

ESRS - Markets and Funding WG Report

Contents

Contents	1
1 Introduction	2
2 Existing Market and Funding Barriers	4
2.1 Barriers and Options to remove based on consultation responses	4
3 Routes to Market.....	5
3.1 Market Based Solutions	5
3.2 Regulated Routes	5
4 Risks & Mitigations.....	6
4.1 Table of Risks	6
5 Impact on Industry.....	6
5.1 Impact on Industry Codes	6
6 Conclusion	6

1 Introduction

The ESO have a licence requirement to meet the Electricity Supply Restoration Standard (ESRS) by 31 December 2026. This new Electricity System Restoration Standard will require ESO to have sufficient capability and arrangements in place to restore 100% of Great Britain's electricity demand within 5 days. It will be implemented regionally, with an interim target of 60% of regional demand to be restored within 24 hours. The Electricity System Restoration Standard will reduce restoration time across Great Britain and ensure a consistent approach across all regions.

ESO commenced work on this requirement by creating industry working groups to understand more about the changes that were needed. This Markets and Funding Mechanism working group is part of a series of 7 working groups, discussing different aspects of a restoration. The Markets and Funding Mechanism working group included members of the National Grid Electricity System Operator (ESO), GB Transmission Owners (TOs), Distribution Network Operators (DNOs) and Generator Owners, with other subject matter experts from across the industry brought in as required. The purpose of this working group was

“To Understand how to further remove market barriers (real or perceived) and assist in the development of agile solutions for restoration”

To commence the working group ESO completed

Strawman initial proposal to prompt discussion

Consultation with industry

The following outputs were delivered by this working group. These are summarised below and presented within the body of this report.

Existing market and funding barriers (real or perceived) and options to remove them

Routes to market

Risks and mitigations

Procurement Principles

Purpose:

To establish the key procurement principles that the ESO will adhere to during the development and delivery of competitive procurement tenders where appropriate to support the ESRS in a way that does not commercially disadvantage individual parties.

There is also an expectation that all parties shall procure any services that will assist the provision of the ESRS efficiently and economically in accordance with Good Industry Practice.

Principles:

ESO shall continue to follow the over-arching Procurement Guidelines as prescribed in condition C16 of ESO transmission licence and shall also be guided by our general principles for procuring any restoration services, such as;

- A clear and transparent requirement.
- Enabling competition where appropriate to provide a fair and level playing field.
- Reducing and removing barriers for all to enable broader participation.

In addition, all parties shall not unduly discriminate to deliver the ESRS. This shall include and not be limited to

- ESO procurement of restoration services.
- TO and DNO funding through their respective price controls to facilitate the ESRS.

To meet the requirements of the ESRS we want to encourage a diverse mix of technologies and locations to provide restoration services. We also need to ensure that costs are optimised and the services are procured efficiently which is best done by procuring these services using competitive markets. Distributed Restart have designed a procurement approach which includes DER contracts as well as DNO asset funding.

2 Existing Market and Funding Barriers

As part of the wider industry engagement, we consulted on the services the Electricity System Operator (ESO) should establish and/or procure to comply with the new Electricity System Restoration Standard (ESRS) and the issues each sector of the electricity industry expect to face in providing, or facilitating the provision of, these services.

2.1 Barriers and Options to remove based on consultation responses

“It is difficult to operate a competitive market for Black Start services when the service providers technical capabilities vary so much.”

“We appreciate the commercial and regulatory difficulties for NG ESO to provide a level of information and transparency that could compromise the realisation of the restoration strategy in GB. However, we would welcome more transparency about the zone requirements and how these are to be covered over time in long term. Without an understanding of the actual needs from the SO and TOs, it is difficult to get a market signal that allows potential providers to invest on new capabilities.”

