



# Generation adequacy in the internal market: guidance to optimise public interventions

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**Tadhg O'Briain –  
DG ENER, Unit Internal Market II**

*The true cost of the adequacy problem has been the distortion of market designs by misguided attempts to solve it. These designs cause risks, inefficiencies and regulatory responses that are far more costly than any likely mistake in the provision of adequacy.*

**Cramton and Stoft (2008)**

*...politicians' risk aversion is by far larger than that of almost any power consumer... which will in the end affect the security of supply of the system.*

**Rodilla and Battle (2012)**

# Preconditions for public intervention

*Concern in relation to generation adequacy must be properly identified*

*The underlying causes of the problem must be properly identified (market or regulatory failures?)*

*Costs and benefits must be assessed holistically and in comparison to other instruments*

# Design Recommendations – which instrument under what circumstances?

*Strategic reserves*

*One-off tendering for new capacity*

*Market-wide capacity remuneration schemes*

# Design Recommendations – what features?

*Technological neutrality*

*Temporary nature*

*Financing*

# Precondition: analyse objectively generation adequacy concern

*Recognize the reality of coupled markets: cross-border assessment is needed*

*Maximize interconnection capacity*

*Include the potential of demand response in generation adequacy assessment*

*Distinguish generation adequacy concerns from profitability concerns (take into account overcapacity and economic crisis)*

# Identify the causes of the concern

*Regulated wholesale and retail prices: as a general rule public interventions not proportionate where regulated wholesale and/or retail prices continue to exist*

*Existing support schemes: are RES support schemes in line with best practices? Support for fossile and nuclear generation?*

*Do effective intraday and balancing markets exist? Can the demand side participate in these markets?*

# Costs and benefits must be assessed holistically in comparison with other measures

*Promote (local) generation or increase interconnection capacity?*

*Promote generation or promote demand response?*

*Impact on electricity bills? Is the cost of intervention not higher than the value of lost load?*

*Impact on CO<sub>2</sub> and RES targets: how to avoid lock-in effects?*



# Design of public intervention

- "Simplicity is the genuine sophistication"
- A strategic reserve is normally less distortionary, less costly and easier to implement; it may be particularly well suited for covering peak-load during limited number of hours; can include generation and demand based solutions.
- One-off tendering could be less distortionary and easier to implement when there is a clearly identified and temporary investment gap – must be credibly one off

# Design of public intervention

Where market wide capacity remuneration schemes are considered, capacity payments are less desirable and capacity markets are to be preferred

The cost of capacity remuneration schemes can be very high (over 10% of wholesale electricity costs)

# Design features

*technological neutrality*

*transitional with an exit strategy*

*regional schemes or at least cross-border participation*

*minimizing distortions of competition and trade (no adverse effect on market coupling; no export restrictions)*

*financing*

# Conclusion

## **Intervention only after:**

*careful and objective assessment of needs*

*Addressing regulatory and market failures*

*cost/benefit analysis compared to other solutions  
and value of lost load*

## **Recommendations:**

*chose the right instrument to address the  
problem identified*

*Design the measure to minimize distortions*

*Ensure mechanism is reviewed as underlying  
concern addressed*



**Thank you for your attention!**

