



Developing the internal energy market further - the European Network Codes

E-Control Fachtagung
"Netzkodizes –Hintergrund und Auswirkungen"
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DG ENER unit B2: Wholesale markets

Content

- Short historical view on network codes
- What are the codes?
- What is the process to approve them?
- Timing
- Winter package and network codes



2.3 Legislative Framework and Institutions

Following the entry into force of the Directive and Regulation on cross border trade, there will be a variety of bodies with different responsibilities in the regulatory framework. These will need to work closely together as follows.

The **European Commission** will be responsible for ensuring overall compliance with the Directives, that is, whether Member States create the appropriate legal framework. It will also have responsibility for taking the chair of the Regulatory Committee which will make decisions on cross border issues under the Regulation.

Member States' Governments will be the voting representatives of the Regulatory Committee which will take decisions on issues of cross border exchanges. They will also be responsible for the correct transposition of the Directives and Regulation into national law.

National Regulators have considerable responsibility to set the framework for the functioning of the electricity market. The Directive bestows a set of minimum competences on the regulators in the realm of network access and implementation of guidelines agreed under the Regulation. Regulators will also be expected to provide considerable input through an High Level Committee which the Commission intends to establish. This will enable them to make a contribution in substance to any proposals to be put before the formal decision making Comitology procedure.

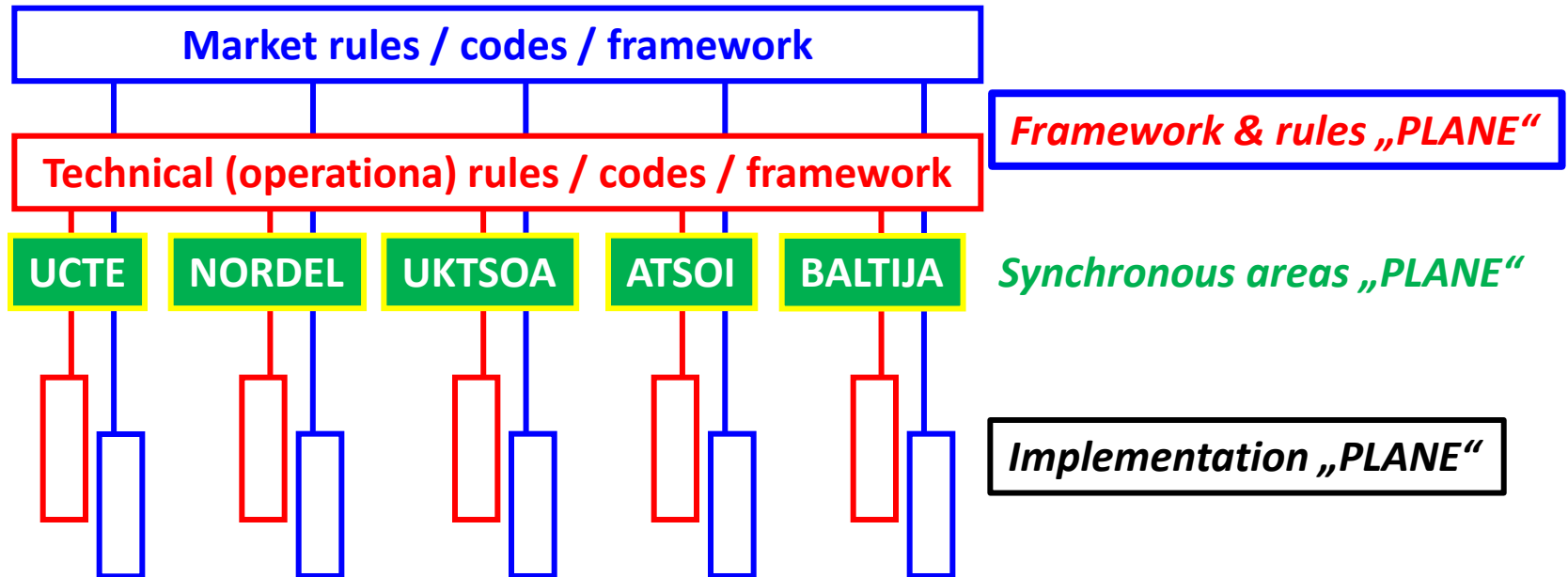
Transmission System Operators will have a key role in developing the European electricity market by providing, in particular, the main technical input towards the formulation of new rules and guidelines. TSOs will have to ensure the day to day functioning of the electricity market, with in the framework approved by regulators and the guidelines emerging from the Comitology procedure. It is expected that TSOs will harmonise network security rules, grid codes, and access and tariff methodologies, such that trade within a region is as easy as trade within a country or TSO control area. In this context, the work on rewriting rules for the UCTE Operational Handbook is to be welcomed. However there will be an ongoing need for regulators to verify that such revisions complement and do not impede cross border control area trades, the integration of the regional markets, and the wider development of the single market.

