

Agenda



Irish Regional Workshop, Crowne Plaza, Dundalk

Network Code Development



Reliable Sustainable Connected



9.00 - 9.30	Registration
9.30 - 10.00	Network Code Development
10.00 - 10.15	Q & A
10.15 - 10.45	Network code Content (General sections)
10.45 - 11.00	Q & A
11.00 - 11.30	Tea and Coffee
11.30 – 12.00	Network Code Content (Specific requirements)
12.00 onwards	Q & A and open session

Network Code Development



Irish Regional Workshop, Crowne Plaza, Dundalk



Reliable Sustainable Connected

ENTSO-E association

- Structure

Network Code Development Process

- Regulation (EC) 714/2009
- EC/ACER/ENTSO-E work program
- Consultation Process

Timeline NC development

- Pilot process
- Formal period
- Next steps



ENTSO-E association



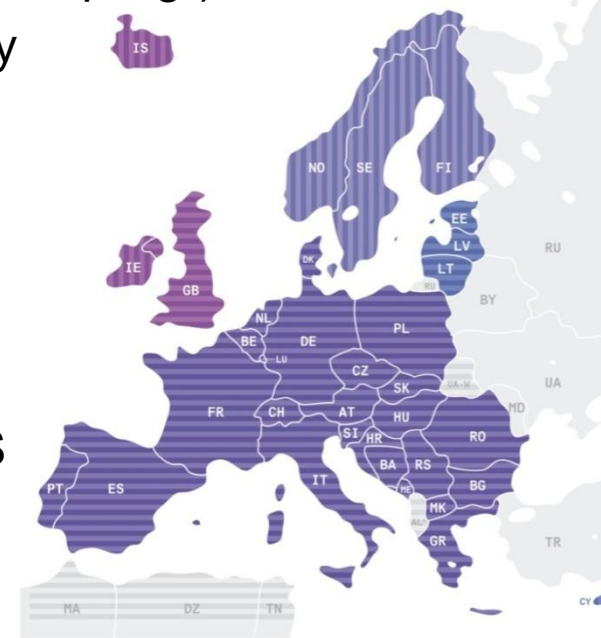
Key activities set out in Regulation 714/2009 (on cross-border electricity trade, part of the 3rd Internal Energy Market Package)

- Deliver **network codes**
- Deliver **network plans** European / regional view of system needs (“TYNDP”)
- Deliver crucial aspects of **market integration** (“market coupling”)
- **R&D Plan** (fully included in EEGI – European Electricity Grid Initiative, part of the SET Plan)

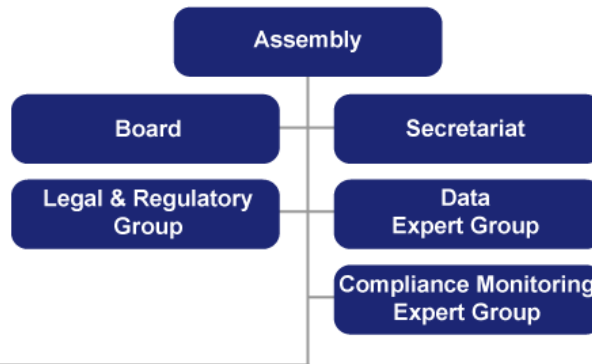
Through its members deliver the **infrastructure** to:

- enable markets to function,
- secure energy supply,
- meet climate change objectives through connecting RES

