Optimising Asset Replacement Timing

The following problem statement has been developed by the innovation teams within the UK’s Gas and Electricity Networks for the 2024 Energy Innovation Basecamp.

Theme: Maximising Use of Existing Infrastructure

Network Areas: Electricity Distribution

What is the problem?
DNOs are always searching for solutions to increase the efficiency of their network, particularly around asset optimisation and those that are particularly at the tail end of their life cycle. There is very limited re-use case for assets beyond their eventual decommissioning and therefore there may be added benefit if the timing of ageing asset replacement were to be explored.

What are we looking for?
We would be interested in understanding if there are underlying benefits from potentially increasing and/or decreasing the asset lifecycle. i.e. how beneficial is procuring flexibility and to what effect does it slow the aging of an asset. Conversely, to what extent can you override an asset given that it is known to be replaced in the near-term future. What benefits would a DNO potentially see in doing this and to what limits are DNOs allowed to push assets at the end of their life?

What are the constraints?
The solution must consider a range of assets and manufactures.
The solution must inform potential changes to policy, if required.
The solution must consider all voltage levels.

Who are the key players?
- DNOs
- Consultants
- Asset Manufacturers
- Policy Makers

Does this problem statement build on existing or anticipated infrastructure, policy decisions, or previous innovation projects?
The potential project would have to look at ways to influence the next iterations of policy and decision making on the basis of the generated benefits.

What else do you need to know?
N/A

Innovator submissions to this problem statement will be open here during March and April, but we encourage you to submit your response as early as possible, as networks will be able to review submissions as soon as they come in.

You can also use the virtual Q&A on the Smarter Networks Portal to ask for more information about this problem statement. Questions may be answered online or at the ENA Problem Statement Launch in March 2024. More information on last year’s Basecamp programme can be found here.