

European Developments



Transmission Workgroup
6th December 2012

EU Interoperability & Data Exchange Network Code



Transmission Workgroup Update
6th December 2012

Current Position

- ENTSOG has published draft business rules for each topic area:
 - Interconnection Agreements (IAs)
 - Gas Quality
 - Odourisation
 - Units
 - Data Exchange
- SJWS1 (IAs and Gas Quality) held on 14th November
 - Minutes available on ENTSOG's website
- SJWS2 (Units and Data Exchange) held on 28th November

Stakeholder Feedback: General Points

- ENTSOG should be designing a Code that is fit for the future not documenting existing rules
- Business rules should not be caveated by reference to other documents that are not visible

Stakeholder Feedback: Interconnection Agreements

- IAs should be consistent with other connections agreements
- A high level of transparency is desirable for:
 - Development of IAs
 - Modification of IAs
- Network Users want to send one nomination when nominating against bundled capacity
- ENTSOG should consider harmonisation of reconciliation rules for IPs (but this is outside the scope of the Framework Guideline)
- OBA is the preferred allocation rule
- Potential link between Exceptional Events and REMIT identified

Stakeholder Feedback: Gas Quality

Handling differences at IPs

- Some parties did not believe this to be an issue for cross border trade, others thought TSOs 'masked' the issue
- Debate about the role of NRAs

Short Term Monitoring

- Some want to see a minimum service level for which costs would be socialised with bespoke services offered where demanded
- Some want to see detailed rules in the Code rather than obligations to consult at a national level

Long Term Monitoring

- The value of this outlook will be limited if TSOs are not be able to access the relevant information

Data Exchange and Units

- SJWS held 28th November on Data Exchange and Units
- Data Exchange
 - Harmonisation of Data Exchange solutions between TSOs and counterparties
 - Current intention by ENTSOG is for Code to define what technical IT solutions we must all use. Proposal to be finalised by the 11th December SJWS.
 - Possible proposal:
 - Data Network = internet
 - Data Format = EDIG@S
 - Data Protocol = AS/4

Data Exchange and Units

- Early feedback from some EU stakeholder groups have proposed that the Code should define the selection process and not the tools themselves.
- Should Code contain a mandated list of specific technologies to be used or alternatively should it define the process for consultation, selection and implementation of any common solution?
- National Grid favours the latter, if UK stakeholders agree then they should feed this back to ENTSOG before final SJWS on 11th December

Units

- The common units for pressure, temperature, volume, calorific value, energy, and Wobbe-index for communications proposed:
 - Pressure : bar
 - Temperature : °C (degree Celsius)
 - Volume : m³(n) (at 0°C and 1.01325 bar(a))
 - Gross Calorific Value : kWh/m³(n)
 - Energy : kWh (based on GCV)

- Combustion reference temperature for GCV, Energy and Wobbe-index shall be 25°C (different from UK which uses 15°C).

Next Steps

- ENTSOG is considering stakeholder feedback
- Revised business rules taking feedback into account will be published shortly
- SJWS 3 scheduled for 11th December
 - Taking place in Brussels but available via webcast
- Refined business rules will then be drafted as legal text ready for the 2 month formal consultation between Feb-April 2013
- For further information contact philip.hobbins@nationalgrid.com (01926 653432)

EU CAM Network Code and CMP Guideline – Update



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Capacity Allocation Mechanism - CAM?

The Capacity Allocation Mechanism Code has the following key principles for all Interconnection Points within the EU:

- Standardised capacity allocation mechanism in the form of a joint auction procedure
- Standardised approach on how Capacity products are to be offered and how cross-border Capacity will be allocated (Bundled)
- Reallocate currently booked Capacity into Bundled Capacity products across interconnection points (sunset clause)
- Standardised approach on how adjacent transmission system operators cooperate in order to facilitate capacity sales, having regard to general commercial as well as technical rules related to the chosen capacity allocation mechanisms.

Capacity Allocation Mechanism - CAM?