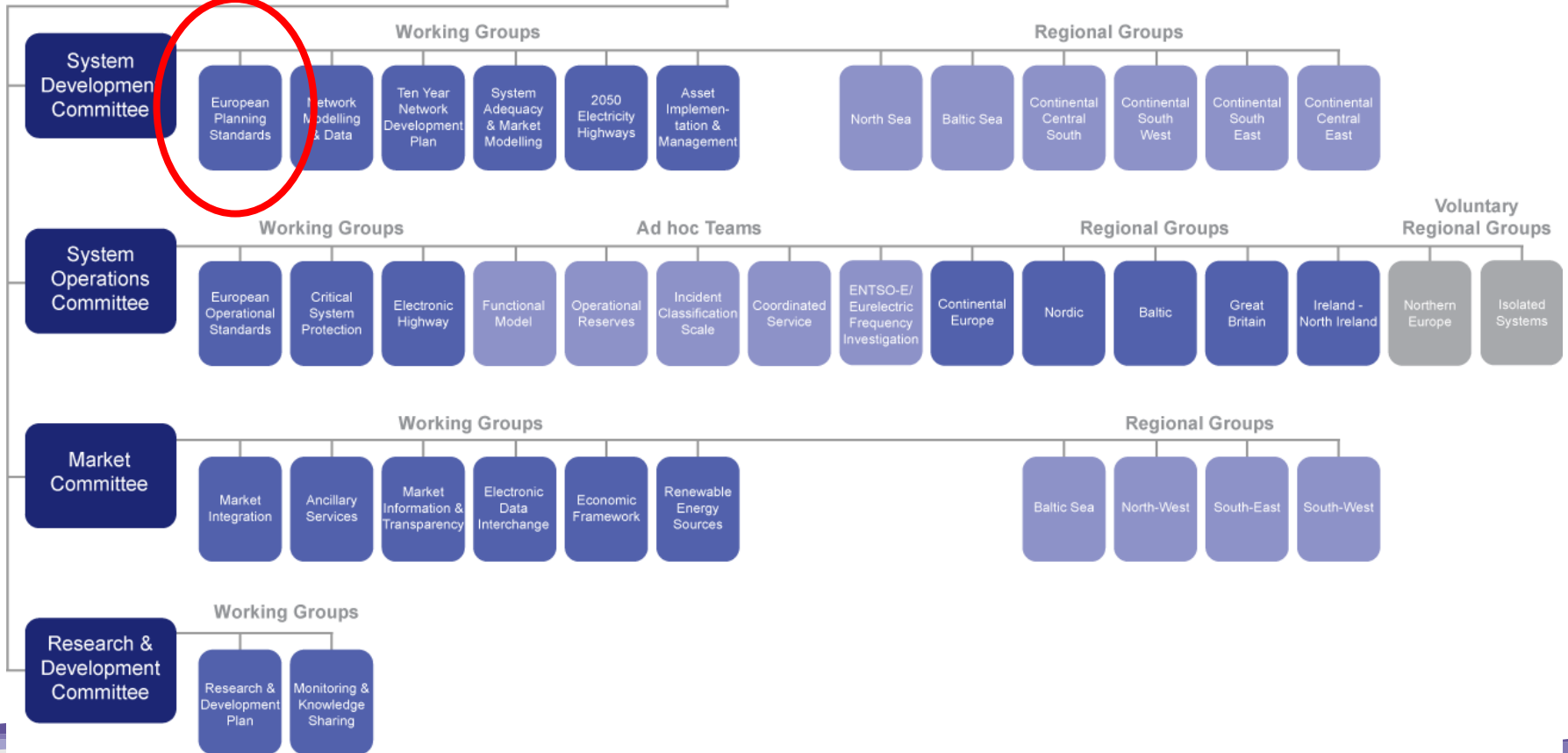
Represents **41 members from 34 countries**



ENTSO-E organizational structure



Drafting teams on grid connection Network Codes





Network Code Development Process

Background Regulation (EC) 714/2009

Why European Network Codes?



The development of *European wide Network Codes* in various domains by

- bringing together the expertise of diverse stakeholders
- in an open and transparent process
- creating a coherent approach on common issues

is a crucial enabler of *Europe's Energy goals* in

- increasing the amount of renewables
- guaranteeing an adequate Security of Supply
- contributing to an Internal Energy Market



Article 8 – Tasks of ENTSO-E

6. “The network codes ... cover the following areas, taking into account, if appropriate, regional specificities:”

Draft
framework
guideline

network security and reliability rules incl. rules for technical transmission reserve capacity for operational network security;

Final
framework
guideline

network connection rules;

c. *third-party access rules;*

d. *data exchange and settlement rules;*

e. *interoperability rules;*

Draft
framework
guideline

operational procedures in an emergency;

Final
framework
guideline

g. capacity-allocation and congestion-management rules;

h. *rules for trading related to technical and operational provision of network access services and system balancing;*

