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Developments in Europe: Energy Infrastructure Package and Network Code Developments

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10th EU-US Energy Regulators Roundtable
The Hague, 8 April 2013

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European Council Conclusions – 4 Feb 2011

Market Integration Target

- ***"The internal market should be completed by 2014 so as to allow gas and electricity to flow freely" (§4)***

Removal of Energy Islands Target

- ***"No EU Member State should remain isolated from the European gas and electricity networks after 2015" (§5)***

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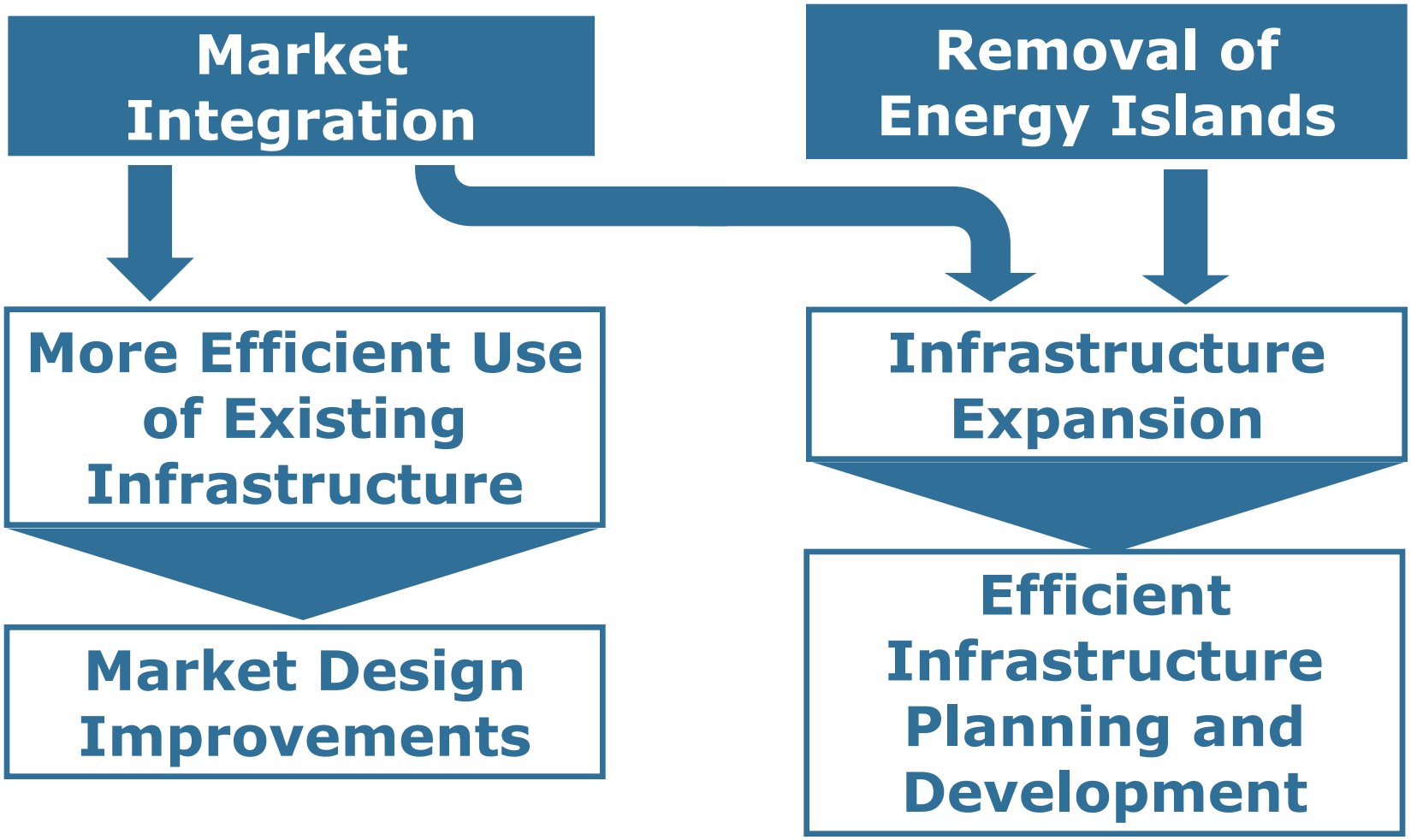
EU Energy Policy Approach



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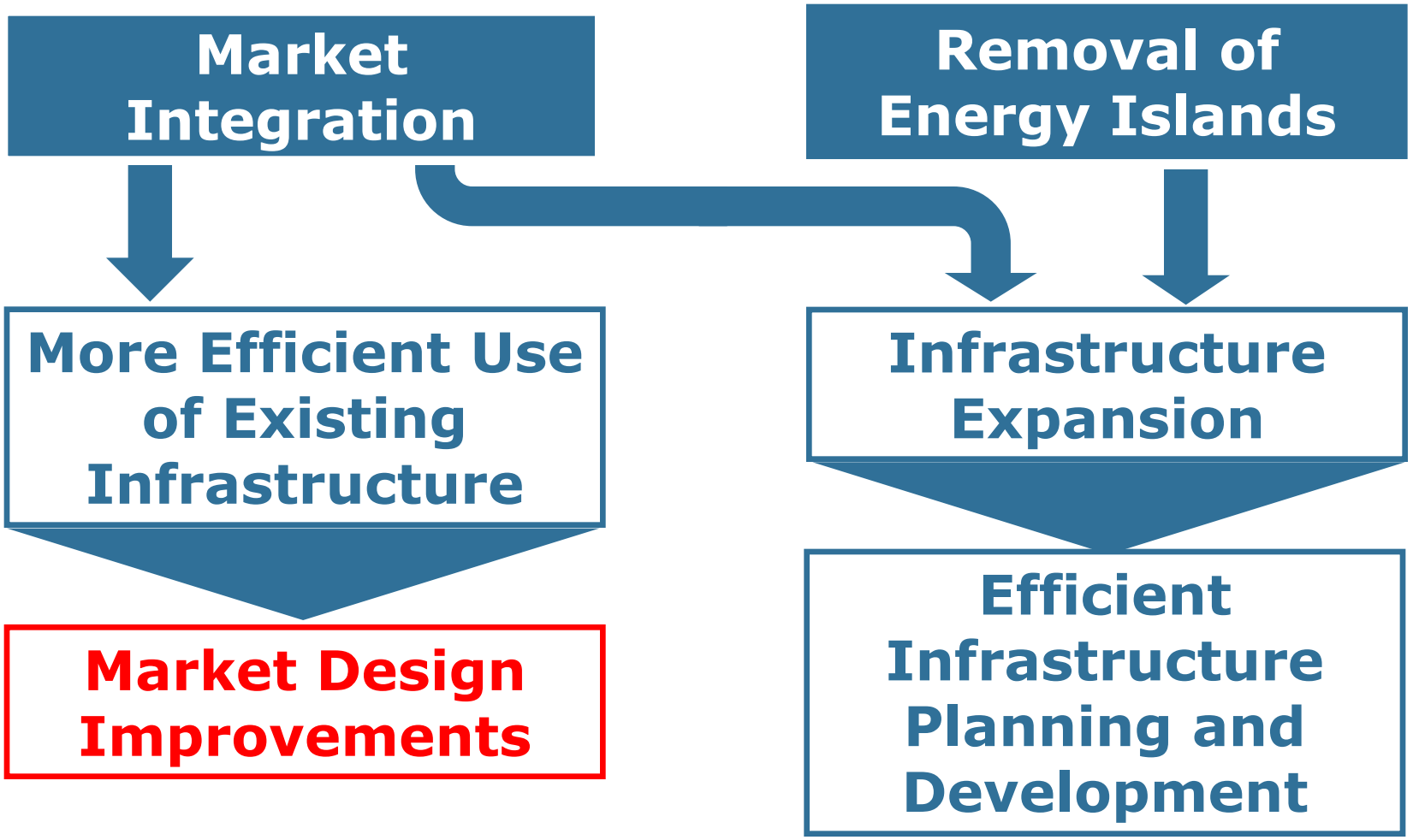
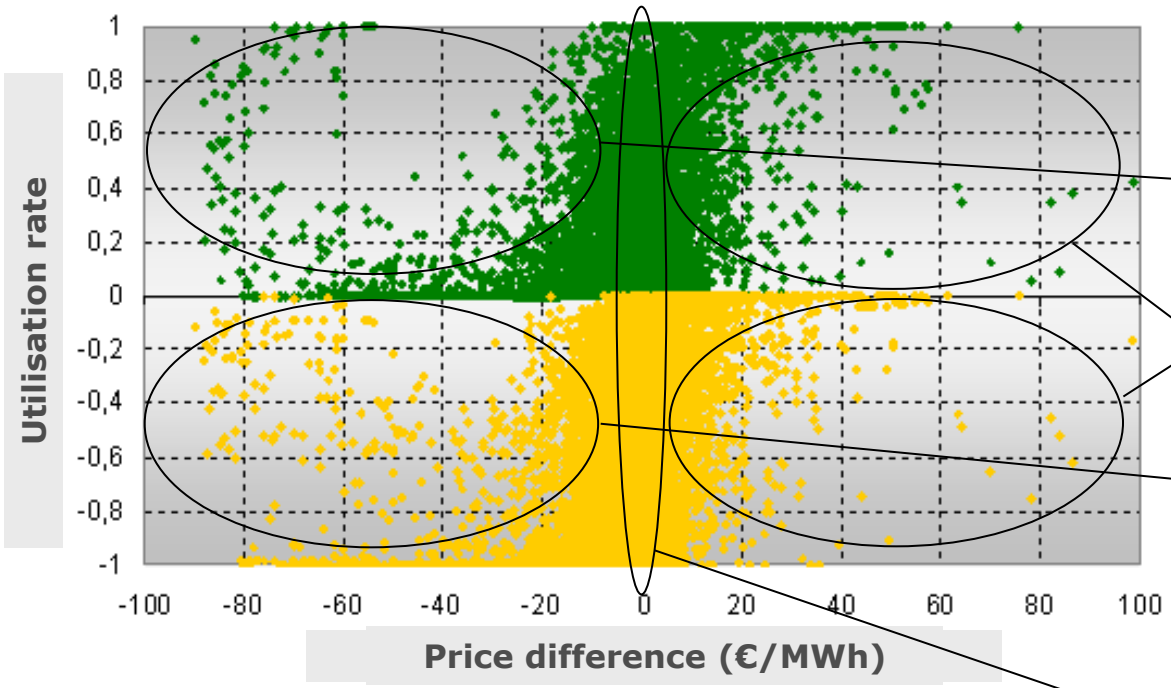
EU Energy Policy Approach



