Energy Innovation Basecamp 2026
Problem Statement EIP157

OHL DLR limited by other network assets

The following problem statement has been developed by the innovation teams within the UK's Gas and Electricity Networks for the 2026 Energy Innovation Basecamp.

Theme: Building Better and Faster

Network Areas: Electricity Distribution, Electricity Transmission, Electricity System Operator,

What is the problem?

Dynamic Line Rating (DLR) enhances the utilisation of OHL capacity, however this may be limited by the capacity of other interconnected network assets. How can we reduce this limitation?

What are we looking for?

There is a need for a baseline understanding of the life of existing transformer assets as a starting point. This will inform solutions that remove the normal capability limit (NCL) rating limitation of non-OHL assets, to release higher capability of DLR. The Technology Readiness Level is not limited. Scalable solutions are sought, for deployment across the network, including automation feature to minimise manual workload.

What are the constraints?

The solution must maximise use of existing data sources and initially avoid addition of new monitoring.

Phase 1 - Solutions intended to be non-invasive to expedite benefit quicker, minimising addition of active monitoring.

Phase 2 – Longer term solution could be more sophisticated.

Who are the key players?

Key stakeholders are TOs, DNOs, NESO. Consumer benefit (reduced constraint costs), User benefit (higher load factor), Developer benefit (reduced connection costs and/or earlier connections).

Does this problem statement build on existing or anticipated infrastructure, policy decisions, or previous innovation projects?

Builds on Dynamic Line Rating projects for OHL assets, including SSEN-T's North of Beauly DLR innovation project - Leading the way on dynamic line rating - SSEN Transmission

The System Access Reform initiative, in response to the Electricity Commissioner's report, frames the importance and context of reducing system operation costs for NESO and the end consumer, whilst simultaneously facilitating network upgrades to achieve Pathway to 2030 objectives. The DSR project will therefore require collaboration with NESO and will be reliant on a refreshed ratings management system to fully utilise dynamic data for maximum benefit.

What else do you need to know?

Innovator submissions to this problem statement will be open on the Smarter Networks Portal from 4th February to the 13th March, 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.

Energy Innovation Basecamp 2026
Problem Statement EIP157

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 on 4th February 2026. More information on last year's Basecamp programme can be found on the Smarter Networks Portal.