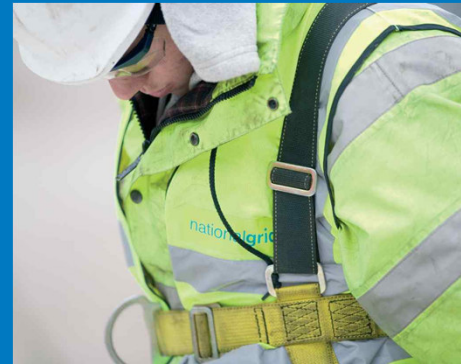


## European Developments



Transmission Workgroup  
7<sup>th</sup> March 2013

## EU Balancing Code



## EU Gas Balancing Code - Timeline

2013				2014	2015
Jan	Feb	March - June	July - December	Jan - Dec	Jan - Dec
Acer opinion 26 Jan	Revised code submitted ACER 22 Feb	Pre- comitology	Comitology	Yr 1	Yr 2
			Code Entry into force	Code implemented (1)	Code implemented (2)

- Comitology expected to start July 2013
- European Commission envisage only one meeting required
- Implementation - NG will have 12 months to comply with the provisions of the code (1) but has the option to approach Ofgem for approval of a further 12 months (2)

## ACER opinion – key issues

ACER Concern	Detail
1. Partial Acceptance of (re)nominations	Request changes to the nomination rules as the provisions may undermine the firmness of capacity and harmonisation
2. Principles of neutrality mechanism: Efficiently incurred costs	Code should be amended to reflect that TSOs shall only pass on any costs that are economically & efficiently incurred
3a Transitional measures for implementation of nomination rules (2 yrs)	Rules not justified and should be removed
3b. Information provision for WDOs	Code should require that adequate information is provided to enable network users to comply
3c. Definitions relating to paper traders	Clarification required that “paper traders” are not excluded from the balancing market
3d. Minimum information provision in (re)nominations (Network User/Portfolio IDs)	Clarify the exact “destination” identifications for nominations relating to bundled and unbundled capacity
3e. NRA decision making	Regulatory issues are out of the scope of the Network Code – inappropriately places an obligation on the NRAs, etc.
3f. Balancing neutrality cash flows; Level of detail of neutrality provisions	Separate neutrality pots for Variant 2/NDM offtakes [German regime]

# ENTSOG Position

ACER Concern	ENTSOG Position
1. Partial Acceptance of (re)nominations	<ul style="list-style-type: none"> <li>✓ Revisions clarify TSO can only amend firm capacity in exceptional events/emergency situations</li> <li>✓ Enable NRA to request TSO consult on the applicable rules</li> </ul>
2. Principles of neutrality mechanism: Efficiently incurred costs	✓ Balancing costs can be recovered by TSO unless the NRA considers these costs and revenues as inefficiently incurred in line with national rules
3a Transitional measures for nominations	✓ Rule deleted
3b. Information provision for WDOs	✓ Minor changes made
3c. Definitions relating to paper traders	✓ Any Network User shall have the right to gain access to transmission network
3d. Minimum information provision in (re)nominations	✓X No change to Art.19 but some change to Art.18
3e. NRA decision making	✓ Requested changes made
3f. Balancing neutrality cash flows	X No changes made to the code

## Future GB Stakeholder Engagement

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- National Grid NTS to provide the following updates
  - Balancing Overview
    - Enable stakeholders to understand the key aspects of the EU Gas Balancing Code [reminder] – April
  - National Grid NTS Impact Assessment
    - Enable stakeholders to understand the impacts to GB Regime – May
  - NG Comitology Position
    - Enable stakeholders to understand our views on any potential changes required to the EU code [if any] – June

# EU CAM Network Code Update and CMP Potential UNC Changes



Transmission Workgroup  
7<sup>th</sup> March 2013

## CAM – Comitology

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- The first comitology meeting took place Thursday 24th Jan 2013
  - Discussions continue between member states on the potential changes to the draft Regulation following the initial page turn
- The second comitology meeting is to take place 15<sup>th</sup> April 2013
  - Commission pushing for comitology completion at the 15<sup>th</sup> April meeting
  - 3 – 4 months transposition into Member States languages
  - This may indicate a March 2015 start date for the first Long Term CAM Auctions (effective 1<sup>st</sup> October 2015)
- National Grid NTS have held initial constructive discussions with Ofgem and DECC with regards to the overall implementation approach of the CAM Regulation.