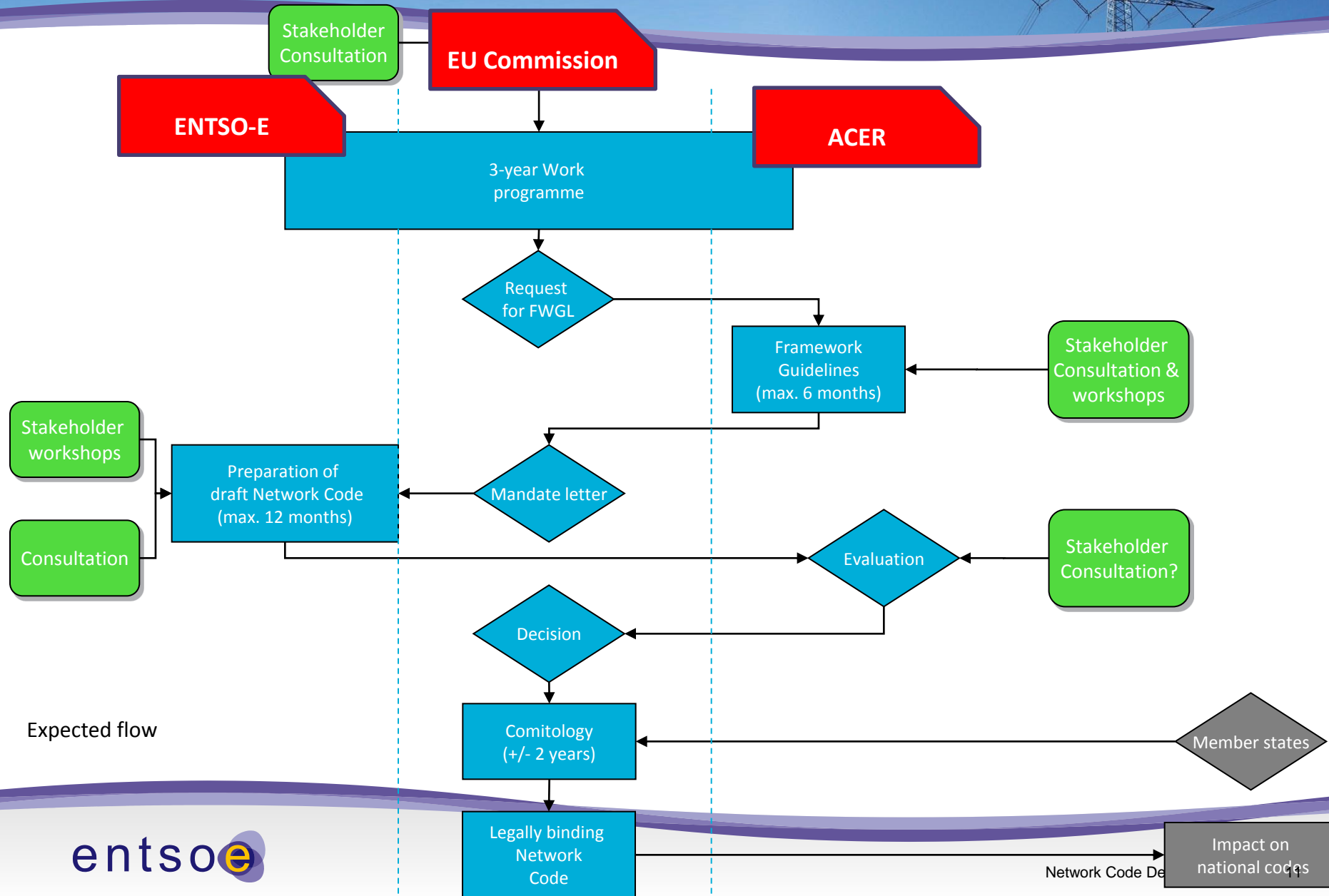
i. *transparency rules;*

j. *balancing rules incl. network-related reserve power rules;*

k. *rules regarding harmonised transmission tariff structures incl. locational signals and inter-transmission system operator compensation rules; and*

l. *energy efficiency regarding electricity networks.*

General Framework - Regulation 714/2009





Article 8 (cont.)

7. “The network codes shall be developed for **cross-border network issues** and **market integration issues** and shall be without prejudice to the Member States’ right to establish national network codes which do not affect cross-border trade.”

Article 10 – Consultations

1. “... While preparing the network codes ... ENTSO for Electricity shall conduct an **extensive consultation process, at an early stage and in an open and transparent manner**, ..., in accordance with the rules of procedure referred to in Article 5(1). ..”

2. “**All documents and minutes of meetings** related to the consultations referred to in paragraph 1 shall be made **public**”

3. “...ENTSO for Electricity shall indicate how the observations received during the consultation have been taken into consideration. It shall provide **reasons where observations have not been taken into account**”



- **Discussed in the Florence Forum with all stakeholders**
- **Regularly discussed by EC / ACER / ENTSO-E**
- **Resulting in a three-year work program**
 - **High priority:** Listing all Network Codes that are to be finalized by 2014 (creation of the European internal energy market)
 - **Low priority:** timeline to be discussed
 - Under public consultation by EC (April 2011):
http://ec.europa.eu/energy/international/consultations/20110410_external_dimension_en.htm

EC / ACER / ENTSO-E three year work program



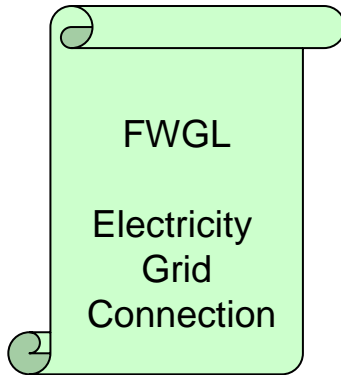
EC public consultation document (Apr. 2011)

Deliverable	ACER FG draft		ENTSO-E code drafting		ACER evaluation	Comitology	2011				2012				2013				2014			
	Start	End	Start	End			Start	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
Established work																						
Framework Guideline (FG) on capacity allocation and congestion management (includes AHAG work)	Q2/11	Q2/11																				
Capacity Calculation Network Code (NC) (includes IWG work) ¹			Q2/12	Q1/13	Q2/13	Q3/13																
Intraday Platform (trading/congestion management) NC (including IWG) ²			Q4/11	Q3/12	Q4/12	Q1/13																
Day Ahead (trading/congestion management) NC (includes IWG) ³			Q4/11	Q3/12	Q4/12	Q1/13																
Forward Market network code			Q4/12	Q3/13	Q4/13	Q1/14																
Regional progress, setup and testing																						
EC guideline on governance	Q1/11	Q2/12																				
FG on network connection ⁴	Q2/11	Q2/11																				
NC on generation connection ⁵			Q3/11	Q4/11	Q1/12	Q2/12																
NC on DSO and industrial load connection			Q1/12	Q4/12	Q1/13	Q2/13																
NC on connection procedures			Q1/13	Q4/13	Q1/14	Q2/14																
NC on HVDC connection ¹⁰			Q1/14	Q4/14	Q1/15	2015																
FG on system operation ⁶	Q1/11	Q2/11																				
NC on operational security			Q3/11	Q2/12	Q3/12	Q4/12																
NC on operational planning and scheduling			Q1/12	Q4/12	Q1/13	Q2/13																
NC on load-frequency control and reserves			Q3/12	Q2/13	Q3/13	Q4/13																
NC on operational training ⁷			Q1/13	Q4/13	Q1/14	Q2/14																
NC on requirements and operational procedures in emergency			Q3/13	Q2/14	Q3/14	Q4/14																
FG on balancing	Q3/11	Q4/11																				
NC on balancing ⁸			Q4/12	Q3/13	Q4/13	Q1/14																
Draft comitology guideline on transparency	Q2/10	Q4/10			Q2/10	Q1/11																

