European Workgroup







7th May 2015



Code Status Update

Code	Current Status	Implementation date
Congestion Management (CMP)	Implemented	1 st October 2013
Capacity Allocation Mechanism (CAM)	CAM approved for EU wide implementation at relevant EU IPs	1 st November 2015
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)	1st Oct 2015
Interoperability & Data Exchange (INT)	Code approved at second comitology meeting 3-4 November 2014. Expected to enter EU law by 1 st May 2015, compliance required by 1 st May 2016.	Some deliverables planned for 1 st October 2015, others by 1 st 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

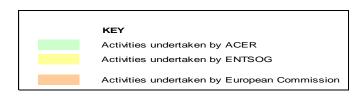
Status of Development of European Gas Network Codes

Future dates are subject to change

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

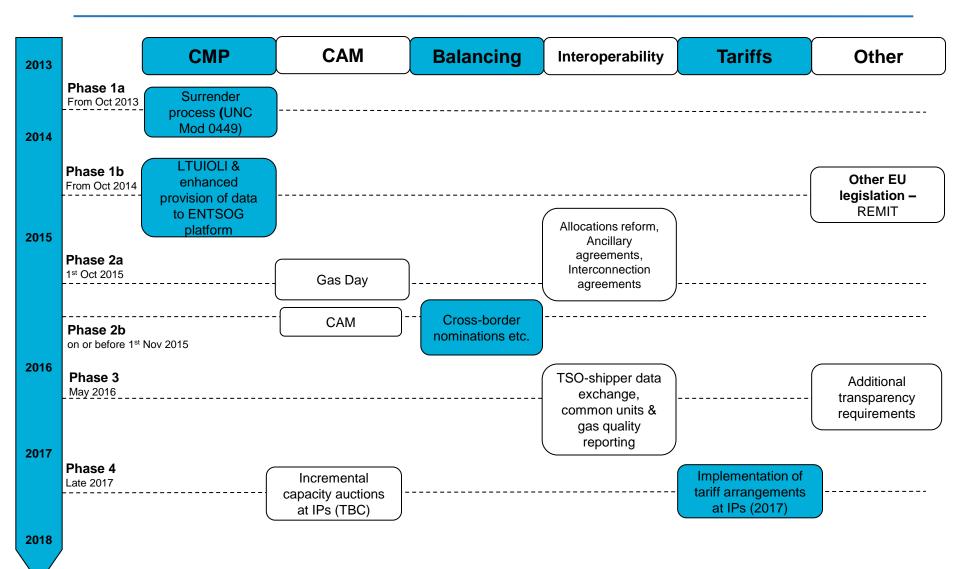
TODAY

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



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Road Map





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
11	Nomination Process at IPs (493)	With Ofgem	Ofgem decision	Complete
II	SMP Buy & Sell (494)	Ofgem approved	Implementation	Complete
Capacity Allocation Mechanism (CAM)	Gas Day change (461)	Ofgem approved	Implementation	Complete
н	CAM / CMP Compliant Capacity Auctions (500)	With Ofgem	Ofgem decision	Complete
11	Bacton split (501V / 501A V/ 501BV / 501CV)	Variation Request and FMR resubmitted to Panel	Send for Consultation or Ofgem Decision	Original Mods complete, V's subject to Panel consideration
Interoperability & Data Exchange (INT)	Reform of Allocations (0510)	Final Workgroup Report to Panel	Mod Panel decision due 21st May	
11	Harmonisation of Reference Conditions (0519)	Final Workgroup Report to Panel	Mod Panel decision due 21st May	
11	Enabling EU Compliant Interconnection Agreements (0525)	In development	Complete development (~3 months)	June-July 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
Bacton Split	501, 501A, 501B,501C	Ofgem have directed that UNC Modifications 501,501A,501B and 501C are revised and resubmitted to accommodate the Impact Assessment. Revised Legal text, Variation Request and FMR have been resubmitted to Panel. The indicative date for the IA to commence is 19 th May 2015.



EU Tariffs Code & Incremental Amendment Update

"Slides on this section shall be provided following agreement between ACER and ENTSOG of the revised Tariff Code Timetable."

