



# Network Codes and Guidelines

**=> *ADOPTION PHASE***

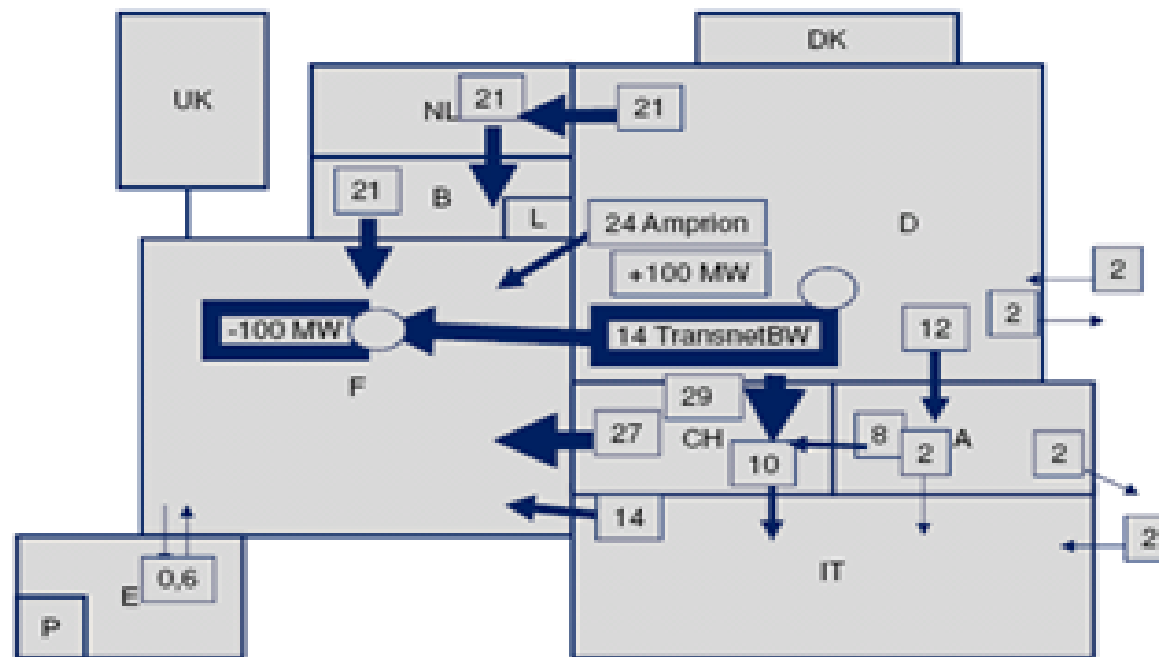
DG Energy

Oliver Koch  
Deputy Head of Unit B.2 – Internal Market II  
Wholesale markets; electricity & gas

