style-type: none"> • <u>Sub-option 4:</u> Only two reference price methodologies described in the NC – Post. Stamp and CWD <p>Entry Exit split:</p> <ul style="list-style-type: none"> • 50/50 Entry exit split as default rule unless otherwise set or approved by the NRAs <p>Adjustment of the outcome of the reference price methodology:</p> <ul style="list-style-type: none"> • Limited number of secondary adjustments <p>Storage Entry/Exit tariffs:</p> <ul style="list-style-type: none"> • <u>Sub-option 1:</u> Individual NRA decision on necessity of adjusting the outcome of the reference price methodology based on harmonized criteria <p>Multi-TSO Entry/exit zones:</p> <ul style="list-style-type: none"> • <u>Sub-option 1:</u> One single ref. price methodology applied jointly but separate application allowed for transitional period under specific conditions |
| 2. Multipliers and seasonal factors | <ul style="list-style-type: none"> • <u>Sub-option 2:</u> One single range for all short term capacity products after a transitional period |
| 3. Payable price at IPs and Revenue Reconciliation | <ul style="list-style-type: none"> • Floating price as default rule with fixed under specific circumstances |

Impact Assessment: Preferred Policy Options

| | |
|---|---|
| 4. Pricing for interruptible capacity | <ul style="list-style-type: none">• <u>Sub-option 3</u>: Interruptible capacity and non-physical backhaul capacity based on ex-ante discount |
| 5. Publication requirements | <ul style="list-style-type: none">• Increased transparency on transmission tariffs |
| 6. Publication of binding tariffs and tariff setting year | <ul style="list-style-type: none">• <u>Sub-option 2</u>: No harmonisation of tariff setting year + publication of binding reference price prior to capacity auction |
| 7. Changes in tariffs/mitigating measures | <ul style="list-style-type: none">• Gliding path system and grand-fathering of contracts with fixed tariffs before TAR FG |

Timeline for TAR NC Implementation

- EC pushing for quicker implementation than 24 months currently in code
- ENTSOG starting to develop minimum timeline for implementation
- Current view within ENTSOG is that even 24 months is ambitious considering consultation requirements prior to implementing changes
 - Could be over a year after entry into force before NG could raise any UNC Mods
 - E.g. consultation preparation, consultation, ACER non-binding opinion (3 months), NRA motivated decision (3 months)....

EU Incremental Amendment Update

Incremental Amendment

- Reg. 715/2009 allows ACER to make “reasoned proposals for amendments”
- CAM amendment text adopted by ACER Board of Regulators on 13 October
- Push from stakeholders for implementation of INC should not be delayed by TAR NC
- EC still plans to keep current structure of TAR and CAM
 - INC chapter will remain in TAR NC
 - Keep parallel timescales for TAR NC and CAM amendment

NTS Optional Tariff (Shorthaul)

5th November 2015

NTS Optional Tariff (Shorthaul)

- To comply with EU regulations, from 1 November 2015 the Bacton ASEP was split into two new ASEPs (Bacton UKCS and Bacton IP)
 - As a consequence of this, the Bacton ASEP is no longer a nominated Entry Point for the purposes of NTS Optional Tariff (Shorthaul)
 - UNC (TPD Y3.5) restricts a User to only be able to nominate one Specified Entry Point (an ASEP) to one or more Specified Exit Points
 - If Shorthaul is required going forward Users need to request this **at either** Bacton UKCS or at Bacton IP

NTS Optional Tariff (Shorthaul)

- In September 2015, a notification was issued via the JO and also relevant proformas sent by Xoserve to those Shippers with Bacton ASEP as their nominated Entry Point in readiness for 1 November 2015
- From 1 November 2015 the Standard NTS Commodity Tariff will be applied until such time as any renomination is received and processed

Mod 534 – “Maintaining the efficacy of the NTS Optional Commodity (‘shorthaul’) tariff at Bacton entry points”

- This allows, from 1 November 2015, for the purposes of the NTS Optional Commodity arrangements only, that the two new Bacton ASEPs are considered as one entry point (the Bacton Combined ASEP).
- However the UNC 0534 solution is primarily manual in nature and **Users are still required to nominate one entry point (either UKCS or IP ASEP)**. The presumption will be that where this occurs the User has nominated the Combined Bacton ASEP. The “Combined Bacton ASEP” will be used to determine the total daily quantity used and the resultant NTS Optional Commodity Tariff.
- Any queries regarding the application process please contact a member of the Xoserve SPA team on +44 (0121 623 2476). Alternatively you can e-mail the SPA team regarding any issues at uniquesites.spa@xoserve.com