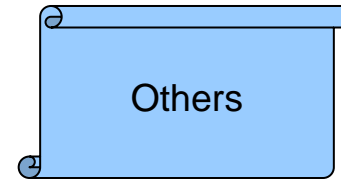
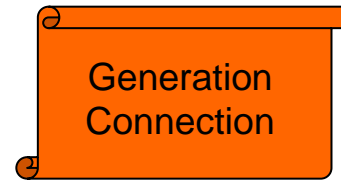


'Framework Guideline'

Approved

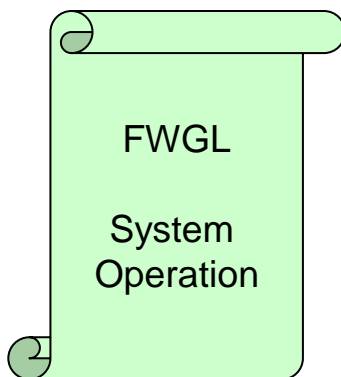


Network Codes

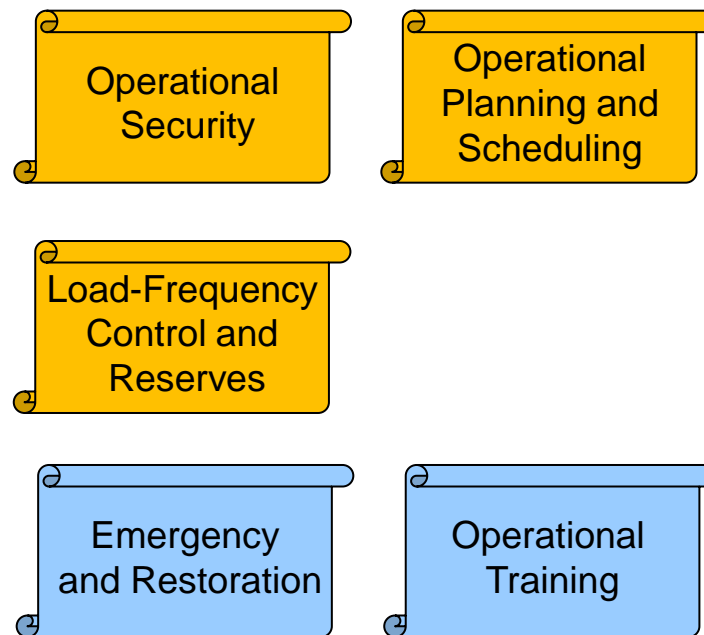


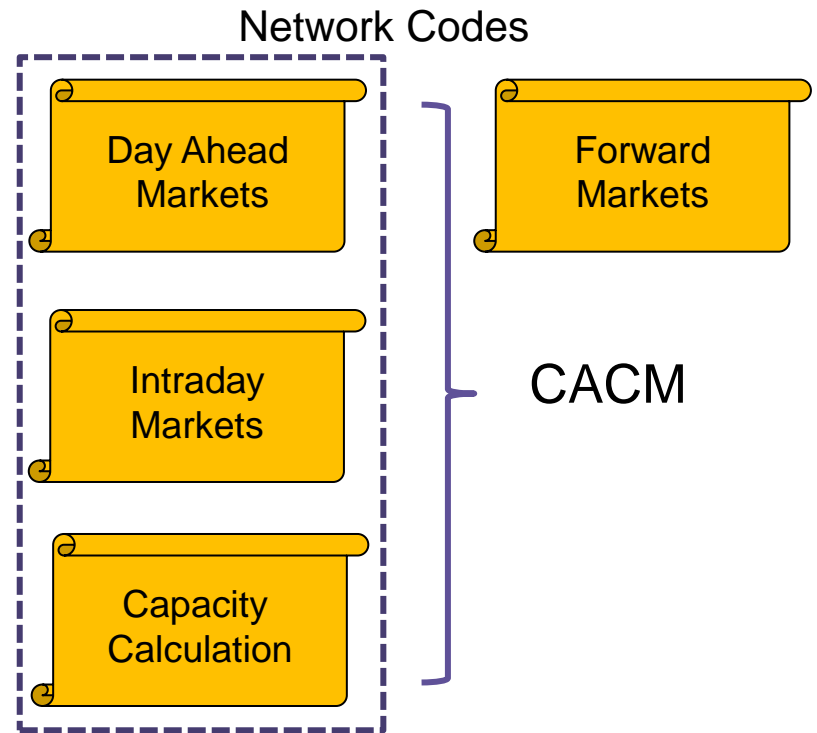
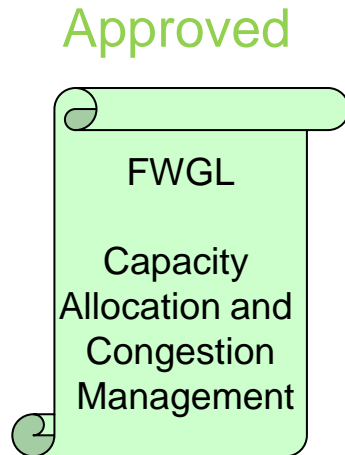


