State Aid Control, Security of Supply and the Role of Capacity Mechanisms

PUBLIC INTERVENTION IN THE ENERGY TRANSITION: A LEGAL AND ECONOMIC PERSPECTIVE ON STATE AID POLICY

Workshop organised by the Florence School of Regulation, Energy Union Law Area, RSCAS/EUI, The European Electricity Markets and the Governance & Regulation Chairs, Paris-Dauphine University

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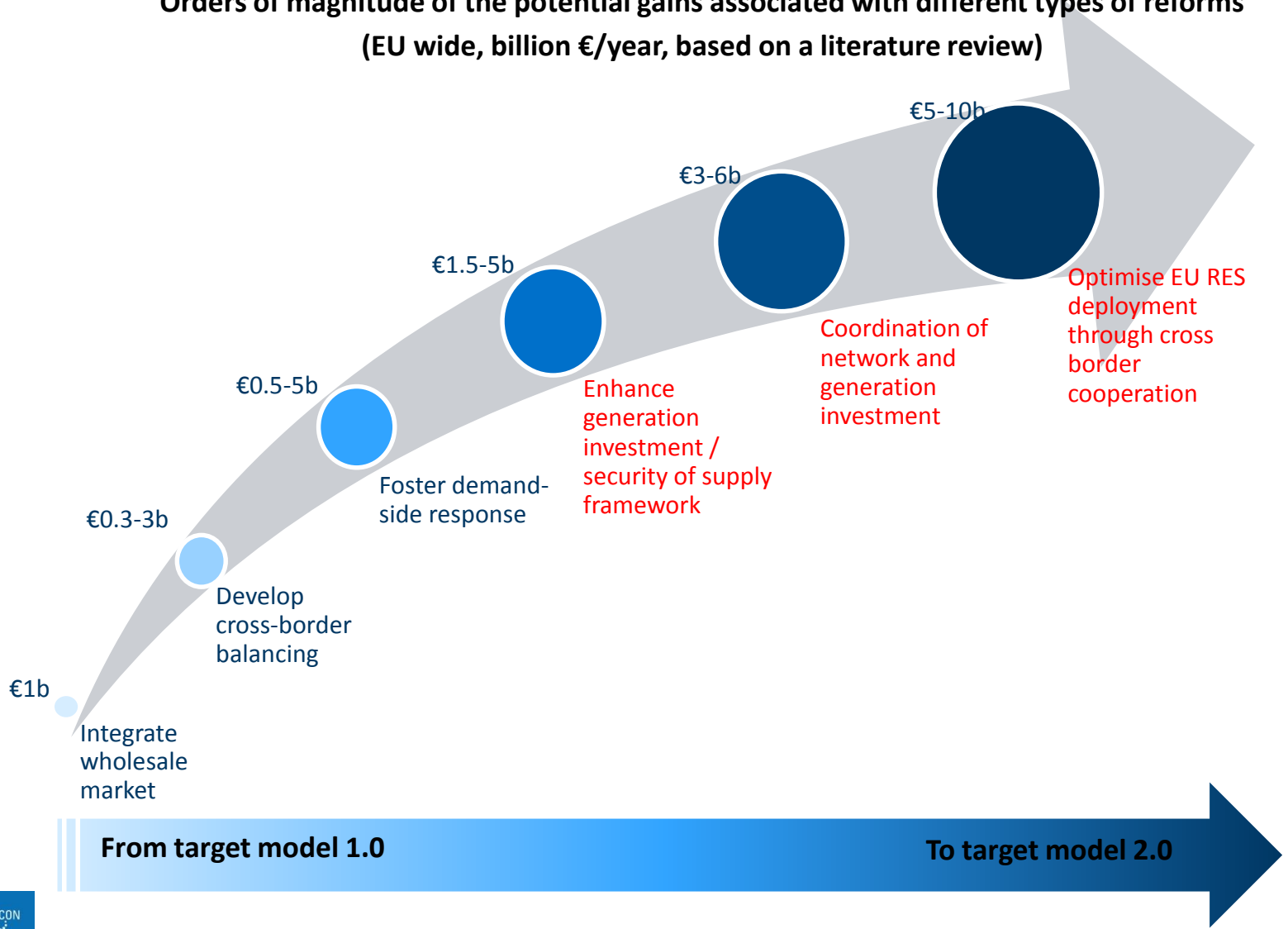
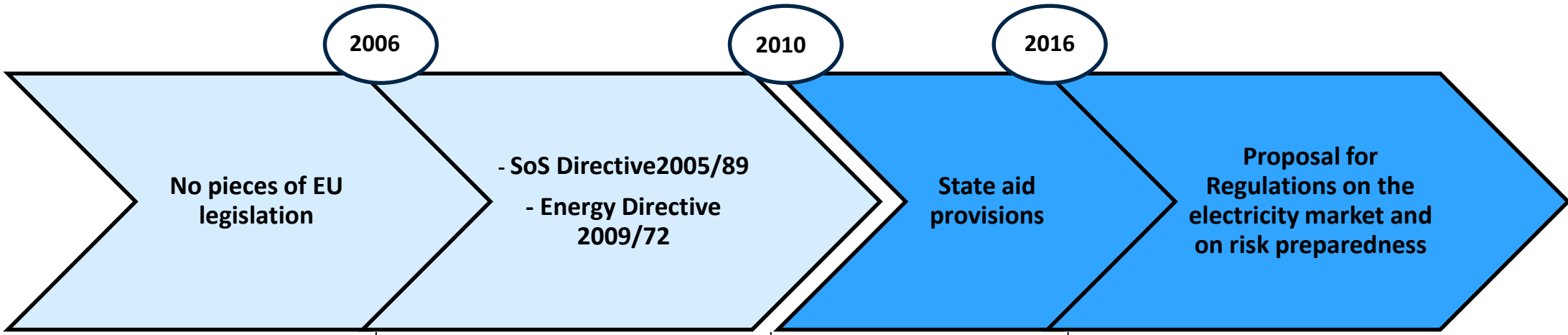
A look back at historical EC interventions and potential efficiency gains in EU electricity markets