## **CMP Potential UNC Change Process**

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- National Grid will raise UNC Modification on CMP for the March Modification Panel.
- To meet 1 October 2013 implementation date the following timeline is proposed (please note all dates are subject to confirmation and due process):
  - Submit to Modification Panel (21 March)
  - Workgroup development – 3 months (April/May/June)
  - Modification Panel (to issue for consultation) – 20 June
  - Industry Consultation close - 16 July
  - Panel recommendation – 15 August
  - Await Ofgem decision
- 1 October implementation date is challenging but possible under existing process

## CMP Modification 1

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- Seeks to comply with the following relevant objective:
  - *g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators*
- Modification will introduce a number of requirements that will be reviewed as part of the introduction of Capacity Allocation Mechanism (CAM) Code:
  - *Interconnection Point* as a new classification of “System Point”
  - Surrender processes introduced for:
    - NTS Entry Capacity
    - NTS Exit Capacity

## CMP Modification 2

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- Introduce AMSEC Oversubscription process (utilising many of the same features as the AMSEC surrender process)
- EU Transparency obligations at Interconnection Points for firm capacity products with a duration of 1 month or longer, e.g.
  - the number of unsuccessful requests for firm capacity
  - the volume of the unsuccessful requests for firm capacity made via non auction processes
  - where and when capacity has cleared at a price higher than the reserve price (for auctions only)
  - where and when no firm capacity is offered in the allocation process
  - total capacity made available through the application of the Congestion Management Procedures
- To be reviewed as part of the introduction of Capacity Allocation Mechanism (CAM) Code

## NTS Entry Capacity

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- Applied at QSEC, AMSEC and RMSEC Auctions
- Common process:
  - Offline surrender prior to auction invitation being issued
  - Surrender capacity only utilised where bids exceed the available capacity
  - Based on capacity entitlements
  - NTS utilise buyback functionality to effect the capacity surrender
- Allocation Process:
  - QSEC – embedded within existing allocation process
  - AMSEC / RMSEC – NTS use DRSEC auction functionality to effect capacity allocation

## NTS Exit Capacity

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- Applied to Enduring Annual and Annual NTS Exit (Flat) Capacity application processes
- Common process:
  - Offline surrender prior to application process invitation being issued
  - Surrender capacity only utilised where applications exceed the available capacity
- Allocation Process:
  - Enduring Annual – embedded within existing allocation process
  - Annual – surrendered capacity allocated as non-obligated
- Surrender
  - Enduring Annual – NTS use adhoc reduction functionality to effect surrender of capacity holding
  - Annual - NTS utilise buyback functionality to effect the surrender based on capacity entitlements

# EU Interoperability & Data Exchange Network Code



Update for Transmission Workgroup

7<sup>th</sup> March 2013

## Current Position

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- ENTSOG is expected to issue the draft Code plus supporting document for public consultation on 28<sup>th</sup> February 2013
- The consultation is expected to close on 26<sup>th</sup> April 2013
- This presentation summarises the main provisions of the draft Code and highlights potential impacts for the GB regime
- National Grid NTS encourages GB players to study the proposals and respond to the consultation

## Aims of the Interoperability Code

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- Enhance cross border trade by harmonising operational, technical and communication arrangements
- Shippers don't face barriers any higher than if EU networks were operated by a single TSO
- Greater transparency for market players
- Enhanced cooperation TSO-TSO and TSO-shipper
- Internal market integration



## Topic Areas (the “barriers”)

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1. Interconnection Agreements
  2. Gas Quality
  3. Odourisation
  4. Units
  5. Data Exchange
  6. ~~Capacity Calculation~~ (included in CAM Code)
- A Code which contains diverse topics
  - A ‘supporting’ Code for CAM and Balancing

## Milestones to Implementation

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- ENTSOG must produce the Code by September 2013
  - ‘ACER review’ period
  - Comitology
- } Timescales undefined
- TSOs required to implement its terms within 12 months after it becomes EU law
    - This means mid-late 2015 as a best guess