Expected by
the end of 2011



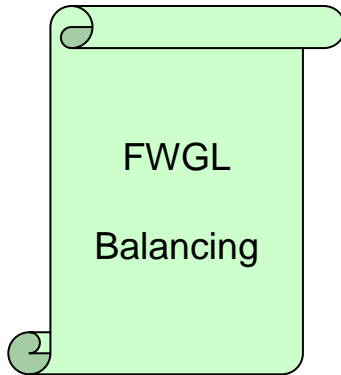
Network Codes



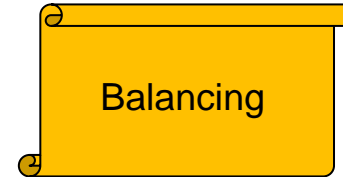




Expected in
2012



Network Codes





When?

- Network Code development
- Annual Work Program
- Ten Year Network Development Plan

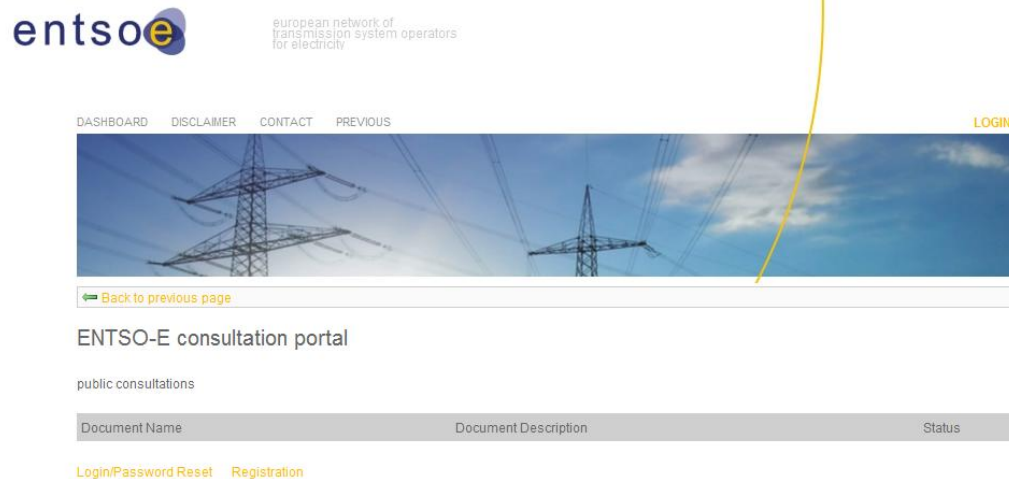
Public Consultation Process

- All (non-confidential) responses received to formal consultations and the total number of responses received will be made **public**. Note: In case of NC: all comments are treated as **non-confidential**
- The final ENTSO-E position following the consultation including an **evaluation of the responses** received explaining the reasons why comments have or have not been taken into account, in accordance with Article 10(3) of the Regulation, will be made public

Tool?

- Web consultation tool to facilitate submission, review and publication of comments
- <https://www.entsoe.eu/consultations/>

- Clear structure for respondents to enter comments
- Facilitates handling of a large number of comments by ENTSO-E reviewers (filtering, assigning, cross-checking)
- Can be used for sending notifications, uploading additional information, publication



The screenshot shows the ENTSO-E consultation portal. At the top left is the ENTSO-E logo, which consists of the word "entsoe" in a sans-serif font with a stylized "e" inside a blue circle, followed by the text "european network of transmission system operators for electricity". To the right of the logo are navigation links: "DASHBOARD", "DISCLAIMER", "CONTACT", and "PREVIOUS". In the top right corner, there is a "LOGIN" link. Below the navigation is a banner image of high-voltage power lines against a blue sky. Underneath the banner is a "Back to previous page" link with a left-pointing arrow. The main heading is "ENTSO-E consultation portal". Below this, it says "public consultations". There is a table with three columns: "Document Name", "Document Description", and "Status". At the bottom of the page, there are links for "Login/Password Reset" and "Registration".

<https://www.entsoe.eu/consultations/>



Comitology definition

- System where the European Commission is delegated by the European Parliament and the Council the power to adopt detailed implementing measures.
- The EC must act in conjunction with committees of representatives of member states.