“We feel strongly that current standard commercial terms greatly disincentivise any form of participation because it offers no mechanism to limit liabilities or any form of indemnity from plant damage. Current standard terms force participants to accept unquantifiable and uncapped liabilities on behalf of their operating company, thereby providing a valuable service for little net reward. We feel that this situation is unsustainable and becomes more relevant with greater levels of complexity and participants involved in a single restoration event i.e. there is greater likelihood of things going wrong and uncapped liabilities being faced.”

“We think that the current commercial framework does not reflect the changing technical abilities of new assets connecting to the grid.”

“Information on pricing, locations, and system requirements should be more widely available. Running longer-term contracts should incentivise capacity to deploy in the right places.”

“Commercial effectiveness should be determined by technical abilities, such as connection voltage and location. For example, using the Pennines reactive power Pathfinder, certain locations and voltages were given 100% effectiveness, with decreasing weightings depending on 1. connection voltage at national grid, and 2. connection voltage at the distribution network.”

3 Routes to Market

3.1 Market Based Solutions

The current market-based solution is via the Tender Process. Having already launched two tenders previously and from the distributed restart project there are experiences and learning points to be drawn which will be considered as such, including:

- Enhance valuing different technologies in each region to System Restoration
- Being clearer and more concise within the tender documents about what information (and format) is required from potential bidders
- Greater understanding of availability of the network and the service providers
- Review weighting of the commercial and technical assessment criteria
- Evolve technical requirements to remove barriers to entry
- Better appreciation of the timeframes of the tender process including submissions of Feasibility studies and the Engineering Procurement and Consultation phase.
- Management of external impacts, such as pandemic on the tender process
- Assessing credibility and suitability of providers beforehand (including financial viability)

3.2 Regulated Routes

The Transmission Owner’s (TOs) are funded to participate through MSIP (Medium Sized Investment Projects) mechanism

MSIP reopener (taken from NGET licence)

3.14.6 The licensee may apply to the Authority for a direction amending the outputs, delivery dates or associated allowances in Appendix 1 in relation to one or more of the following activities:

..... (i) a Black Start Project following the publication by government of a new Black Start Standard, published on or after 1 February 2021;

.....(u) Black Start Projects or a Flooding Defence Project, where the licensee can demonstrate a well-justified needs case.

It will therefore be important that the relevant reopener mechanisms within these frameworks, such as the Medium Sized Infrastructure Projects (MSIP) have the necessary scope and flexibility to accommodate such funding.

DNO ED2 Re-Opener

For the DNOs, Ofgem included a re-opener within their RIIO-ED2 Methodology Decision: Annex 1 - Delivering value for money services for consumers

“We also proposed to have a re-opener for ESR, to cover the costs of workload changes in response to changes in the mandatory resilience period or additional activities that may arise from new obligations once the ESR standard is in place.”

4 Risks & Mitigations

4.1 Table of Risks

Risk Number	Description of Risk	Consequence of Risk	Risk Likelihood (0-4)	Risk Mitigation	Mitigated Likelihood (0-4)
1.	Lack of equivalent funding mechanism for the Secondary DERs as exists for Transmission Secondary Providers	Lack of level playing field for secondary providers across the network	4	Issue flagged to the BSC Issues Working Group	2

5 Impact on Industry

5.1 Impact on Industry Codes

NGESO have raised Grid Code Modification GC0156 to implement the necessary changes to the Grid Code. It is proposed this is a joint Grid Code / Distribution Code Workgroup which will also develop Distribution Code Changes. There will however need to be separate workgroup under the auspices of the other industry code panels (eg STC, SQSS, CUSC and BSC) to implement the full suite of measures required. It has been proposed that the combined Grid Code / Distribution Code should be the first formal Code modification established and the other industry code changes will then follow with the Grid Code taking the lead. The changes related to the Market and Funding Mechanism will mainly impact BSC and CUSC.

6 Conclusion

We acknowledge that further work is required in developing the Markets signals and appropriate funding mechanism, therefore, as the Grid Code solutions are developed, the commercial impact on the BSC and the CUSC will be identified and the framework will be updated accordingly.