

Demand-Side Flexibility Routes to NESO Markets Review

Quarterly Update 3, Q2 2026

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Introduction

Update on recent key progress

Scope of the Route to Market Review at NESO

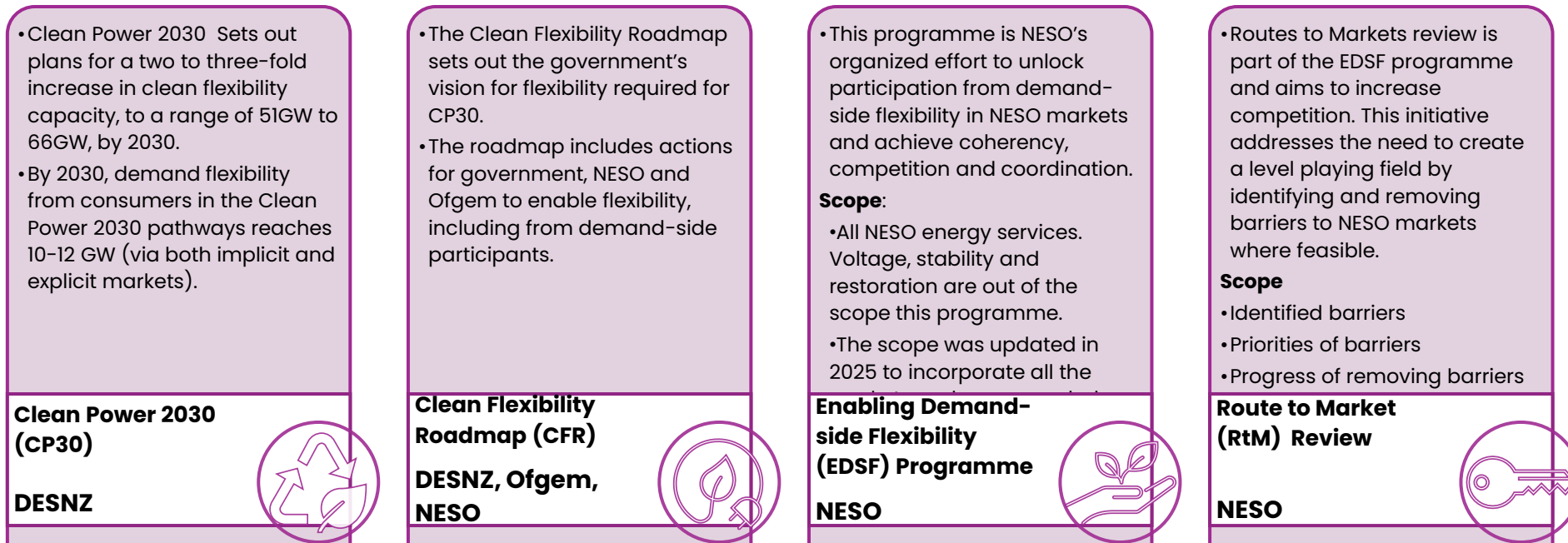
The Demand-Side Flexibility Routes to Market Review is NESO's project for **removing barriers** to NESO services for Demand-Side Flexibility, which were identified in collaboration with industry. It is a part of the [Enabling Demand-Side Flexibility in NESO Markets programme](#) that is seeking to deliver increased **competition**, **coordination** and **coherent** market arrangements for GB, in collaboration with DESNZ, Ofgem, Elexon, DNOs and industry.

By removing barriers, this work is:

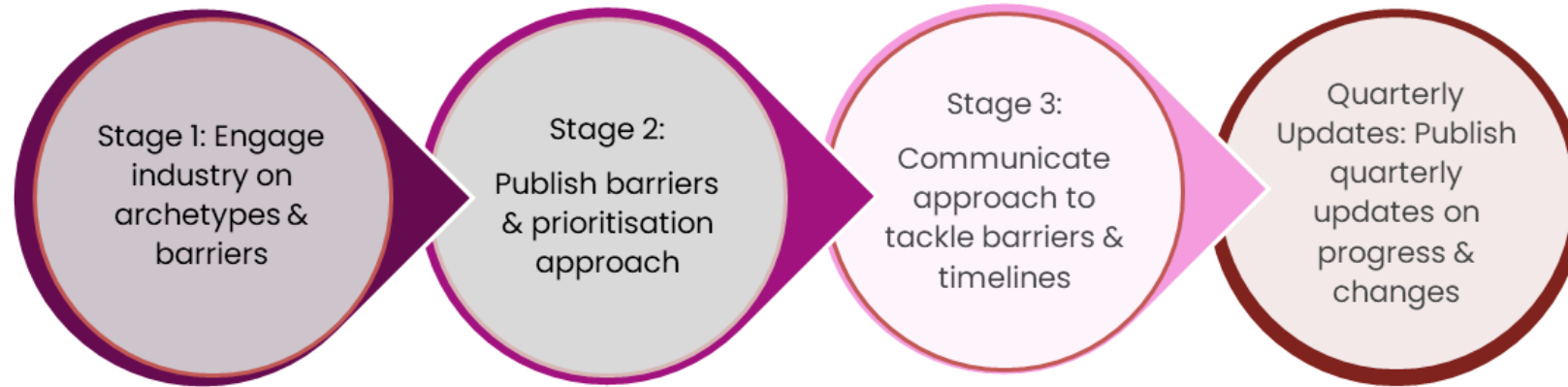
- Unlocking participation from smaller and aggregated assets
- Increasing competition across NESO services
- Improving operational efficiency and predictability
- Enabling coordinated flexibility across GB markets

This supports delivery of Clean Power 2030 and the transition to a more flexible, low-carbon electricity system.

Realising the benefits of these changes will require market participants to evolve their participation and provide feedback to support ongoing improvements.



Stages of the Route to Market Review



- [Stage 1](#) of the review was published in May 2024 and set out to identify barriers for a range of archetypes across NESO services.
- [Stage 2](#), published in December 2024, set out our barrier removal process and approach to prioritisation.
- [Stage 3](#), published in May 2025, included the barrier removal plan and set out our ongoing quarterly update engagement approach.
- The [Q4 2025 update](#) was published in December 2025 and the [Q1 2026 update](#) was published this March. This report published on 29 June 2026, is the third of our quarterly update reports. The quarterly updates include a description of the barriers, NESO's proposed work to remove them and the latest progress update.

