Tailoring flexibility to the needs of the market

December 2020 Charlie Edwards

Scottish & Southern Electricity Networks



## Todays Agenda



- What is a flexibility market?
- How are flexibility markets changing?
- How can I participate in TRANSITION's flexibility market?
- What are my contracting options?
- How is payment decided?

### **Housekeeping**

- Please use the chat function throughout and mute your mic if not talking
- Questions will be taken both after each slide and at the end of the session
- Towards the end of the session we will be asking you to use Slido to answer some questions.
  Please have a device ready to use and logged into https://www.sli.do/





## Why Flexibility







## Flexibility Markets – The Basic



- An opportunity for users of electricity to get paid for changing their consumption/generation patterns to meet the electricity networks needs
  - As well as contributing to local aims to meet net zero
- There are several ways in which an asset provider might offer changes in their electricity consumption/generation to the DNO
  - Pathways may vary for different types of assets and customer risk attitudes
- Basic requirement
  - At least 30 minute monitoring + ability to send this to the DNO's systems
    - Larger customers may require minute-by-minute
  - Contract for flexibility –DNO or Third-party
  - Ability to respond to signals from DNO or third-party
    - Automation advised but not necessitated















## Competitive Market



Auction				
Pros	Cons			
Economically efficient – Customers compete on price	Uncertainty of market prices			
	Complication			









## Price Ceiling Example





### Pure Monopoly





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# Competitive Market Options Example transition



#### Pure Monopoly





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## Market Stimuli Packages

Electricity Networks

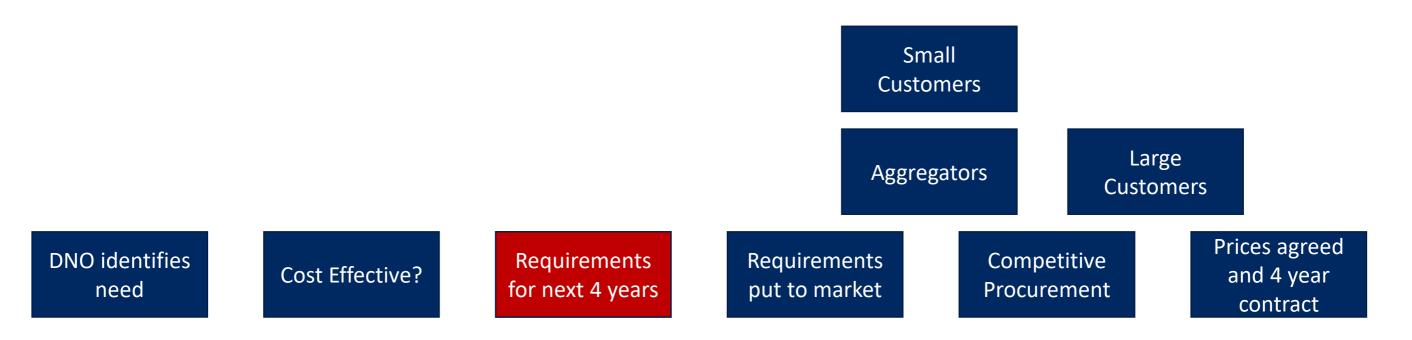


with

Liquidity	Package 1 - This package will provide a flat rate payment for the delivery of 10 events.	flexibility		
	Variable Rate Route to Market – Auctions Fixed Rate Route to Market – Fixed Price Package 2 - This package will provide some upfront capital support for asset ena			Market
S = D	and will also provide a flat rate payment for the delivery of 50 flexibility events of the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events and will also provide a flat rate payment for the delivery of 50 flexibility events	ents.		Stimuli Packages
	Package 3 - This package will provide capital support for asset enablement and remarket participant to compete in a flexibility market for a defined minimum			
	Pure Monopoly	Competition	1	
Scotti	ish & Southern	In partnership		