Florence Forum 15 May 2013

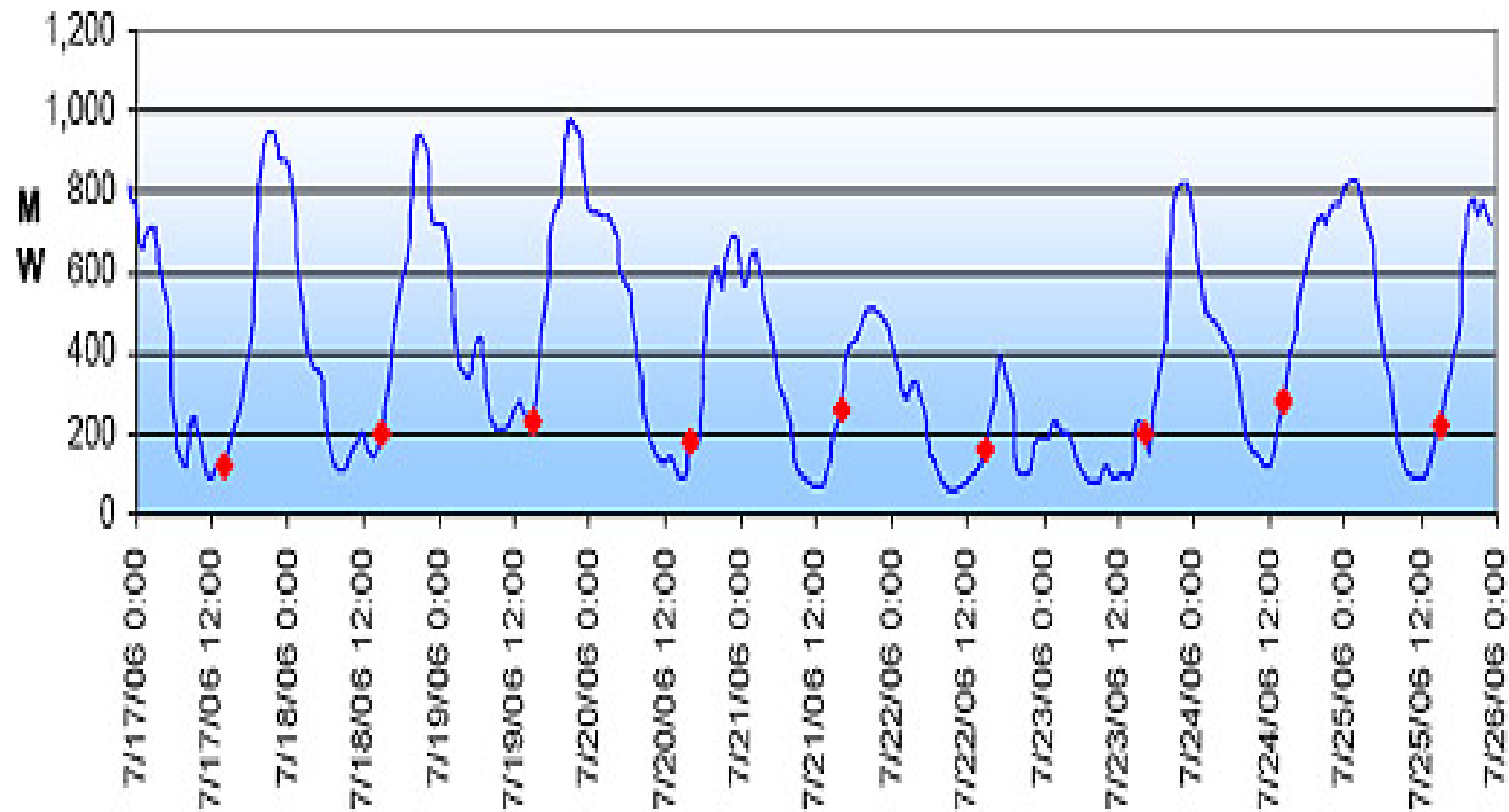
Energy

## Network Codes & Guidelines: Why?

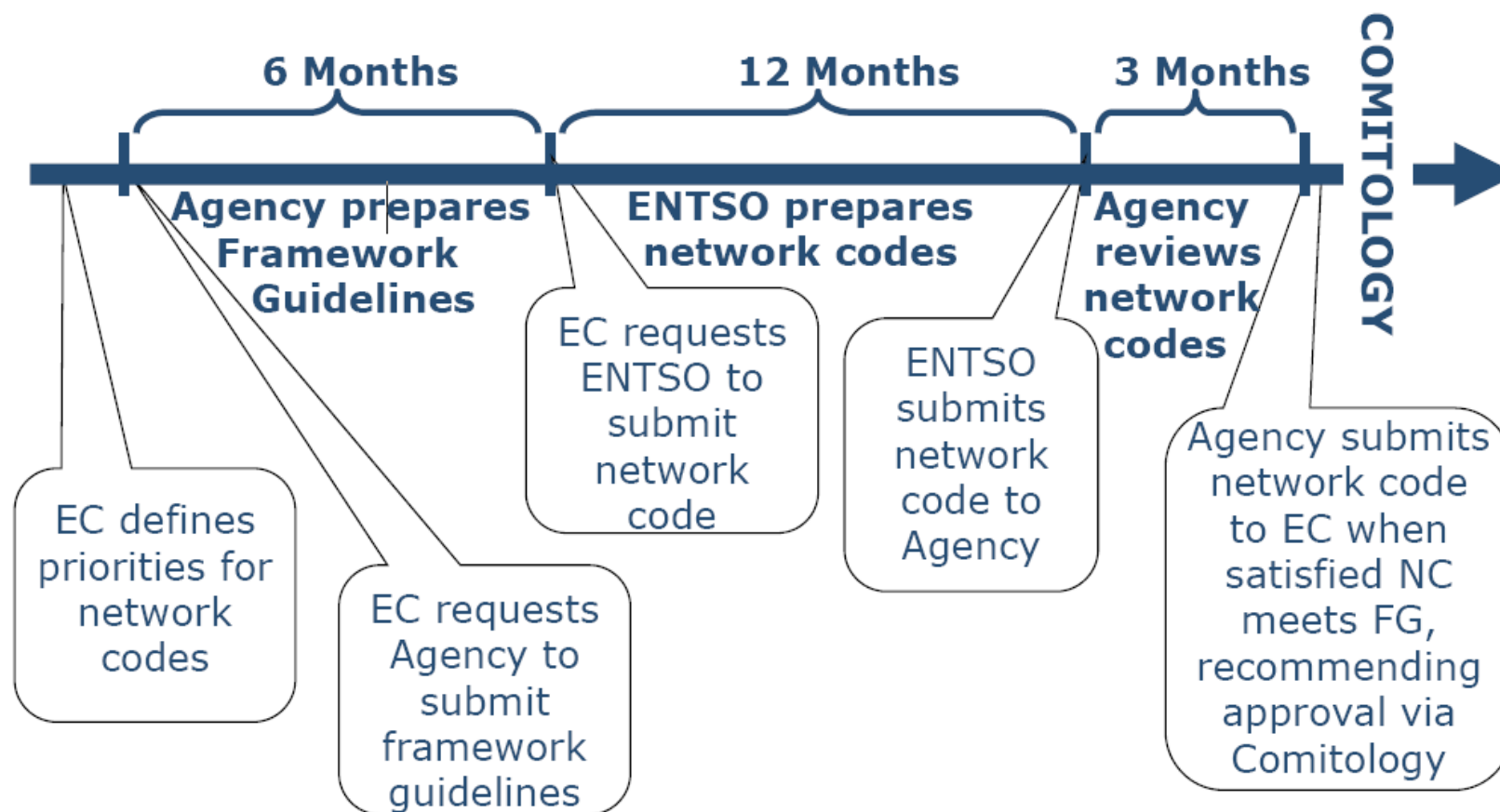


- The major part of cross-border-flows affects grids of third countries / TSOs

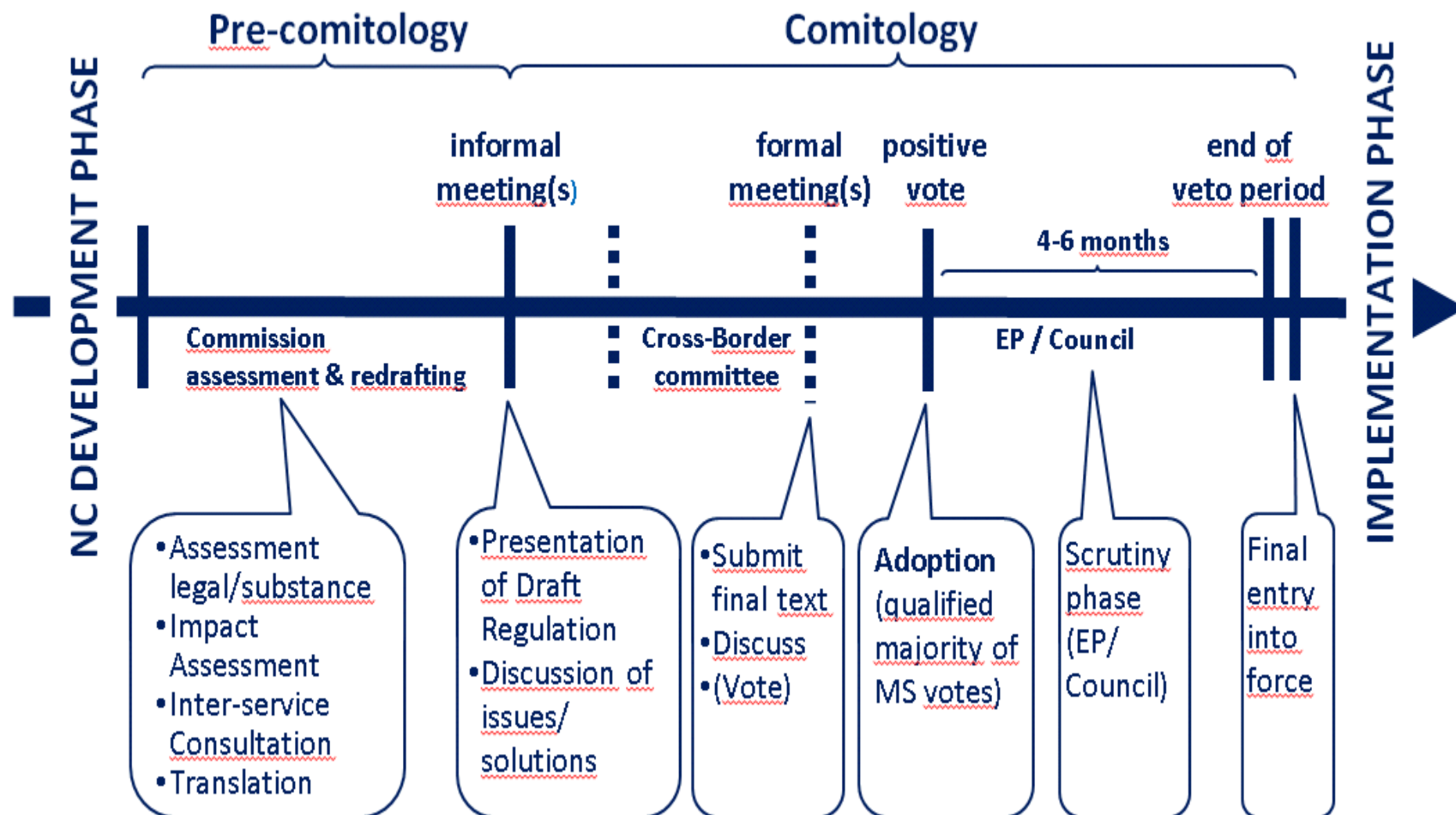
## Network Codes & Guidelines: Why?



## Network Codes: Development Phase



## Network Codes: Adoption Phase



## Network Codes: Adoption Phase

- What is a Network Code?

=> *Regulation 714 => (Annex I) => Supplementing Regulation*

- What happens if COM receives a code?

=> *Commission has to assess:*

- **Formal/legal issues**

- Coherence: other Codes/Reg. 714 etc.; compatibility with EU law
- Rules *clear enough* and *enforceable* ?

- **Substance**

- Sufficiently neutral – appropriate balancing of all interests?
- No excessive burden?
- Appropriate level of harmonisation?

=> *Revised text will be made available to stakeholders before comitology*

## Network Codes: Communicating proposals for changes



# BIG BROTHER TO SWITCH OFF YOUR FRIDGE

- Computer chips will take control of home appliances when energy is low
- Power giants to make millions – but you must pay for 'sinister' technology

FRIDGES and freezers in millions of British homes will automatically be switched off without the owner's consent under a 'Big Brother' regime to reduce the strain on power stations.

The National Grid is demanding that all new appliances be fitted with sensors that could shut them down when the UK's generators struggle to meet demand for electricity.

