

Flexibility: Interaction with Commercial Arrangements

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Significant Transformation

Decarbonisation

- Fewer synchronous generators and increased renewables



Decentralisation

- Generation units decrease in size and move closer to consumption



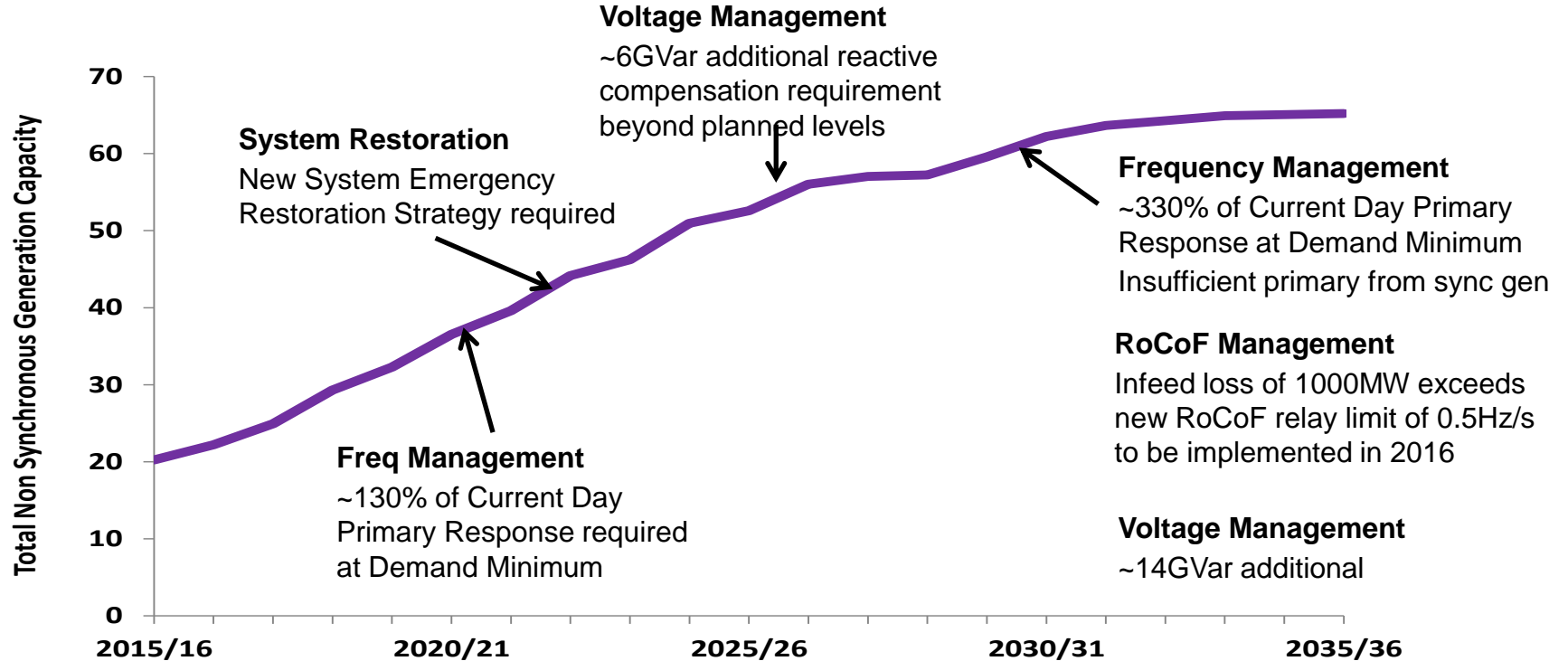
Digitisation

- New electricity assets such as distributed storage and Electric Vehicles

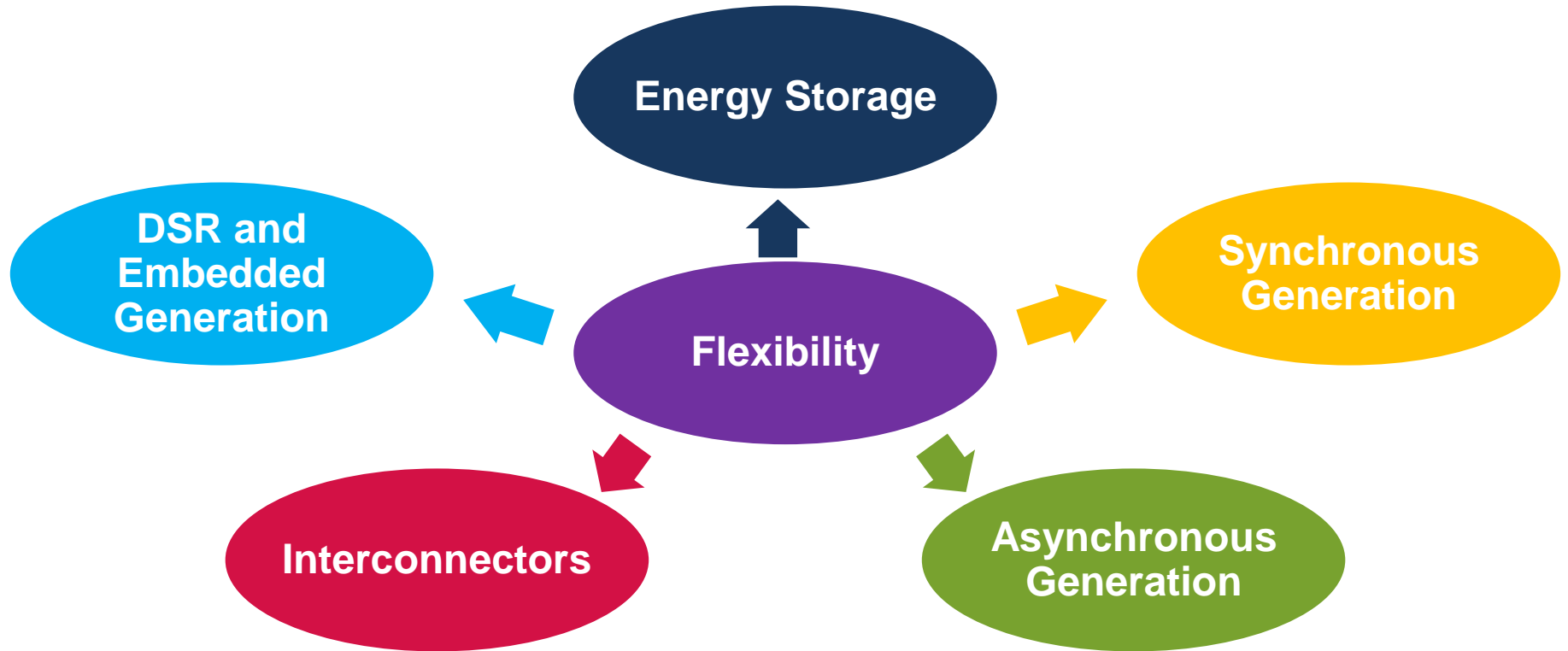


**Greater
System
Uncertainty**

System Challenges



New Technologies



Market Participants' Concerns

Factor	Highlighted concerns
Provide the right incentives	(1) There is potentially low confidence in the market
	(2) Signals may be insufficient to finance investments
	(3) Specifically, there may be insufficient premiums for flexible capacity and capability
	(4) The system operator takes out of market actions
	(5) Network charges may not align with emerging investment drivers
	(6) Specifically, embedded benefits may provide a tilted playing field for distributed technologies
	(7) Lack of sufficient information to deliver credible business cases
Provide sufficient information	(8) Undue barriers to entry
Allocate risks efficiently	(9) Restrictions on service stack-ability
	(10) Some services delivered at sub-market prices
Limit transaction costs	(11) Lack of clarity on roles / responsibilities
	(12) Complexity from providing services to different entities
	(13) Complexity due to revenue streams

Network charging arrangements are central to a number of these concerns and could present a barrier to the development of flexibility markets

Frameworks for flexibility markets



More flexibility is needed to deliver a system that accommodates environmental targets

Network charges need to evolve to provide efficient market signals and allow costs to be recovered in a fair manner

Leading the delivery of flexibility markets

SHORT TERM (<12 Months)

1. Customer Engagement Activity: DSR and Flexibility Sources
2. Improving Confidence in Flexibility:
 - Working with Third Parties/Aggregators
 - Effectiveness of Information/Market Signals
3. Evolution of Flexibility Markets
 - Demonstrating product sharing
 - Simplification of market offerings

MEDIUM TERM DELIVERY

1. Clarity on roles and responsibilities between DNOs, TOs, suppliers and SO
2. Clarity and greater access to the wholesale, balancing & capacity markets
3. Improved market liquidity
4. Development of charging arrangements that facilitate Flexibility Markets and Providers



Working with the changes to charging to ensure synergies