## Market Options – Feedback Wanted transition

Moving to a smart future

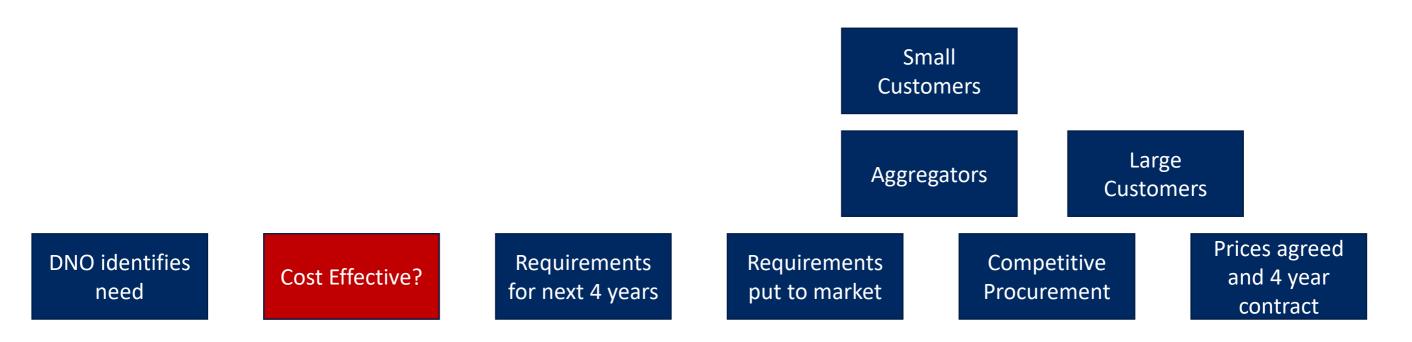
Time Horizon	Details	Payment	Certainty of DSO payment	Certa of ca	inty pacity	
Year Ahead- Committed	Availability expected across a pre-defined period i.e. winter weekdays 4-8pm	Availability and Utilisation contracted once per year.				
Year Ahead- Flexible	Availability need notified week-ahead and paid accordingly.	Availability and Utilisation contracted once per year.				
Week Ahead	Availability need notified and auctioned week ahead.	Availability and Utilisation auctioned each week.				
Day Ahead	Flexibility need notified and auctioned day ahead.	Availability or Arming and Utilisation auctioned day before an event.				
Intra-Day	Flexibility need notified hours before an event.	(Arming and) Utilisation payment auctioned.	Stackin market	↓ g across s	Procurement optimisation	