Market Participants will need to be regularly consulted on the expected and actual effects of reform proposals.

(i) A European grid

Consumers need a single European grid for a real European electricity and gas market to develop. This can be done by ensuring common rules and standards on issues that affect cross-border trade. Progress is being made on these issues, but it is too slow.

A **European grid code** could encourage harmonised, or at least equivalent, grid access conditions. This would take the form of common rules on regulatory issues that affect cross-border trade. Experts are taking a first step forward on a regional basis, in particular energy regulators through the Council of European Energy Regulators and the European Regulators Group. But further and quicker progress is necessary before all business and private consumers will be able to purchase their electricity and gas from suppliers in other Member States. To this end, the Commission will examine (i) what needs to be done to address the differences between existing equivalent powers and independence for national regulators and (ii) whether existing forms of collaboration between national regulators and national grid operators are adequate, or whether a closer level of collaboration is needed – with for example a **European energy regulator** to look at cross-border issues. Such a regulator could have decision-making powers for common rules and approaches such as a European grid code and would work together with the network operators. A **European Centre for Energy Networks** could also bring the network operators together in a formal body to assist work on developing a European Grid Code.

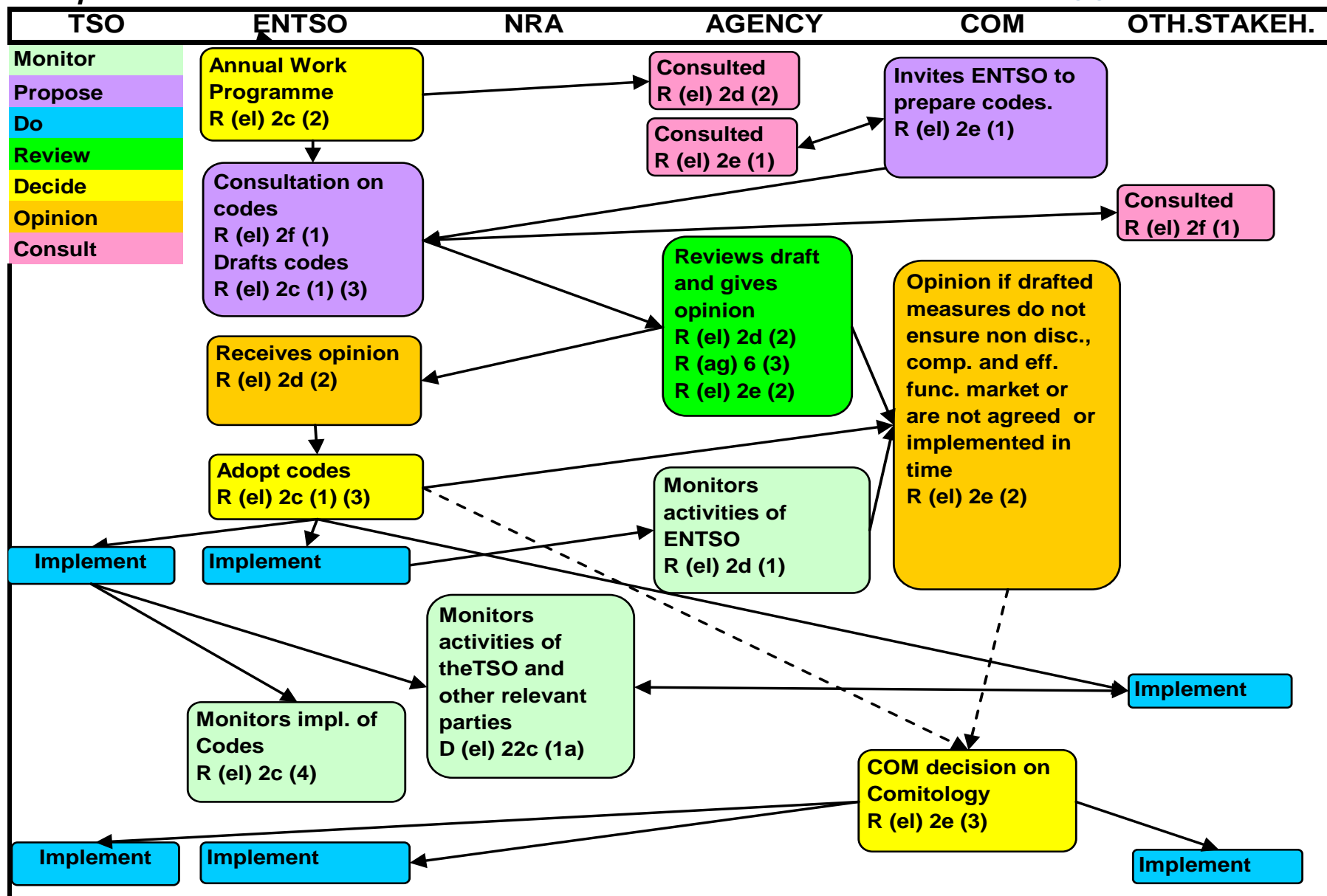


the meantime it has become clear that there is a need to address a number of issues on which the Regulation does not foresee detailed guidelines. The following tentative list contains the ongoing issues relating to cross border trade, only some of which are fully covered by the Regulation. However, most of them are already addressed by various ERGEG initiatives:

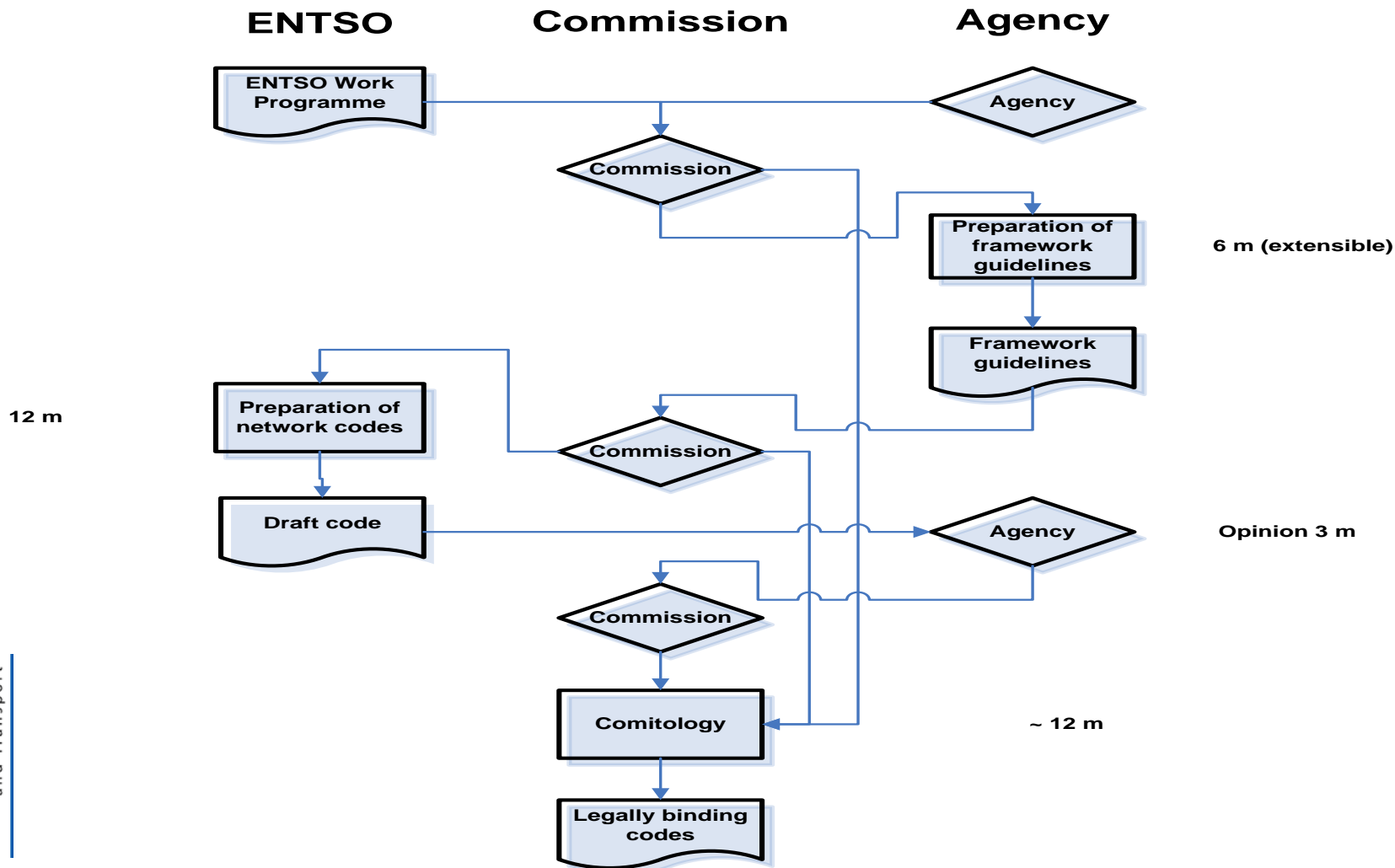
- (1) Security and reliability rules: rules between the TSOs to ensure safe operation of the grid. A mandate for the adoption of guidelines by the Commission is already contained in Article 8 of Regulation 1228/2003.
- (2) Connection rules: governing the relation between the TSOs and the customers (generators, distribution system operators and big end-customers).
- (3) Rules for trading electricity: harmonisation of trading arrangements, timetables and products, including intra-day trade.
- (4) Transparency rules: detailed rules on data exchange and publication between market participants. Transparency rules are already addressed in the amended congestion management guidelines.
- (5) Balancing and reserve power rules: aiming at further integration of the balancing and reserve power markets. Cross-border balancing is already addressed in the amended congestion management guidelines.
- (6) Data exchange and settlement rules: aiming at integration of the retail market through sufficiently harmonised data exchange and settlement rules.
- (7) Investment incentive rules including locational signals: providing a European framework for efficient investment signals for both generation and network investments.