CAM will have impacts to how N Grid / UNC will operate at EU IPs in the future:

- Different auction design than Entry
- CAM does not manage Incremental Capacity (but being discussed)
- Changes required to the 'new' GB Exit arrangements at IPs
- Different products / durations
- Interruptible Capacity
- Auction timings
- Obligated / Non Obligated Capacity?
- No / limiting IP flange trading
- Interaction with CMP Code – Bundled / unbundled Capacity
- Interaction with other Codes e.g. Balancing - Nominations
- Gas Day

CAM Overview

- ACER provided their 'qualified recommendation' on the CAM Network Code (as resubmitted by ENTSOG 17th September) to the EU Commission on the 5th October along with ENTSOG's 2nd version of the CAM NC
- The Commission has converted the CAM Network Code into a informal draft Regulation and has issued it to Member States on the 22nd November 2012.



CAM – Issue Overview Comparison

Issue	ENTSOE Original Position	ENTSOE Current Position	ACER's Position	Commissions Position
Application of quotas for <u>new</u> capacity	In line with the FG, the NC will retain the provision that new capacity is exempt from the NC rules on allocation	No Change	Rules on reservations applying to existing capacity should also apply to new capacity – implies at least 20% of any incremental capacity should be reserved for a release in the Medium term / short term during the regular auctions	No change to ACER's position
Higher quotas for <u>existing</u> capacity	Minimum reservation >10% creates artificial scarcity and damages operation of auctions Higher quotas already possible if required on a local IP level	No Change	Reservation of at least 10% of technical capacity for release in the medium term (4-5 years), in addition to the minimum 10% already reserved for short term (Year ahead)	No change to ACER's position
Mismatched unbundled capacity <u>only offered in the very short term</u>	Offered on the same timescales as bundled capacity i.e. 15 years	Changed to specify that any unbundled capacity can be offered for a pre-defined and limited period, i.e. 5 years ahead	Unbundled capacity arising from a difference in technical capacity at two sides of an interconnection point should only be offered no more than one month ahead	Unbundled capacity arising from a difference in technical capacity at two sides of an interconnection point should only be offered no more than one year ahead

CAM – Issue Overview Comparison

Issue	ETSOG Original Position	ENTSOG Current Position	ACER's Position	Commissions Position
Deletion of tariff provisions from the CAM NC	Tariff provisions required in the CAM NC	No Change	The revenue equivalence principle (REP), which specifies that the average revenue from a flat yearly product should be equal that from a profiled booking of shorter duration products, should be removed from the CAM NC. Forthcoming Tariff Code should include such aspects	(Article 26) provides additional protection for TSO'S revenue resulting from CAM changes. REP not included but text includes that appropriate tariff arrangements to be brought forward in due time for CAM.
Tight Implementation timescales	27 months (9 months for code changes and 18 months for IT system delivery)	No Change	Implementation timeline of 18 months after the Code comes into force	No change to ACER's position
Capacity Calculation and maximisation	N/A	N/A	N/A	Capacity calculation (Article 6) has been added to NC
Sunset Clause	Opposed to the "Sunset clause" proposals	No Change	ACER maintain sunset clause proposals i.e. bundling current contracted capacity within 5 years	Original text has been revised – (Article 20) "shall make best efforts to bundle capacity"

CAM – Comitology Preparation

- The Commission expect the Comitology timeline follows that of CMP
 - The first Comitology meeting is due to take place in January 2013 and it is expected that a second meeting is to take place in April 2013
- The Commission have converted the CAM Code into a draft Regulation
- This has been issued to GB stakeholders by Ofgem on the 22nd November. DECC / Ofgem have asked for comments by **Tuesday 4th December 2012** ahead of a pre-Comitology meeting on the 5th December.
- Further information please contact matthew.hatch@nationalgrid.com

Constraint Management Principles (CMP) Update nationalgrid

- GB has to be compliant by 1st October 2013 (July 2016 for Firm Day Ahead UIOLI)
 - Compliance / Impact Assessment continues to be discussed with Ofgem
 - In principle National Grid CMP arrangements already broadly compliant
 - But still continue to focus and work with Ofgem in order to recognise areas where further clarification is required
- Ofgem consultation planned for [Dec – Feb]

- Further information please contact matthew.hatch@nationalgrid.com

Gas Day



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Gas Day – NTS Review

- National Grid Transmission has initiated an internal review of the proposed change in the Gas Day from 06:00-06:00am to 05:00-05:00am
- Initial Scope:
 - UNC and supplementary documentation
- First phase:
 - Search of UNC for lines with specific timings
 - Review of each specific timing to establish if it is impacted – timing may need to change
- 2nd phase: to analyse the implications of making the required changes