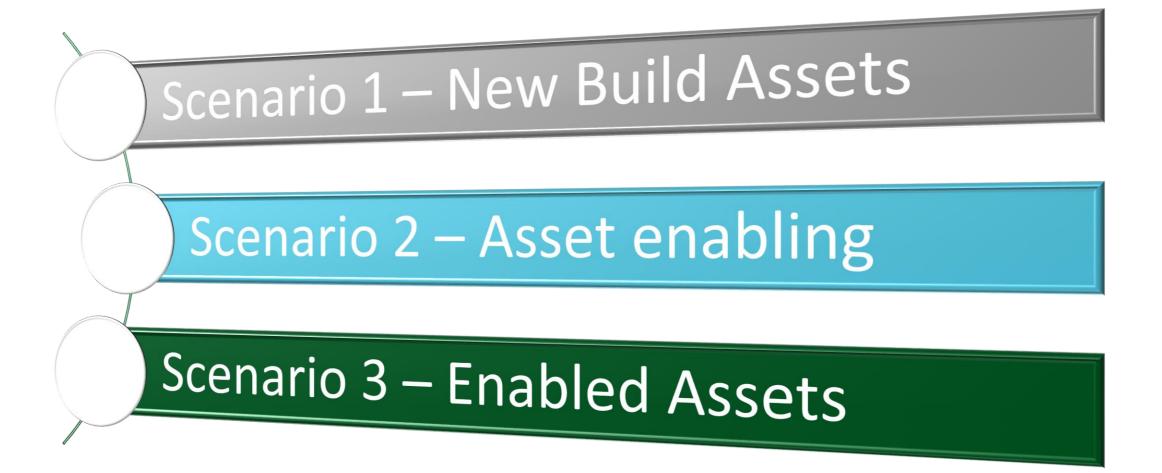






## Willingness to Accept Scenarios

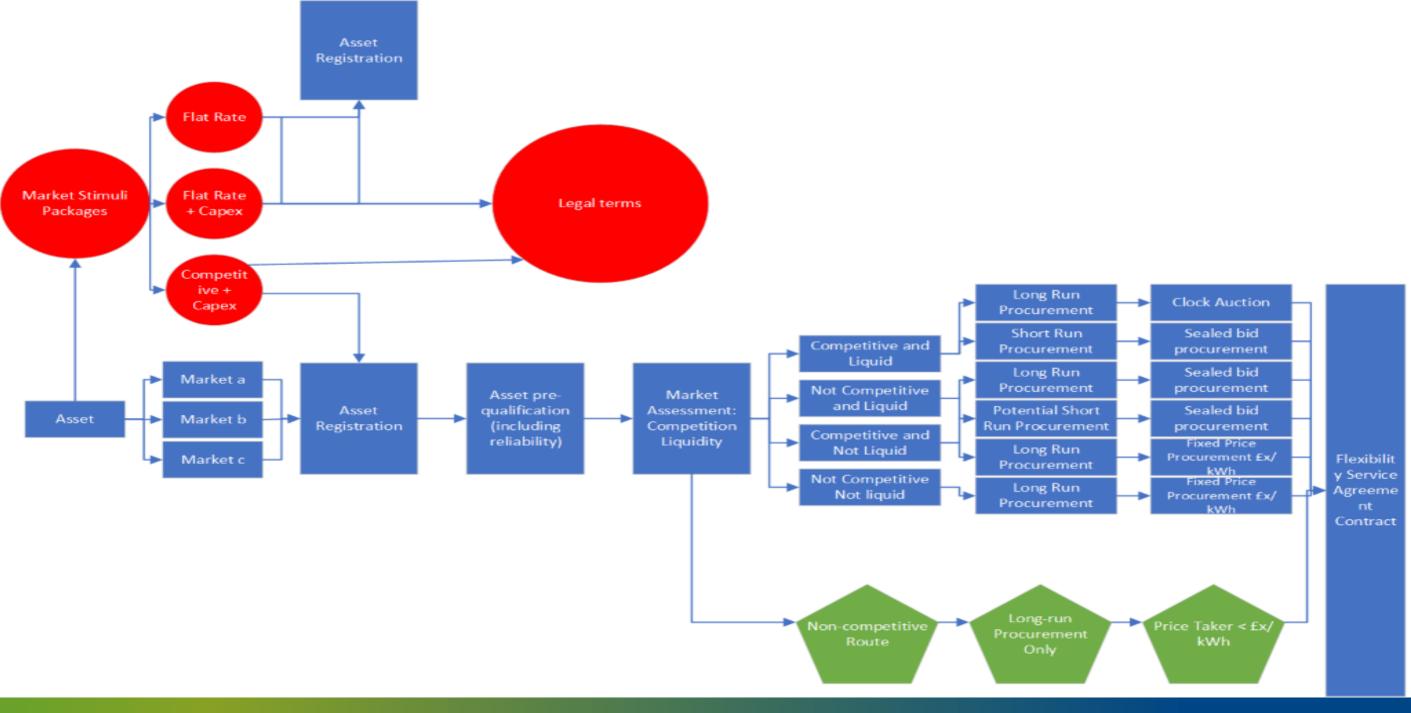














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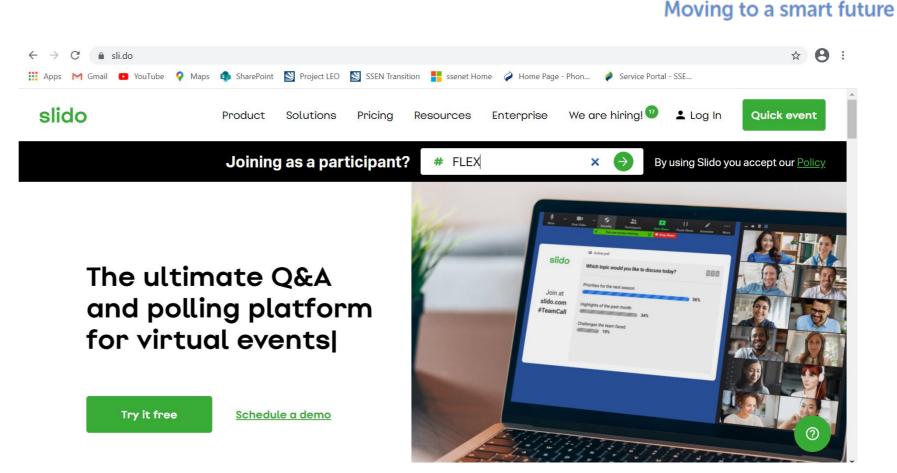
## Time for Slido.....

Using a smart device log into

https://www.sli.do/

You don't need to download anything.

Type in the word FLEX and hit the green arrow.







transition



### **Questions, and more information**

SSENTRANSITION@SSE.COM

https://ssen-transition.com/get-involved/

You can also sign up to receive news and events form LEO here;

https://project-leo.co.uk/stay-connected/