European Technical and Market Codes

(Presentation in the European Council working group in 2008)



● Network codes



● Network codes, Article 8 of Electricity regulation

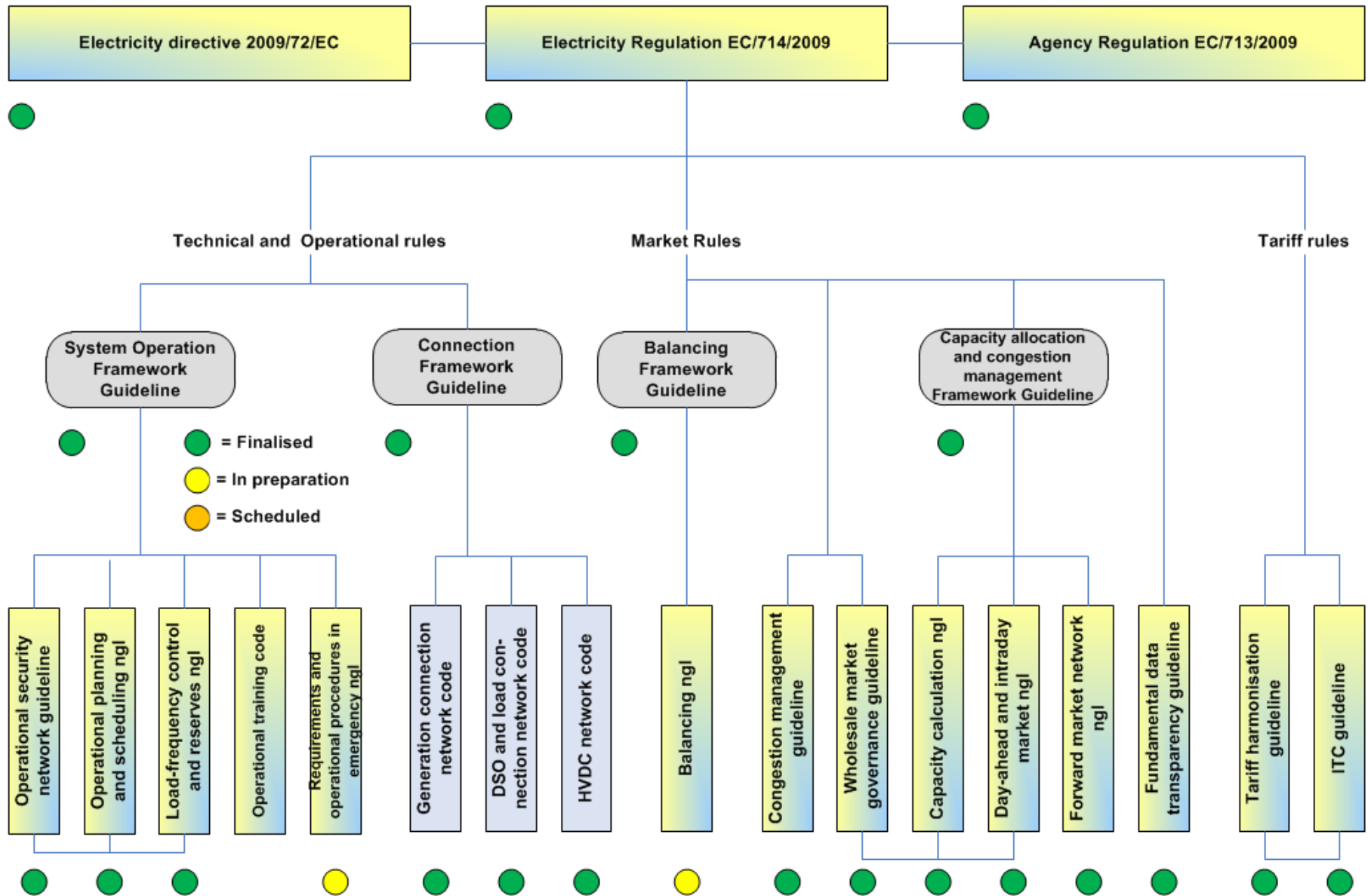
1. network security and reliability rules including rules for technical transmission reserve capacity for operational network security;
2. grid connection rules;
3. third party access rules;
4. data exchange and settlement rules;
5. interoperability rules;
6. operational procedures in an emergency;
7. capacity allocation and congestion management rules;
8. rules for trading related to technical and operational provision of network access services and system balancing;
9. transparency rules;
10. balancing rules including network related reserve power rules;
11. rules regarding harmonised transmission tariff structures including locational signals and inter-TSO compensation rules;
12. energy efficiency regarding electricity networks