EU Systems Update

Actions from the last meeting

- TR1001: *SSN and DSN Duplicates* – National Grid NTS to provide a view on the rules demand and what the functionality allows
- National Grid NTS Response:
 - UNC EID Section C2.1.5 permits a User to submit both a SSN and a DSN in the same matching cycle where it is both the NG User and the counterparty User
 - National Grid NTS can currently manage this by datafix in Gemini
 - We are monitoring the use of this in order to assess the need for a functionality change but do not understand why a User would want to nominate in this way

Actions from the last meeting

- TR1002: *User Testing Environment Window* – National Grid NTS to consider extending the window and advise shippers.
- National Grid NTS Response:
 - The testing environment has been closed down and will not be re-opened
 - Training material is available on the Xoserve website

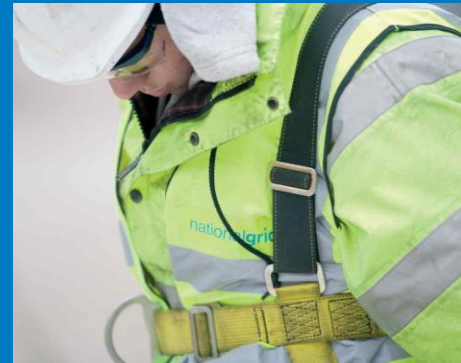
Resolved Systems Issues

- The nominations 'lock out' issue during the matching process has been resolved
 - A User can renominate again at hour bar +5 minutes
- The issue of nomination start time not automatically populating for within day matching cycles starting at hour bars 21:00, 22:00 and 23:00 has also been resolved
- Shipper balance screens are being corrected going forward to show the correct confirmed nominations
- Users are now able to renominate a positive value if a zero value has been entered as the original nomination
- An issue with day-ahead renominations submitted between 04:00 and 05:00 has now been resolved

Update on Other Systems Issues

- A User may get 'locked out' of Gemini as a result of entering incorrect information associated with a SSN
 - A fix is scheduled for this issue but we are not currently able to advise a delivery date
 - In the interim, Users can contact the Xoserve helpdesk to get the erroneous information deleted
- Non-receipt of Confirmed Quantities
 - If a User cannot see its CQ by the time expected in Gemini, the User should contact the adjacent TSO in the first instance before the Xoserve helpdesk

EU Phase 3 Project: Overview



Background

- The EU Phase 3 project is a National Grid NTS project to ensure system compliance with the following EU Regulations:
 - The EU Interoperability and Data Exchange Network Code (Regulation EU 703/2015)
 - The Transparency Annex of Regulation (Regulation EU 715/2009)
 - Capacity Allocation Mechanism Network Code (Regulation EU 984/2013)

Scope

| <u>Driver</u> | <u>Requirement</u> |
|---|--|
| Interoperability and Data Exchange (INT) / UNC Mod519 | Common Units Solution |
| Interoperability and Data Exchange (INT) | Shipper to TSO Data Exchange |
| Capacity Allocation Mechanism (CAM) | Within-Day Capacity Changes |
| Capacity Allocation Mechanism (CAM) | Improvement of the LT UIOLI Monitoring Report |
| UNC Mod510 | Disapplication of Scheduling Charges at IPs |
| Regulation 715/2009 Annex 1 (Transparency) | Publication of 10 years worth of future capacity data on ENTSOG TP |
| ENTSOG agreement with Industry | Publication of Hourly Physical Flow data for IPs |

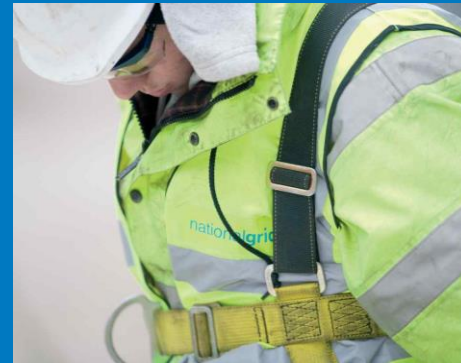
Project Dates / Timeline

- Key EU Phase 3 Project Dates:
 - Code & Unit Testing: **12th October to 20th November**
 - System Testing: **23rd November to 29th January**
 - UAT: **1st February to 11th March**
 - Code Deployment: **10th April**
 - Go Live: **1st May**

| | | | | | | | | | | | | |
|--------------------------|----------|--------|--------|--------|--------|--------|----------------|--------|--------|----------------|--------------------|---------|
| EU Phase 3 Project | Analysis | | | Design | | CUT | System Testing | | UAT | | Code Deployment | Go Live |
| | | | | | | | | SIT | | User Trials | IDR | PIS |
| | Jun-15 | Jul-15 | Aug-15 | Sep-15 | Oct-15 | Nov-15 | Dec-15 | Jan-16 | Feb-16 | Mar-16 | Apr-16 | May-16 |