# 1. Interconnection Agreements (IAs)

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- All IPs must have IAs in place which as a minimum include the following provisions:
  - Modification process
  - Flow control
  - Measurement
  - 'Matching' nominations
  - Allocation rules
  - Exceptional events
  - Dispute Resolution

# 1. Interconnection Agreements (IAs)

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- All IPs must have IAs in place which as a minimum include the following provisions:
  - Modification process      Covered in GB IAs & UNC
  - Flow control      Little mention in GB IAs
  - Measurement      Broadly aligns with GB IAs
  - 'Matching' nominations      Not performed by NG, not in IAs
  - Allocation rules      Rules are not in GB IAs, OBAs?
  - Exceptional events      Not in GB IAs
  - Dispute Resolution      Broadly aligns with GB IAs

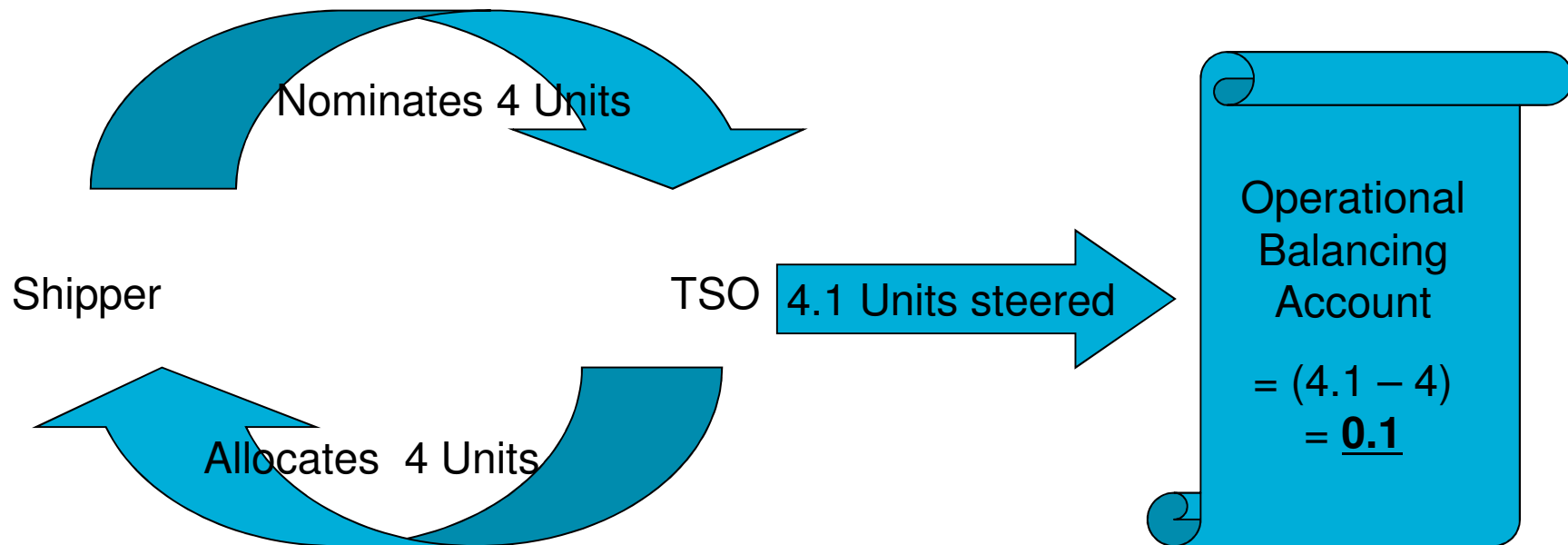
## Matching of Nominations and OBAs

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- Matching of nominations and allocations processes at GB IPs are currently performed by ‘allocation agents’ on behalf of shippers
- The model being promoted requires:
  - TSOs to do the matching and allocate shippers ‘whole’
  - The difference between allocations and physical measurement to be managed using an Operational Balancing Account (OBA)
- Prevailing allocation rules could still apply if shippers don’t want to change

## What is an OBA?

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- GB current regime: 4.1 units would be allocated to shippers and scheduling charges apply for the 0.1 'steering error'
- OBA regime: 0.1 is allocated to the OBA which is, at some point, reconciled by a physical steer of flow between TSOs

## 2. Gas Quality

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- Three components:
  - Managing differences in specification at IPs
  - ‘Short Term Monitoring’
    - Data publication
    - Short term forecasting of variations
  - ‘Long Term Monitoring’ (an ENTSOG obligation)