Recent progress in removing barriers

Balancing Mechanism (BM)

- As per the skip rate target set at an average of 30% (January to June), skip rates have reduced across most technologies, but Demand-Side Flexibility units remain high and are under investigation. Volume from these units is typically very low and only in-merit for short periods over the course of a day.
- Root cause analysis work to understand the different components causing skips has been delivered, recommendations and next steps are now under review.
- [Methodology for skip rates behind constraints](#) agreed and published in March 2026. Implementation ongoing, with data expected in Summer 2026.
- [Operational Metering](#) Phase 2 commenced in April 2026, with the launch of an innovation project to explore synthetic metering. An RFP went out to suppliers for consulting on 19 June 2026.



Recent progress in removing barriers

Demand Flexibility Service (DFS)

- [Ofgem approved](#) the evolved service design and updated terms on 25 March, with an effective from date of 9 April. These changes are now live:
 - Bi-directional capability (Demand Turn Up and Demand Turn Down).
 - Reduction in the unit threshold to 0.1MW. DFS has procured its first sub-MW volumes since the updated service design and terms.
 - Self-nominated baseline option (I&C/intermittent renewables/generation only).
 - Introduction of 12 Locational Assessment Zones - the ability to define volume requirements by zone to maximise operational and economic value.
 - Facilitation of early primacy processes.
- Events summary since go-live:
 - 56 events delivered in total
 - 33 positive margin events (Demand Turn Down)
 - 23 negative margin events (Demand Turn Up).
 - Positive margin events are showing growing participation and increasing accepted volumes.
 - Negative margin events have seen slower uptake, with participation constrained by resource availability.



Recent progress in removing barriers

Static Firm Frequency Response (Static FFR)

- Proposed [amendments to the sFFR service](#) have been approved by Ofgem (May 2026), effective from 31 July. The key service design changes proposed were:
 - Reducing the frequency trigger level from 49.7Hz to 49.65Hz, with a future ambition of dropping this further to 49.6Hz.
 - Reducing the unit and bid order threshold to 0.1MW.
 - Tighter performance measures in performance monitoring process.
- These changes make the service far more accessible and reliable for Demand-Side Flexibility providers. Lowering the trigger level reduces the frequency of activations, giving industrial users confidence that participation won't significantly disrupt their operations, improving retention and willingness to join. Reducing unit and bid thresholds opens the market to smaller, more variable domestic and aggregated assets, removing a key barrier to entry. Tighter performance measures ensure consistent and predictable delivery across all assets, which builds confidence in Demand-Side Flexibility as a dependable resource for system needs.
- Through the engagement last year, NESO also updated guidance for [performance monitoring data](#), detailing how providers can meet requirements with less frequent meter read intervals at individual assets.



Recent progress in removing barriers

Slow Reserve

- Successful launch of the new Slow Reserve service with the first auction held on 31st March 2026. The introduction of Slow Reserve, and recent change of auction timing for Balancing Reserve, means Dynamic Response and Reserve day-ahead auctions are co-optimised at 2:00pm on our Enduring Auction Capability (EAC) platform. The new Slow Reserve service attracted 21 market participants with an average clearing price of 3.84 (£/MW/h) this new service has reduced minimum bid size, enabled shorter service windows along with access to downward flexibility, this is all part of our work to implement more simplified, flexible and transparent products.

Reserve Reform

- We have launched a [Request for Information](#) as part of our Reserve Reform programme. We are seeking feedback on the journey so far and would welcome market participants input into shaping the future of our Reserve services.



Recent progress in removing barriers

Other progress

- DESNZ have announced a £20m trial run by UK Research and Innovation (UKRI) for removing Final Consumption Levies (FCLs) from Demand Turn Up, and their intention to bring forward legislation as part of the [RNP Delivery Plan publication](#). NESO are supporting both the trial scoping as well as the enduring policy implementation process.
- Following successful launch of DfC RFI in March 2026, NESO is continuing to progress the detailed design of 'Demand for Constraints' (DfC) as part of the [Constraints Collaboration Project](#). This is a long-term contract to incentivise new, flexible demand capacity in certain areas to alleviate thermal constraints. Further updates were also shared at the Demand for Constraints Commercial Design webinar on 23 June 2026.



Recent progress in delivering CFR Actions

Clean Flexibility Roadmap (CFR)

The [Clean Flexibility Roadmap](#) was published in July 2025 in collaboration with DESNZ and Ofgem. The Routes to Market Review is recognised as fundamental to the CFR and has been included as an action (33a) in its own right. Additionally, NESO has made a number of commitments in the roadmap including a range of initiatives focusing on growing the non-domestic flexibility market. An update on the CFR will be published soon.

CFR Actions for NESO, relating to consumer-led flexibility and markets*	Progress
Increasing non-domestic flexibility capacity. (7a)	NESO set a minimum ambition to deliver an additional 750MW of industrial and commercial flexibility through NESO Markets by 2030. The focus now is on translating this strategic signal into delivery.
NESO large loads engagement. (7b)	NESO's outreach campaign to non-domestic groups went live in October 2025. Current activity is focused on identifying common barriers and working with the identified industrial and commercial businesses to help transition them from interested to onboarded.
Non-domestic onboarding support. (7c)	NESO set up an onboarding support team in November 2025, developed for non-domestic customers, suppliers and aggregators for an improved digital experience. Ongoing activity is focused on refining processes, clarifying roles between NESO and market participants, and resolving common onboarding friction points.
Consumer carbon savings report. (7d)	A workshop was conducted within Power Responsive in order to find out whether carbon-savings information or other non-financial incentives could be used to increase participation in the Demand Flexibility Service (DFS). It was concluded that there is interest in such information. The April 2026 published report sets it out in detail. Next steps steps are finalising the methodology.
Non-domestic evidence base. (7e)	NESO supported DESNZ and Ofgem to compile the evidence base, which is continually updated. The three organisations, launched the forum in December 2025, and we continue to engage actively.
Route to Market (RtM) Review. (33a)	This report published on 29 June 2026, is the third of our quarterly update reports.
Skip Rates. (33b)	Skips Rates Dashboard including Demand-Side Flexibility published on NESO's webpage. Further analysis work is ongoing to understand underlying causes of skips, such as system constraints, forecast errors, and operational decisions that lead to skips (see slide 20).
Longer term direction of travel for LCM and DFS is designed and communicated. (33c)	The new DFS service launched on 14 April. Progress on LCM is being tracked, and we will provide updates on evolution regularly.
Distributed Energy Resources (DER) integration. (33d)	TIDE roadmap consultation was published at the end of March. NESO engaged with industry to get their feedback during the April consultation period, receiving 22 responses from a broad range of industry stakeholders. These are systematically reviewed and reflected in ongoing development of NESO's roadmap thinking, followed by approval and publication by August 2026.



