

# Unlocking the Energy Future for the North - 7 December 2018

## Discuss with us:

- 1 The transition to a low carbon, decentralised and much more active network
- 2 Delivering an energy network that is prepared for the realities of a changing climate
- 3 Reshaping our network, enabled by new technology, so that it is more responsive to the needs and views of our customers

*Keeping our promises*  
**Innovation to drive long-term  
customer benefit**

**Jim Cardwell**  
Head of Policy Development

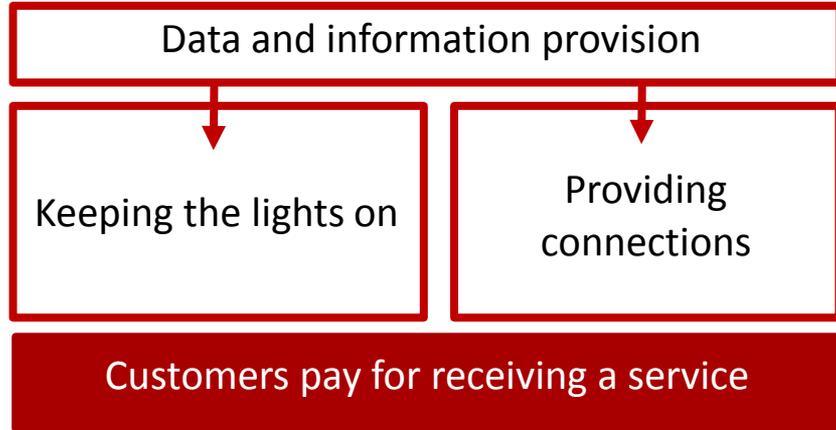


# An evolving world

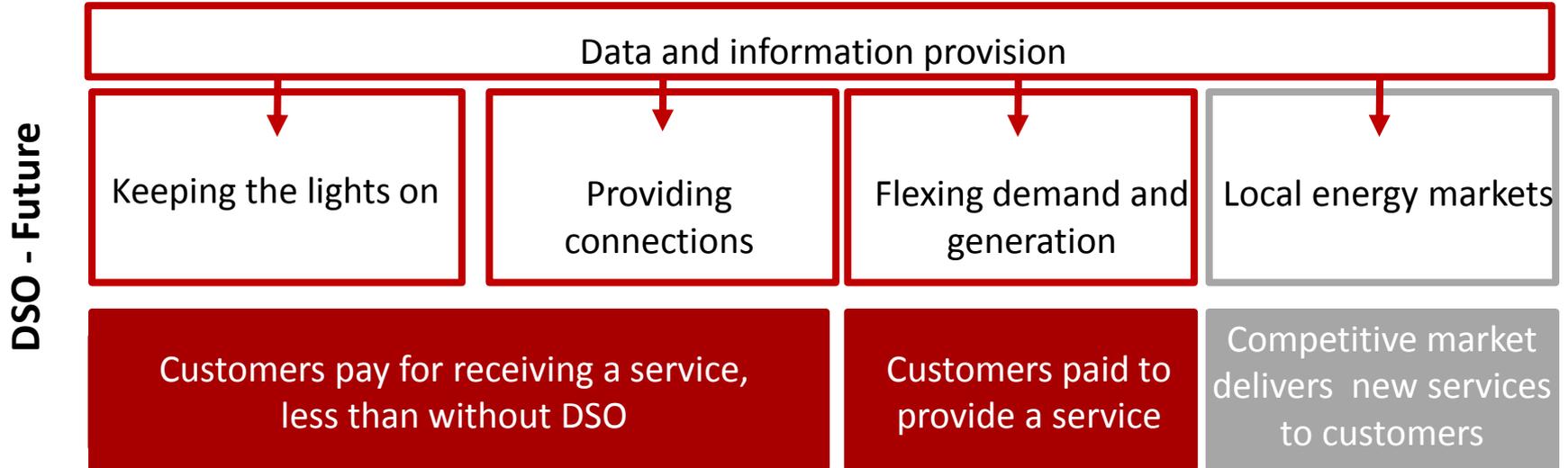


# What DSO means for our customers

DNO - Today

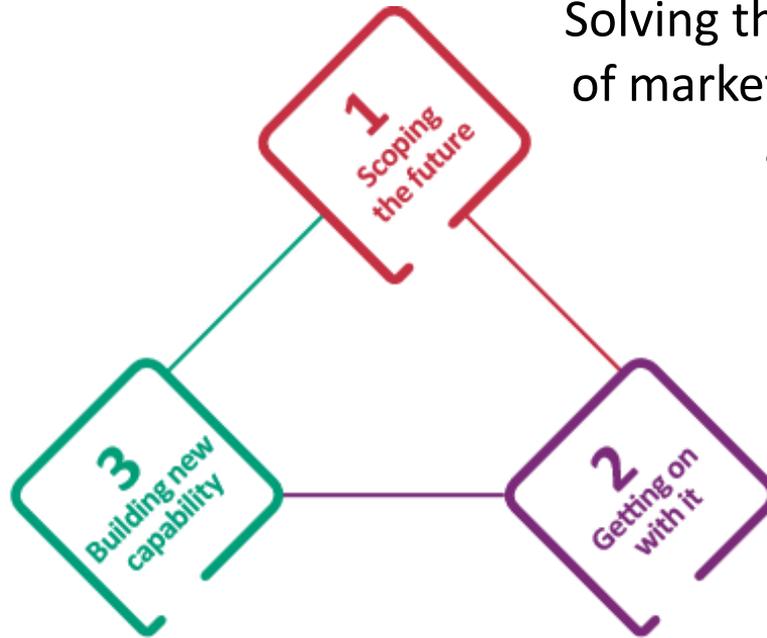


# What DSO means for our customers



# Our approach to being the DSO

Providing new infrastructure and processes



Solving the big open questions of market design and industry architecture

Low regrets steps to implement, demonstrate and learn

# Exploring the future: our innovation portfolio



## Future services: our guiding principles

1. Led by our customers' needs

2. Promotes sustainability by being efficient, fair and inclusive, and better for the environment

3. Requires a right-sized regulated business supporting competitive markets for flexibility

4. Changes to duties that optimise the system as the volume of distributed energy resources increase

# DSO V1.0: implementing first phase of customer flexibility



**2019-2023**

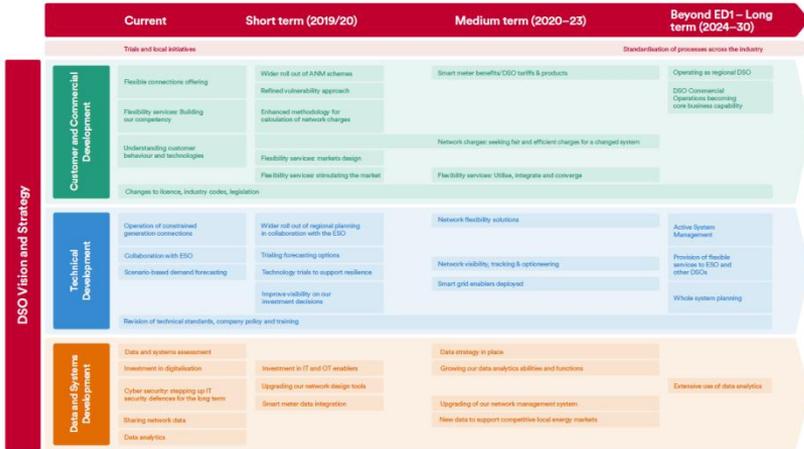
Capacity required for flexibility  
up to 14 sites, 16MW



**2023-30**

Capacity required for flexibility  
Up to ca. 40MW

