Electricity Transmission

Managing Electricity Network Reliability

26 March 2019

nationalgrid

Welcome to the Managing Electricity Transmission Network Reliability

- Thank you for joining us! You will be joined in listen only mode.
- Please do not unmute yourself or turn your camera on.
- We will run polling to get your input and welcome any questions via the chat function throughout the session.
- There will also be an opportunity to ask questions in Q&A – please use the chat function
- Please note we will be recording this webinar
- The recording, slides and Q&A will be made available on our website

Document Link

This webinar is part of a programme of engagement to build our business plans for the RIIO-T2 period. You can get involved through our website:

Get involved website

Welcome to the Managing Electricity Transmission Network Reliability webinar

Throughout the presentation please feel free to provide feedback or ask questions via the **chat function** and we will pause at points to respond

We will be using the **polling function** at certain stages during the presentation to collect your views and feedback

We will have a **question and answer session** at the end of the webinar, which we will use to cover any additional questions you may have submitted through chat function

Agenda

Introduction and context

Reliability vs Resilience

Interactions

Measures

Interventions

Next Steps

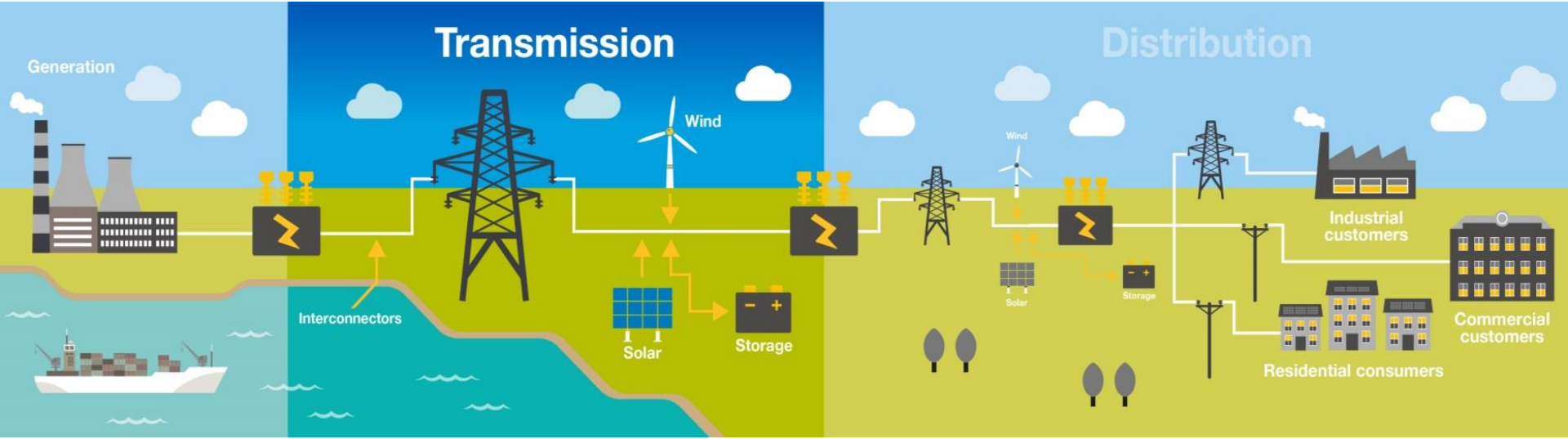
Q&A

Your hosts:

Dan Penny, Asset Lifecycle Manager

Damien Culley, Circuits Lifecycle Manager

National Grid Electricity Transmission



Poll Question 1

On a scale of 1-5, how would you rate your own understanding of reliability?

1. Expert understanding
2. Good understanding
3. Fairly Confident
4. Not great
5. I don’t know anything about reliability

Reliability

Reliability

Day-to-day challenges of running a network, within 'normal' operating conditions

Resilience

'the ability to withstand and reduce the magnitude and/or duration of disruptive events, which includes the capability to anticipate, absorb, adapt to, and/or rapidly recover from such events' (FERC, 2018)