Plan on a page

This section sets out the planned timeline for removing identified barriers. The plan reflects both NESO-led activities and broader industry dependencies, helping stakeholders understand when changes will take effect and how they align with wider industry initiative timelines. A deeper dive into each project will be provided in the following section.

Barrier removal programme plan (Q2 '26)

External activities
NESO timeline change

Barrier removed - expected
Barrier removed - indicative

Quarters are calendar years throughout this report		2026				2027				2028				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Onboarding	B16 Registration & onboarding of assets	Continuous improvement of onboarding & registration systems, processes & information												
	B15 Visibility of service information	Onboarding team supporting non domestic consumers & aggregators/suppliers & improved digital experience												
Procurement & Dispatch	B10.1 & B10.2 Sub-MW & Non-Integer	Options assessment		Detailed design & implementation subject to outcome of Options Assessment.										
	B13 Aggregated BMU location	Downstream systems to use granular aggregator data												
	B12 Skip rates	Phase 2 Skip Rate programme activities												
	B11.1, B11.2 & B19 Barrier to participate in NESO services due to mechanisms designed to protect DNO capacity	NESO-DNO risk of conflict data exchange	Application of Primacy in DFS	Market Facilitator proposal: Primacy in other services										
	B10.1 & B10.2 Sub-MW & Non-Integer	DFS	sFFR											
Settlement	B9 Imbalance & compensation	BSC modification for NESO ancillary services												
Metering & Baselines	B1.1, 1.2 Operational metering	Phase 1 Phase 2												
	B2 Smart meter data access	Consumer consent solution MMP Consumer consent solution iterative releases												
	B5 Measuring Instrument Regs	DSIT												
	B14 Procurement in EFA blocks	Needs assessment standardised 30 minute for Response services												
	B7.2 Cross Service Baselineing	NESO and DSO services aligned, in line with Market Facilitator Flexibility Market Rules												

Procurement in EFA blocks: timeline change explained in slide 18.



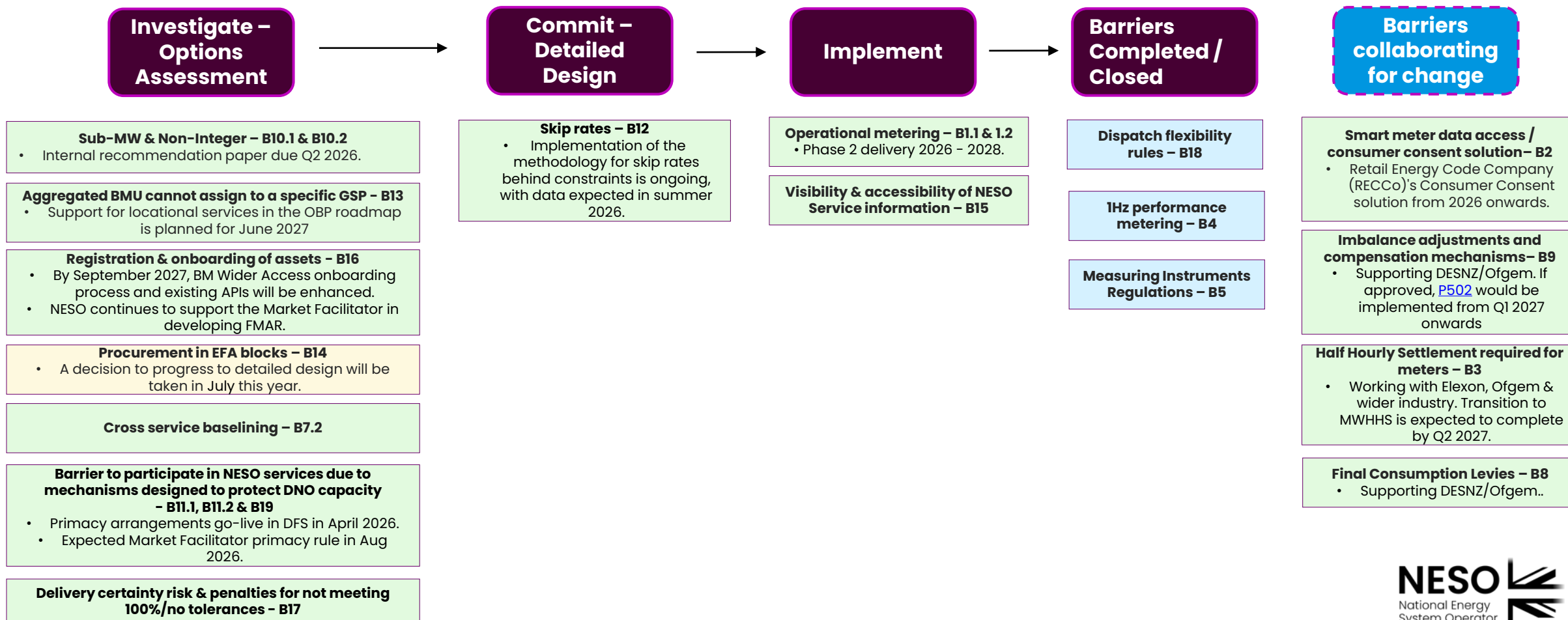
Zooming in: Detailed Project Updates

Removing barriers requires sustained action across multiple fronts. Barriers are grouped according to the stages they are currently in.

In this section, we provide a description of each barrier, the proposed work, including the latest update on it and a RAG rating illustrating NESO's progress.

Where Each Barrier Stands Today

- This diagram highlights where each barrier sits in the removal process. B numbers refer to the barrier number & description from our [stage 2 report](#).
- The RAG ratings illustrate NESO's progress:
 - Clear – No workplan has been defined.
 - Red – No work has been delivered.
 - Yellow – Work is slightly behind schedule.
 - Green – Work is on track.
 - Blue – Work has been completed.



Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Delivery certainty risk & penalties for not meeting 100%/no tolerances	<p>Some Demand-Side Flexibility Providers are concerned about penalties and the lack of tolerance for not delivering 100% of committed capacity across NESO services.</p> <p>While penalty and delivery-accuracy requirements do exist, they are often highly technical, service-specific, and not clearly or consistently communicated, creating uncertainty for providers.</p> <p>Comparisons with international approaches (such as Energinet's T90 model, which allows limited under-delivery) have raised questions about whether NESO's near-perfect delivery requirements may unnecessarily restrict participation from more variable or aggregated flexible resources.</p> <p>There is a lack of clarity, consistency, and visible guidance, alongside a question over whether NESO should explore tolerance-based or probabilistic models used internationally.</p>	All	<p>NESO should review and clearly articulate the delivery-accuracy and penalty frameworks that already exist across its services, ensuring they are transparent, consistent, and proportionate. This may include:</p> <ul style="list-style-type: none"> • Consolidation and clarification • Benchmarking and design options • Future framework development 	<p>For each NESO service, there is a guidance document which sets out the performance monitoring approach, including applicable tolerances. These tolerances are defined in the service terms and supporting guidance published on the NESO website. The new onboarding flexibility webpage directs users to each service page, where the relevant guidance documents can be accessed.</p> <p>In addition, the increasing use of day-ahead procurement across NESO services has improved forecasting, which supports more effective performance monitoring.</p> <p>NESO is not considering a probabilistic approach similar to Energinet's P90 model. NESO's performance monitoring approach, including tolerances, has been subject to industry consultation and approved by Ofgem as part of the service design process. Further rationale is therefore available through those consultation materials and approvals.</p> <p>In the absence of further feedback, this barrier will be marked as completed/closed in the Q3 update.</p>	B17	

Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Sub-MW & Non-Integer	<p>Most NESO markets require minimum 1MW, Integer-Sized bids, which prevents Sub-MW and Non-Integer bids from participating. This limits access for smaller assets and aggregated portfolios, reducing efficient utilisation of distributed flexibility and weakening competition in NESO markets.</p> <p><u>Pre-reform:</u></p> <ul style="list-style-type: none"> Balancing Mechanism: does NOT allow Sub-MW & Non-Integer bids. Frequency Response & Reserve (including sFFR): does NOT allow Sub-MW & Non-Integer bids. DFS: does NOT allow Sub-MW, allows Non-Integer bids. Local Constraint Market (LCM): DOES allow Sub-MW & Non-Integer bids. 	<p>Sub-MW: all except LCM</p> <p>Non-Integer: all except DFS & LCM</p>	<p>NESO are reviewing reforms to allow Sub-MW & Non-Integer bids in all NESO markets:</p> <ul style="list-style-type: none"> Balancing Mechanism: Industry workshop in April and internal recommendations paper in June. Frequency Response & Reserve: Industry workshop in April and internal recommendations paper in June. <ul style="list-style-type: none"> Proposed amendments to the sFFR service, in particular 0.1MW, have been approved by Ofgem (May 2026), effective from 31 July. DFS: Consulted on DFS 0.1MW reform (Nov 2025). Ofgem approved the proposal on 25 March with an effective from date of 9 April. This change is now live. 	<p>BM and Frequency Response & Reserve internal recommendations paper in June.</p> <p>sFFR proposed amendments approved by Ofgem in May. Changes go live on 31 July.</p> <p>Ofgem approved the DFS proposal on 25 March with an effective from date of 9 April. This change is now live.</p>	<p>Sub-MW: B10.1</p> <p>Non-Integer: B10.2</p>	
Aggregated BMUs cannot assign to a specific GSP	<p>Aggregated BMUs cannot be assigned to a specific GSP, which means they cannot contribute to locational requirements, and will sometimes be ruled out because of locational constraints that may not be impacted by their location.</p> <p>Aggregators submit an Aggregator Impact Matrix (AIM) which maps a GSP Group level aggregation down into individual GSPs. This information is not currently used in dispatch decision making.</p>	BM	<p>AIM integration:</p> <ul style="list-style-type: none"> NESO is integrating the AIM into the Single Markets Platform (SMP) so that both GSP Group and individual-GSP granularity can be captured for Aggregated BMUs. This removes the need to complete a separate AIM spreadsheet with duplicate data that is already in the SMP. <p>Downstream systems:</p> <ul style="list-style-type: none"> Downstream systems need to consume and use this granular aggregator data for forecasting, constraint management and future locational optimisation. In the OBP roadmap, the support for locational services is planned for June 2027. 	In the OBP roadmap, the support for locational services is planned for June 2027 .	B13	



Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Registration & onboarding of assets	<p>This barrier refers to the complexity & inefficiency in how Demand-Side Flexibility assets are registered and onboarded into different markets, as NESO systems and processes haven't been designed for very high volumes of small-scale assets.</p> <p>Asset registration systems are not standardised, which results in:</p> <ul style="list-style-type: none"> • Multiple registrations. Assets must repeatedly register with the same data. • Complex and time-consuming onboarding processes. Processes differ across services and regions. • Reduced market participation. Providers may be deterred from participating because onboarding is slow, opaque, manual and resource-intensive. 	All	<p>Improve internal NESO registration processes</p> <ul style="list-style-type: none"> • NESO defined "Domestic" and "Industrial and Commercial" Demand-Side Flexibility, which has been added to the SMP for unit and asset registration directly via the SMP portal or APIs. • SMP actively working with business and users to identify enhancements to business process and user experience. • Integrating the Aggregator Impact Matrix into the SMP. • Enhancements made to the end-to-end Wider Access onboarding process and existing APIs aimed at handling high volumes of small assets. <p>Develop the Flexibility Market Asset Registration (FMAR) solution</p> <ul style="list-style-type: none"> • NESO is supporting the Market Facilitator (Elexon) in developing FMAR - a single, common, cross-market registration system. <p>Onboarding team support</p> <ul style="list-style-type: none"> • As per commitment in the CFR, NESO set up an onboarding support team in November 2025, developed for non-domestic customers, suppliers and aggregators for an improved digital experience. 	<p>By September 2027, NESO will remove key barriers to enable Wider Access (WA) BM participants to join and operate more easily, by:</p> <p>Establishing clear ownership and governance</p> <ul style="list-style-type: none"> • Setting a single, defined onboarding process and standard materials • Providing one clear entry point for participants. • Reporting progress through EDSF governance. <p>Delivering a digital-first onboarding journey and improved APIs</p> <ul style="list-style-type: none"> • Introducing an improved WA API interface to support real-time operational communications and end user journey. • Reducing manual processes to improve ease of use. <p>FMAR is not currently used for asset registration in SMP. However, NESO continues work with the Market Facilitator to consider plans for future integration with FMAR for more granular asset data and consent management.</p>	B16	



Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Cross service baselining	<p>Different methodologies are used to calculate the baseline (expected consumption/generation).</p> <p>NESO compares the baseline to actual delivery to determine performance and payment.</p> <p>Baseline methodologies vary across services, and some are more dynamic than others (PN-type baselines are more accurate and have a lower risk of gaming).</p> <p>A general hierarchy of baseline methodologies is: Historic < Fixed < Physical Nomination</p> <p>NESO Services:</p> <ul style="list-style-type: none"> All NESO Services, except DFS, use Physical Nomination (PN) as their baseline methodology DFS currently uses a Historic 30-day average baseline. <p>DNO Services:</p> <ul style="list-style-type: none"> DNOs use Fixed Profile baseline methodologies. 	All	<p>NESO Services:</p> <ul style="list-style-type: none"> NESO is exploring moving DFS toward a more dynamic approach by allowing I&C assets to choose between the Historic baseline or a PN-type baseline. <p>DNO Services:</p> <ul style="list-style-type: none"> Elexon is leading on the introduction of PN as an optional methodology in the short term. In the long term (>2 years), NESO should justify the need to Elexon, for DNO services to move to PN-only baselining and phase out Fixed Profile. 	<p>Cross service baselining was included as a topic in the DFS Consultation.</p> <p>Ofgem approved the evolved DFS baselining on 25 March, with an effective from date of 9 April.</p> <p>As the proposed work for NESO services have been completed. This barrier will be marked as 'collaborating for change' for DNO services.</p>	B7.2	
Procurement in EFA blocks	<p>EFA (Electricity Forward Agreement) blocks are rigid 4-hour procurement windows used in UK electricity markets.</p> <p>The fluid nature of Demand-Side Flexibility assets means that 4-hour commitment blocks represent a significant barrier to participate due to the changing nature of the flexibility profile and potential duration and shape of flexibility availability.</p>	SFFR, DC, DM & DR	<p>NESO is reviewing reforms to shift response services procurement to 30-min procurement windows, instead of current 4-hour EFA blocks. This would allow units to contract for shorter periods that better align with their capacity, while enabling uncontracted periods for energy management of less than four hours. This increased flexibility could ultimately help reduce system costs.</p> <p>This approach would also align response services procurement more closely with other Reserve Services (BR, QR and SR) and the Wholesale Market.</p>	<p>NESO held an industry workshop in April to present the early-stage options and is now gathering feedback.</p> <p>A decision on whether to progress to detailed design will be taken in July (delayed from June). Following this, NESO will move into the detailed design phase.</p>	B14	

Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Barrier to participate in NESO services due to mechanisms designed to protect DNO capacity*	<p>NESO currently has limited mechanisms to coordinate flexibility procurement from DER with distribution network capacity constraints.</p> <p>As a result, flexibility instructions may conflict with DNO protections (such as ANM), leading to flexibility being unwound after procurement, or creating a risk of stress or damage to distribution networks. Existing pre-qualification and operational arrangements do not fully account for these interactions.</p> <p>Why this is important:</p> <ul style="list-style-type: none"> Without effective coordination between NESO and DNO capacity management, NESO may pay for flexibility that cannot be delivered as intended or that creates downstream network impacts. This reduces confidence in flexibility outcomes, undermines whole-system efficiency, and can unnecessarily limit DER participation. Addressing this barrier is essential to ensure flexibility delivers system value without compromising distribution network security. 	All	<ul style="list-style-type: none"> Introducing primacy arrangements into the Demand Flexibility Service. This allows us to make participants ineligible for events if DNOs flag network security impacts based on near term forecasts. By building this capability, we remove a provision in the pre-qualification process that we will not normally pre-qualify ANM connected assets. We are in parallel exploring the application of primacy arrangements in our other Balancing Services (including our Response and Reserve Services). We are carrying out a cost benefit analysis of this intervention, and working with the Market Facilitator and DNOs to understand the scope and opportunity for improving DNOs' capability to forecast conflicts. We are supplementing this analysis with real data about potential conflicts we are now receiving from DNOs. In the meantime (i.e. ahead of implementation of primacy in Response and Reserve Services), we are reviewing our guidance around how we treat assets with an ANM agreement as part of the pre-qualification process. 	We have introduced primacy arrangements into the Demand Flexibility Service, these went live in April 2026 .	B11.1, B11.2 & B19	

* Barrier to participate in NESO services due to mechanisms designed to protect DNO capacity, is a combination of these barriers:

- Localised DNO limits on capacity limiting participation – B11.1
- Flexible connections & Active Network Management (ANM) prequalification assessment – B.11.2
- (new) ANM impacts on Demand Turn Up & Demand Turn Down – B19

Barriers in Detailed Design

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Skip rates	<p>The 'Skip rate' refers to the frequency at which certain actions or assets are bypassed or 'skipped' during operational decisions. When instructions via BOA (Bid Offer Acceptance) are sent at a higher price than an alternative action that could have been taken, then NESO will have created a skip and the alternative action is bypassed.</p> <p>Why this is a barrier:</p> <ul style="list-style-type: none"> Uncertainty for Demand-Side Flexibility Providers: High skip rates make revenues unpredictable, particularly for aggregators managing small, distributed assets. Operational inefficiency: Skips distort price signals and reduce effective optimisation across the BM. Barrier to participation: Demand-Side Flexibility portfolios operate on tight margins and rely on delivery certainty; frequent skips deter investment and ongoing engagement. 	BM	<p>NESO is improving transparency and understanding of skip rates so Demand-Side Flexibility Providers can better assess performance and revenue risks:</p> <ul style="list-style-type: none"> Phase 1: Publishing skip rate data by asset type, including a public Skip Rates Dashboard on the NESO website. Phase 2: Conducting Root Cause Analysis to understand underlying causes of skips, such as system constraints, forecast errors, and operational decisions that lead to skips. <p>These actions give Demand-Side Flexibility Providers clearer visibility of when and why skips occur, helping them make more informed participation and investment decisions.</p>	<p>Phase 1:</p> <ul style="list-style-type: none"> Skips Rates Dashboard has been published on NESO's webpage. <p>Phase 2:</p> <ul style="list-style-type: none"> Root Cause Analysis: understanding the different components causing skips. This project has delivered and we are now reviewing recommendations and next steps. Skip rate target: agreed an average skip rate of 30% from January to June. Skip rates have reduced across most technologies, but Demand-Side Flexibility units are seeing high skip rates – we are actively investigating. Volume from these units is typically very low and only in-merit for short periods over the course of the day. Skips behind constraints: methodology for skip rates behind constraints agreed and published in March 2026. Implementation ongoing, with data expected in Summer 2026. 	B12	

