



Concurrent Session IIIa: Smart grids & systems

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Encouraging demand side flexibility in 'smart' networks

*“Greater penetration of renewable-based generation is significantly **increasing the requirement for market-based flexible response** which will include the demand side and the supply side.”*

- ACER Bridge to 2025 -

But, consensus still needs to be reached around:

- the definition of flexibility and
- regulatory measures required

So, **Regulators have committed** to:

- defining "flexible response"
- an action plan for removing the barriers to its development
- a recommendation on the facilitation of the development of flexible response and its implication for the design of the electricity market and the operation of the electricity system

Flexibility – a holistic approach

		Network		Market		
		Management	Interruptible contracts	Ancillary services	Balancing	Wholesale / Retail
Capacity		DSF as an alternative to network reinforcement	Specific interruptible contracts concluded by the TSO with industrial consumers	DSF participation to the procurement of frequency containment reserves (FCR) and frequency restoration reserves (FRR)	DSF participation to procurement of manual reserves (mFRR, RR, of other dedicated DSF reserve)	DSF participation to CRM (if such a mechanism is implemented)
		DSF for congestion management purposes			Activation of DSF bids	Direct DSF participation to the wholesale market
Energy						Suppliers internal portfolio optimization through dedicated supply prices

GB example: experience in regulating “smart”

- In RII0-ED1 (2015-2023), we benchmarked forecast smart savings as part of our business plan assessment
- While companies put forward significant savings we felt there was room for significantly more
 - £322m across the 10 slow tracked DNOs reflecting cost savings available through network innovation and use of smart grid solutions
 - Combined with business plans this suggests overall savings of £798m with strong incentives on companies to find more savings during the control period
- Companies also investing in smart grid enablers during ED1 to allow for further savings during RII0-ED2



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