Current Status

EU Phase 3 Project: TSO-Shipper Data Exchange Update



Background

- The EU Interoperability and Data Exchange Network Code requires TSOs to implement 'common data exchange solutions'
- This is only in relation to nominations arrangements with TSOs & Shippers at Interconnection Points (IPs)
 - IUK, BBL, Moffat for GB

Common Data Exchange Obligation

- The full suite of data exchange solutions that may be used as per Article 21 of the Interoperability Network Code is shown below:

| | | Data content format | | Data exchange protocol | |
|----------------|----------|---------------------|----------------|------------------------|---------------|
| 'Toolbox' item | Network | Structure Format | Content Format | B2B standard | Comm Protocol |
| Document based | Internet | XML | Edig@s | AS4 | HTTP(S) |
| Integrated | Internet | XML | Edig@s | SOAP | HTTP(S) |
| Interactive | Internet | None | | | HTTP(S) |

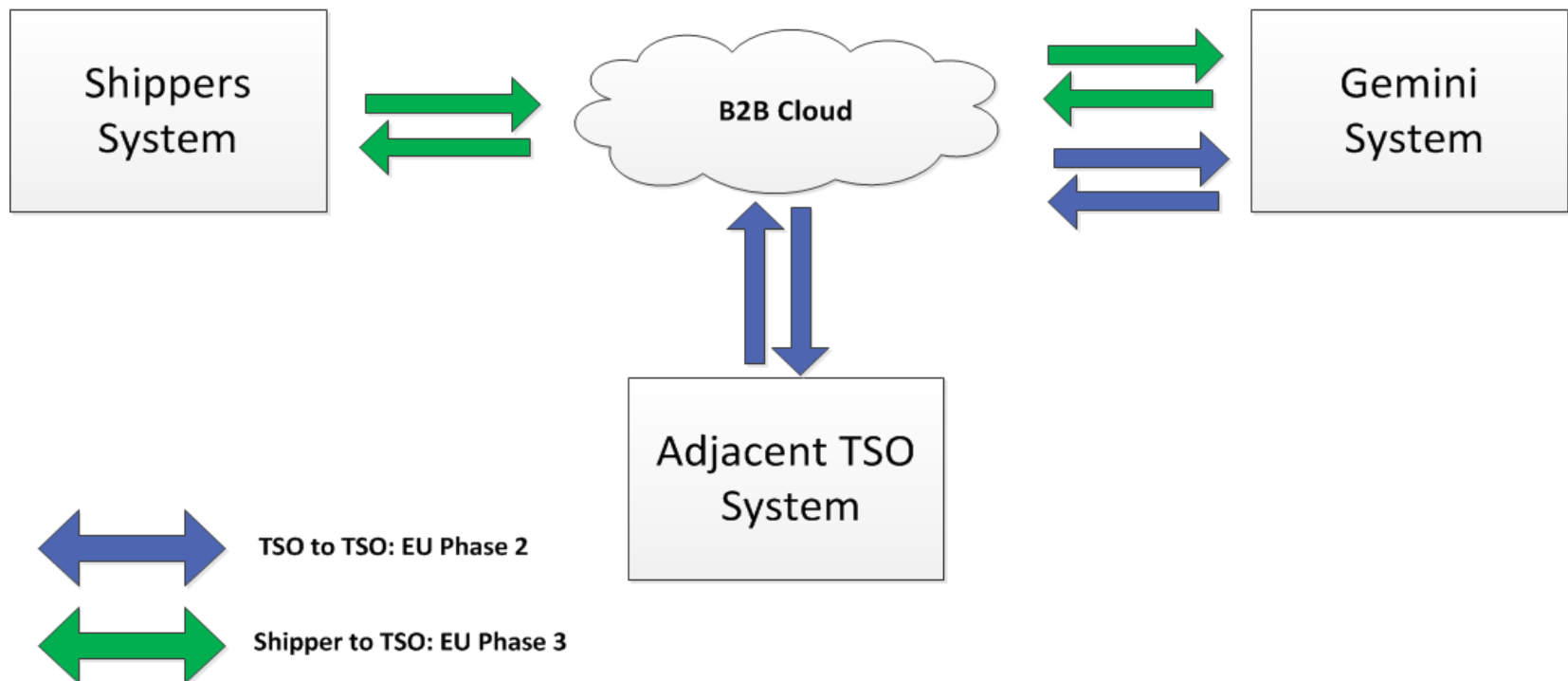
- Article 21 places an obligation on TSOs to implement “one or more of the following types of data exchange”.