Electricity: Cross-Border Capacity Allocation before Market Coupling

France – Germany Border



Export (France → Germany)

Import (Germany → France)

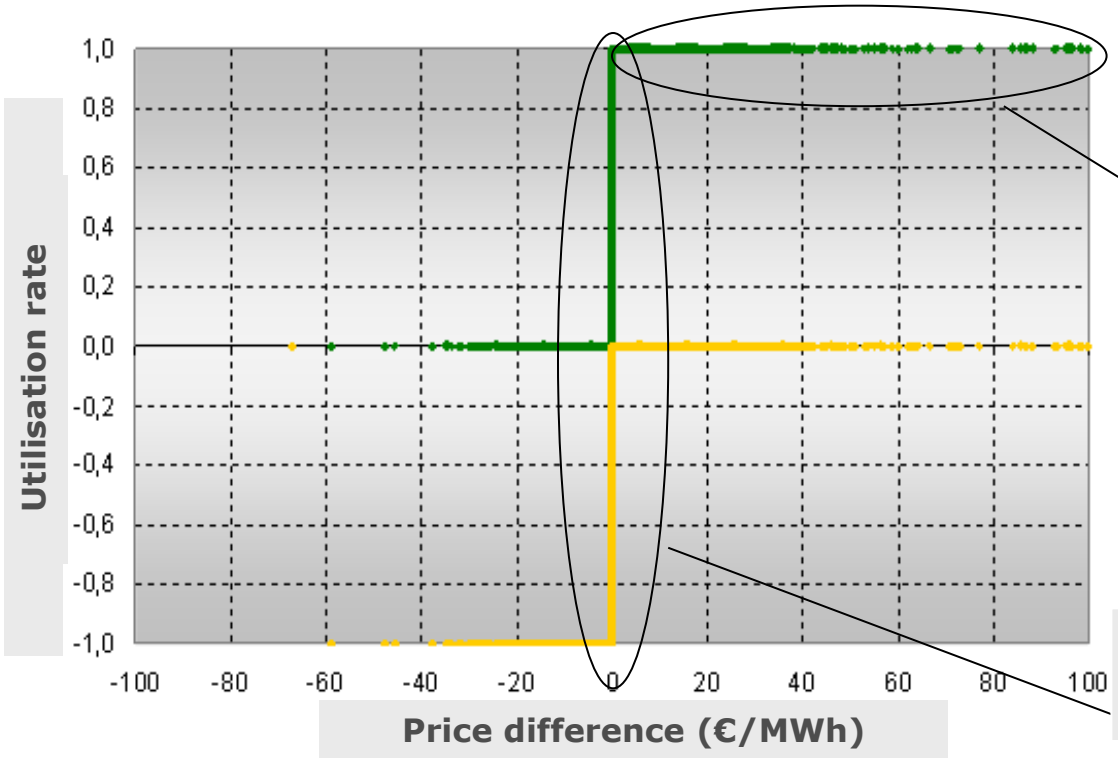
Flows against price difference

Available Capacity not used at its maximum

Full Price convergence: 10% of the time

Electricity: Cross-Border Capacity Allocation after Market Coupling

France – Germany Border



Export (France → Germany)

Import (Germany → France)

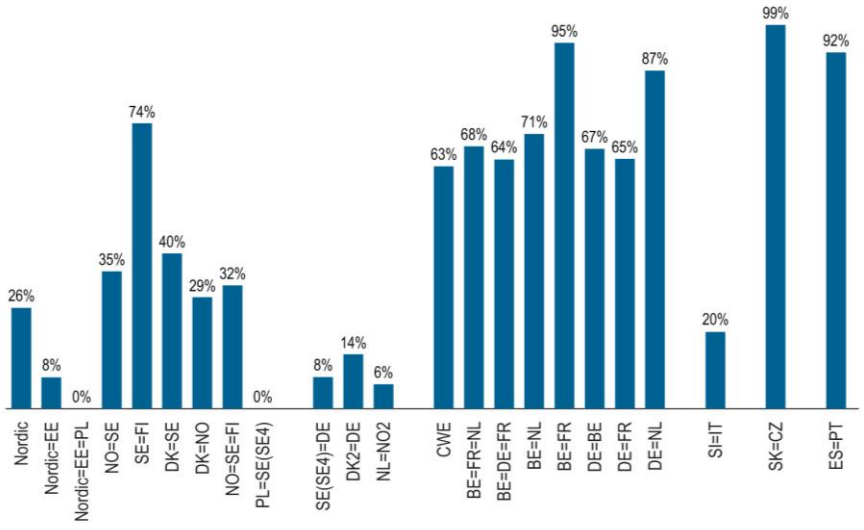
Available capacity used at its maximum

Full price convergence:

65% of the time

Electricity: Uneven Degree of Price Convergence

Figure 17: Percentage of hours when hourly day-ahead prices were equal for a selection of European regions – 2011 (%)



Source: Data provided by NRAs and a selection of power exchanges (2012)

- **The degree of price convergence between Germany and The Netherlands increased from 12% in 2010 to 87% in 2011, following the introduction of market coupling**

Gas: Contractual Congestion not Reflected in Flows

Table 14: Used capacity versus booked capacity at natural gas IPs – Averages for 2011

IP name	Direction	Physical capacity in GWh/day	As a % of physical capacity: Booked capacity (1)	Used capacity (2)	Difference (3) = (1) - (2)
Veľké Kapušany/Uzghorod	UA > SK	3.088	95%	68%	27%
Baumgarten	SK > AT	1.632	99%	66%	33%
Lanzhot	SK > AT	1.266	100%	64%	36%
Tarvisio/Arnoldstein	AT > IT	1.184	100%	62%	38%
Waidhaus	CZ > DE	1.118	100%	57%	43%
Mallnow*	PL > DE	931	100%	65%	35%
Interconnector	BE > UK	807	100%	43%	57%
	UK > BE	630	100%		
Oude Statenzijl/Bunde**	DE > NL	677	96%	21%	75%
	NL > DE	410	91%		
Medelsheim/Obergailbach	DE > FR	648	77%	37%	40%
Dunkerque	NO > FR	619	94%	74%	20%
Taisnieres/Blaregnies H+L	BE > FR	588	82%	57%	25%
Bocholtz	NL > DE	527	100%	62%	38%
Julianadorp	NL > UK	475	95%	42%	53%
Tarifa	AL > ES	355	71%	62%	9%
Oberkappel	AT >DE	146	95%	92%	3%
	DE > AT	107	100%		
Larrau	FR > ES	100	94%	63%	31%

