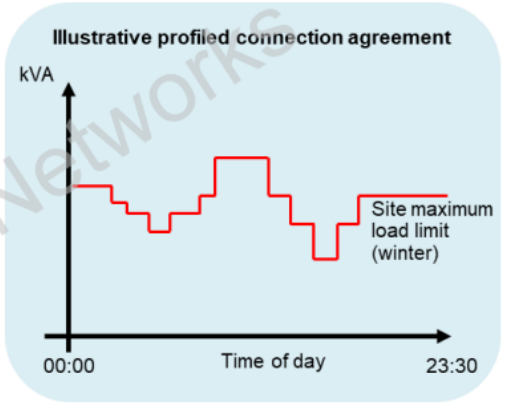
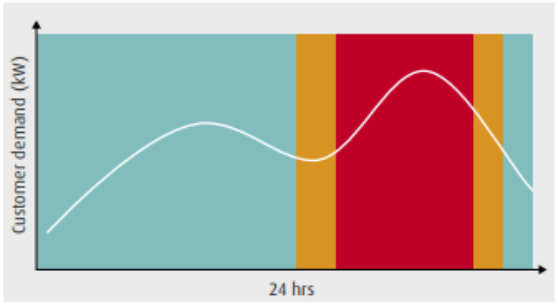
Distribution Commercial Mechanisms

	Connections	Distribution pricing	Flexibility services
Overview	Connection fees generally reflect the impact of a connection on network capacity or security. This incentivises more flexible design or operation of connections.	Distribution pricing enables EDBs to recover the cost of distributing electricity from consumers. Prices are intended to signal the economic cost of service provision to inform recipients' decision-making.	Paid services used specifically to support efficient use of the electricity network. This could include demand turn-down or generation-turn up at specific times or locations
Value exchange	Connection charges	Published tariffs	Procured service contract
Participant/ recipient	Connecting customers	Industrial and commercial (I&C) customers, retailers	Flexibility providers, I&C customers
Contractual arrangement	Customer Contribution Policy, Distributors' Connection Standards / Agreement	Default Distribution Agreement & published participation criteria	Direct agreement, possibly using standard product definitions to the extent possible
Funded source	Customer and/or Distribution allowances (net of capital expenditure)	Distribution revenue and revenue washup mechanism	Distribution allowances

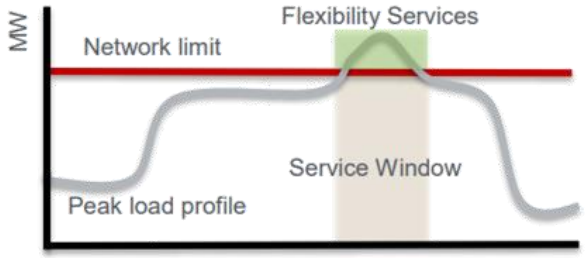
Case studies

	Connections	Distribution pricing	Flexibility services
Historic	• Behind the meter optimisation	• Ripple hot water control • Night store heating • Peak charges / control period demand	• Bilateral agreements with specific large consumers and large DG
Today	• Static operating limits/envelopes	• Static time of use price signal	• Flexibility RfPs (dynamic) • Microgrids
Future	• Dynamic operating envelopes • Options for tailored reliability	• Dynamic operating envelope • Location- and time-varying distribution pricing	• Dynamic operating envelope • More aggregated and location-specific contracting through tenders • "Spot" flexibility purchases





Group 2



What impacts the value?

- Value of flexibility is very location-specific as it depends on the cost and circumstances of traditional solutions being avoided or deferred – the more highly optimised or the greater the synergy benefits the less value there is for NWAs
- Accuracy of forecasted load growth
- Value of flexibility (and deferred capex) is sensitive to time value of money and inflation
- Whether there is value stacking within the distribution network e.g. LV vs HV vs subtrans network deferral
- Any accessible upstream value that can be bundled (e.g. transmission lines)
- Effectiveness and reliability of flexibility – how risks are allocated across the parties
- Customer contribution policy used by each EDB

Next steps

- Estimating value ranges for a range of EDBs and/or case studies