
Italian Capacity Market

Bruxelles, April 14th 2015

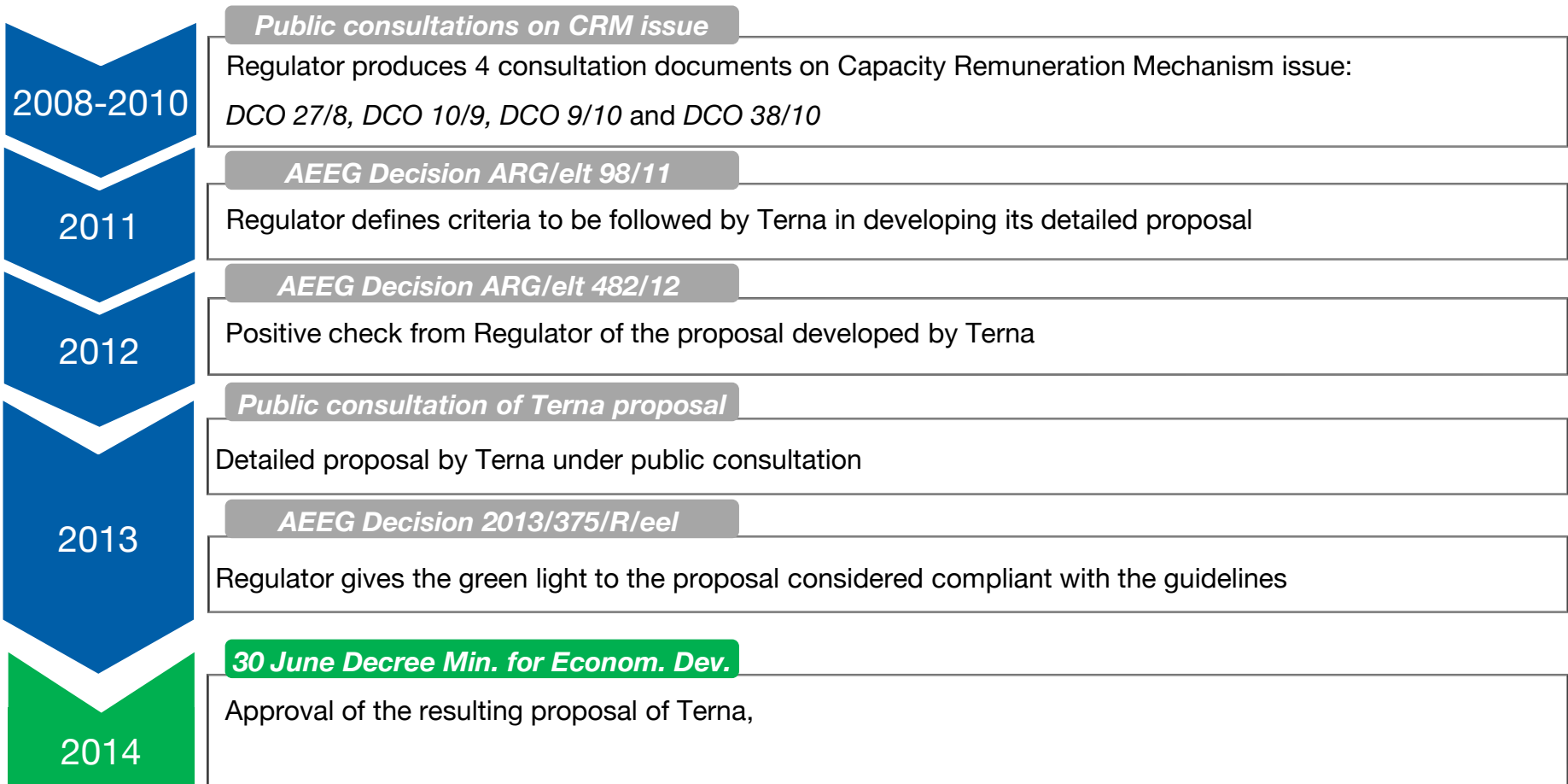


Agenda

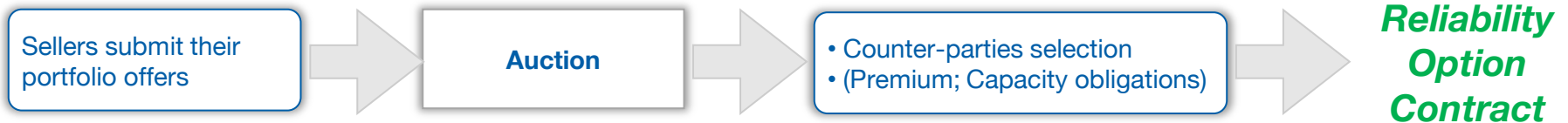
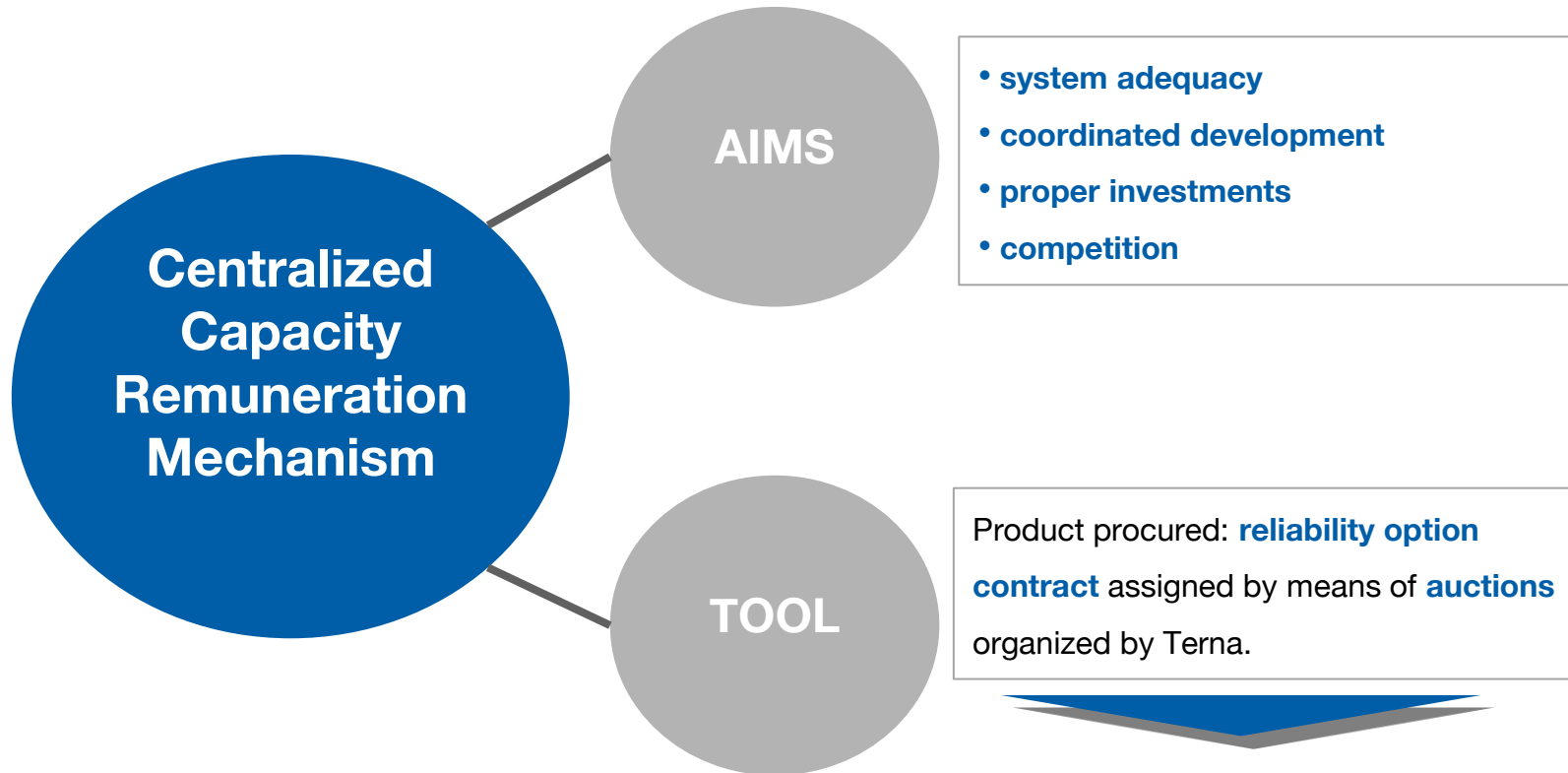
➤ **Introduction**

➤ **Main principles of the Italian Capacity Market**

Timeline of internal legal and regulatory framework



Italian Capacity Market: *aims and tools*



Main principles – *market structure*

Procurement of capacity is performed by competitive tenders where Terna is the central counterparty.