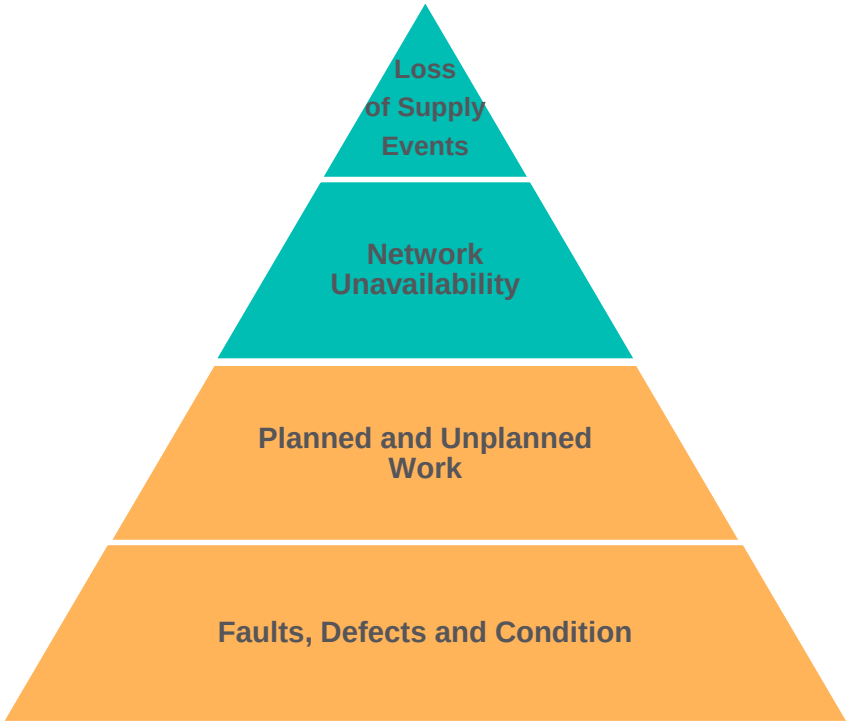
By current (2017/18) measures
NGET's system is **99.999984%** reliable

Polling Question 2

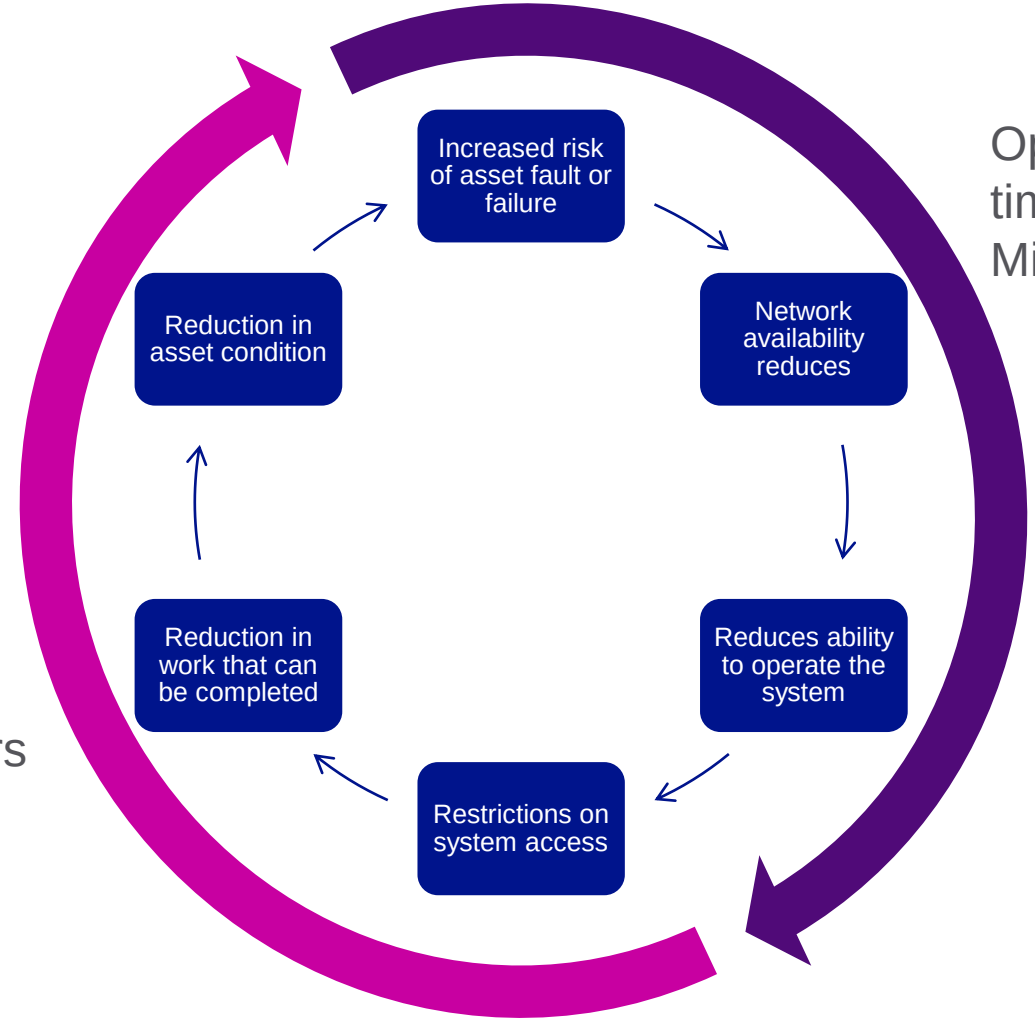
Do you have a better understanding on the difference between reliability and resilience?