Barriers in Implementation

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Operational metering	<p>Operational metering provides the near-real-time data NESO requires to dispatch, monitor, and manage flexible assets, both when delivering contracted services and in the BM. It is distinct from performance metering, which is used post-event for settlement.</p> <p>Why this is a barrier: The default BM operational metering standards (1-second meter readings, ±1% accuracy, and up to 5-second data latency) were designed for large generation assets.</p> <p>Although Demand-Side Flexibility assets can technically meet many of NESO's operational standards, the cost and complexity of meeting them create a significant barrier to participation.</p>	BM, BR	<p>NESO reforms to Operational Metering Requirements:</p> <p>Phase 1</p> <ul style="list-style-type: none"> • Delivery: March 2026. • Scope: Reduces meter-read frequency from 1 second to 30 seconds and removes asset-level accuracy requirements, making participation easier for smaller and less technically complex assets. • Status: The new BM Operational Metering requirements went live this March. <p>Phase 2</p> <ul style="list-style-type: none"> • Delivery: 2026 - 2028. • Scope: Focuses on longer-term metering solutions, including synthetic metering and further operational metering reforms. • Status: In April 2026 an innovation project was launched to explore synthetic metering. An RFP went out to suppliers for consulting on 19 June 2026. 	Phase 2 commenced in April 2026 , with the launch of an innovation project to explore synthetic metering. An RFP went out to suppliers for consulting on 19 June 2026.	B1.1 & B1.2	
Visibility and accessibility of NESO service info, standards and policies	<p>Access to information on NESO services, technical standards, and policies can be difficult for service providers to find and navigate, particularly for newer market entrants.</p> <p>Information is often spread across multiple sources, making it harder for participants to understand requirements and engage confidently in real-time markets, which can slow onboarding and create uncertainty for Demand-Side Flexibility Providers.</p>	All	<p>NESO actions:</p> <ul style="list-style-type: none"> • As per commitment in the CFR, NESO set up an onboarding support team in November 2025. We have and continue updating our website for easy access to information for Demand-Side Flexibility Providers. <p>Market Facilitator actions:</p> <ul style="list-style-type: none"> • Elexon will also be publishing information in one place for all DNO & NESO services. 	<p>NESO:</p> <ul style="list-style-type: none"> • Tailored sectoral guidance is being developed based on learnings from non-domestic engagement as well as exploring how NESO could provide a better "self service" functionality via the website. <p>Market Facilitator:</p> <ul style="list-style-type: none"> • Published the Flexibility Market Catalogue. 	B15	

Barriers Completed / Closed

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Dispatch Flexibility Rules (1MW/1 min)	<p>The Dispatch Flexibility Rules barrier stems from strict technical requirements for activating flexibility assets in real-time markets.</p> <p>Historically for the Balancing Reserve, assets had to respond in 1 MW increments with 1-minute response capability, alongside constraints like minimum zero and non-zero times.</p>	BR	<p>NESO relaxed the Dispatch Flexibility Rules to make real-time markets more accessible for Demand-Side Flexibility:</p> <ul style="list-style-type: none"> Indivisible volumes of up to 25MW allowed for assets participating from 0MW, meaning providers can choose to be dispatched only at their full offered volume rather than in partial MW increments. Minimum non-zero time extended to 5 minutes, giving assets participating from 0MW a more practical minimum run time once dispatched. 	<p>Ofgem approved and NESO implemented the updated Dispatch Flexibility Rules. Guidance was clarified (March 2026) and this barrier marked as completed/closed in Q1 2026 Route to Market report.</p>	B18	
1Hz Performance Metering	<p>Performance metering is used by NESO to assess the delivery of a service by a provider.</p> <p>Historically, the 1Hz metering requirement meant recording data every one second from all assets providing the sFFR service.</p> <p>High resolution metering is expensive and technically challenging, especially for smaller aggregated assets, creating a barrier for Demand-Side Flexibility participation.</p>	sFFR	<p>The requirement for 1Hz metering was assessed across the specific requirements of sFFR.</p> <p>NESO published Metering Guidance in Q4 2025 to clarify how aggregated units can implement 1-second metering effectively.</p>	<p>Published Metering Guidance (Q4 2025). This barrier marked as completed/closed in Q1 2026 Route to Market report.</p>	B4	
Measuring Instruments Regulations (MIR)	<p>The Measuring Instruments Regulations 2016 (MIR) impose strict and outdated compliance requirements on metering equipment.</p> <p>For instance, the requirement for physical displays means that around 99% of meters used by flexibility assets are non-compliant.</p> <p>This prevents Demand-Side Flexibility from participating in markets.</p>	All	<p>MIR rules are set by the Department for Science, Innovation & Technology (DSIT). NESO contributed to the DSIT review of MIR, pushing for rules that better reflect digital, automated and smart metering technologies.</p>	<p>This barrier was resolved following DSIT's Consultation Response publication this February, which included removing the requirement for a physical display. No further action required from NESO. This barrier marked as completed/closed in Q1 2026 Route to Market report.</p>	B5	