Common Data Exchange Solution

- National Grid NTS proposes to meet the above obligation by implementing an **integrated** solution
- A Business 2 Business (B2B) gateway will also be implemented that enables NG NTS to communicate with a counterparty that has implemented a **document** based solution.
- The B2B gateway has already been successfully implemented as part of EU Phase 2, enabling TSO - TSO data exchange

B2B Gateway

- The diagram below illustrates at a high level the proposed B2B gateway data exchange solution



Communication with Industry

- Feedback was requested on the proposed NG solution via UK Link Committee in August
 - Presented proposed solution and provided feedback window for industry comments.
 - No objections raised by industry to National Grid NTS
- Topic has been raised at previous Transmission Workgroups (Aug/Sep)
- NG have engaged Ofgem in discussions on the solution

Testing Approach

- Due to the timeframe for on-boarding to the B2B gateway, testing is no longer available to the industry
- National Grid NTS will therefore undertake testing of the B2B gateway solution on behalf of the industry
- A 'Simulator User' will be created in order to test the B2B Gateway
- National Grid NTS proposes to test using the following scenarios matrix

| Scenarios Matrix | | |
|----------------------------|-------------------------------|------------------------------|
| Before the Day Nominations | Single Sided Doubled Sided | Forward Flow Reverse Flow |
| On the Day Nominations | Single Sided Doubled Sided | Forward Flow Reverse Flow |

Scenario Feedback Window

- National Grid NTS proposes to open a feedback window until the next Transmission workgroup in December for Users to propose additional scenarios to be tested
- Please contact Bill Goode (bill.goode@nationalgrid.com) with any suggested scenarios or questions on the subject
- National Grid NTS will provide evidence of the tested scenarios for the industry to review once testing has been successfully completed

Interconnection & Tripartite Agreements Update



Interconnection & Tripartite Agreements Update

- The Interconnection and Tripartite agreement consultations ran during July and early August 2015
- Post consultation, TSOs carried out further discussions
- TSOs engaged with National Regulatory Authorities (NRAs)
- All changes agreed prior to 1st October 2015
 - Minor changes needed to BBL and IUK agreements
 - Moffat agreements required more changes following TSO to TSO discussions and NRA engagement
- Tracked change versions of the final agreements are available at <http://www2.nationalgrid.com/UK/Industry-information/Europe/Consultations>

EU Webpage

EU Webpage

- EU Implementation webpage
 - A good source for an overview of changes and recent communications and updates.
 - <http://www2.nationalgrid.com/uk/industry-information/europe/eu-project---implementation-information/>
- Recent additions:
 - Key Points for Gas Days from 1st November 2015

EU Gas Quality Harmonisation Update

CEN Standard on Gas Quality

- The standard was approved for adoption by majority vote of Member States in late September 2015
 - 18 approvals, 4 disapprovals (inc UK), 10 abstentions
- Reasons for UK 'no' vote
 - Lack of clarity about EC implementation proposals
 - All network points or IPs only?
 - Flexibility to permit gas entry / offtake outside CEN limits?
 - Uncertainty about how oxygen and carbon dioxide relaxations could be applied
 - Lack of evidenced case for UK to adopt it
 - Potentially detrimental to UK and Ireland's security of supply as some UKCS gas sources could be stranded
 - Interoperability Code already provides an appropriate process to address gas quality related barriers to trade

Implementation of the CEN Standard

- At October's Madrid Forum, EC confirmed its intention to make the standard legally binding by amendment to the Interoperability Code
- EC is expected to send an official request to ENTSOG to start the process
- Implementation is to be subject to impact assessment / cost/benefit analysis and consultation
 - Coordination role for ENTSOG and CEN?
- 28th Madrid Forum summarised the discussions as follows:

“The Forum notes that the Commission will propose binding application of the recently adopted CEN gas quality standard by launching the process to amend the Interoperability and Data Exchange Network Code while having due regard to appropriate scope and possible impacts, including via a robust CBA. The Forum welcomes the Commission’s and CEN’s intention to continue the process of finding a consensus on the Wobbe Index level for the next version of the standard”

Wobbe Index: Next Steps

- Work will be re-started to develop a harmonised Wobbe Index for future incorporation into the CEN standard
 - An amendment to the original 2007 mandate is expected
- The 'Gas Quality Harmonisation Pilot Project' will be re-launched for this purpose
- A 'brainstorming / direction setting' meeting has been arranged for 18th November 2015 in Brussels to discuss:
 - Objectives
 - Structure & governance
 - Information requirements
 - Stakeholder involvement

Future Topics

Future Topics

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

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:
 - Philip 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/>