Source: Agency/CEER calculations based on ENTSOG data, downloaded in August 2012

43%

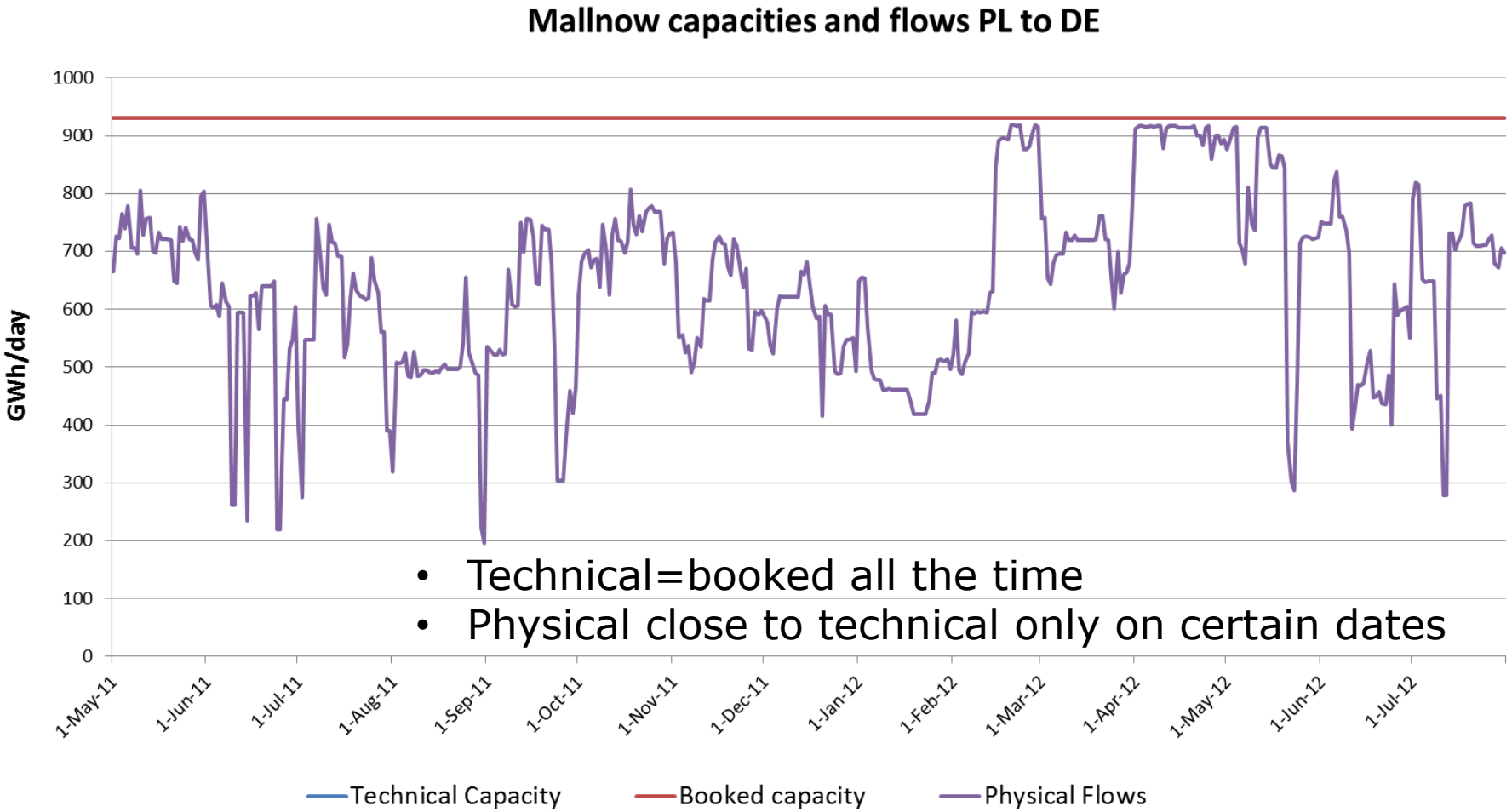
57%

40%

53%

- **For many Interconnection Points across Europe Contractual Congestion does not correspond to Physical Congestion**
- **A number of Contractually-congested Interconnection Points show a lower rate of capacity utilisation**

Gas: Contractual Congestion not Reflected in Flows



- Technical=booked all the time
- Physical close to technical only on certain dates

Data Source: Cascade

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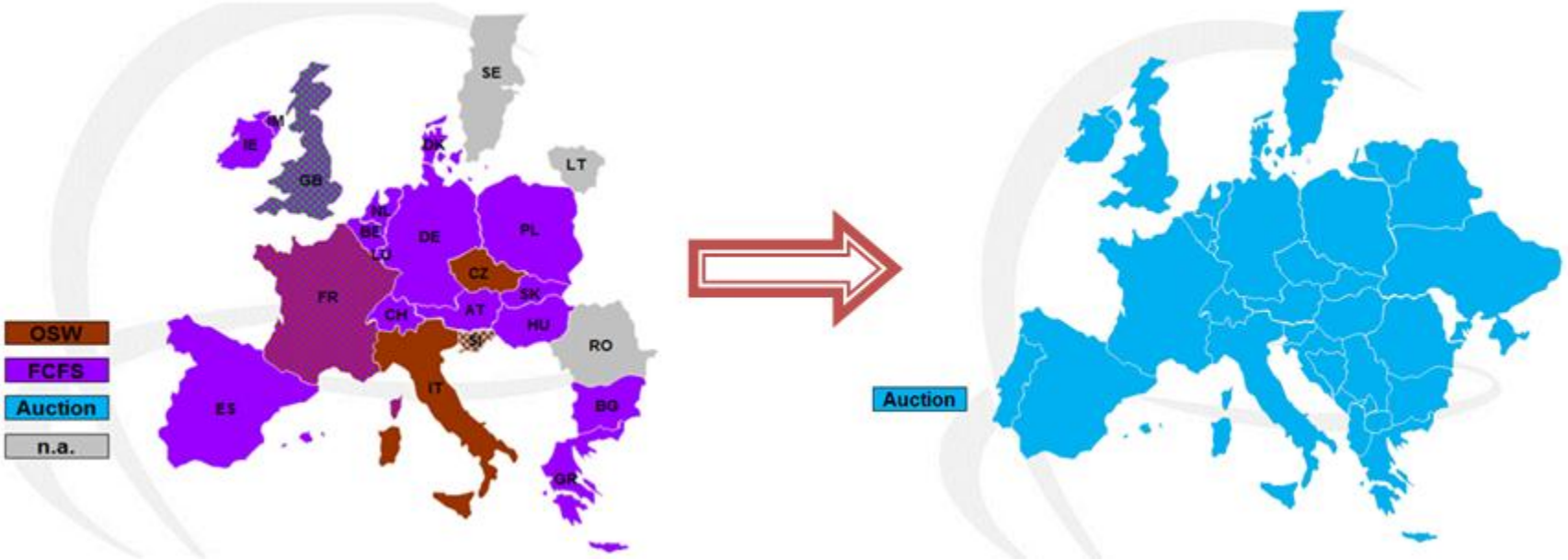
Gas: Cross-Border Capacity Allocation

- Capacity Allocation Mechanisms are heterogeneous across EU



Completing the IEM: a Clear Target

- It would be difficult to claim that the Internal Energy Market has been completed if the Target Model/Rules had not been implemented

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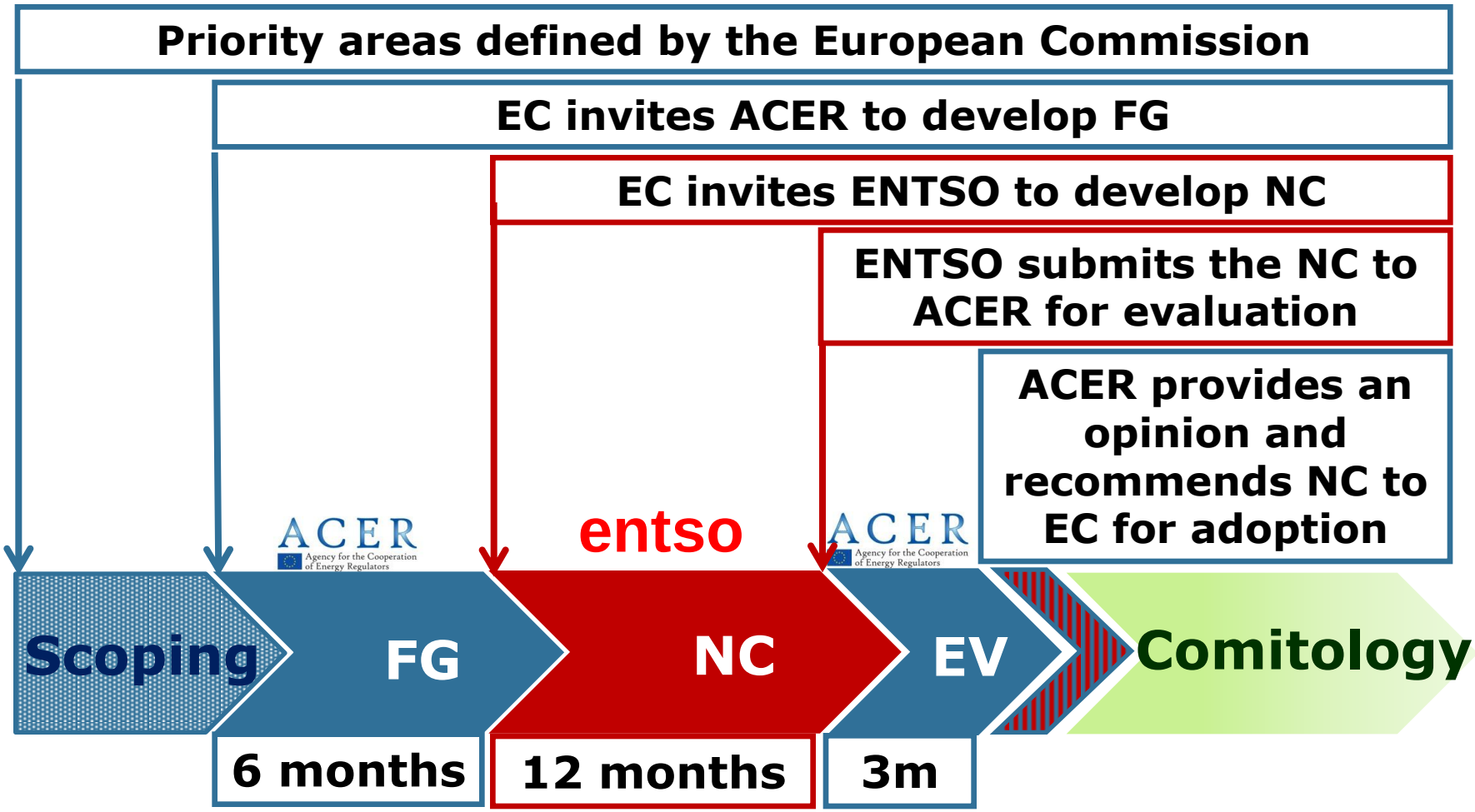
Framework Guidelines and Network Codes

