National Grid ESO
Faraday House, Gallows Hill
Warwick, CV34 6DA

ESO

Please provide your assessment of each criterion in the below pro-forma:

Product Name	Demand Flexibility Service (DFS)
Product Description	This balancing service is a merit-based margin tool to support the operation of the system and offer alternative economic options whilst providing a route to market for consumer/commercial demand flexibility.
ESO Business Lead	Jonathan Wisdom
RAPID Complete	Yes
RACI Complete	Yes
Planned Go-Live Date	November 2024

Criteria	Assessment
Homogeneity	The Demand Flexibility Service is a homogenous product. This service is open to the market and aggregated loads will typically deliver through either suppliers or third-party aggregators. Should consumers be able to meet the minimum thresholds, they are also able to contract directly with ESO. The product will not have different technical requirements for different providers as they are standardised: - Duration of delivery. Service Requirements will be issued for a minimum delivery period of 30 minutes. - Recovery Period. Not applicable for this service. - Dispatch. ESO will publish any Service Requirement to all parties at the same time through our data portal. This will be issued within day, typically mid to late morning. Parties will have 1 hour to submit their bids and ESO will endeavour to share results with industry through our data portal ~1 hour later. - Location. Procurement will be at a national level. ESO have sought to include reviewing adding a locational aspect to the service in its roadmap activities. - Metering and Baseline. All providers must provide their total half-hour estimated baseline demand/total half-hour readings for the outturn demand of their participating meters. ESO have prescribed a standard baseline methodology which parties must follow. Asset metering is permitted under the service. - No restriction on ramp rate, ESO will shape the requirement so that overall step change is manageable. As long as a provider can satisfy the technical parameters ESO set, the service will be homogenous to ESO, regardless of whether it is provided through/by suppliers, aggregators or directly contracted.
Full Information	As a merit-based margin tool, DFS will be assessed against alternative commercial actions including the Balancing Mechanism and Trading. This means that the requirement issued will not be indicative of the likelihood of contract acceptance, as the requirement would be completely unfilled if no units can beat alternative commercial actions. Therefore, the market does not have full information. The prices in these alternative markets will not be known by DFS participants at the time of tender (and BM prices will not be firm due to the DFS tender being ahead of BM gate closure). Participants will be able to see prices after the fact but will be able to use historical information to support bid submissions. This would risk participants aiming to beat a marginal cost of other actions rather than submitting their own marginal cost, removing the benefits of pay-as-clear. A pay-as-clear market would also be less transparent for the ESO to assess against other pay-as-bid markets (BM/Trades) and could lead to paradoxical rejections. A pay-as-bid structure will allow the ESO and participants to directly compare their prices with other options and actions that the ESO had available once data is published.

<table>
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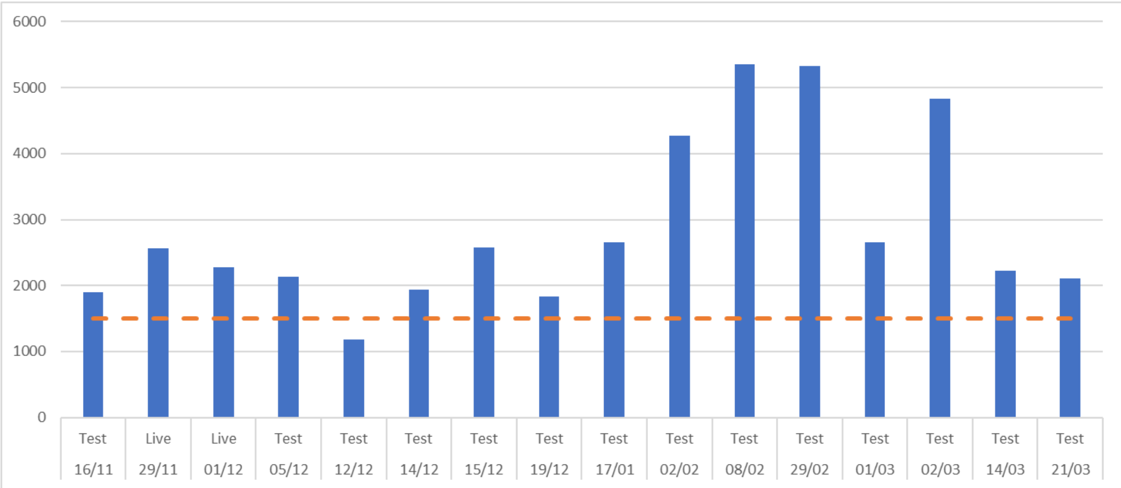
<td>Competition</td>
<td>To understand the competition level in the Demand Flexibility Service market, we calculated the Herfindahl-Hirschman Index (HHI) based on the events in winter 23/24 service, as per the chart below with the competitive market threshold (1500) as the dashed line.



As can be seen from the above graphs, the HHI values generally exceeded the unconcentrated market threshold of 1500 significantly. This indicates that the Demand Flexibility Service market is highly concentrated. The “Competition” criteria (HHI <1500) has not been met.</td>
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Conclusion	The DFS market is still too concentrated for a Pay as Clear (PAC) mechanism. There is potential for market power risk (in the imperfect competitive market, there is the risk that one company may have strong market power to manipulate the market price easily by changing its supply) or distortive behaviour. There is not full information for providers, which would reduce or remove the benefits of a Pay as Clear (PAC) market. Pay as Bid (PAB) therefore continues to be the chosen payment mechanism as it is more efficient for this market.

If Pay as Cleared is not the outcome, further detail is required.

Overall Assessment	**Pay-as-bid**
Description of measure proposed to minimise the use of the Specific product subject to economic efficiency.	The product is intended to be used for economic efficiency, and the ESO is not planning other uses outside of this.
A demonstration that the Specific balancing product does not create significant inefficiencies and distortions in the balancing market inside the scheduling area.	As a merit-based margin tool, ESO will only seek to utilise the service whereby it can provide either an operational benefit due to system conditions or provide an economic outcome compared to alternative actions available to our control room. ESO will continue to apply the industry recognised P376 baseline methodology, removing the within day adjustment to accurately determine delivery of the service. The ESO is also proposing to apply a performance incentive structure to increase certainty in delivery.

	As part of its move to a merit-based margin tool, ESO will be integrating the service with existing decision-making processes to ensure it is considered alongside alternative actions available within our toolkit to manage margin on the system. ESO will continue to share data transparently with the market through our data portal, and volume will be shared with Elexon for the purposes of imbalance calculations.
A demonstration that the Specific balancing product do not create significant inefficiencies and distortions in the balancing market outside the scheduling area.	Following EU-exit, GB can no longer participate in balancing markets outside the GB scheduling area. The ESO requirement and market results will be published so no inefficiencies and distortions in the balancing market outside the scheduling area are expected to be created by the introduction of this service.
Where applicable, the rules and information for the process for converting the balancing energy bids from Specific balancing product into balancing energy bids from standard balancing products. EU Regulation 2019/943	Not applicable to this Demand Flexibility Service as there are no standard products currently in operation in GB.

Date of scheduled review (Insert date 2 years from Go-Live date, to be followed by periodic review every 3 years)	Review date: July 2026