Energy Innovation Basecamp 2026
Problem Statement EIP164

Stability service from distributed 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: Net zero transition impacts

Network Areas: National Energy System Operator

What is the problem?

To date, NESO procurement of stability services has focused on assets that are transmission-connected, or if embedded, connected at 132kV only. Consequently, NESO is not currently procuring stability services from distribution-connected assets at the DNO level (specifically <132kV). There are concerns about the effectiveness of these distribution-assets in providing stability services and potential conflicts with equipment on the distribution network. Before procuring stability from distribution-connected assets, NESO need to understand the capability of these assets and their ability to provide stability services.

What are we looking for?

In 2023, NESO launched the first tender under the Mid-Term (Y-1) Stability Market to procure stability services. The primary goal of this market was to access inertia capability from existing assets on a high-availability basis. By offering annual contracts, the market provides revenue certainty for participants while reducing risk for NESO, especially as periods of low inertia become more frequent and unpredictable. The first contracts for the Mid-term (Y-1) Stability Market have been awarded and run from October 2025 to September 2026. NESO have since launched the second tender under the Mid-term (Y-1) Stability Market In October 2024 and launched the first tender under the Long-term Stability Market in March 2025.

The stability market is currently seeking provision of stability services from assets that are transmission-connected, or if embedded, connected at 132kV only. In this project we aim to understand the potential of distribution-connected assets to contribute to system stability. Specifically, we would like to understand their effectiveness towards system stability, and we would also like to understand any technical barriers that could be faced when using distribution-connected assets in meeting stability requirements. Ultimately, this will allow NESO to decide whether, based on the findings of this innovation project, if it is appropriate to expand the Stability Markets to procure from distribution-connected assets <132kV.

What are the constraints?

1. Technical effectiveness of distribution-connected assets in providing stability services.
2. Potential conflicts with equipment on the distribution network.
3. The need to explore and understand internal and external factors or technical limitations that may hinder access to these services.

Who are the key players?

1. NESO (National Energy System Operator)
2. Distribution Network Operators (DNOs)
3. Providers of stability services from distribution-connected assets
4. Industry stakeholders providing feedback

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

Yes, it builds on the existing Stability Pathfinders and involves potential developments in the Stability Market. The project aims to explore existing infrastructure and policy decisions related to accessing stability services from distribution-connected assets.

What else do you need to know?

1. Specific technical challenges or limitations associated with the provision of stability services by distribution-connected assets
2. DNO views on the use of distribution-connected assets by NESO for provision of stability services, and how instructions for provision of service can be facilitated
3. Criteria for assessing the effectiveness of stability services from these distribution-connected assets and how DNOs could provide this information to NESO on a sufficiently regular basis.
4. Any existing policies or regulations that may impact the use of distribution-connected assets in the Stability Market or any other markets.
5. As a secondary piece, detailed feedback from the industry regarding the use of distribution-connected assets to provide stability services

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.

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.