Framework Guidelines (FG)	Network Codes (NC)
Based on the annual **priorities set by the Commission**	
Non-binding	Are made **legally binding via "Comitology"**
Setting **clear and objective principles** for the network codes	Must be **in line with the FG**
Shall contribute to non-discrimination, effective competition and the efficient functioning of the market	Provide effective access to the TSO networks across borders; promote cooperation & coordination among TSOs; allow for national network rules and regional specificities

FG and NC: Basic Timeline



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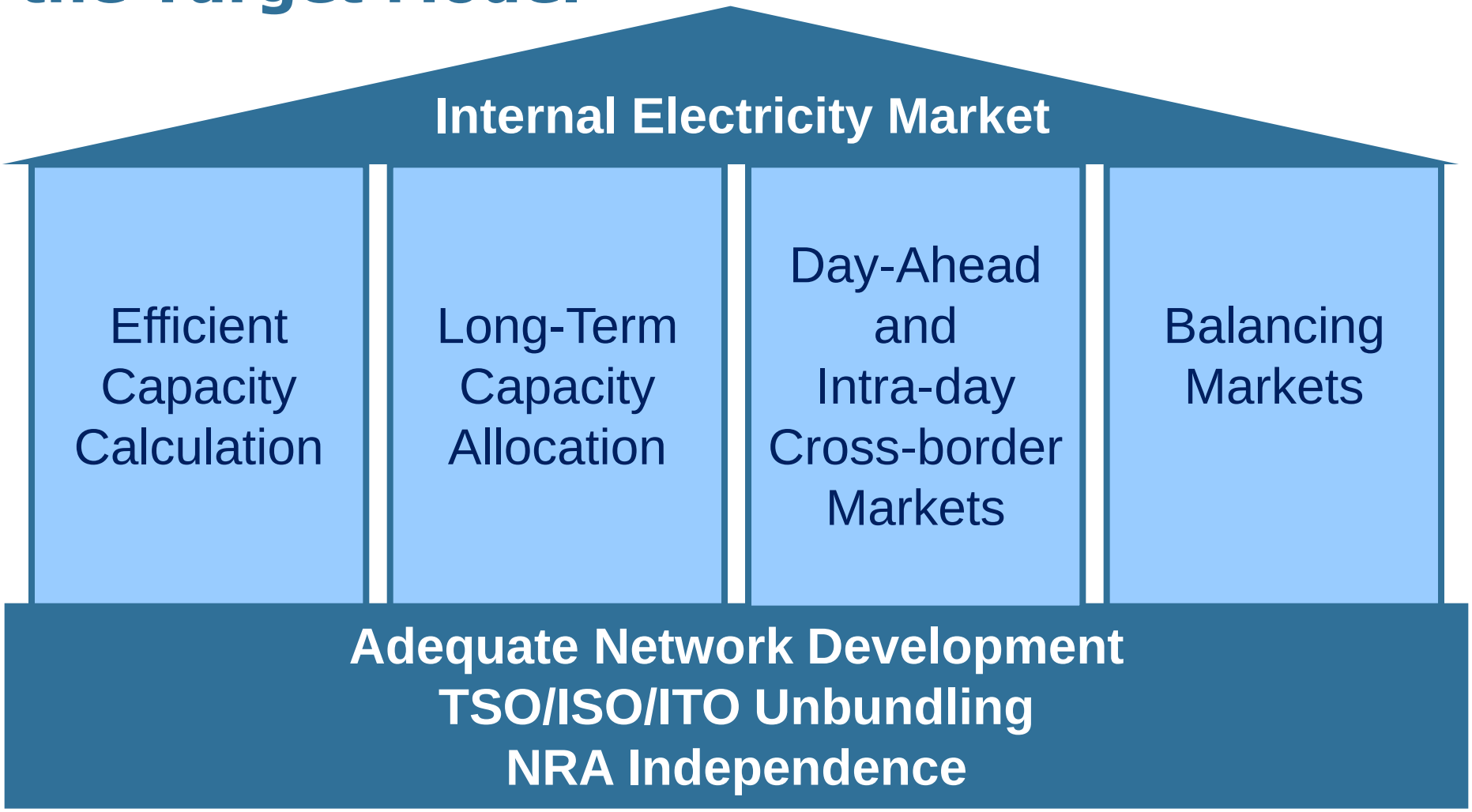
The Internal Electricity Market Vision: the Target Model



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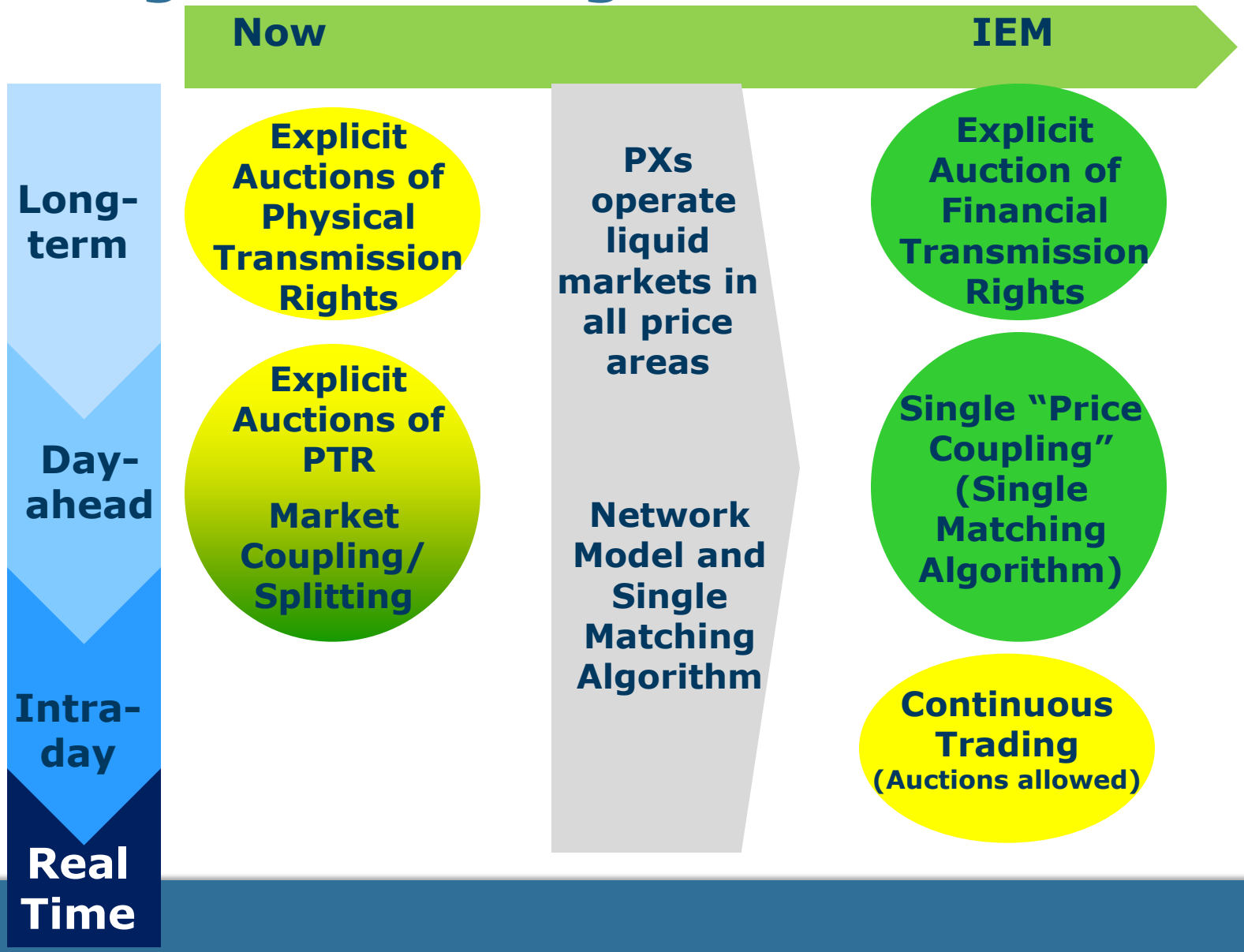
Congestion Management in the IEM