A. Definitely Good understanding
B. It's much better, thank you
C. I still don't understand

Performance Triangle



Interactions



Operational timescales: Minutes/hours

Planning timescales: Months/years

Polling Question 3

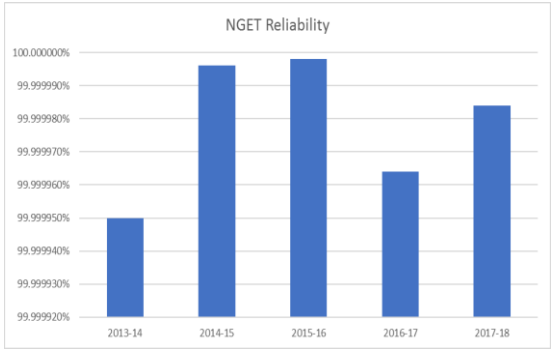
To what extent do you agree that the decisions we make in RIIO-T2 impact the long term reliability of the network?

A. Fully agree
B. Somewhat agree
C. Somewhat disagree
D. Fully disagree

Measures

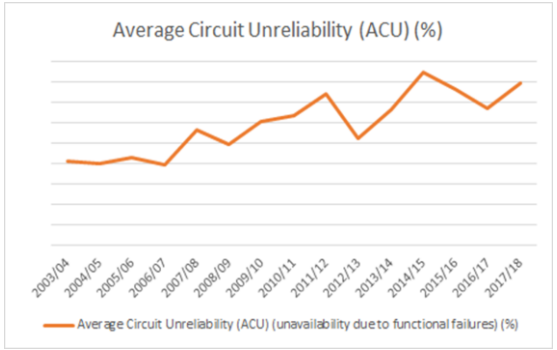
Energy Not Supplied

- Incentivised to reduce loss of supply events
- Penalised if loss of supply too high (max £48m p.a.)



Average Circuit Unreliability

- Measures proportion of network switched out due to faults or defects



Network Risk

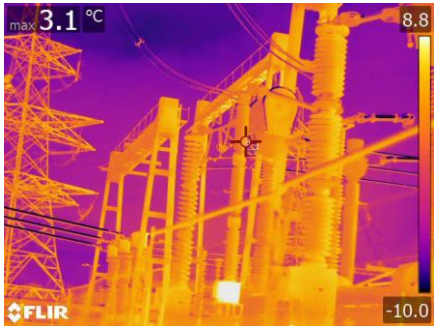
- Considers asset probability of failure and consequence

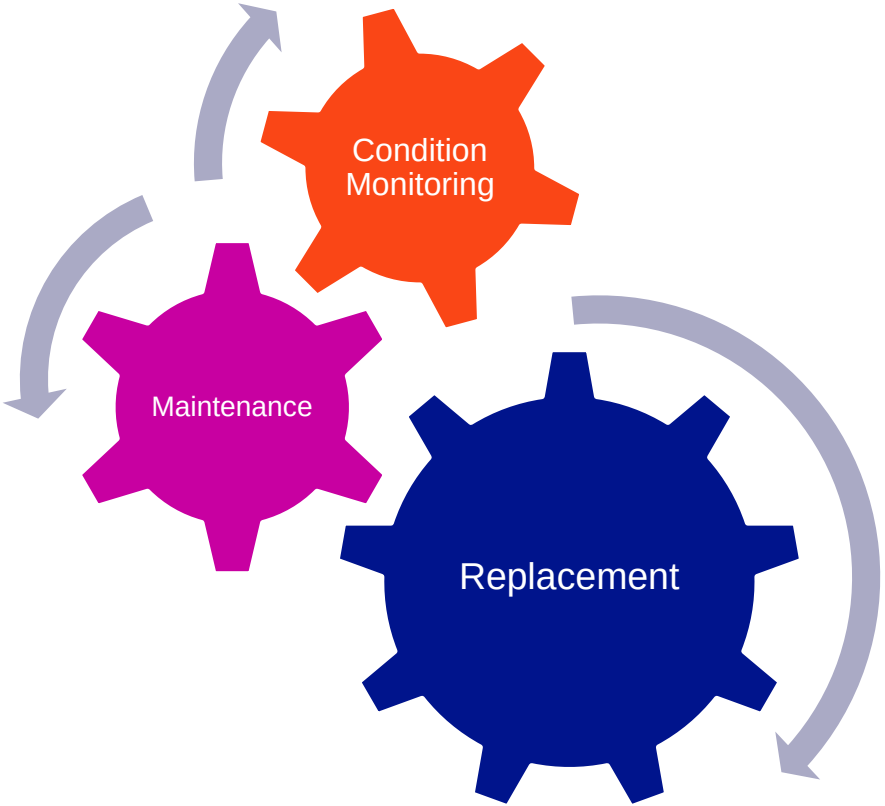
Polling Question 4

To what extent do you agree that these measures provide a sufficiently broad representation of reliability?