● Legally binding guidelines Article 18 of Electricity regulation

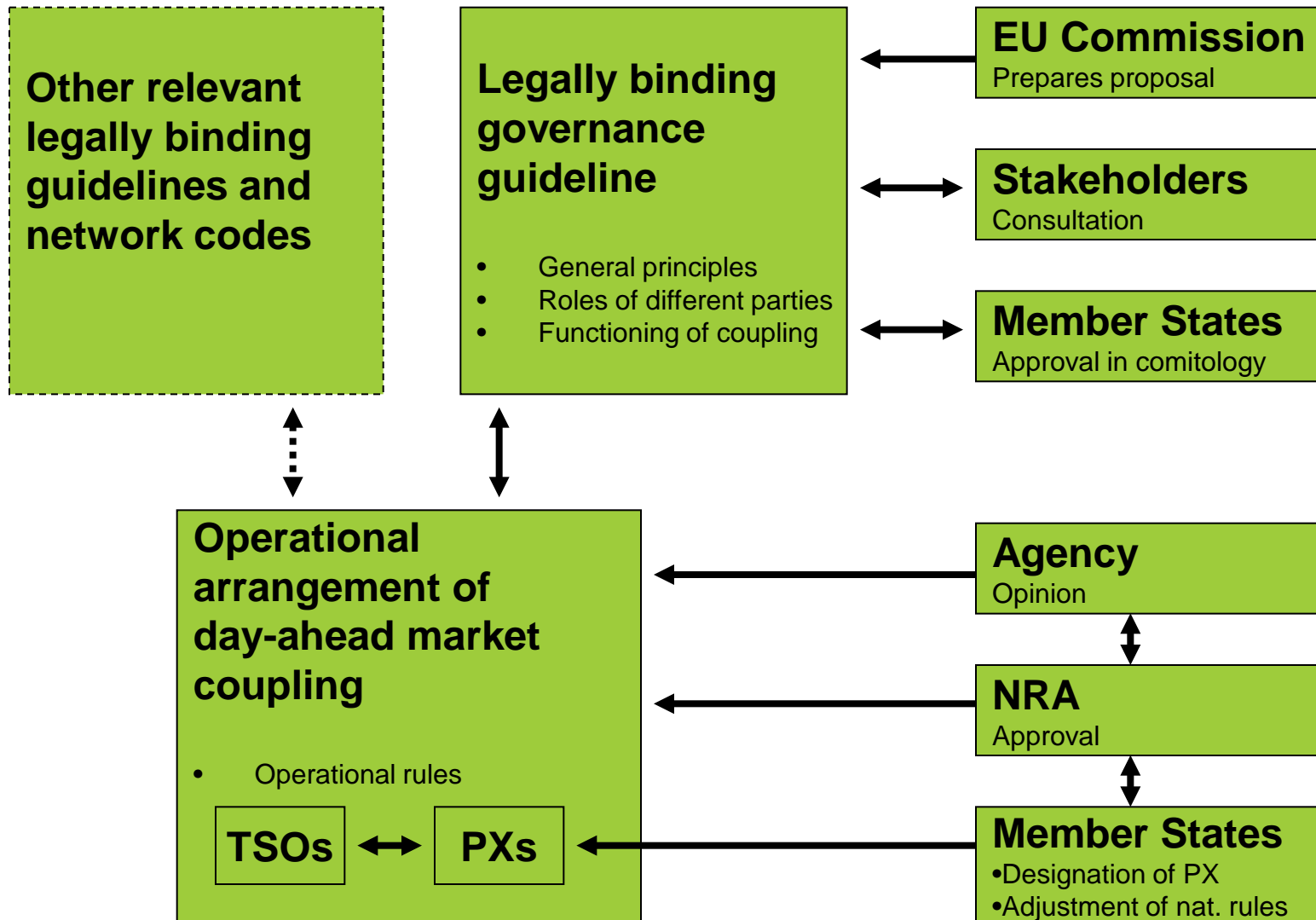
1. Inter TSO compensation mechanism
2. Tariff harmonisation rules
3. Congestion management rules
4. Safety and operational rules
5. Provision of information rules
6. Trading of electricity rules
7. Investment incentive rules