**The development of a harmonised gas quality specification for the EU is being progressed by CEN and is out of scope for the Interoperability Code**

## 2. Gas Quality: Managing Differences

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- Proposal:
  - TSOs to regularly review whether differences in national specs are causing / could cause flow restrictions at IPs
  - If so, they are to develop options and submit solutions for approval by their regulators
  - If TSO don't agree, regulators would resolve disputes
- The UK : Continent wobble differential is perceived to be the main issue



## 2. Gas Quality – Short Term Monitoring

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- TSOs to publish real time wobbe and CV data at IPs
  - In our view, this would entail cost for no benefit to GB market participants
- TSOs to provide forecasts of gas quality changes to certain transmission direct connects whose processes are sensitive to variations (and potentially DNOs)
  - This provision applies where a TSO can fulfil it using existing equipment

### 3. Odourisation

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- 'Target model' is non-odourised transmission networks
- Where different odourisation regimes could create flow restrictions at an IP:
  - TSOs try to agree a solution and submit to their NRAs
  - If no solution is reached or NRAs deem the solution inadequate, TSOs should work with relevant authorities to plan a move towards non-odourised network
- No impact for GB unless Irish IC developed a capability to physically reverse flow (Ireland to GB)

## 4. Units

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- ENTSOG's proposal:
  - Pressure: bar
  - Temperature: °C (degree Celsius)
  - Volume: m<sup>3</sup>(n) (at 0°C and 1.01325 bar(a))
  - Gross Calorific Value: kWh/m<sup>3</sup>(n)
  - Energy: kWh @ 25°C reference temp
  - Wobbe-index: kWh/m<sup>3</sup>(n)(based on GCV)

## 4. Units

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- ENTSOG's proposal:

- Pressure: bar OK for GB
- Temperature: °C (degree Celsius) OK for GB
- Volume: m<sup>3</sup>(n) (at 0°C and 1.01325 bar(a)) GB uses (s) & 15°C
- Gross Calorific Value: kWh/m<sup>3</sup>(n) GB uses MJ/m<sup>3</sup>
- Energy: kWh @ 25°C reference temp GB uses 15°C
- Wobbe-index: kWh/m<sup>3</sup>(n)(based on GCV) GB uses (s) & MJ/m<sup>3</sup>

## 4. Units

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- ENTSOG proposal is that common units must be used for data publications and communications under the EU Codes, with use of other units permitted “in addition”
- Framework Guideline envisages harmonisation only “where necessary for the purposes of interoperability”
- Reference temperature is the main issue for GB
  - CEN have argued for a 15°C reference temperature and MJ/m<sup>3</sup> to be in line with its European technical standards

## 5. Data Exchange

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- The Framework Guideline requires the Code to “foresee” common data exchange solutions/standards
- NG NTS’ interpretation: the Code should set out how TSOs can work towards and manage common IS solutions over time rather than specifying the details of the technical solution
- ACER & ENTSOG consider that solutions should be defined within the Code itself
- Means new TSO-TSO and TSO-shipper IS capability for processes developed under the Third Package

## 5. Data Exchange

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- ENTSOG is proposing the following solution for 'document based' data exchange:
  - Message format: [Edigas] XML
  - Message protocol: AS4
  - Network: Internet

## Summary and Next Steps

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- The public consultation on the draft Code is expected to close on 26<sup>th</sup> April 2013
- ENTSOG is planning to host a consultation workshop in Brussels on 20<sup>th</sup> March 2013
  - Webcast facility available – see ENTSOG website for details of how to register
- National Grid NTS encourages GB industry participation
- For further information please contact:  
[philip.hobbins@nationalgrid.com](mailto:philip.hobbins@nationalgrid.com) (01926 653432)