UNC sections under review

- About 100 lines of code with specified timings have been identified
- A breakdown, by UNC section, is given in the following table...
- It is anticipated that the review of these timings (first phase) will be completed by the end of the year

UNC Section	Area	Code items
TPD B	System use & Capacity	36
TPD C	Nominations	11
TPD D	Operational Balancing and Trading Arrangements	7
TPD E	Daily Quantities, Imbalances and Reconciliation	3
TPD H	Demand Estimation and Demand Forecasting	2
TPD J	Exit Requirements	4
TPD K	Operating Margins	1
TPD M	Supply Point Metering	3
TPD N	Shrinkage	1
TPD Q	Emergencies	3
TPD R	Storage	1
TPD U	UK Link	1
TPD V	General	2
TPD Z	National Grid LNG Storage Facilities	7
OAD I	NTS Operational Flows	14
OAD J	LDZ/LDZ OffTakes - Planning and Operational Flows	1
	Total	97

ENTSOG Winter Outlook 2012-2013

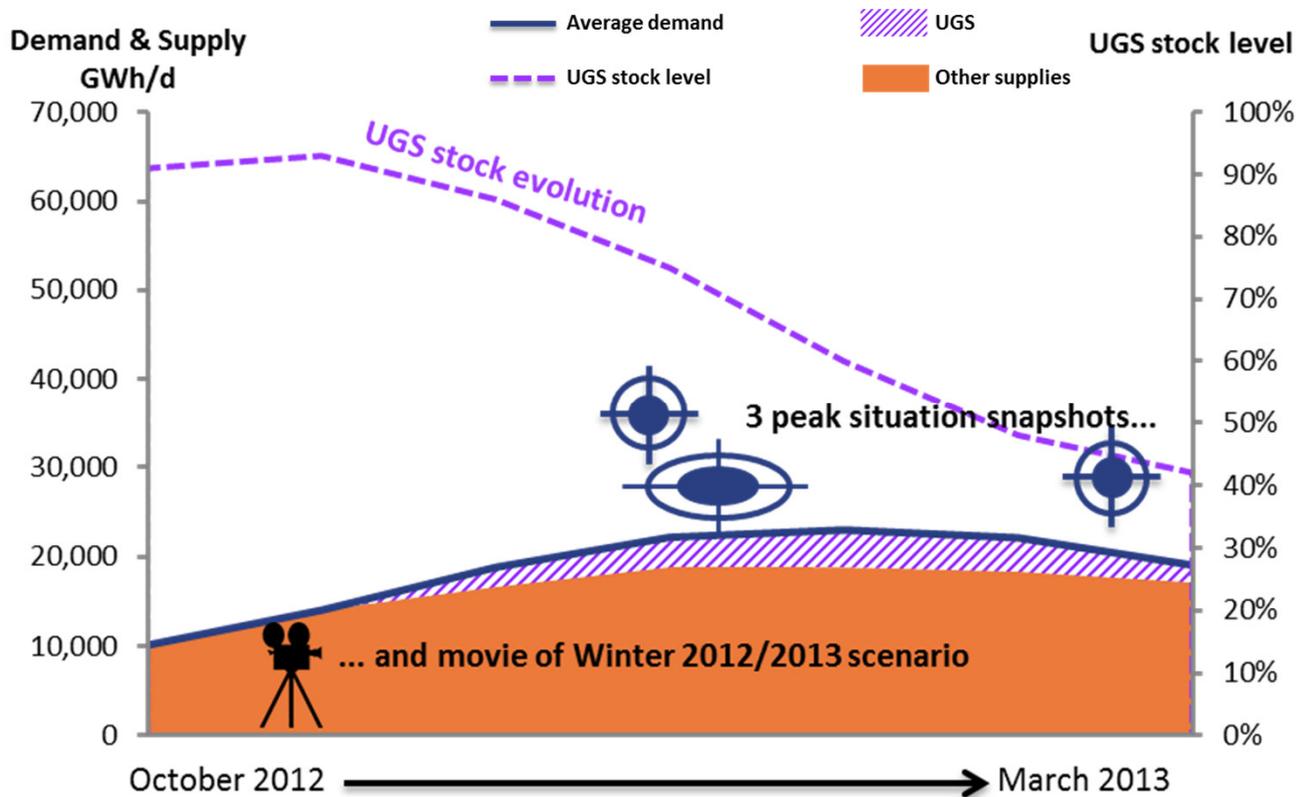


December 2012
Tx Workstream

Background and Content

- **The ENTSOG Winter Supply Outlook (and Review) was published on 18th November 2012.**
 - Legal obligation on ENTSOG to produce a winter and summer supply outlook each year
- **Consistent Methodologies with previous Winter Outlooks**
 - 1) **Winter Storage stock analysis around a reference case, including 4 sensitivity studies**