Network Code for Generators follows 'old' Comitology rules

- Regulatory Procedure with Scrutiny: The Council and the Parliament have a direct right of scrutiny over the Commission.
- Limited grounds for opposition

New comitology regime

- “Delegated acts” under the Treaty of Lisbon
- Unlimited ground for opposition
- Right of revocation by Council and Parliament
- Transitory period for until the end of 2014



Network Code on Connection Requirements applicable to all Generators

Timeline



ENTSO-E has identified in 2009 wind connection as the most prominent topic for a rapid introduction of network codes

- Based on ERGEG's framework guideline on grid connection
- With the strong support of the EC and the Florence Forum

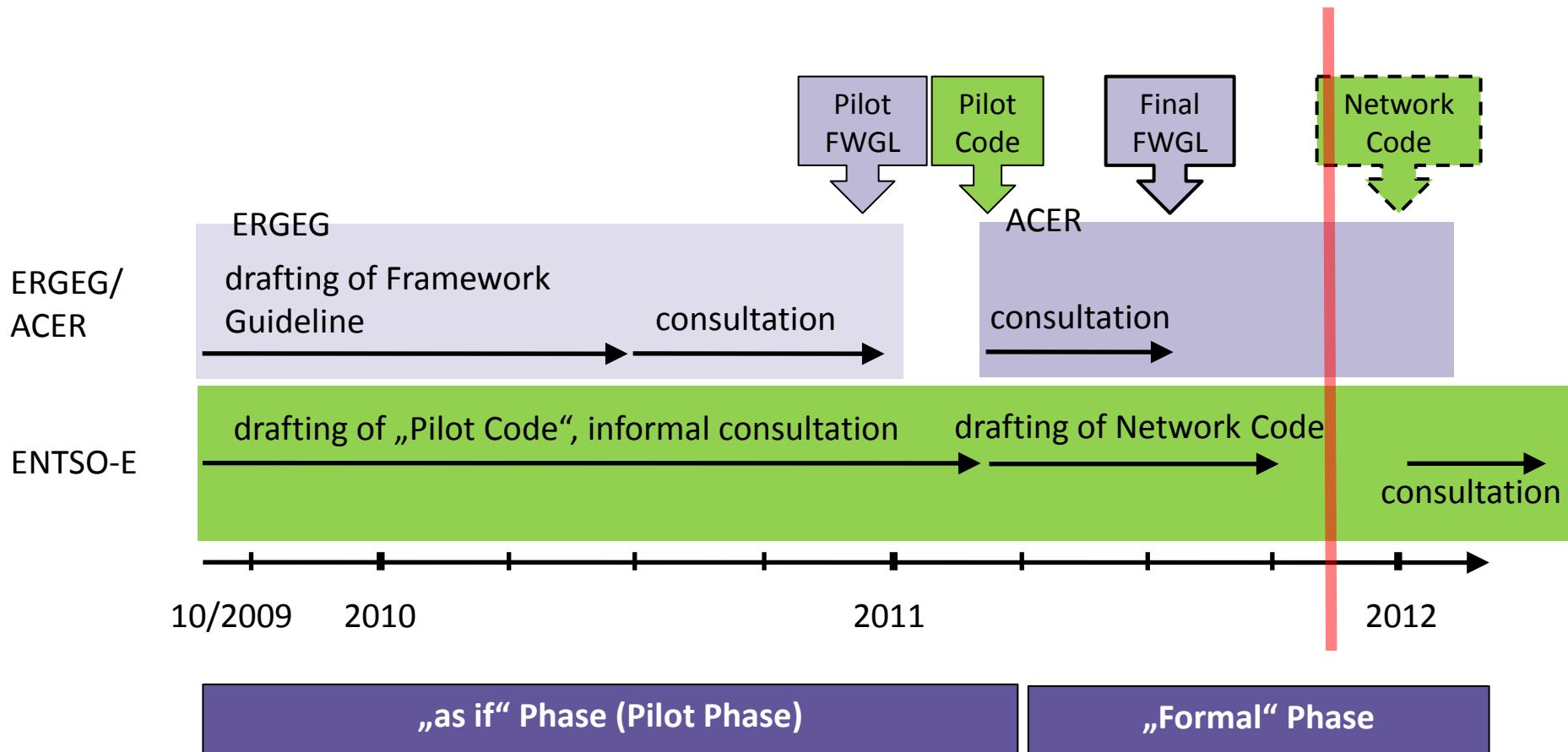
Objectives

- Enable **EU energy and climate policies** while securing **reliability of the power system**
- Facilitate adoption of best practices
- Reduce development and investment costs
- Harmonize structure and technical contents of national codes