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Achieving the Internal Electricity Market by 2014

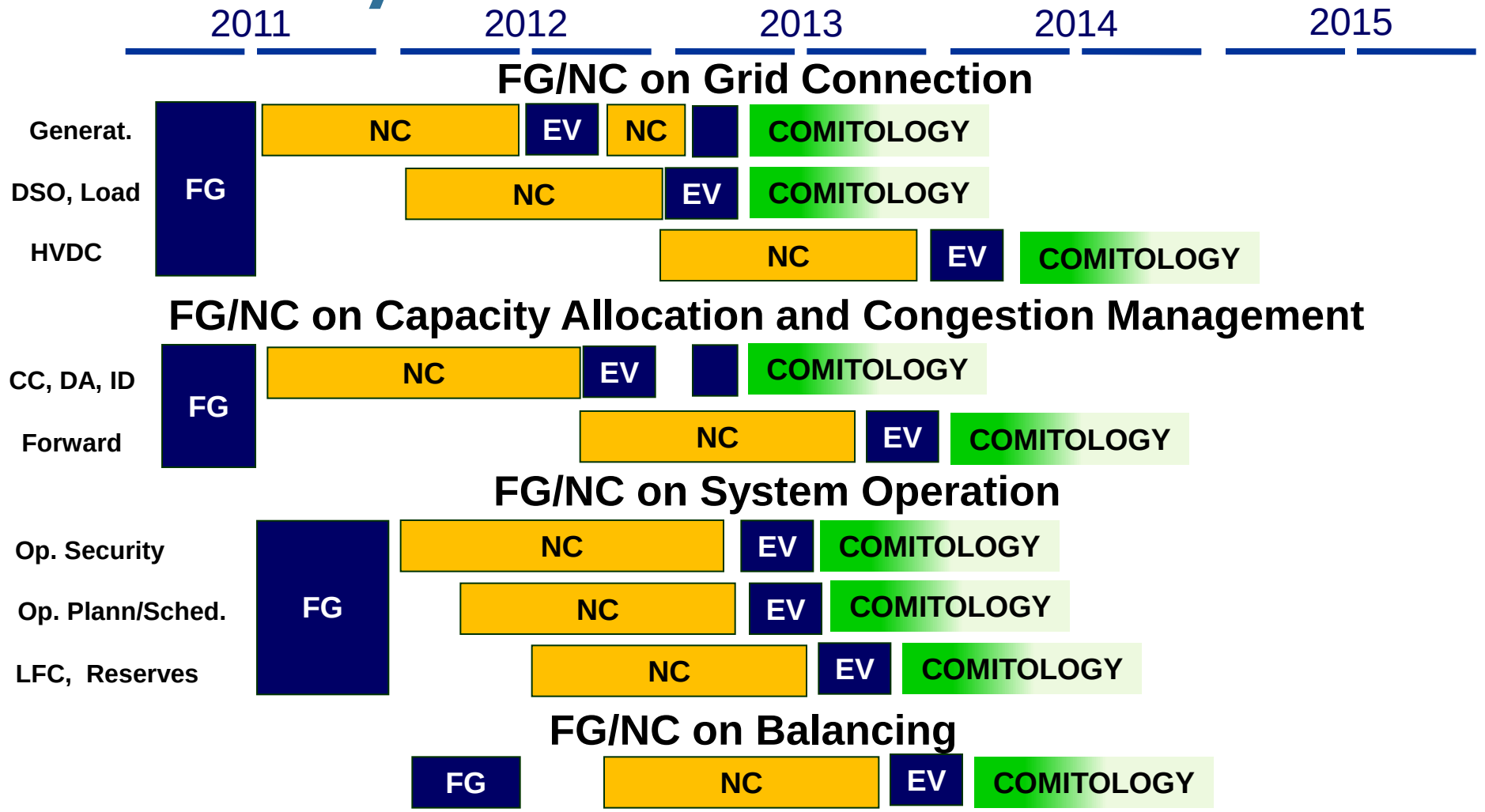
Formal Framework Guidelines / Network Codes process

- FG/NC on Electricity Grid Connection
- FG/NC Capacity Allocation and Congestion Management
- FG/NC on System Operation
- FG/NC on Electricity Balancing

Voluntary Coordinated Implementation of the Target Model

- Agency Electricity Stakeholders Advisory Group (AESAG)
- Regional and Cross-Regional Roadmaps
  - Capacity calculation
  - Long-term capacity allocation
  - Day-ahead capacity allocation
  - Intra-day capacity allocation
  - Pilot projects on Balancing

Progress in Network Codes Development Electricity



ACER ENTSO-E EP - EC EV = Evaluation on NC

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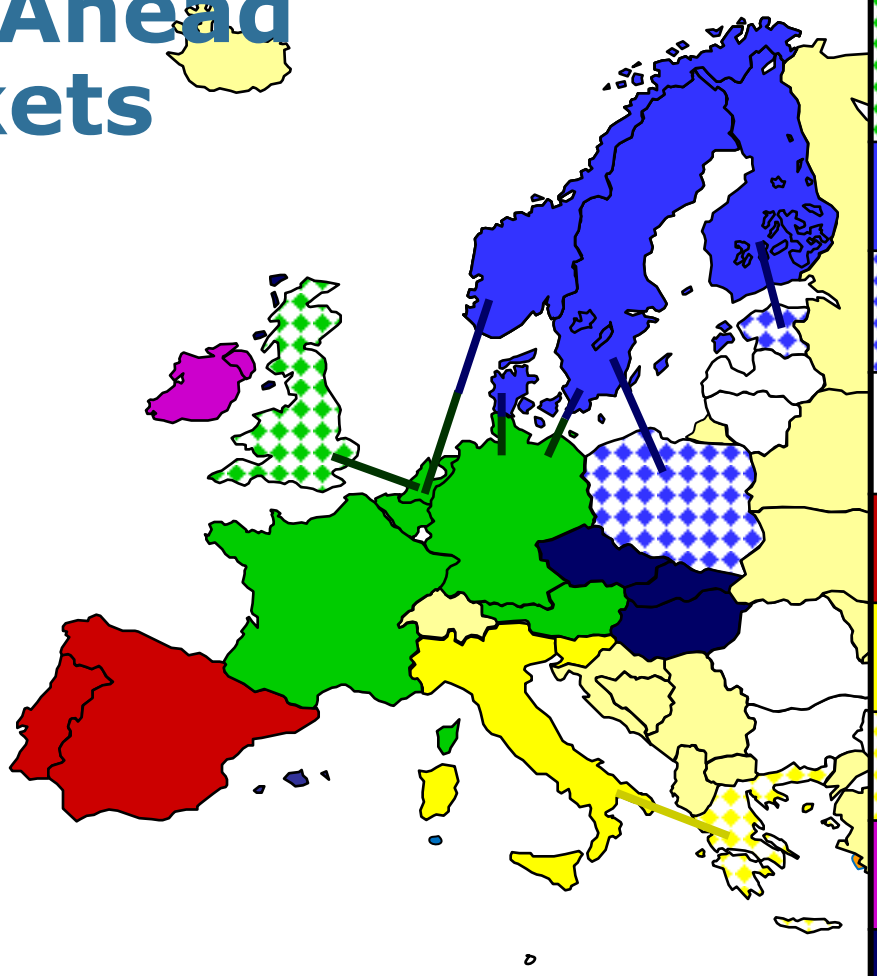
Current Regional Day-Ahead Markets



	CWE	Price Coupling
	GB	Implicit auction to NL via BritNed
	Nordic	Market Splitting
	Estonia and Poland	Market Coupling
	ITVC (CWE-Nordic)	Tight-Volume Coupling
	MIBEL	Market Splitting
	IT and SI	Market Coupling
	GR	Implicit Auction to IT
	EI and NI	Market Splitting
	CZ, HU and SK	Market Coupling

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Achieving the Internal Gas Market by 2014