 - 2) **Two existing high demand situations were modeled to assess the remaining flexibility between countries**
 - Single high daily demand day in January 13
 - Single high daily demand day in March 13 (where reduced storage could play a more significant role)
 - 3) **Two new scenarios were also modelled**
 - 2 week high daily demand case
 - Ukraine disruption on a 2 week case

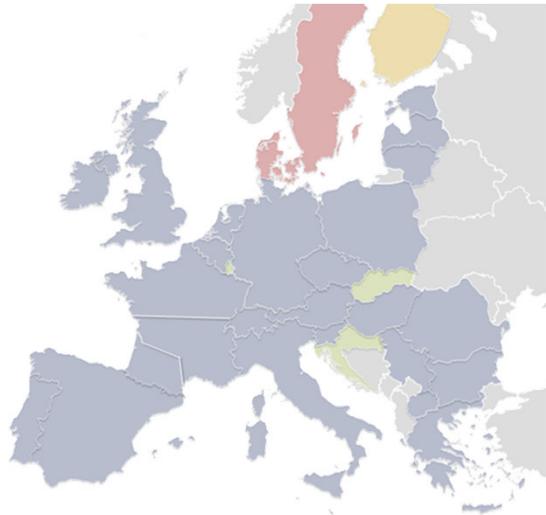
Storage Stock Analysis



- **How the Reference Case is made up:**
- Demand built on TSOs 1 in-2 estimation
- Imports based on last 3 years average level
- UGS to close the balance starting at 88% (source AGSI platform)

Stock level at the end of each month	Sep. 2012	Oct. 2012	Nov. 2012	Dec. 2012	Jan. 2013	Feb. 2013	Mar. 2013
Reference Case	88%	92%	87%	76%	63%	53%	49%

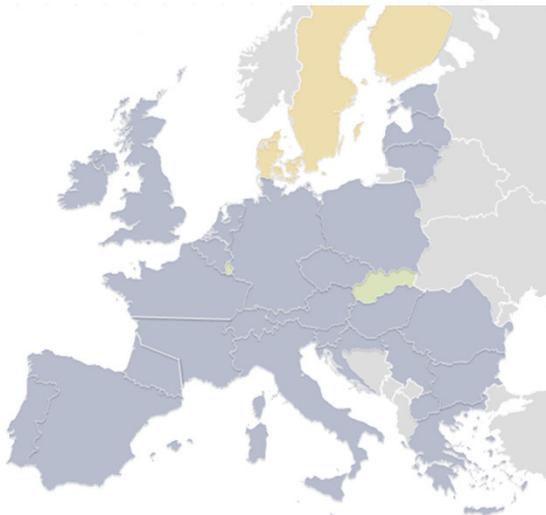
High Daily Demand Days



January Case

- > Remaining Flexibility above 5% in most of the countries with the exception of:
 - Finland with very high ability to switch to alternative fuel
 - Denmark and Sweden where short term entry capacity exists on interruptible basis (29 GWh/d required)
- > In both cases, ENTSOG TYNDP 2011-2020 shows some infrastructure projects mitigating the issue