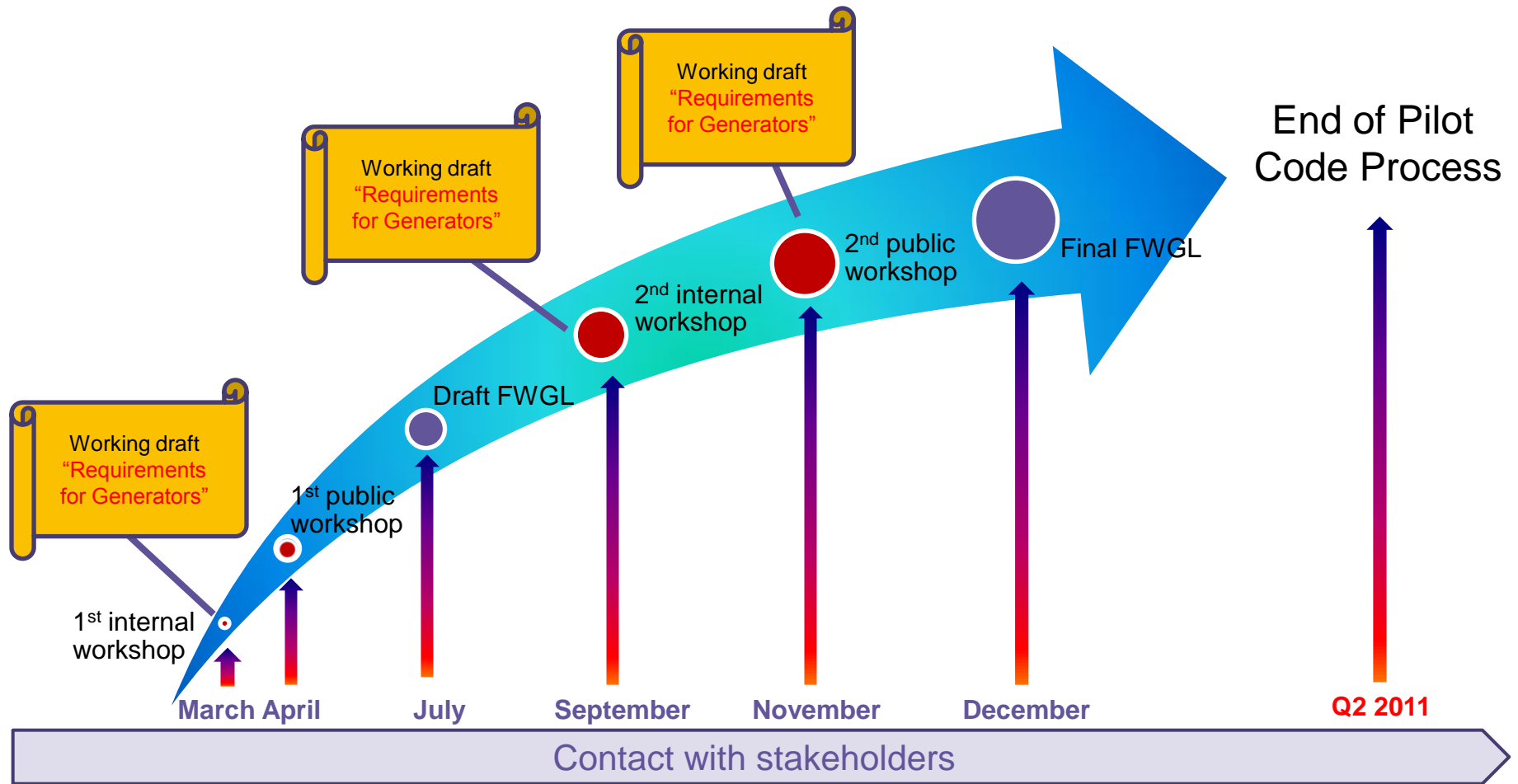
Pilot process

- Scope generalized to all types of generation connection
- Parallel development of code (ENTSO-E) and framework guidelines (ERGEG) to develop the process
- Ending in March 2011 with the entry into force of 3rd Energy Package