The product negotiated into each tender is a **reliability option contract**

Multi-round descending auction

Main yearly auction

Procurement of capacity

- Lead Time: 4 years
- Delivery period: 3 years
- Location: Area where the resource is located

Adjustement auction

• Re-negotiation of the products acquired in the main auction (*sellers*)
• Adjustment of the adequacy objectives when approaching the delivery period (*Terna*)

- Lead time: 3 to 1 years
- Delivery period 1 year
- Location: Area where the resource is located

Continuous transactions

Secondary Market

Re-negotiation of the products acquired in the previous auctions (*sellers*)

- Lead time : less than 1 year
- Delivery period: 1 month
- Location: Area where the resource is located

Main principles – *eligibility requirements*

Admission to Capacity Market

Both **new** (planned or under construction) and **existing** resources are admitted to the CM as long as these are:

- non-intermittent;
- not subject to any type of investment incentive scheme;
- not subject to dismantling measures approved by the competent authorities.

Each participant can submit offers for an amount no greater than its **expected available capacity** defined by Terna for each power plant.

Participation to Capacity Market

Participation is **voluntary**, subject to the presentation of **appropriate guarantees** to Terna

Main principles – *contract rights and obligations*

Contract structure: reliability option (1-way **C**ontract for **D**ifference)

Rights

- Selected counterparties receive **premium** (€/MW-year) for their **capacity obligation** (MW-year); premium is the auction clearing price (the marginal price principle is applied)

Obligations

- Selected counterparties are obliged :
- to submit offers in Day Ahead (DAM) and Ancillary Services Markets (ASM);
 - to pay Terna the positive difference between spot price and strike price



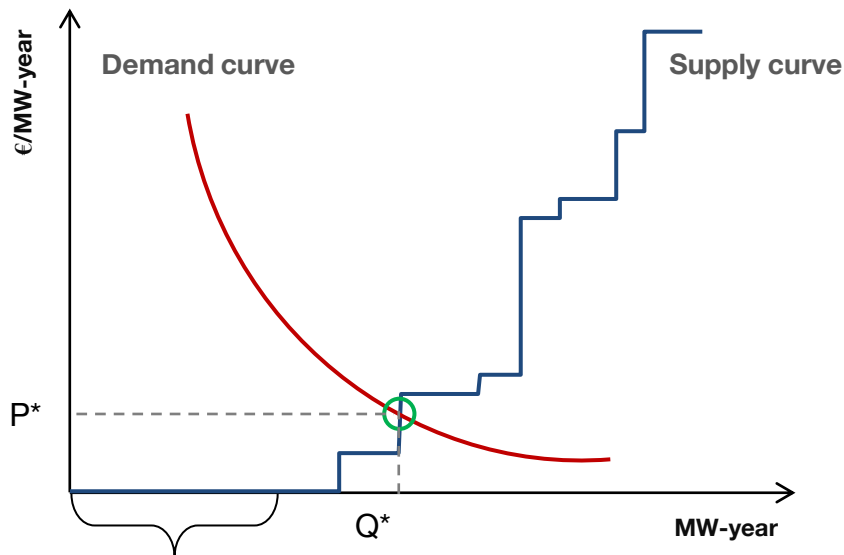
The considered **spot price** penalizes selected counter-parties not offering in DAM and ASM or offering at a price higher than the strike price

Strike price is the standard hourly variable cost of the **marginal technology** which is the technology with the lowest annual fixed costs.

Main principles – *supply and demand curves*

Capacity Market Equilibrium: Capacity Clearing Price (Premium - P^*) and Clearing quantity procured (Q^*)

A simplified example of auction results:



Demand Curve - elastic yearly demand curve defined by Terna on an annual basis

Supply curve - participants portfolio offers (premium; quantity)

Ineligible capacity and ***not offered available capacity*** are implicitly considered as offered at 0€/MW-year and don't receive any remuneration

Backup

Main principles – *supply and demand curves*

Each reliability option contract foresees a **spot price** for each hour of the delivery period calculated as follow:

Quantity		Spot price	
		Offered price \leq strike price	Offered price $>$ strike price
Accepted on the Day-ahead market		Price on the Day-ahead market (P_DAM)	
Presented but not accepted on the Day-ahead market (DAM) and not presented on the Dispatch Services Market (DSM) or Not presented on the DAM nor on the DSM	Adequacy system	Max (P_DAM; Max Price on the DSM)	
	Lack of adequacy system	VENF	
Presented and accepted on the DSM		Strike price	Offered price
Presented but not accepted on the DSM			Max (P_DAM; Max Price on the DSM)