A. Fully agree
B. Somewhat agree
C. Somewhat disagree
D. Fully disagree

Interventions



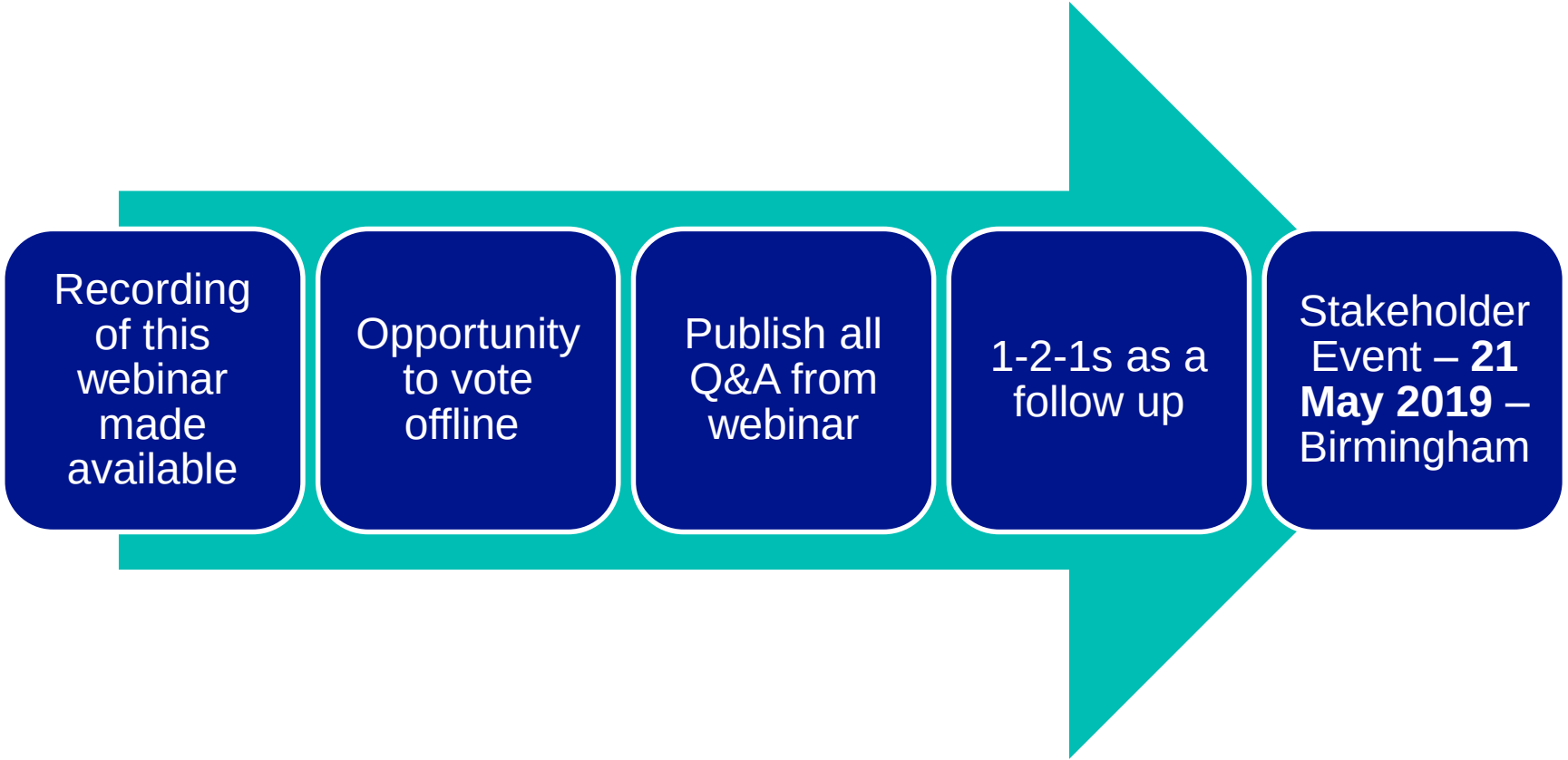


Polling Question 5

Do you have a better understanding of the levers we use to manage reliability?

A. Definitely
B. Better
C. I still don’t understand

What next?


Recording of this webinar made available
Opportunity to vote offline
Publish all Q&A from webinar
1-2-1s as a follow up
Stakeholder Event – **21 May 2019** – Birmingham

Polling Question 6

On a scale of 1-5, how would you rate your own understanding of reliability?

1. Excellent
2. Good
3. Not sure
4. Not good
5. Terrible

Polling Question 7

Based on what you've heard today, what themes do you want to see at our May stakeholder event? Free format text

QUICK POLL

Any Questions?

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