... and all items on the Article 8 list

European Electricity Rules



Setup of the day-ahead market coupling governance structure





Capacity allocation and congestion management framework guideline

Codes and guidelines

Governance guideline

Day-ahead code

Intra-day code

Capacity calculation code

Co-ordination

Implementation projects

Day ahead integration

Intra day platform

Common grid model and capacity calculation

Framework guideline

Legally binding guideline

Network code

Guidance

Input

Task force

Design phase

Implementation phase

2010

2011

2012

2013

2014

2015





Electricity network codes and guidelines adoption timetable 2015

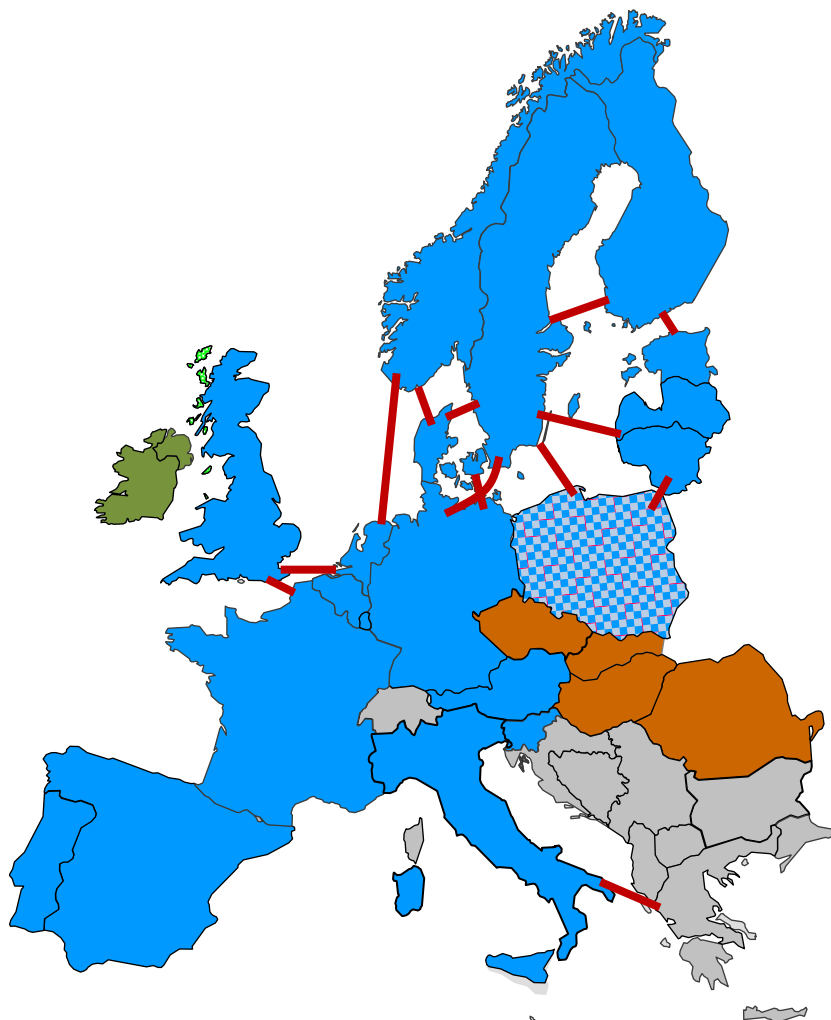
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Capacity allocation Congestion management	Voted		Scrutiny					Adopted	Implementation				
Forward capacity allocation		Update text					Committee and Translation				Voted		Scrutiny
Requirements for generators			Committee and Translation				Voted					Scrutiny	
High voltage direct current connection					Committee and Translation					Voted			Scrutiny
Demand connection											Voted		Scrutiny
System operation		Redrafting and Combining										Committee	
Balancing										Update text			
Emergency and restoration										Update text			