# Our emerging thinking: potential pathways to 2030



- **Customer and commercial development** – developing deep and liquid flexibility markets through co-ordinated actions with customers and the sector
- **Technical development** – cost effective deployment of well-targeted and well-timed investment smart grids
- **Data and systems development** – embracing the opportunities to revolutionise our service delivery

## Engagement objectives:

**ENGAGE**

**Provide clear  
information**

**Seek  
challenge**

**Ensure  
opportunity  
to inform  
our thinking**

# Dialogue welcomed

- ✓ Today – stakeholder validation of our DSO V1.0 thinking
- ✓ Events - **23 January 2019**, DSO event, London
- ✓ Newsletter
- ✓ Email:  
[yourpowergrid@northernpowergrid.com](mailto:yourpowergrid@northernpowergrid.com)

Northern Powergrid Stakeholder Summit – 7 December 2018

**DRAFT DISTRIBUTION SYSTEM OPERATOR (DSO) V1.0 DOCUMENT**  
**STAKEHOLDER VALIDATION STAGE**

The attached document is a pre-design and well-developed draft of our DSO v1.0 next steps and emerging thinking document. We are seeking and welcome your comments today.

We are planning to complete and sign this off with our executive team next week following the Stakeholder Summit. Our expectation coming in to today is that we will publish prior to Christmas such that all stakeholders, not just those present, may engage with its content prior to further events scheduled for Q1 2019. However, this plan is not set in stone and depends on what you say today.

We hope that we will bring to life some of the content in the discussions today. We would also welcome any comments on Slido or even annotated on this front sheet (or document pages) and placed in the drop box before you leave.

Thank you

NAME
COMMENTS