EU Gas Quality Harmonisation Update

Background

- In 2007, the EC issued a mandate to CEN to develop a harmonised standard for gas quality
 - "the broadest possible range within reasonable costs"
- The draft standard was issued for public consultation in 2014
- After reviewing the consultation responses in Nov/Dec 2014, the CEN working group was unable to agree on a harmonised Wobbe Index range
- It was agreed that the standard should proceed to publication based on non-combustion parameters only; Wobbe Index would be subject to further study

Comparison of Gas Quality Specifications

Content or Characteristic	CEN Standard 16726:2014 on Gas Quality	Gas Safety Management Reg (GSMR) Value http://www.legislation.gov.uk/uksi/1996/551/sched ule/3/made	Gas Ten Year Statement Value (A5.3.2) http://www2.nationalgrid.com/WorkArea/DownloadAsset. aspx?id=30018
Hydrogen sulphide (H ₂ S)content	≤5 mg/m3 (also includes carbonyl sulphide)	≤5 mg/m³	≤5 mg/m³
Total sulphur content (including H ₂ S)	≤20 mg/m³	≤50 mg/m³	≤50 mg/m³
Hydrogen content	No value defined	≤0.1% (molar)	≤0.1% (molar)
Oxygen content	"At network entry points and interconnection points, max of 0.001% mol expressed as a moving 24 hour average. However, where the gas can be demonstrated not to flow to installations sensitive to higher levels of oxygen, eg. underground storage systems, a higher limit of up to 1% may be applied."	≤0.2% (molar)	≤0.001% (molar)
Contaminanants / Impurities	"The gas shall not contain constituents other than listed in Table 1 at levels that prevent its transportation, storage and / or utilisation without quality adjustment or treatment."	"Gas 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."	"Gas 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 http://www.legislation.gov.uk/uksi/1996/551/sched ule/3/made	Gas Ten Year Statement Value (A5.3.2) http://www2.nationalgrid.com/WorkArea/DownloadAsset. aspx?id=30018
Hydrocarbon dewpoint and water dewpoint	Hydrocarbon dewpoint: Max of -2 °C at a pressure up to 7 MPa (70 bar) Water dewpoint: Max of -8°C at a pressure up to 7 Mpa (70 bar)	"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)	No limits defined	(i) ≤51.41 MJ/m3, and (ii) ≥47.20 MJ/m3	(i) ≤51.41 MJ/m3, and (ii) ≥47.20 MJ/m3
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 interconnection points, the mole fraction of carbon dioxide shall be no more than 2.5%. However, where the gas can e demonstrated to not flow to installations sensitive to higher levels of carbon dioxide, eg. underground storage systems, a higher limit of up to 4% may be applied."	Not a GS(M)R parameter	≤2.5% (molar)

Comparison of Gas Quality Specifications

Content or Characteristic	CEN Standard on Gas Quality	Gas Safety Management Reg (GSMR) Value http://www.legislation.gov.uk/uksi/1996/551/sch edule/3/made	Gas Ten Year Statement Value (A5.3.2) http://www2.nationalgrid.com/WorkArea/DownloadAsset.asp x?id=30018
Relative Density	min 0.555, max 0.700	Not a GS(M)R parameter	Not a GTYS parameter
Mercaptan Sulphur without odourant	Max of 6 Mg/m ³	Not a GS(M)R parameter	Not a GTYS parameter
Methane number	Minimum of 65. No maximum defined.	Not a GS(M)R parameter	Not a GTYS parameter

Implementation of the CEN Standard

- "Once a standard is agreed, the DG Energy is ready to consider a proposal making it binding via an amendment of the Network Code on Interoperability and Data Exchange Rules" Conclusions Paper from a Gas Quality Workshop, Brussels, 1st July 2014.
- "The [Madrid] Forum looks forward to the imminent adoption of a CEN gas quality standard.... The [Madrid] Forum invites the Commission to ensure the binding application of the forthcoming standard" conclusions of the 27th meeting of the European Gas Regulatory Forum, 20-21 April 2015
 - The Madrid Forum also called for Wobbe Index to be studied at national level

Implementation of the CEN Standard

- National Grid NTS expects the Commission to propose an amendment to the EU Interoperability Code but does not know what the amendment will propose. Will it:
 - Oblige TSOs not to refuse gas presented at entry points that complies with the standard?
 - Apply at interconnection points only or across the entirety of networks?
 - Retain / remove / amend Interoperability Code rules about NRA and TSO management of cross border restrictions due to gas quality?
 - Require national gas quality specifications to be changed?

Expectation of the next process steps

- National standardising bodies (BSI for GB) will shortly vote on whether to send the standard for a formal vote to adopt it as an EN standard
- Formal vote takes place under CEN governance
- Standard is published as an EN standard by December 2015
- BSI adopts it as a British Standard in early 2016
- Process to make the standard binding commences in early 2016

Commitment and Recommendation

- National Grid NTS will keep the Workgroup informed of developments
- National Grid NTS recommends that GB stakeholders who might be affected by the CEN standard conduct their own impact assessments