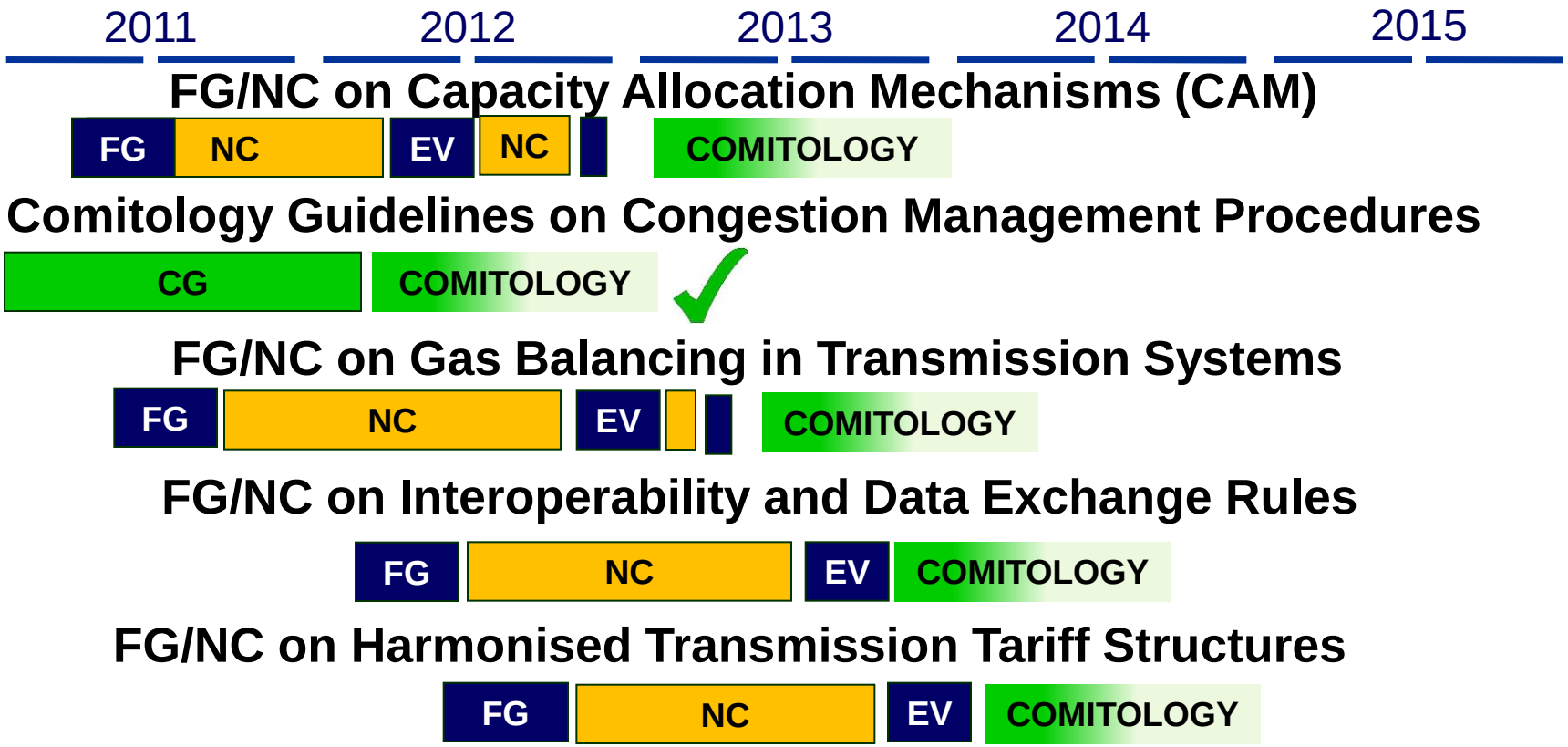
Formal Framework Guidelines / Network Codes process

- FG/NC on Capacity Allocation Mechanisms (CAM)
- Comitology Guidelines on Congestion Management Procedures
- FG/NC on Balancing
- FG/NC on Interoperability and Data Exchange Rules
- FG/NC on Harmonised Tariff Structure

Voluntary Coordinated Implementation of CAM

- Coordinated auctions of a common set of bundled capacity products

Progress in Network Codes Development Gas



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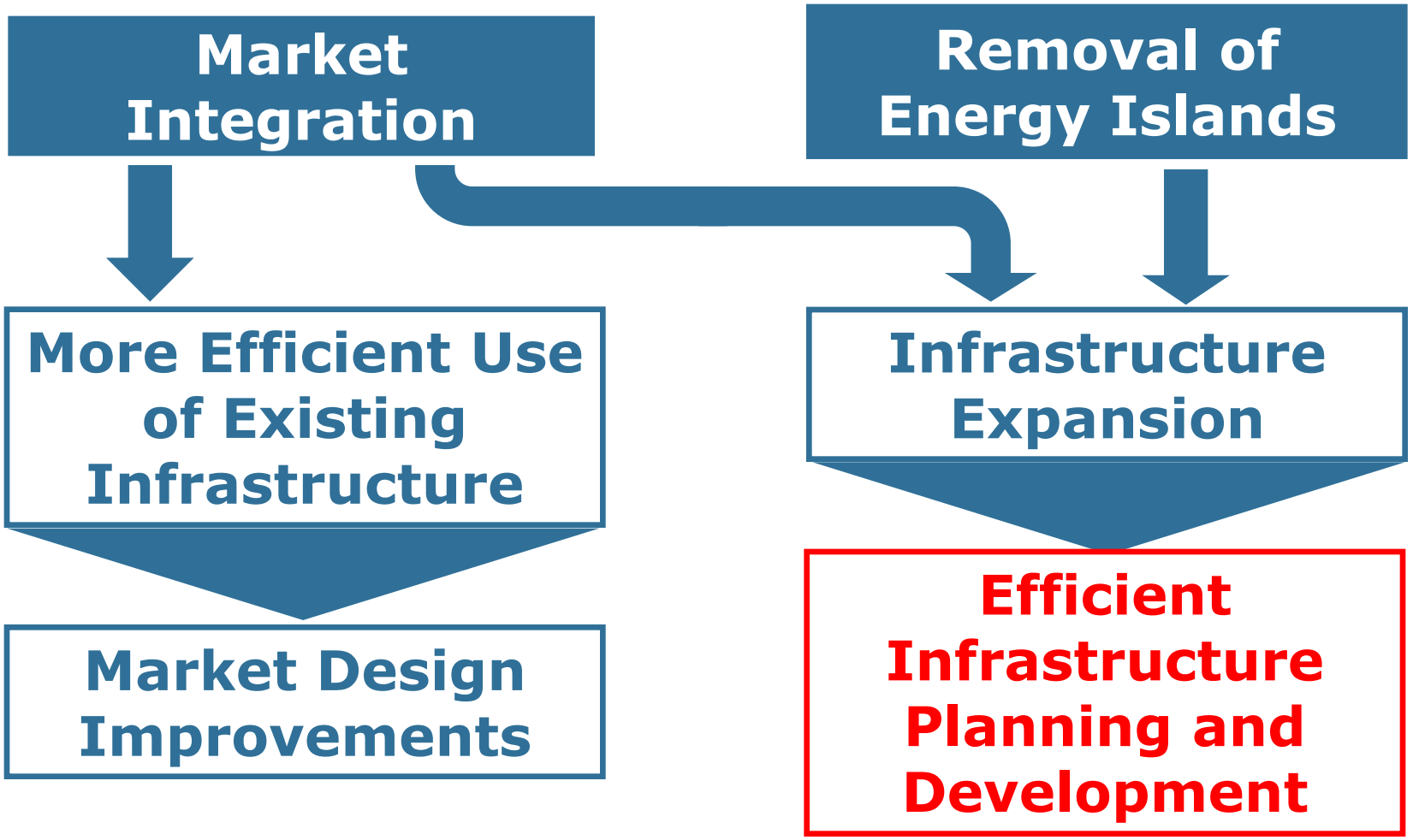
EU Energy Policy Approach



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Infrastructure Planning and Development

TEN-E Guidelines (2006)

Projects of Common/European Interest
- Long list of projects in the Decision
- Selection based on political agreement
- No revision of the list envisaged