Barriers Outside of NESO Control – Collaborating for Change

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Access to smart meter data for 3rd Parties / Consumer Consent Solution	<p>Smart meter (MPAN-level) data is essential for providers to baseline consumption, verify delivery, and settle services accurately.</p> <p>However, third-party Demand-Side Flexibility Providers often struggle to access this data due to GDPR consent requirements, DCC technical limitations, and fragmented supplier-led consent processes.</p> <p>Without timely access, Demand-Side Flexibility Providers cannot confidently participate in NESO markets.</p>	DFS	The Consumer Consent Solution is being delivered by RECCo (The Retail Energy Code Company) for the development of a digital solution enabling consumers to share their energy data with trusted third-parties.	The Retail Energy Code Company (RECCo)'s Consumer Consent solution is expected to solve this challenge from 2026 onwards.	B2	
Imbalance adjustments and compensation mechanisms	<p>Imbalance adjustments to supplier positions were introduced to support the provision of Balancing Services when flexibility is delivered via aggregators.</p> <p>While mechanisms such as ABSVD (Applicable Balancing Services Volume Data) adjust supplier imbalance positions when aggregators provide services on behalf of NESO, coordination of supplier, VLP and non-VLP aggregator balancing responsibilities remains complex. Currently there is no mechanism for compensation between suppliers and aggregators.</p> <p>This has led to ongoing concerns about incentives, a level playing field, and consistency across markets.</p>	All	<p>DESNZ/Ofgem:</p> <ul style="list-style-type: none"> As part of the Clean Flexibility Roadmap, DESNZ and Ofgem are reviewing how suppliers, aggregators and other non-licenced entities participate and interact in the market. <p>NESO actions:</p> <ul style="list-style-type: none"> BM: Approved & implemented (Nov 2025) via BSC code mod P444, Direct Compensation between suppliers and aggregators (VLPs). Ancillary Services (AS): Resulting from Issue 1 in Issue Group 114 in Nov 2025, NESO raised new BSC code mod, P502, to introduce compensation arrangements for BM and non-BM ancillary services via Direct Compensation. LCM: NESO developed its own compensation mechanism, ABSDV opt-out and price adjustment mechanism (Ofgem approved), and is using insights to inform wider AS reforms. 	<p>Closure of Issue Group 114 (Jan 2026), and P502 workgroups commenced to discuss the introduction of Direct Compensation for Ancillary Services.</p> <p>If approved, P502 is expected to be implemented from Q1 2027 onwards.</p>	B9	



Barriers Outside of NESO Control – Collaborating for Change

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Half Hourly Settlement (HHS) required for meters	<p>Current market rules require assets to have Half-Hourly metering for Settlement, which excludes many smaller or domestic Demand-Side Flexibility assets that do not have HHS-compliant meters.</p> <p>Installing these meters increases cost and operational complexity for aggregators and consumers, limiting how quickly Demand-Side Flexibility can scale in real-time markets.</p> <p>Smart meters can provide half-hourly data but having a smart meter does not automatically mean the customer is settled on a half-hourly basis – the settlement system itself must change. Until that change is complete, many assets cannot fully participate.</p>	BM, BR, Phase 1 QR & SR	<p>Supporting the Market-wide Half-Hourly Settlement (MHHS) Programme</p> <ul style="list-style-type: none"> NESO is actively supporting Ofgem’s MHHS reforms, which began rolling out in October 2025 and aim to complete within ~18 months. MHHS will allow all consumers to be settled based on actual half-hourly data instead of static profiles, enabling large-scale participation in flexibility services. <p>Collaboration and Alignment</p> <ul style="list-style-type: none"> NESO is working closely with Elexon, Ofgem and wider industry stakeholders to ensure settlement reforms align with flexibility needs and to minimise disruption during migration. This collaborative approach aims to smooth the transition into MHHS and reduce barriers for providers. 	<p>NESO have removed HHS requirements from all services where we have the ability to do so (DFS & LCM).</p> <p>Externally, a BSC code mod (P483) was implemented in Nov 2025 to resolve the settlement issue (lifting the HHS requirement because most domestic consumers are still non-HH).</p> <p>The Market Wide HHS Programme (MWHHS) began migration of domestic meters to HHS in October 2025, the transition is expected to complete Q2 2027. As of 19 June, there have been 13.1 million successful migrations.</p> <p>NESO responded (26 May) to the M16 Settlement Consultation (28 April) from the Elexon Programme. The Consultation is seeking to reduce the settlement timetable from 14 to 7 months. Following response, we expect the MHHS Programme to reduce the timetable. We are working with Settlement teams to ensure they are prepared for the new timeline.</p>	B3	

Barriers Outside of NESO Control – Collaborating for Change

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Final Consumption Levies (FCLs)	<p>Final Consumption Levies (FCLs) are fixed charges applied to every unit of electricity consumed.</p> <p>Because these levies still apply when Demand-Side Flexibility provides demand turn-up (DTU), they can reduce the relative competitiveness of DTU actions compared to other flexibility solutions. This creates asymmetries across technologies and customer groups, which can influence participation incentives.</p>	All with DTU	<p>NESO is engaging with DESNZ and Ofgem to support ongoing policy discussions on the role of FCLs and their interaction with flexibility markets.</p> <p>NESO continues to provide analysis and whole-system insight to inform these discussions and help ensure a level playing field for flexibility participation.</p>	<p>DESNZ have announced a £20m trial run by UK Research and Innovation (UKRI) for removing FCLs from DTU, and their intention to bring forwards legislation as part of the RNP Delivery Plan publication (p52). NESO are supporting both the trial scoping as well as the enduring policy implementation process.</p>	B8	

KPIs

Service barriers summary V5

- Changes in Demand-Side Flexibility participation in NESO markets, shown in the [Data Dashboard](#), **cannot be directly correlated** with the removal of NESO Route to Market barriers.
- NESO is yet to see any explicit data showing the impact of completed/closed barriers. We're expecting increased participation in our markets and would welcome stakeholder feedback on the impacts.
- At present, we roughly envisage the impact of completed/closed barriers through the improvements to the Service barriers KPI Summary Table:

Services		DFS	LCM	Slow Reserve	Balancing Reserve	Quick Reserve	Static FFR	Dynamic Regulation	Dynamic Moderation	Dynamic Containment	Balancing Mechanism
Demand-Side Flexibility ¹											
Domestic consumer	Supplier	●	●	●	●	●	●	●	●	●	●
	Virtual Lead Party (VLP)	●	●	●	●	●	●	●	●	●	●
	Non VLP aggregator	●	●	●	●	●	●	●	●	●	●
Non-Domestic consumer	Supplier	●	●	●	●	●	●	●	●	●	●
	Virtual Lead Party (VLP)	●	●	●	●	●	●	●	●	●	●
	Non VLP aggregator	●	●	●	●	●	●	●	●	●	●

● Not aware of any insurmountable barriers

● Barriers or design requirements are likely stopping some of the market

● Barriers or design requirements are stopping all of the market

● Not capable of participating in service

Changes in DFS and sFFR service RAGs since previous update due to progress made in removing barriers (slide 29). [V4 barriers and change log](#)

28 ¹ We have simplified how we present the "archetypes" in the summary by removing technologies.