## Ten Year Network Development Plan 2013-2022 (TYNDP)

March 2013

# ENTSOG Ten Year Network Development Plan 2013 – 2022 (TYNDP)

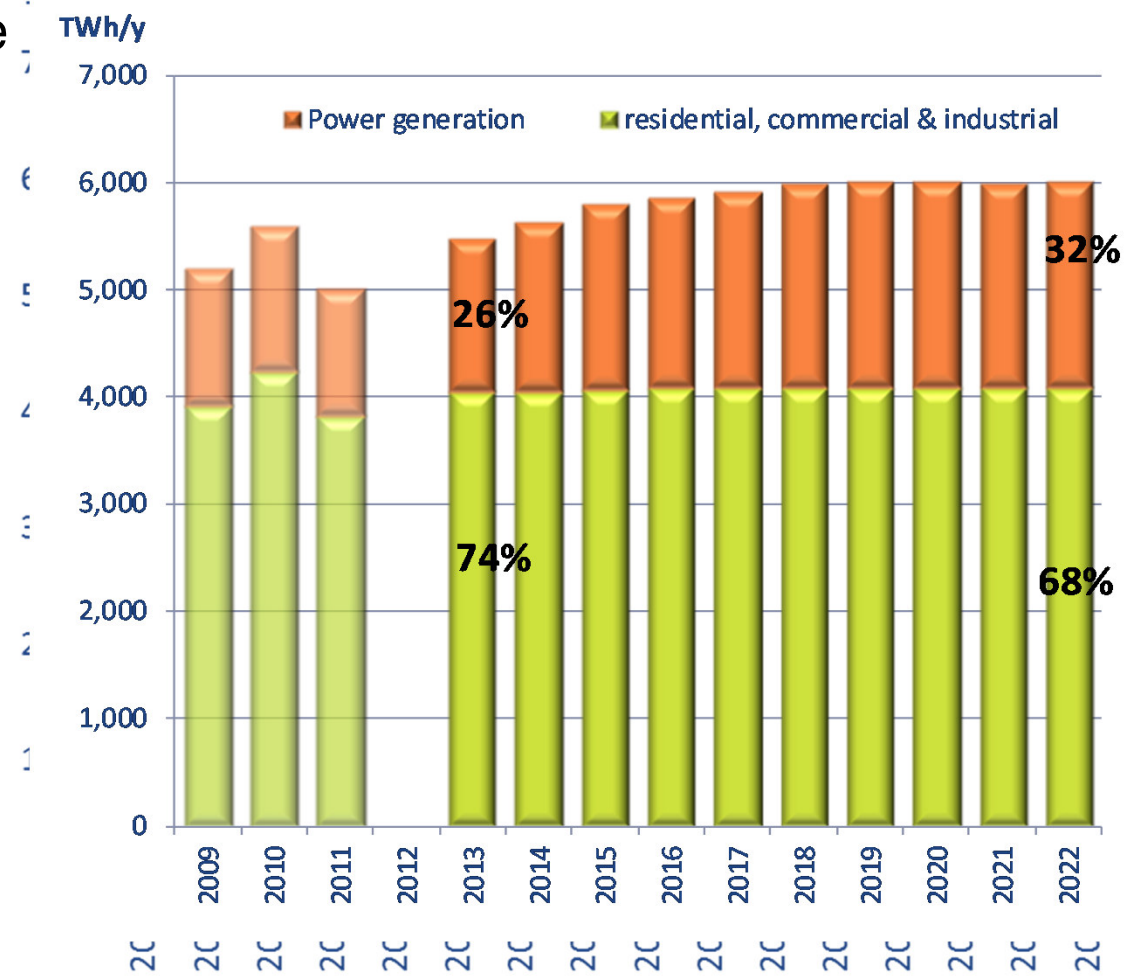
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nationalgrid

- ENTSOG published their third Ten Year Network Development Plan on **21<sup>st</sup> February 2013**
- National Grid NTS played a key role in the development of the TYNDP
- There were no 'Red Flags' for UK in the report
- Legal obligation for ENTSOG to produce a TYNDP every two years
- Based on feedback from the previous TYNDP, ENTSOG held extensive sessions to gain stakeholder input for the report
- There are a number of significant improvements in this report compare to previous versions. (e.g. 200 Cases modelled in this report compared to 67 in the previous report)
- The next few slides will provide an overview for what the actual report covers:

# Demand

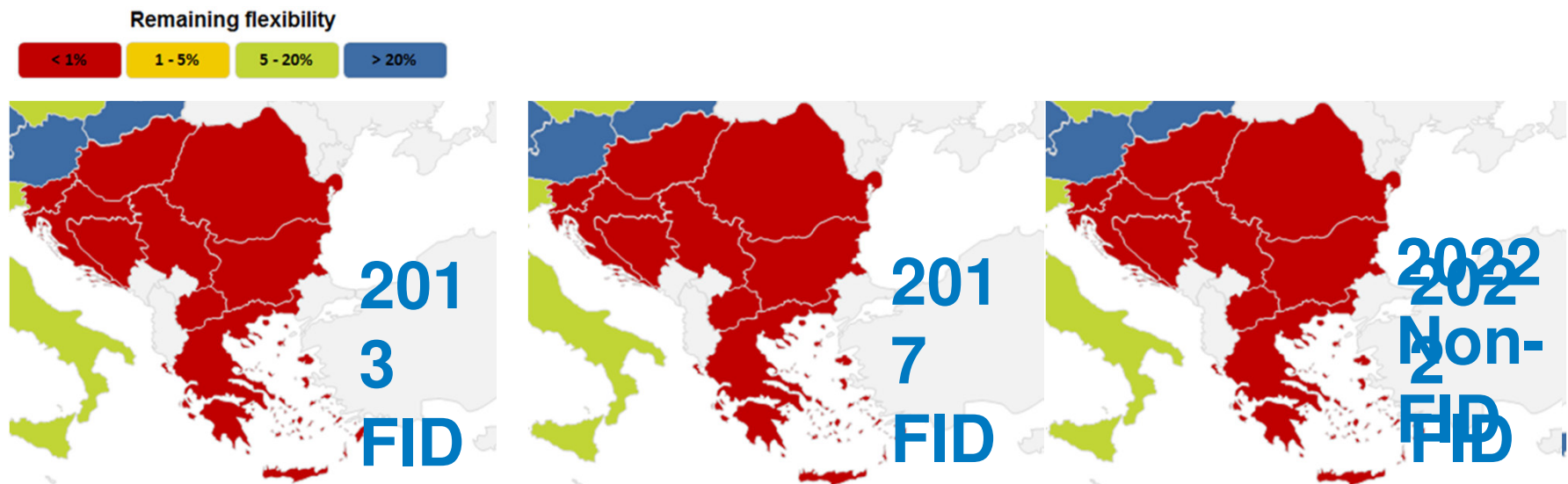
- Specific request to improve demand scenarios
- ENTSOG built on the previous report to produce the following scenarios:
- 1 Annual demand scenario with power generation breakdown
- Daily Average Demand Scenario
- 3 Daily Peak Demand Scenarios
  - Design-Case
  - Uniform Risk
  - 14-Day Uniform Risk



## Resilience Assessment Results

- The key conclusion from the modelling is that under certain climate and supply conditions, there are zones within the European gas system that will not have enough capacity to achieve a full supply-demand balance, **unless a combination of FID and Non-FID projects are brought to market**

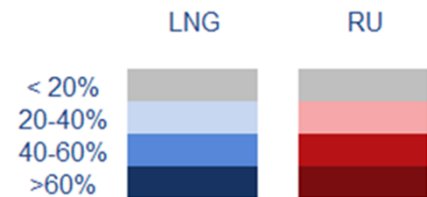
The below example shows the areas impacted by the disruption of transit through Ukraine