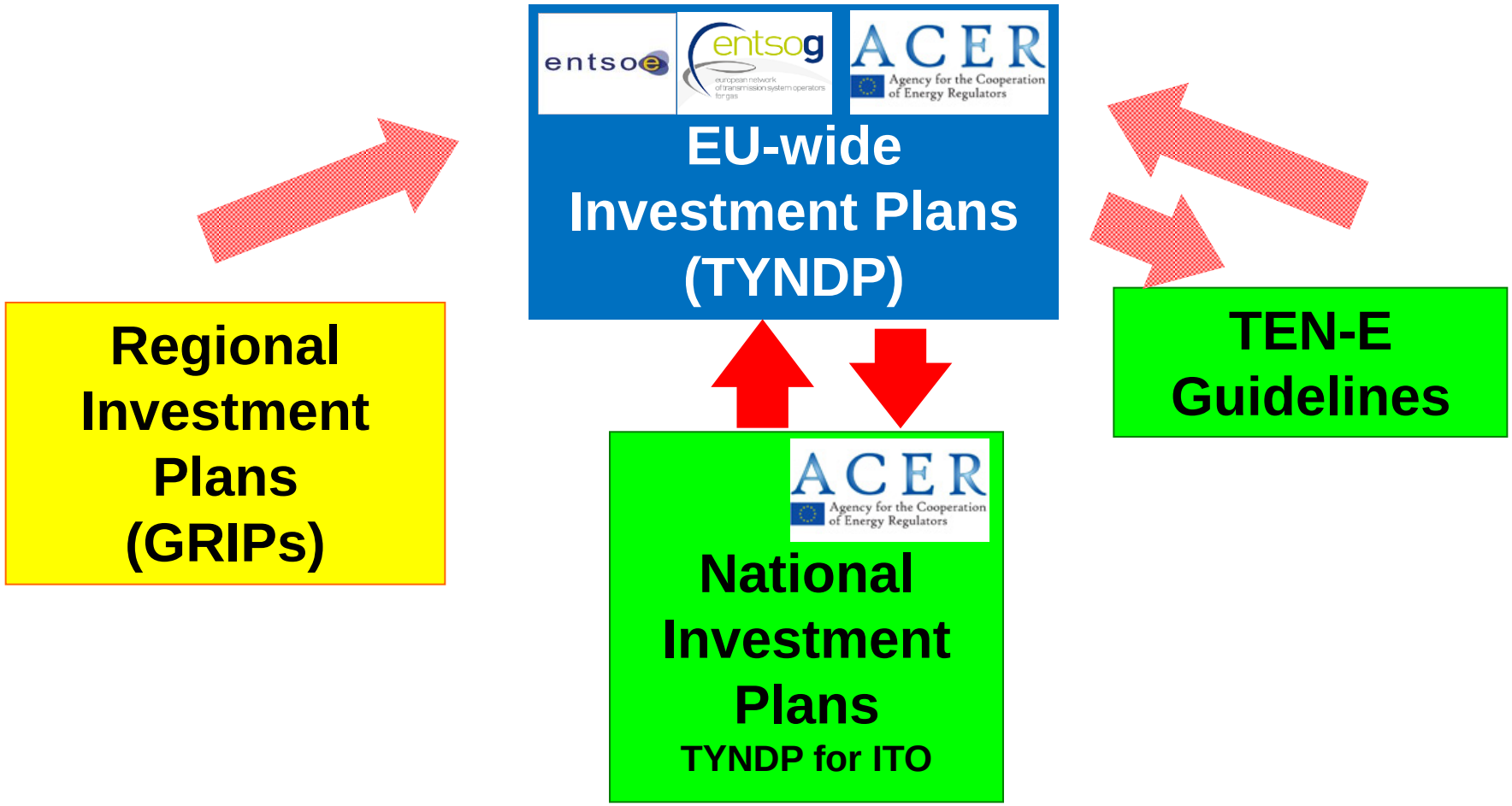
Third Energy Package (2009)

TYNDPs
- Non-binding, … but reference for national NDPs
- Strong EU dimension in Network Planning
- TYNDPs updated every two years

TEN-E Regulation (2013)

Projects of Common Interest (PCI)
- Streamlining of permitting procedures
- PCI selection based on robust CBA
- TYNDP remains the starting point
- PCI list updated every two years
- Cross-border cost allocation
- Financial assistance under CEF

EU Network Expansion Planning
under the Third Energy Package



TYNDP to remain central to EU network development planning under the Energy Infrastructure Package

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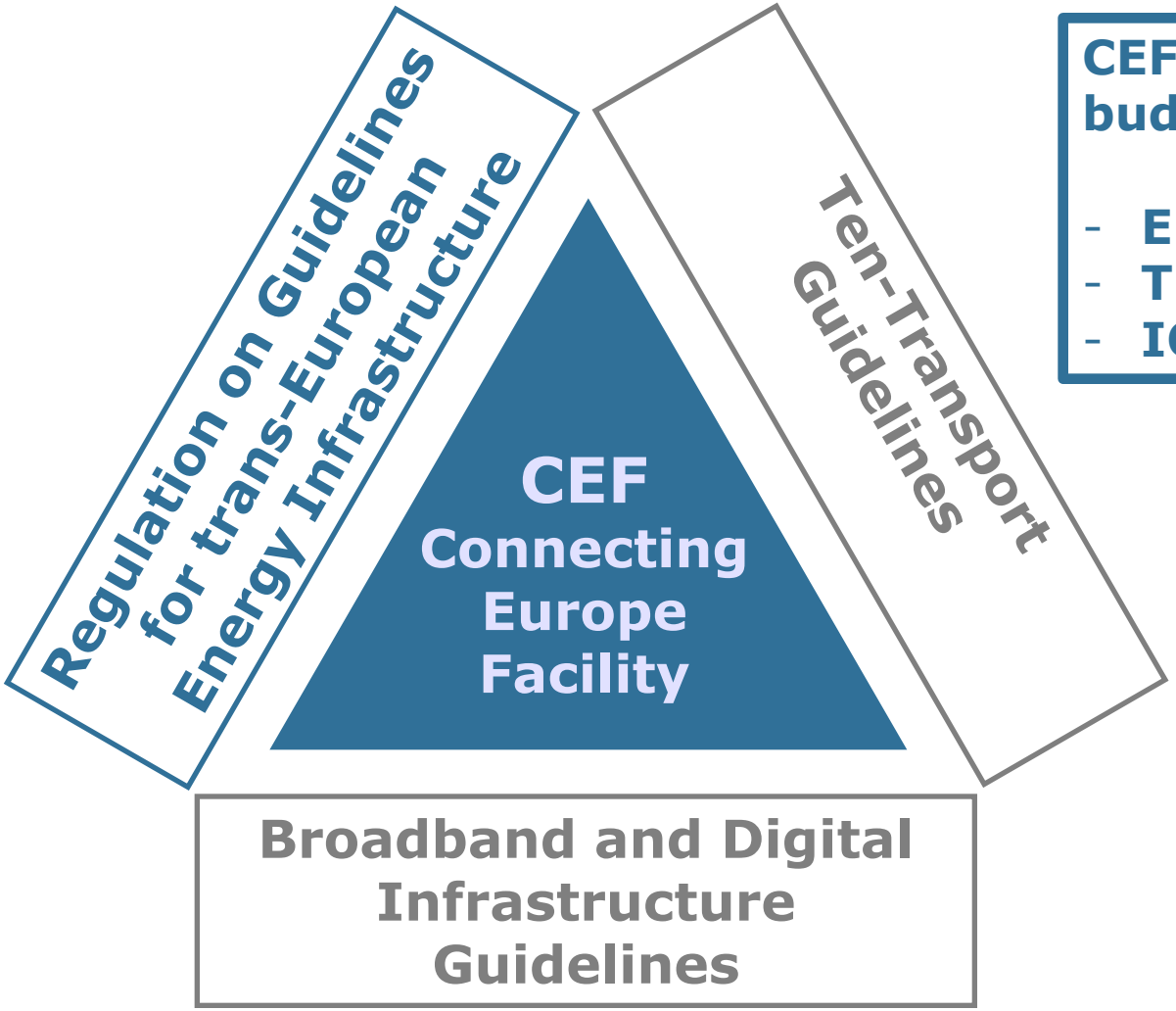
The Infrastructure Package



CEF proposed budget (EUR)

- **Energy: 9bn**
- **Transport: 30bn**
- **ICT: 9bn**

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TEN-E Guidelines

- **Objectives**
  - Implementation of 12 priority corridors/areas …
  - necessary to meet EU's energy and climate policy goals by 2020 and beyond …
  - by providing policy and regulatory certainty …
  - through a stable and appropriate regulatory framework …
  - to promote the necessary investments

- **Tools**
  - Identification of projects of common interest
  - Accelerated permit granting and transparency
  - Regulatory framework
  - EU financing

