

Distribution Sector Resilience, Responsiveness and Cost Efficiency Restoration Performance

Stakeholder Engagement

May 17, 2023

Ceiran Bishop
Director, Critical Initiatives

Purpose of the meeting

Follow-up due to feedback regarding proposed restoration performance metrics.

Highlight importance of measuring restoration performance.

Explore key concepts on reporting and measurement

Importance of Restoration Performance



Enable Setting of Customer Expectations



Identify and Replicate Successful Approaches
across the sector



Substantiate Future Funding Requirements

Restoration Performance Assessment - Objectives

Maintaining Safety During Restoration

Ensuring Value for Money

Improve Transparency

Promoting Continuous Improvement

Sharing Best Practices

Focusing on Outcomes for Customers

London Economics Report – Finland

Restoration Performance Policy

- Targets for outages caused by storms or heavy snowfall.
 - 6 hours for urban areas
 - 36 hours for rural areas
- Targets enforced gradually
 - 50% of customers by 2019
 - 75% of customers by 2023
 - 100% of customers by 2028
- Target date later updated to by 2036.

Observations

- Absolute targets with no flexibility.
- Led to costly solutions by utilities (e.g., excessive undergrounding).
- Rate increases greater than expected.
- Evidence of a mismatch between the policy instrument and the conditions under which a distributor operates.