Orders of magnitude of the potential gains associated with different types of reforms (EU wide, billion €/year, based on a literature review)



A look back: Security of supply and EU Law



Few cases on free movement of goods, e.g. ECJ *Campus Oil* (72/83)

- SoS used as a justification to the prohibition of quantitative restriction
- SoS relates to **public security** issues within the meaning of article 36 ECT

SoS Directive

- Not very prescriptive

Energy Directive

- Articles 4, 8, 42

→ **Both directives are based on article 95 of the EC Treaty**

The support schemes put in place in order to secure generation adequacy should qualify as State aid within the meaning of article 107 TFEU

→ Notification to the Commission (no exemption)

As regards SoS, the CEP is clearly a turning point.

Those two proposals are based on article 194 TFEU: « Union policy on energy shall aim […] to ensure security of energy supply in the Union »

At the beginning of 2000's, several incidents showing the growing interdependency of national networks and the importance to strengthen SoS of MS.

Concern of many MS about Generation adequacy (low demand, missing money…)

The Commision presented the Clean Energy Package

Interplay between the Clean Energy Package provisions and State aid provisions

- **Once the CEP adopted, we will be left with two sets of provisions applicable to Generation adequacy issues**

(SOS Directive and articles 4, 8, 42 of the Energy Directive will be removed)

State aid approach

2014: Guidelines on State aid for environmental protection and energy 2014-2020

→ Chapter 3.9 « Aid for generation adequacy »,

2016: Sector Inquiry on Capacity Mechanisms

→ Interim report and Final report

Cases (France, Germany, GB…)

CEP – Regulation on the internal market for electricity

→ Chapter IV: « Ressource adequacy »

Article 18: Ressource adequacy

Article 19: European ressource adequacy assessment

Article 23: Design principles for capacity mechanisms

- **Alternative or cumulative application?** → Cumulative, Article 23 of the Regulation makes it clear that « States may introduce capacity mechanisms, subject to the provisions of this Article and to the Union State aid rules"
- **Added value of the CEP:** filling the gap of a state aid approach (where a scheme would not qualify as an aid within the meaning of article 107) and providing an answer to MS where another MS would not respect a minimum SoS standard
- **Added value of the Stat aid approach:** providing a procedural framework quite effective for the enforcement of the Regulation – §29 of the Guidelines: "if a State aid measure […] entail a non-severable violation of Union law, **the aid cannot be declared compatible with the internal market**"
- **Comment for discussion:** could the overlapping of the two sets of provisions contribute to the debate whether those provisions should not have been provided for in the 2014 guidelines in the first place?

An economist approach to State Aid and security of electricity supply

- **Assessment of state aid compatibility from an economic perspective based on comparison of:**
  - Benefits of state aid (objective/effectiveness)
  - Costs of state aid (distortions)

- **Economic rationales for intervention in electricity markets:**
  - Correcting market failures:
    - barriers to effective price formation (price caps, etc.)
    - lack of demand participation (without smart meters) leads policy markers to define target level of security (e.g. 3 hours LOLE)
  - Externalities: security of supply has some attributes of a public good
  - Missing markets:
    - Incomplete sequence of electricity markets (e.g. no real time markets in Europe)
    - No locational prices in Europe
  - Wider capital market issues affecting electricity markets: e.g. risk aversion, imperfect pricing of risk for some technologies (e.g. nuclear), etc.