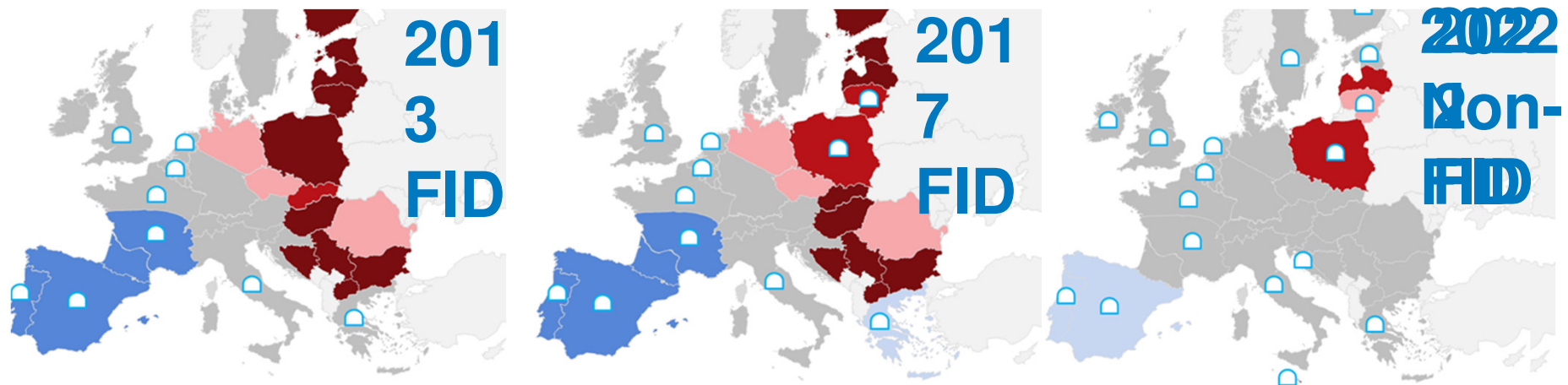
# Supply Dependency Assessment

- The assessment showed UK with no supply dependency of over 20%
- The assessment was based on the amount of capacity available, once a supply source has been fully minimised whilst still achieving a supply demand balance
- Assessment based on an the yearly average demand scenario

Minimum share in total supply



Zone connected to a LNG terminal



## The TYNDP also Includes...

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- The actual report covers various other topics, including:
  - Historical supply and demand information
  - 2 New peak day demand scenarios
  - A multi-supply source scenario approach
  - Detailed 'Methodology' chapter
  - Market integration and supply diversification assessment
  - A new 'Barriers to Investment' chapter
  - The role of storage in the resilience cases
  - Impact of an LNG minimisation
  - Details of all the submitted infrastructure projects
  - New experimental indicator showing a import dependency index
- The report is now published on the ENTSOG website [www.entsog.eu](http://www.entsog.eu)

## TYNDP Consultation

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- National Grid NTS encourages GB stakeholders to complete the TYNDP consultation
- The consultation closes on 21<sup>st</sup> May 2013
- There is a TYNDP workshop in Riga on 21<sup>st</sup> & 22<sup>nd</sup> March 2013
- ENTSOG is available for bi-lateral discussions with stakeholders
- National Grid NTS is also available to field any questions you have on the report.
- Please send any questions through to [Bill.Goode@nationalgrid.com](mailto:Bill.Goode@nationalgrid.com)

# Code Status Update

Code	Current Status	Estimated Implementation date
Congestion Management (CMP)	Text was published in the European Official Journal on 28 Aug 2012. Ofgem intends to issue a letter re implementation of Congestion Management Principles in GB. NG to raise CMP Mod for March Panel initial discussion with industry March Workgroup	1st October 2013
Capacity Allocation Mechanism (CAM)	CAM code transposed into draft regulation. First comitology meeting held 24th Jan 2013. Some changes are possible to the code after the first session. Second meeting planned 15 April 2013	2015-2016
Gas Balancing	ACER reasoned opinion received 26 January 2013, ENTSOG submitted the revised code to ACER on 22 February 2013	Q1 2015/Q1 2016 (subject to NRA approval for additional 12 months to implement)
Interoperability	ENTSOG is expected to publish the draft Code plus support / consultation document on 28 February for 2 months' public consultation. ENTSOG is planning to host a consultation workshop on 20th March in Brussels for which participation will also be available via webcast.	2015
Tariffs	ACER stakeholder workshop on FGs held 23 January 2013 ( Brussels and Ljubljana). Refinement of FGs/revised draft to be issued 31 January. ACER "open house" 4 February deadline for comments 11 February (noon CET). Final FGs expected end of March.	TBC (earliest mid 2016)
Incremental Capacity	CEER consultation paper published on 28 June 2012. "Evaluation of Responses + Next Steps" published 3rd December 2012. ENTSOG incremental Task Force position developed and agreed with ENTSOG Board in February. Looking to work with CEER/ACER to develop their blueprint for Incremental Capacity ahead of Madrid Forum	TBC





## Future EU Updates

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- 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"><li>• Balancing Overview</li></ul>	April 2013
<ul style="list-style-type: none"><li>• Balancing Code – NG Impact Assessment</li></ul>	May 2013
<ul style="list-style-type: none"><li>• Balancing Code – Comitology position</li><li>• Interoperability Code – key outcomes of public consultation</li></ul>	June 2013