Electricity network codes and guidelines adoption timetable 2016

	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Capacity allocation Congestion management	Implementation													
Forward capacity allocation		Scrutiny					Adopted	Implementation						
Requirements for generators	Scrutiny			Adopted	Implementation									
High voltage direct current connection	Scrutiny				Adopted	Implementation								
Demand connection	Scrutiny					Adopted	Implementation							
System operation	Committee and Tr.	Voted			Scrutiny					Adopted	Implementation			
Balancing	Update text and impact assessment											Committee and Tr.		
Emergency and restoration	Update text						Committee and Translation				Voted			

Day-ahead market coupling status in November 2016

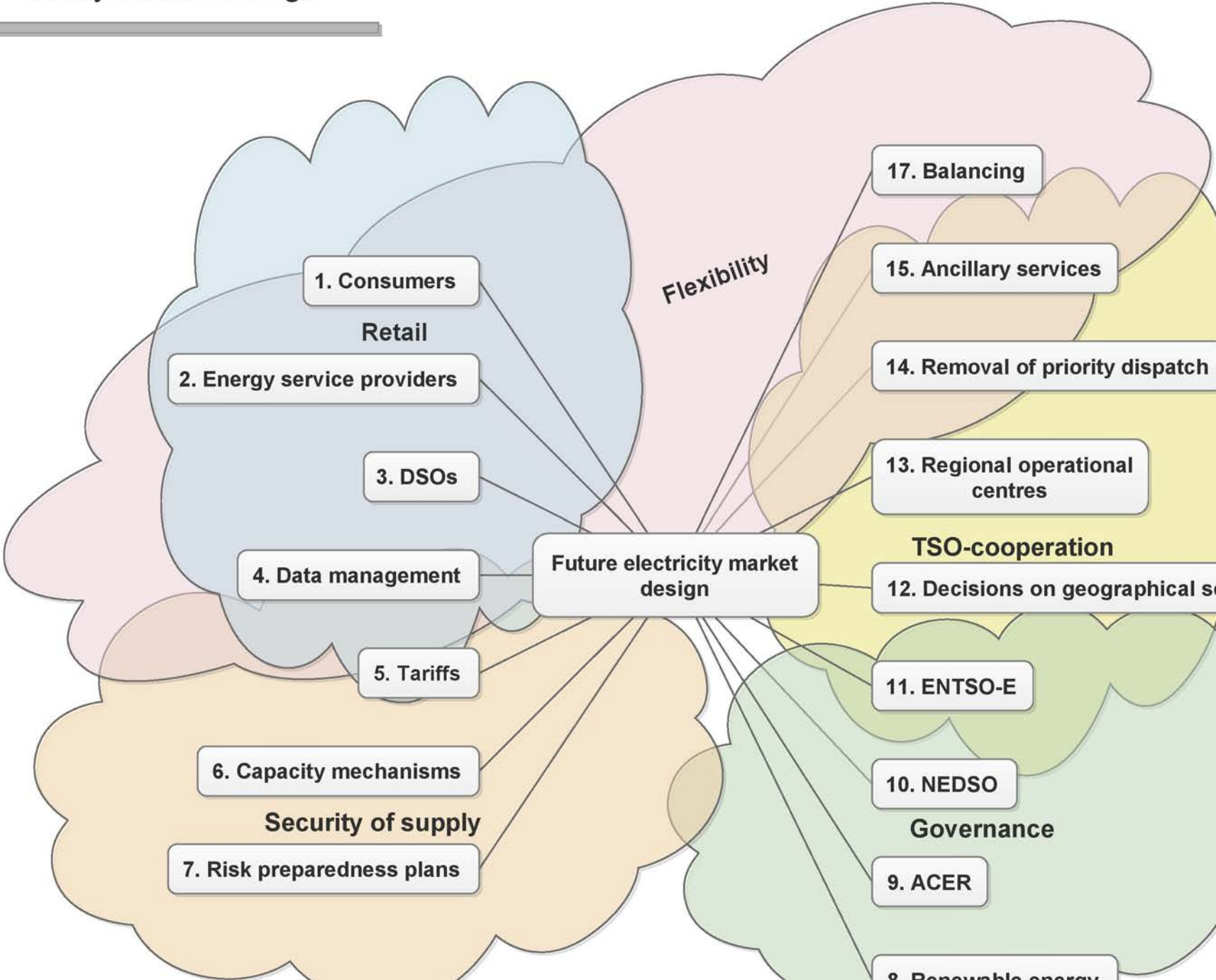
REGIONAL DAY AHEAD IMPLICIT AUCTIONS		
	North West Europe (NWE)	Price coupling
	Poland	Poland price coupled within NWE through SwePol-link
	Ireland and Northern Ireland	All Island market, single price zone
	Czech – Slovak – Hungary-Romania	Price coupling