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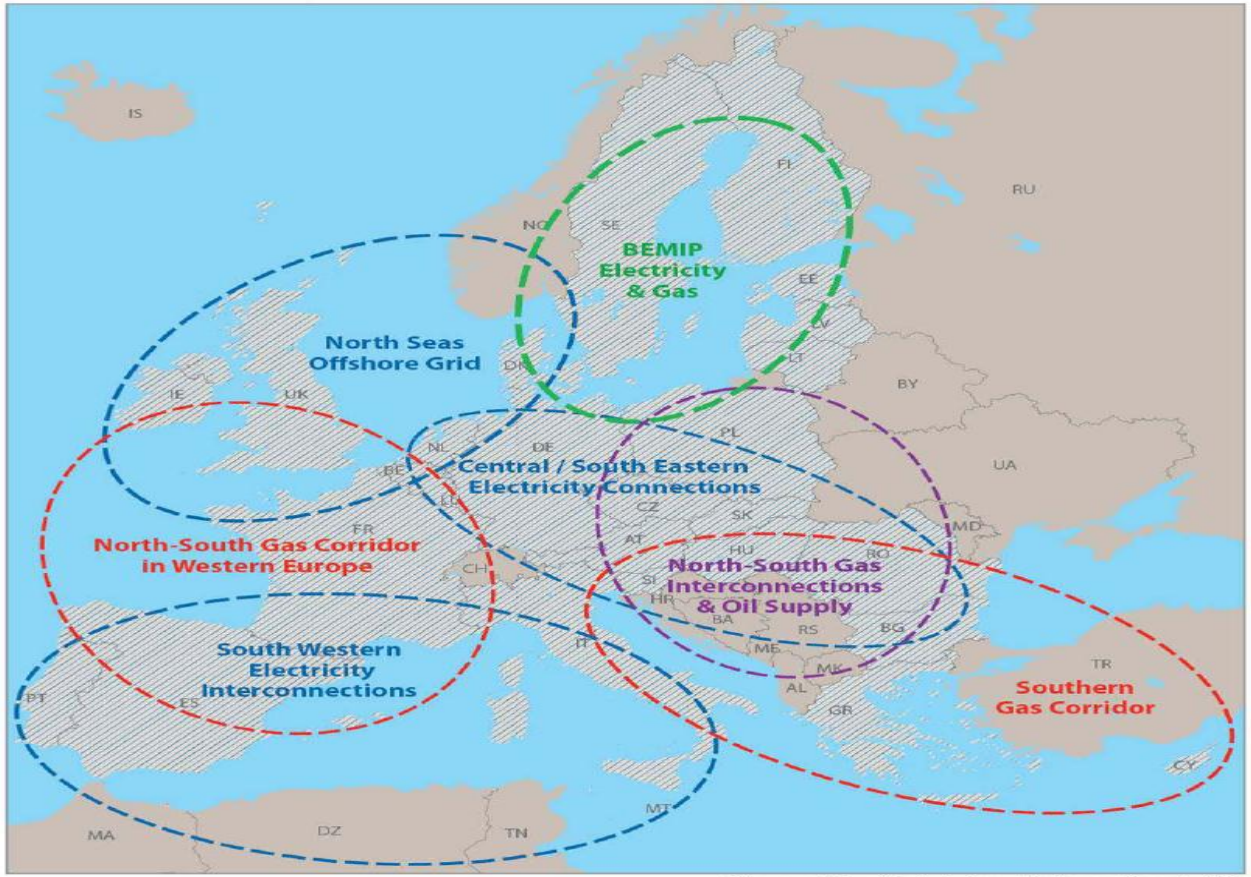
TEN-E Priority Corridors/Areas



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PCI Identification (1)

- General and Specific Criteria
- General criteria for PCI selection:
  - Necessary for implementing the corridors
  - Delivers a positive Cost-Benefit Analysis (CBA)
  - Involves/benefits at least two Member States
- TYNDP should be the starting point for PCI selection (PCIs $\subseteq$ TYNDP)

PCI Identification (2)

- Specific criteria for Electricity PCI selection:
  - ***market integration***, incl. removing isolation of at least one MS and reducing bottlenecks; competition and system flexibility
  - ***sustainability***, incl. through RES integration
  - ***security of supply***, incl. through interoperability, appropriate connections and secure and reliable system operation

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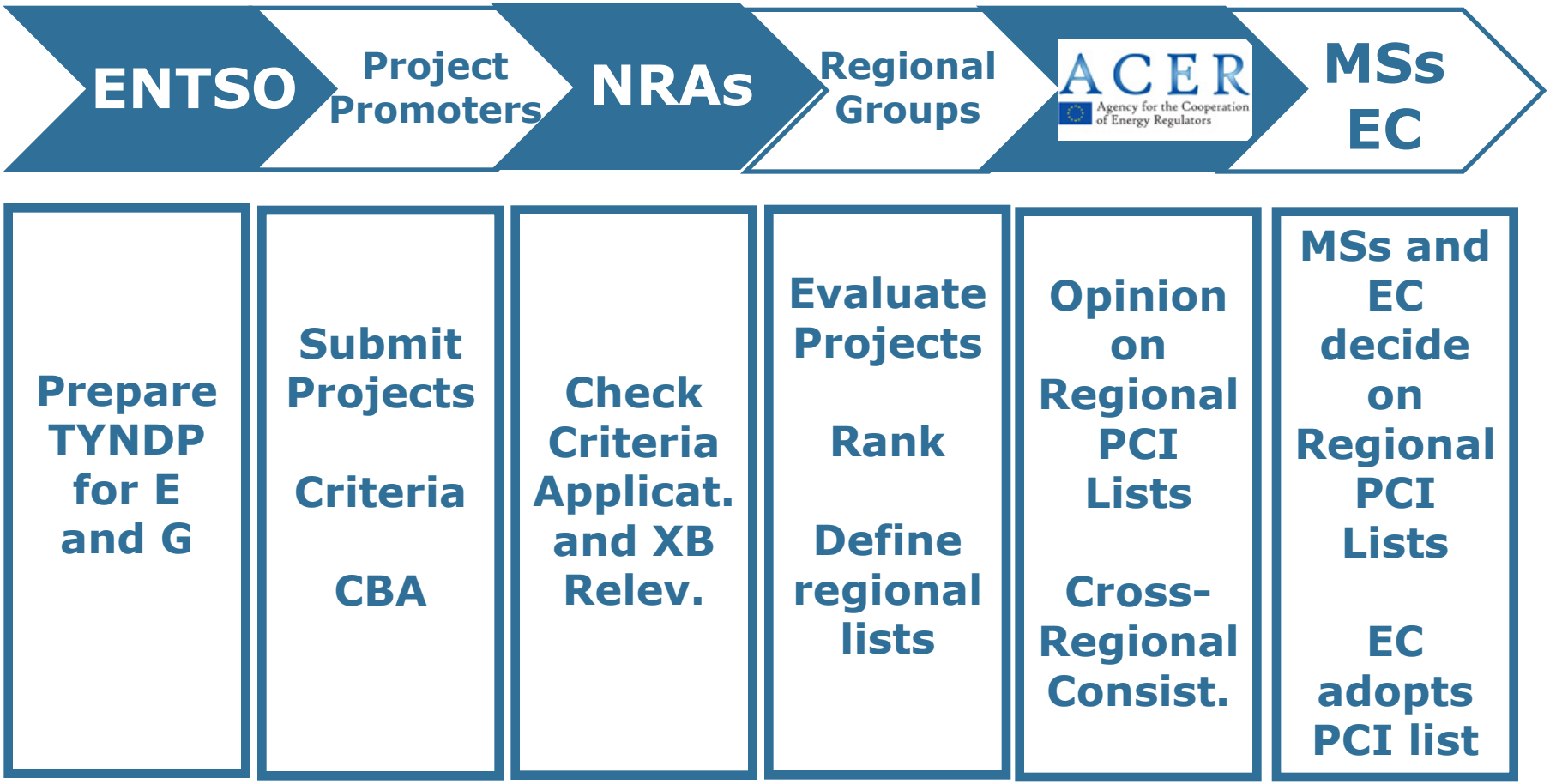
PCI Identification (3)

- Specific criteria for Gas PCI selection:
  - ***market integration***, incl. by removing isolation of at least one MS, interoperability and system flexibility
  - ***security of supply***, incl. through appropriate connections and diversification of supply sources, counterparts and routes
  - ***competition***, incl. through diversification of supply sources, counterparts and routes
  - ***sustainability***, incl. through reducing emissions, supporting intermittent renewable generation and enhancing deployment of renewable gas

PCI Identification Process



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Permit granting – Regime of common interest

- Priority status for PCIs
  - Most preferential treatment in Member States
  - Streamlining of EIA procedures
- Competent Authority to manage permit granting process
  - 3½ year limit for the permit granting decision
- Increased transparency and enhanced public participation

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Regulatory framework - measures

- Energy system-wide **cost-benefit analysis**
  - Proposal by ENTSOs, ACER opinion, Commission approval
- Enabling investments with **cross-border impact**
  - Cross-border cost allocation
  - NRA joint decision on investments and cost allocation
  - ACER decision if NRAs cannot agree
- Long-term **incentives** for investment
  - Obligation on NRAs to grant appropriate risk-related incentives
  - ACER guidance on best practices of NRAs and methodology

Financing – Connecting Europe Facility 2014-2020

- € 5bn? for ***energy***
- ***Financial Instruments*** (equity/debt incl. project bonds in cooperation with IFIs) and grants for studies and works
- ***Eligibility criteria (in guidelines)***:
  - Grants for studies and financial instruments – available to all PCIs
  - In exceptional cases, grants for works for PCIs where:
    - CBA shows positive externalities
    - Commercially not viable
    - Cost-allocation decision taken

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Thank you for your attention!

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