London Economics Report – United Kingdom

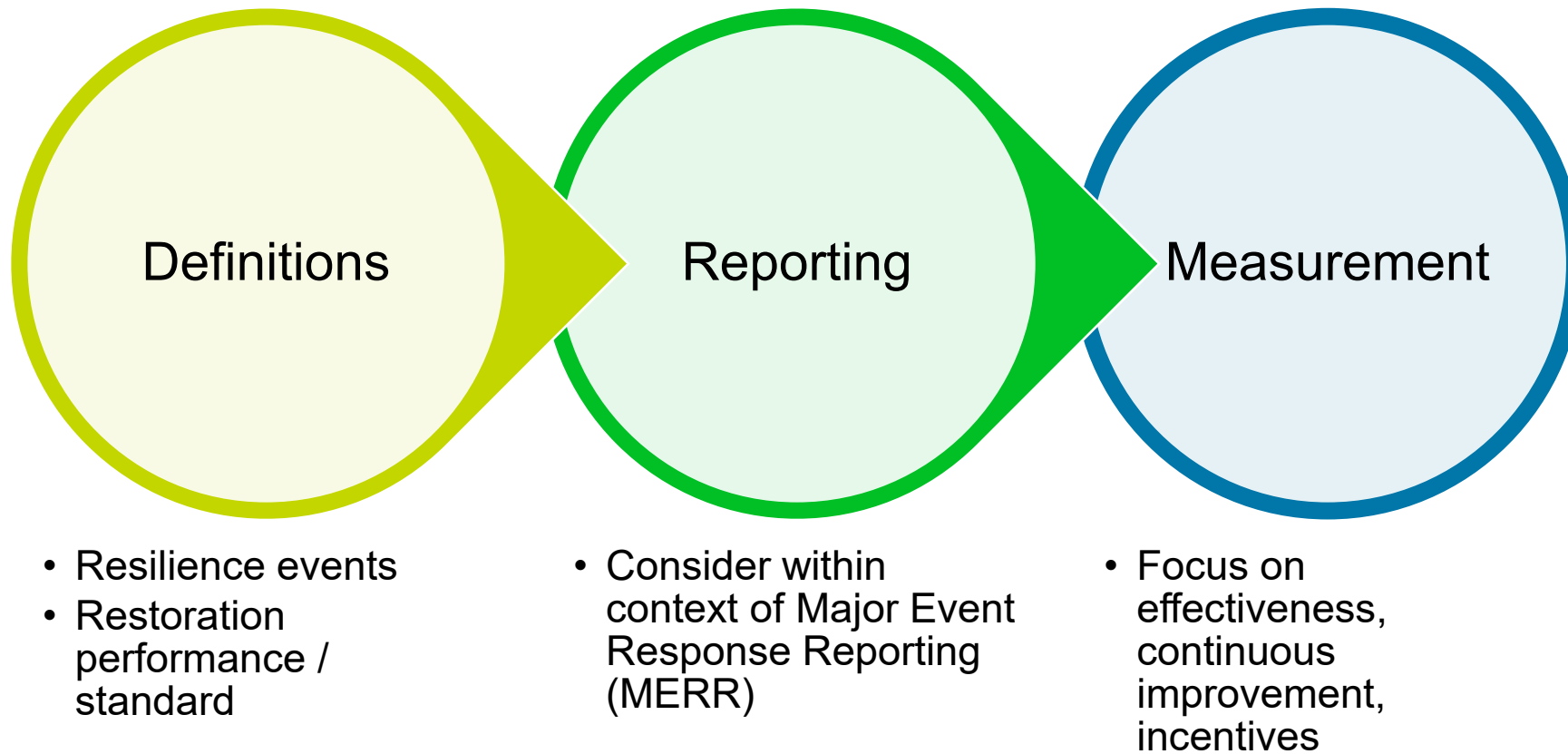
Restoration Performance Policy

- Defined severe weather event
 - Category 1 – 8-12 times average faults in 24-hour period
 - Category 2 – more than 13 times average faults in 24-hour period
- Restoration expectations (before compensation applies):
 - 24hrs for Category 1
 - 48hrs for Category 2
- Initial customer compensation of £80 and additional £80 every 12 hours, capped at £2,000 per customer.

Observations

- Quantitative approach to event definition.
- A step function for restoration expectations.
- Magnitude of penalties may distort incentives for distributors.

Sequencing of Approach



Reporting - Key Concepts

- What information can be collected / reported on distributors' restoration after the event?
 - Impacts of the storm (e.g., damaged assets, costs, # of customers being interrupted, duration of the interruptions)
 - Distributors' efforts (# of staff hours, preparation & training)
- How can we build upon the MERR to capture the information for “resilience event”?
 - “Major Event Response Reporting” - outlines the distributor's response to the Major Event. The report is required to be submitted 60-90 days after the event.
- What information can provide input / insight to support distributor with future planning of resilience?
- What are the key factors / considerations for assessing a distributor's effectiveness at restoration?

Measurement - Key Concepts

- What are the benefits of measuring distributor's restoration performance?
 - Allows the accuracy of the vulnerability assessment to be verified
 - Allows the appropriateness of the plan to be assessed
 - Informs the distributor's overall planning and operations
- What are the criteria for good restoration performance?
 - Degree of deviation from restoration plan
 - Critical infrastructure was identified and addressed appropriately in response
 - Efficient use of labour to restore power
 - Timely restoration of power
 - No injuries to workforce or customers
- How can these criteria be measured efficiently?

Questions & Answers



Appendix: Context – Letter of Direction

Deliverable



Provide “*advice and proposals to improve distribution sector resiliency, responsiveness, and cost efficiency*”



Expectations

LDCs will continue to...

1

Provide high levels of reliability & resiliency

2

Be responsive to consumer expectations & government mandates

3

Do it all at an affordable price

Climate Change Resilience

The OEB will have an important role to play in ensuring that LDCs are preparing their infrastructure for [extreme weather] events...

Ensure proposals reflect...

i

Current & anticipated future extreme weather impacts

ii

Best practices in climate change resilience

Key Enablers

LDCs will need greater capacity to meet these expectations – capacity that can be enabled by aggressively pursuing efficiencies through...

A

Consolidation or enhanced shared services

B

Adoption of innovative technologies & processes

C

Collaboration on responsibilities like cybersecurity

D

Changes to utility remuneration & incentive structure that ensure right investments