Pilot process versus formal process

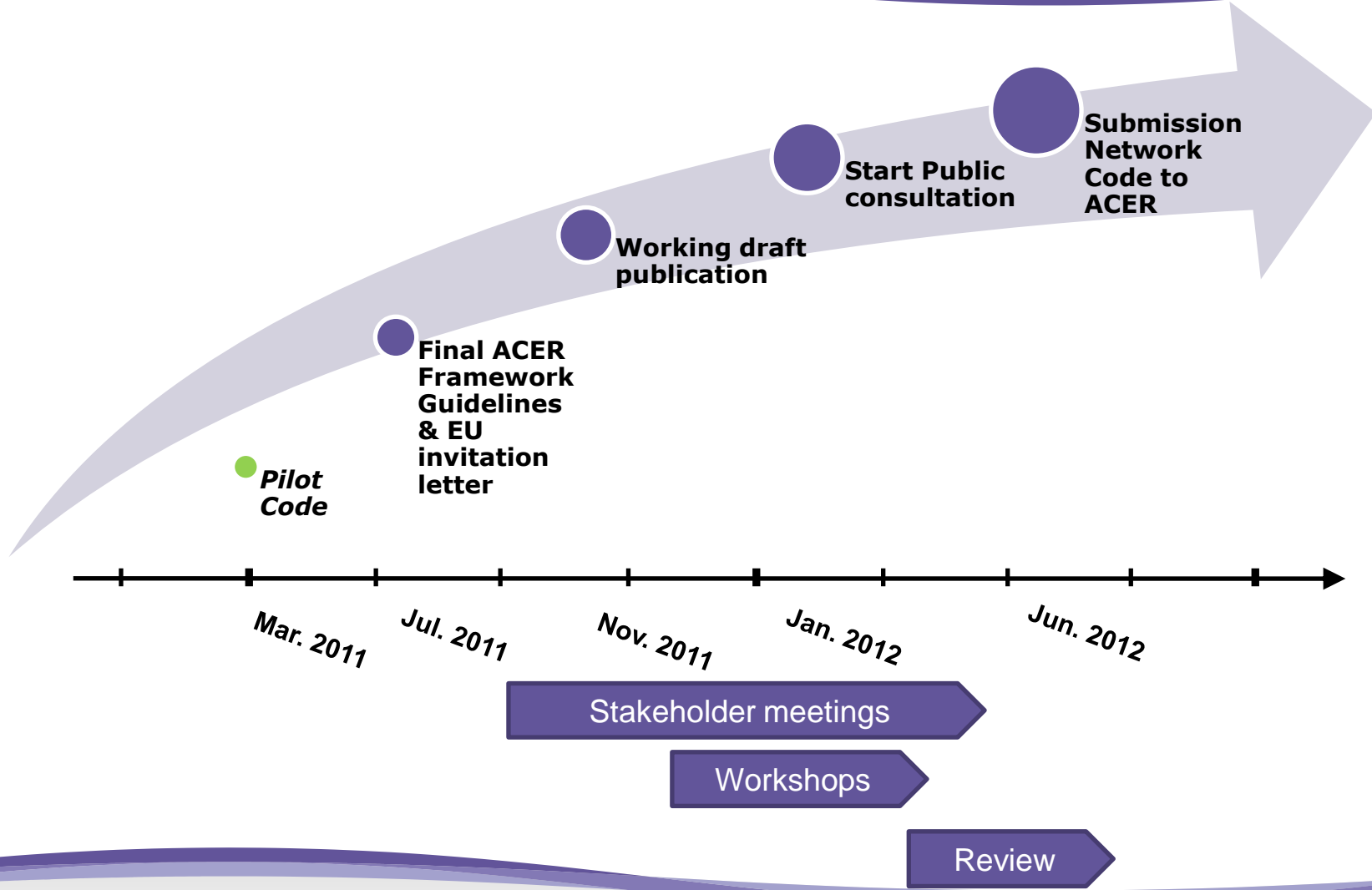


Pilot process



- Mid 2009: **ENTSO-E established a Drafting Team** for Development of a Network Code on Grid Connection of Generators
- September 2009: ERGEG launched **an Initial Impact Assessment** for a FWGL on Grid Connection
- On March 29th 2010 the EC invited ERGEG to draft a **pilot framework guideline** on electricity grid connection
- ERGEG released on July 12th 2010 the **draft FWGL**
- ERGEG released on December 07th 2010 the **final FWGL**
- ENTSO-E released **Pilot Code** on March 22nd 2011
- ENTSO-E engaged in an **extensive interaction with stakeholders** (EWEA, Eurelectric (WG Thermal), DSO Associations (Eurelectric (WG Networks), GEODE, CEDEC), Manufacturers), and ERGEG.
 - 1st public stakeholder workshop in April 2010
 - 2nd public stakeholder workshop in November 2010
 - about 12 stakeholder dialogue meetings
- ENTSO-E published **assessment of stakeholder comments** and an FAQ on July 11th 2011

Formal Network Code process



Public ENTSO-E workshops

- May 2010
- November 2010
- December 2011 (regional workshops)
- February 2012

National level (TSO initiative)

- User groups
- Seminars, ...

DSO associations

- CEDEC
- Eurelectric DSO
- Geode

Bilateral meetings

Industrial customers

- IFIEC

Manufacturers & Generators

- EWEA
- EPIA
- EUTurbines
- Eurelectric WG Thermal / VGB

- ACER published its final FWGL with delay on July 20th 2011
- EC sent an invitation letter to ENTSO-E on July 29th 2011 requesting a code in line with the FWGL
 - exempting the connection of DSOs and industrial loads → new invitation expected beginning 2012;
 - to be submitted to ACER by end of March 2012 → on the reason that due to the pilot process experience, less than 12 months are required
- Submission postponed to end of June 2012
 - To allow sufficient time for adaptation of the code
 - To allow stakeholder involvement before entering in public consultation.

➤ Next steps

- Public consultation (two months) starts end of January 2012
- ENTSO-E review of all comments, response and adaptation of the code if needed in Q2/2012
- Submission to ACER in June 2012

- The European power system is changing fast and significantly to achieve **energy and climate objectives**
- Grid connection codes are **urgently** needed to enable these policies in order to maintain security of supply at least cost for European citizens
- ENTSO-E's **neutrality and expertise** guarantees the process
- Strong **involvement of stakeholders**, and in particular DSOs, are absolute prerequisites
- Consultation is ongoing; ENTSO-E is **listening** in pursuit of the best solutions acceptable by all



Questions?

Key documents

- Consultation Process - https://www.entsoe.eu/fileadmin/user_upload/library/consultations/110628_Consultation_Process_Description.pdf
- Web consultation tool - <https://www.entsoe.eu/consultations/>
- ENTSO-E Network Code updates - <https://www.entsoe.eu/resources/consultations/network-codes/>