

### **Agenda**

10:00 - 10:30: Registration

10:30 - 10:45: Introduction

10:45 - 12:30: Cross-border participation in capacity

mechanisms

12:30 - 14:00: Lunch break

14:00 - 15:45: Different capacity mechanism models

15:45 - 16:00: Conclusion



### Work programme and deliverables

- 1. Demonstrating necessity
- 2. Eligibility 1: General design considerations, demand response and storage
- 3. Designing a competitive bidding process and eligibility 2: existing and new resources
- 4. Designing appropriate obligations and penalties
- 5. Eligibility 3: interconnector / cross-border participation
- 6. Example models



# Cross-border participation in capacity mechanisms



## **EEAG** Requirements

Summary		
EEAG requirement	Objective	
(226)	1.	Should take the contribution of interconnection into account.
(232)	2.	Should be open to interconnectors if they offer equivalent
		technical performance to other capacity providers.
	3.	Where physically possible, operators located in other member
		states should be eligible to participate.
(232)	4.	Should not reduce incentives to invest in interconnection, nor
		undermine market coupling.



### Purpose of these guidelines

- maximise competition in capacity mechanisms
- ensure efficient signals for investment in the right types of capacity and network infrastructure where they are most needed
- But enable market coupling to continue to deliver the most efficient use of existing resources in real time



### **Design choices**

- De-rating
- Obligations and penalties
- Counterparty

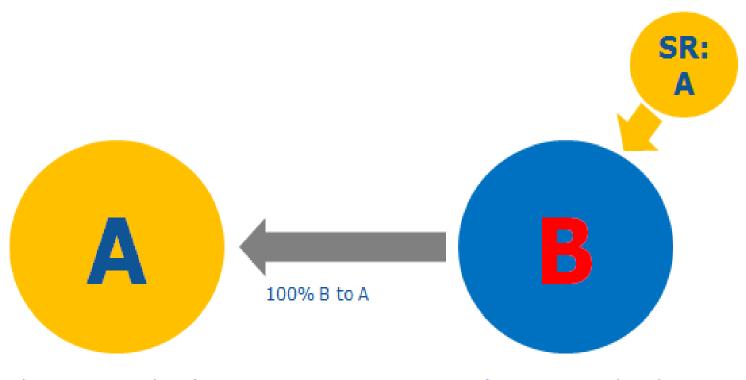


#### Potential for common rules

- Interconnector de-rating
- Eligibility
- Allocation
- Trading
- Obligations and penalties on i) foreign capacity
  ii) interconnector operators
- Interaction with market coupling
- Allocating costs
- Supporting interconnector investment
- Ensuring compliance of TSOs



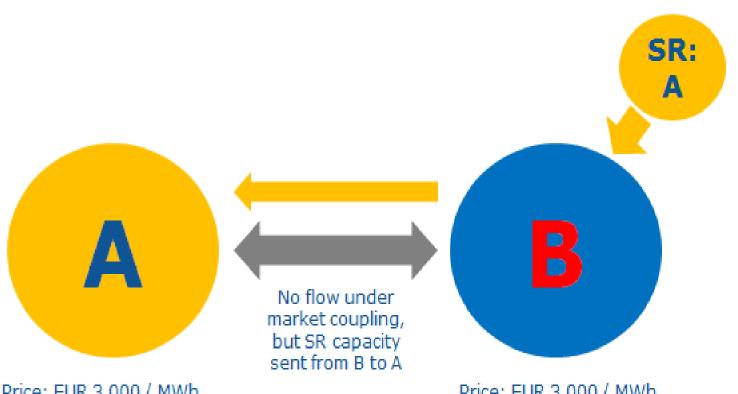
### What about strategic reserves? (i)



Price: EUR 3,000 / MWh Price: EUR 1,000 / MWh



### What about strategic reserves? (ii)



Price: EUR 3,000 / MWh Price: EUR 3,000 / MWh



### **Discussion**

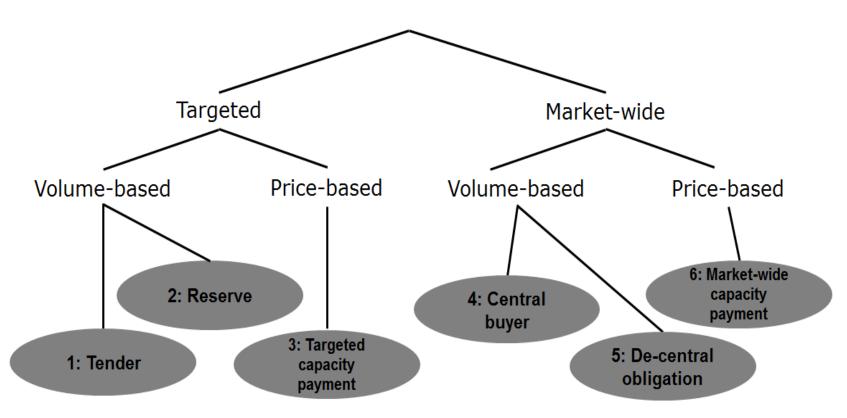
- Have we identified the main design choices in this area?
- Would it be helpful for the Commission to develop common rules for cross border participation?
- Have we identified the right areas for common rules to cover?
- Would the high level design described here be appropriate as a basis for common rules?
- Can cross border participation be enabled effectively for other capacity mechanism designs, or only for volume-based market-wide designs?



# High level comparison of capacity mechanism models and compatibility with EEAG



### Types of capacity mechanisms





### 1. Tender for new capacity

- Advantages
  - Simple implementation?
  - Can it be one-off?
- Disadvantages
  - Effectively solution to missing money problem?
  - Development of other technologies
- Assessment under EEAG
  - Appropriateness (points 226-227)
  - Technology neutrality (point 232)



### 2. Strategic reserve

- Advantages
  - Simple implementation?
  - Suitable for exceptional peak demand
- Disadvantages
  - Solution to missing money problem?
  - Efficient use of resources?
  - Competition of new and existing capacity?
- Assessment under EEAG
  - Appropriateness (points 226-227)
  - Proportionality (point 231)



### 3. Targeted capacity payments

- Advantages
  - Simple implementation?
- <u>Disadvantages</u>
  - Complex central calculations
  - Overcompensation?
- Assessment under EEAG
  - Proportionality (points 228–231)
  - Technology neutrality (point 232 (a))
  - Competitive price to avoid trade distortions (point 232(c))



### 4. Central buyer

- Advantages
  - Transparent market price
  - Right signals for efficient market entry / exit
  - Long term contracts new investments
- <u>Disadvantages</u>
  - Significant intervention / complex rules and calculations
  - Difficult to adapt / remove
- Assessment under EEAG
  - Appropriateness (points 226-227)



### 5. De-central obligation

- Advantages
  - Simpler design than central buyer
  - Right signals for efficient market entry / exit
  - Development of different capacity products
- Disadvantages
  - Significant intervention and complex rules
  - Suitable in case of concentrated market and vertical integration?
- Assessment under EEAG
  - Appropriateness (points 226-227)
  - Proportionality (point 230)



### 6. Market-wide capacity payments

- Advantages
  - Simple to implement?
- Disadvantages
  - Difficult central calculations
  - Overcompensation?
- Assessment under EEAG
  - Proportionality (points 228–231)
  - Competitive price to avoid trade distortions (point 232(c))



### Questions

- Which factors should be taken into account when choosing one capacity mechanism model over another?
- Are certain models more appropriate than others to address particular generation adequacy problems?
- Do you agree with the advantages and disadvantages identified for each model? Has experience in your market shown something different? Are there major advantages or disadvantages missing from this list?