Current Service Barrier Summary

Services	DFS	LCM	Slow Reserve	Balancing Reserve	Quick Reserve	Static FFR	DC/DM/DR	Balancing Mechanism	Cross cutting
Barriers	Access to smart meter data for 3 rd parties (B2) ☆	Final Consumption Levies (B8) ⬆️ ☆			Operational metering (B1.1 & B1.2)	Procurement in EFA blocks (B14)	Lack of aggregated metering approaches (B6)	Skip rates (B12)	Cross service baselining (B7.2) ☆
			Imbalance adjustments and compensation mechanisms (B9) ⬆️ ☆		Imbalance adjustments and compensation mechanisms (B9) ⬆️ ☆		Operational baseline 1 hour in advance (B7.1)	Aggregated BMUs cannot assign to a specific GSP (B13)	Delivery certainty risk & penalties for not meeting 100%/no tolerances (B17)
			Sub-MW & Non-Integer (B10.1 & B10.2)	Sub-MW & Non-Integer (B10.1 & B10.2)	Sub-MW & Non-Integer (B10.1 & B10.2)		Sub-MW & Non-Integer (B10.1 & B10.2)	Sub-MW & Non-Integer (B10.1 & B10.2)	Visibility and accessibility of NESO service info, standards and policies (B15)
									Registration & onboarding of assets (B16)
									Half Hourly Settlement required for meters (B3) ☆
									Barrier to participate in NESO services due to mechanisms designed to protect DNO capacity (B11.1, B11.2 & B19) ⬆️ ☆

☆ Barriers outside of NESOs direct control

⬆️ Demand turn up (DTU) specific barriers

Service barriers change log V5

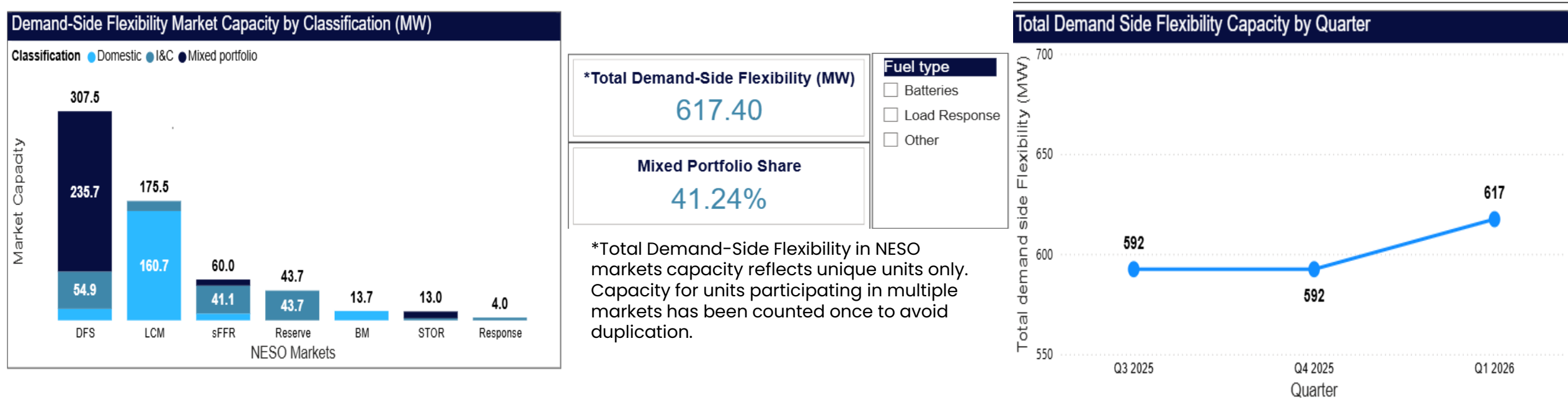
Service	Change
Demand Flexibility Service	Domestic: VLP and non VLP aggregator service barrier RAG has changed from amber to green following Ofgem approval of the Sub-MW/NI DFS proposal which is now live. Non-domestic: VLP and non VLP aggregator service barrier RAG has changed from green to amber due to P502 Demand Turn Up challenges.
Static FFR	All service barrier RAGs have changed from amber to green following Ofgem approval of the Sub-MW/NI sFFR proposal which goes live 31 July.

Market metrics dashboard

We publish a **Demand-Side Flexibility in NESO markets data dashboard** on a quarterly basis alongside these updates. Below is a summary of the total volume of Demand-Side Flexibility¹ that was active² in NESO markets from **January 2025 to March 2026**. The full dashboard can be found on this [webpage](#).

In this quarterly update, we added a new chart to track trends on a quarterly basis. We have also added fuel types data to markets which this data is available for.

Note: changes in Demand-Side Flexibility cannot be directly correlated with the removal of NESO Route to Market barriers.



1 Our full definitions of Demand-Side Flexibility can be found [here](#). This includes demand, storage and generation assets located “behind the meter” at a consumers site.

2 Active means units that have been active in bidding in markets within the last 12 months.

We appreciate your feedback



This is the third quarterly update as part of the Demand-Side Flexibility Routes to Market Review implementation.

We would like to hear your feedback on this update, including content and structure, as well as on specific updates. Please reach out to the team at flexibilitystrategy@neso.energy.

Appendix

Barrier removal programme plan change log (Q2 2026)

This change log represents changes to the plan from the [second quarterly update published in March 2026](#).

Barrier	Change
Delivery certainty risk & penalties for not meeting 100%/no tolerances	Moved from 'Identified & in Backlog' to 'Options Assessment' stage.
Sub-MW & Non-Integer	NESO's progress RAG changed from amber to green.
Procurement in EFA blocks	NESO's progress RAG changed from green to amber.