- **Other (unjustified) political reasons for intervention:**
  - Rescue stranded thermal plants
  - Smooth power prices to reduce “politically unsustainable” volatility
  - Dampen investment and retirement cycles

Criteria introduced by the EC Guidelines

1/ Contribution to a **well-defined objective of common interest**

2/ **Need for State intervention**

3/ **Appropriateness** of the aid measure

4/ **Incentive** effect

5/ **Proportionality** of the aid (aid to the minimum)

6/ **Avoidance of major undue negative effects** on competition and trade between Member States

7/ **Transparency** of aid

Justification	Must be a clear need for state intervention and the objectives must be clearly defined	Objective must be consistent with phasing out environmentally harmful subsidies	
Design	Aid should not change the behaviour of market players and be non discriminatory	Aid to the minimum: the amount paid should tend to zero as capacity available approaches the required level	Must have reasonable rates of return: a competitive bidding process is encouraged
International	Operators from other member states should be allowed to participate	Negative effects on the internal market should be avoided	Should not reduce incentives to invest in interconnection

Towards a more systematic approach for assessment of state aid for security of supply and capacity mechanisms?

- **Approach for state aid compatibility assessment range from:**
  - Streamlined approach: block exemptions
  - Semi structured approaches: guidelines
  - To more substantive analysis of individual cases
  - ⇒ Key issue as compliance costs of state aid processes matter…
  - ⇒ … regulatory uncertainty can in turn undermine investment … possibly creating further need for state aid

- **Towards a more systematic approach for assesment of state aid for security of supply and capacity mechanisms?**
  - Guidelines after EC state aid inquiry left room to a wide range of interpretations
  - Ongoing work by ENTSOE and TSOs to coordinate adequacy outlooks
  - Further recommendations in the Clean Energy Package …
  - … raising a number of questions regarding security of supply and institutional responsibilities

Responsabilities in current approach

State aid assesment criteria	Country	TSO	EC	ENTSOE
Need for intervention	Determines target reliability level (LOLE)	Defines methodology, collects data, and models adequacy outlook	Reviews adequacy outlook / assesses need for intervention / other measures	Coordinates adequacy outlook to account for cross border effects Defines standard methodology
Appropriateness and proportionality	High level design of capacity mechanism	Detailed design / Implementation / calibration of capacity mechanism	Guidelines on design *ex ante*, review of proposed design, suggestions for modfications	
Absence of distortion / impact on competition	Design of capacity mechanism including market power mitigation mechanisms Monitoring by competition autority / regulator	Design of capacity mechanism including market power mitigation mechanisms Defines cross border contribution	Guidelines on design *ex ante*, may request modifications / some specific market power mitigation mechanisms	

Conclusion: issues for further research around state aid and security of supply

State aid criteria	Issues
Need for intervention	Different approaches for adequacy outlook accross countries: • Should a standardised approach be defined by ENTSOE? How to take into account local specifiities (e.g TSO grid model)? Lack of data / harmonization of assumptions : • Lack of comprehensive and transparent dataset on power plants. Can the key assumptions be harmonized (e.g. fuel prices, demand projection, etc)? Cross border capacity contribution: Can a coordinated assessment be conducted at the regional level by ROCs? Is the adequacy assesment sufficient to capture all reasons for intervention? e.g. local network stability issues
Appropriateness and proportionality	Is some degree of harmonization of the underlying security of supply criteria needed: what happens if neighboring countries choose different reliability criteria? Is further harmonization of CMs design suitable? Is a target mdoel for CMs needed? Can we define common certification & verification procedures for plants & DSM by harmonizing TSO's practices? We now have a number of examples of CRMs in operation: time to identify best practice and refine guidelines?
Absence of distortion / impact on competition	Cross broder participation: can some guidelines be defined / a standardised framework? Key issue: Develop a cooperation framework, including operational rules and clarification of responsibilities, to deal with situations of simultaneous system stress Which institutional framework to align national responsibility with regard to security of supply and regional / EU coordination approach?

Thank you for your attention

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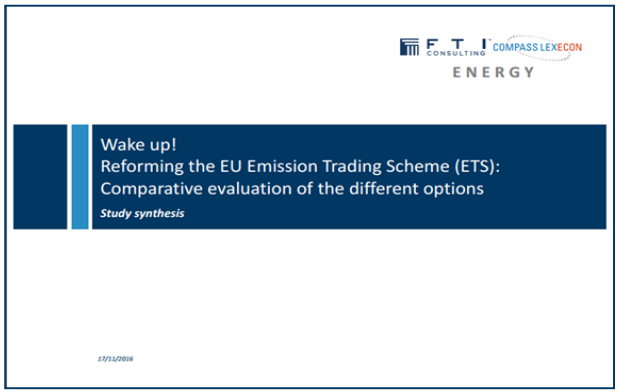

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