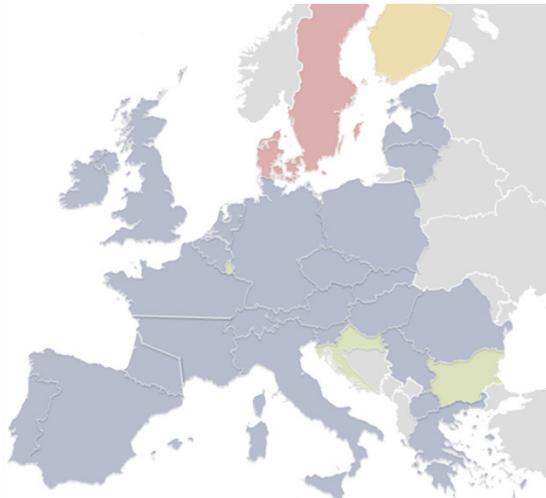
Remaining flexibility



March Case

- > Flexibility increases showing that one day the lower UGS deliverability has a lower impact than the lower demand

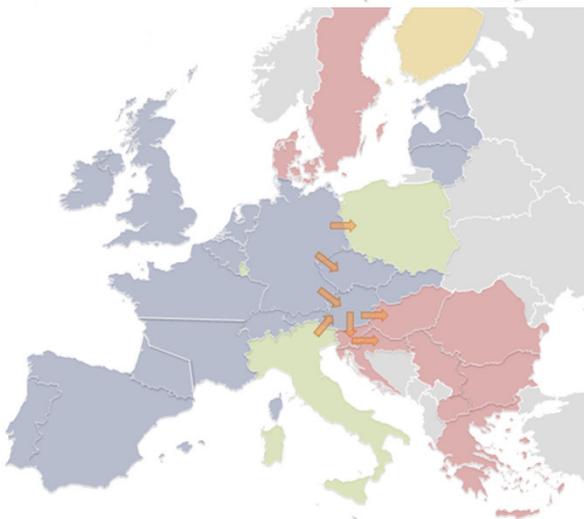
2 Week Case & Ukraine Disruption



2 Week Case - Reference situation

- > Level of stress comparable to January single day case
- > Assuming a flat demand and supply on the period, a minimum stock level of 47% is required prior to the event

Remaining flexibility



Ukraine disruption

- > South-East Europe is not able to face whole gas demand (1,026 GWh missing representing 42% of the needs)
- > Higher stock level is required prior to the event compared to the reference situation (58%)
- > Results are consistent with the single day Ukraine disruption as shown in ENTSOG TYNDP 2011-2020

Conclusion

- The Winter Supply Outlook confirms the ability of the European gas network to face Winter 2012/13 with significant flexibility.
- Import and UGS stock level are sufficient to face at least a winter demand as high as 110% of the average winter demand.
- The European gas network will provide significant flexibility when facing High Daily Demand conditions in most parts of Europe.
- In case of a Ukraine disruption during a 2-week of High Daily Demand, the ability of Europe to face such event will highly depend on the level of UGS and LNG terminals prior to the event.

EU Updates Timetable

- Timetable aims to highlight the key items (consultations, workshops, decisions, etc.) National Grid NTS expect to cover via this agenda item in the forthcoming months

Topic	TX Workgroup
<ul style="list-style-type: none">• CAM update – Comitology• Tariffs update – FG	January 2013
<ul style="list-style-type: none">• Balancing Update – ACER opinion	March 2013

Code Status Update

Code	Current Status	Estimated Implementation date
Congestion Management (CMP)	Text was published in the European Official Journal on 28 Aug. Ofgem intends to consult on how to implement Congestion Management Principles in GB during [Dec – Feb].	1 st Oct 13
Capacity Allocation Mechanism (CAM)	Currently with commission who are redrafting CAM code into draft regulation. Pre comitology meeting 5 th Dec 12 expect to enter comitology end Dec 12.	[2015-2016]
Gas Balancing	ENTSOG published NC on 26 October 2012. ACER reasoned opinion is due on 26 January.	Q1 2015/Q1 2016 (subject to NRA approval for additional 12 months to implement)
Interoperability	Framework guideline has been finalised. ENTSOG has begun work on developing NC.	3 rd September 2013: Submission of Network Code to ACER
Tariffs	Framework Guidelines Consultation closed 5 November 2012.	TBC [earliest mid 2016]
Incremental Capacity	CEER consultation paper published on 28 June 2012. Next steps include publication of an "Evaluation of Responses + Next Steps" paper by the end of the year (2012);	TBC