Electric ovens, air-conditioning units and washing machines will also be affected by the proposals, which are already backed by one of the European Union's most

influential energy bodies. They are pushing for the move as green energy sources such as wind farms are less predictable than traditional power stations, increasing the risk of blackouts.

Last night critics:

- Condemned the principle that outside forces should be allowed to control appliances.
- Warned the new sensors would add £40 to

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Stakeholder submission  
on network code:

*"[Our] initial cost-benefit-analysis revealed substantial inefficiencies of the code: (...) additional costs can be avoided of at least €6 billion."*

## ***Harmonisation via Network Codes: => Success not for granted***

- > 450 pages of Regulation
- Complex technical subject-matter
- > 10,000 comments
- Important individual economic & national interests at stake
- Harmonisation requires changes to status quo

=> No success without...

- ...Readiness for compromises
- ...limiting issues ("choose your battles")



## E-CODES: STATE OF PLAY

	FG	ENTSO-E Drafting Phase	ACER Assessment Phase	COM – Pre Comitology (IA, text review, translations)	COM Comitology (negotiations with MS, final text)
CACM/Gov				X	( ~ 9 / 2013)
RfG				X	( ~ 10 / 2013)
DCC				X	( ~ 10 / 2013)
OS			X	( ~ 6 / 2013)	( ~ 1 / 2014)
OP & S			X	( ~ 7 / 2013)	( ~ 1 / 2014)
LFC		X	(6 / 2013)	( ~ 10 / 2013)	( ~ 1 / 2014)
Forward		X	(10 / 2013)	( ~ 1 / 2014)	( ~ 3 / 2014)
Balancing		X	(1 / 2014)	( ~ 4 / 2014)	( ~ 6 / 2014)
HVDC	X	(4 / 2013)	(4 / 2014)	( ~ 7 / 2014)	( ~ 10 / 2014)
Emergency					(2015)
Training					(2015)
Tariffs					(2014/15)
...					



# Capacity allocation & congestion management / *Governance*

## *Code to implement Electricity Target Model*

- Capacity calculation: Flow based (NTC possible)
- Day ahead market (price) coupling
- Continuous cross-border intraday trading
- Governance rules:
  - Responsibilities for market coupling functions
  - Cooperation in MC development & implementation
  - Regulatory oversight



## ***CACM/Governance: Issues***

- *Text under revision*
- *Content largely agreed*
- *Consensus to preserve main concepts*

## ***CACM/Governance: Issues, e.g.:***

- Capacity calculation (Sufficient level of detail for NTC and Flow-based)
- Level of co-ordination of redispatching
- Regional intraday auctions (possible negative effects on EU-intraday)
- Implementation deadlines
- Governance structure: clarifications needed
  - *Actors (MCO): PXs or TSOs (see afternoon session)*
  - *Sufficient Scope for competition between PXs*
- Role of ACER instead NRA ? (approval of methodologies etc.)?
- Role of ENTSO-E in TSO decision making ("all TSOs") ?
- Rules on cost / cost sharing in Network Code ?
- ...



## ***CACM/Governance: Timeline***

*First informal comitology meeting: 31.5.2013*

*Discussion in comitology meeting in September*

*Goal: Formal opinion of Committee  
in Q4/2013 or Q1/2014*

# Grid Connection for Generators (also "RfG" Code)

## ***Issues***

- *Impact of technical specifications on equipment suppliers*
- *Definition of who is "significant" (i.e. application to existing users)*
- *Implications on DSO level*

# Demand Connection Code

## *Issues, e.g.*

- *Definition of who is "significant"; costs ; reactive power,...*
- *Demand response issues:*
  - No product standardisation via NC
  - Possible: General principles for DSR, e.g.:
    - Role and rights of aggregators
    - Preference for market-based solutions
    - Minimising burden on consumers

# System Operation Codes

## *Issues, e.g.*

- *Information exchange TSOs / DSOs / SGUs*
- *Role of DSOs – risk sharing with TSOs*
- *National scrutiny, Performance indicators*