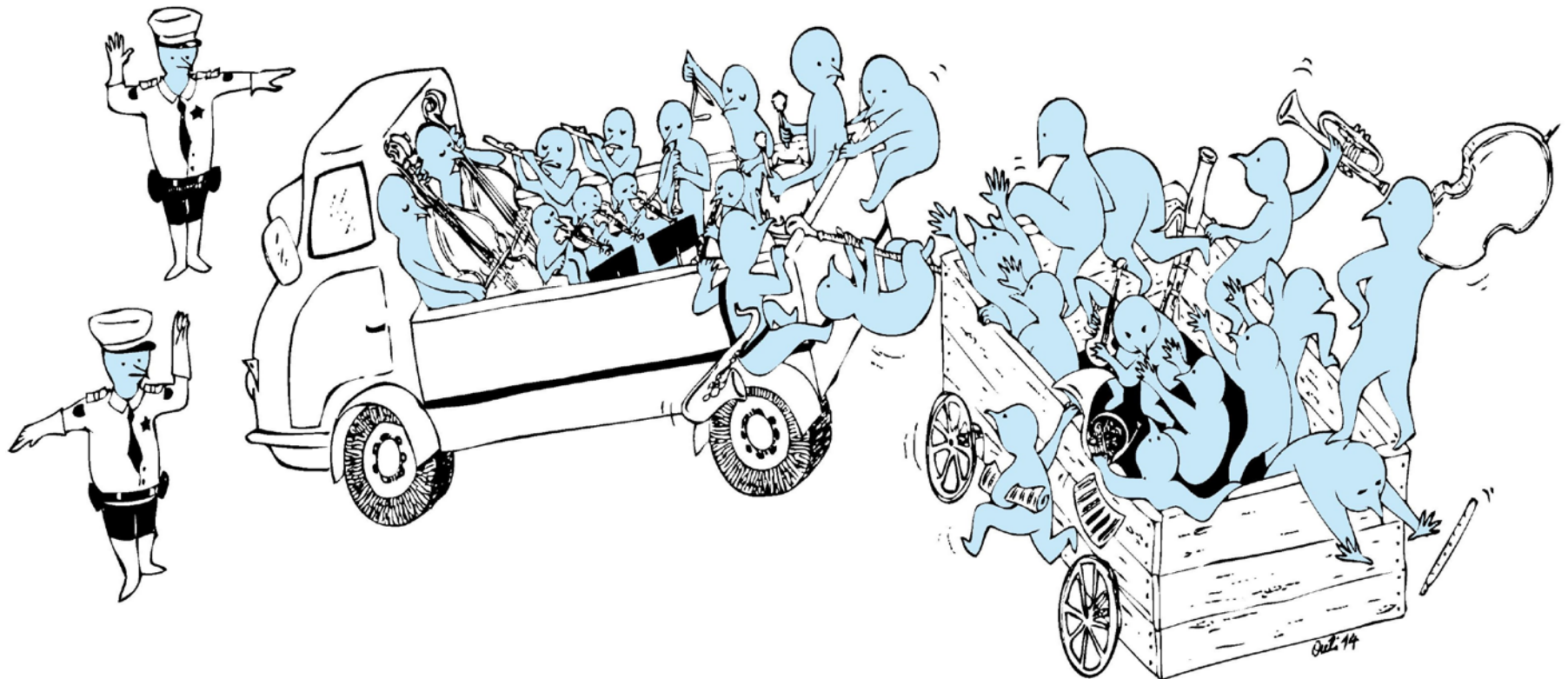
Source: APX, updated by Matti Supponen

Future electricity market design

MS/9.9.2016



Legislative process



Future market design legislative proposals?

- Enhanced and more integrated intraday and balancing markets with deployment of short term price signals and demand response.
- Renewable support and operation more market based, with interaction between national schemes.
- Sorting out roles in distribution, supply and services, imposing collection and access to data, discussion on tariffs.
- Capacity remuneration mechanism guidance with regional adequacy analysis, adequacy standard and cross border participation.
- TSOs to cooperate more, oversight by ACER.
- More: power exchanges' governance, retail stuff, interconnectors, price zones, , and .



Conclusions

- European network codes are here to stay.
- First batch of network codes is nearly ready.
- It is early days to judge how efficiently they are driving the European integration, ...
- ... but without network codes market integration might be very difficult.
- A new set of network codes will probably be born with the Winter package, including some difficult but important items such as tariff structures.



Thank you for your
Attention!