Demand-Side Flexibility Routes to NESO Markets Review

Quarterly Update 2, Q1 2026

NESO
National Energy System Operator

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Introduction

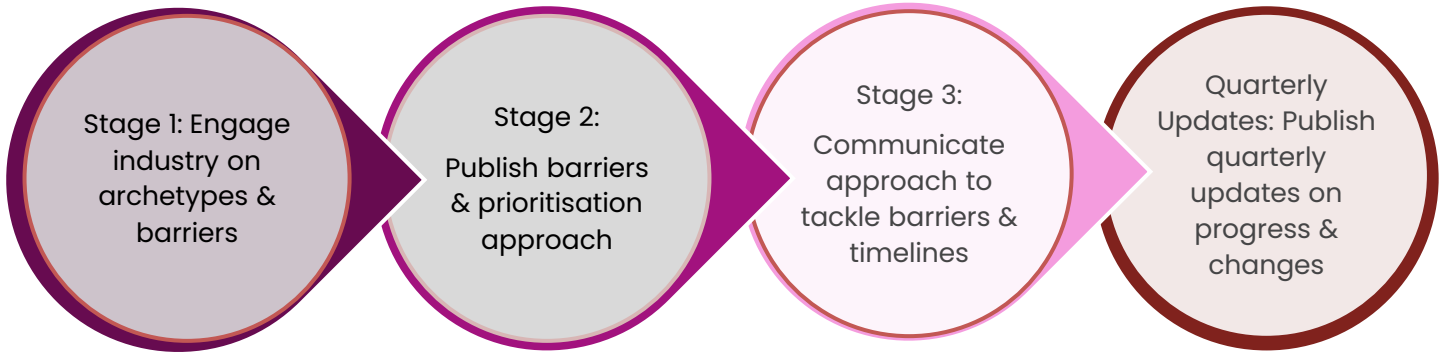
Update on recent key progress

We are removing barriers for Demand-Side Flexibility

The Demand-Side Flexibility Routes to Market Review is NESO's project for **removing barriers** to NESO services for Demand-Side Flexibility. 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.

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 engagement approach. The first quarterly update report was published in December 2025.

This report published on 27th March, is the second of our quarterly update reports. It includes a progress update, an update to the RAG service barrier table and a change log, and the Demand-Side Flexibility in NESO markets data dashboard, which is published alongside this report.



Recent progress in removing barriers

Balancing Mechanism (BM)

- Skips Rates Dashboard including Demand-Side Flexibility has been 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.
- Stage 1 of the Operational Metering Reforms was completed this March. This introduced relaxed requirements for aggregated assets less than 1MW. These reforms mean the BM is now accessible to assets such as EV chargers, heat pumps and home batteries. Opening the BM to households will help reduce balancing costs, increase system resilience through liquidity and allow providers to create new innovative value propositions for consumers. Stage 2, commencing in April until 2028, will build on the Stage 1 reforms by exploring options such as synthetic metering which will make the BM even more appealing for domestic flexibility.

Recent progress in removing barriers

Demand Flexibility Service (DFS)

Included as topics in the DFS Article 18 Consultation in November 2025 and proposed to Ofgem in January:

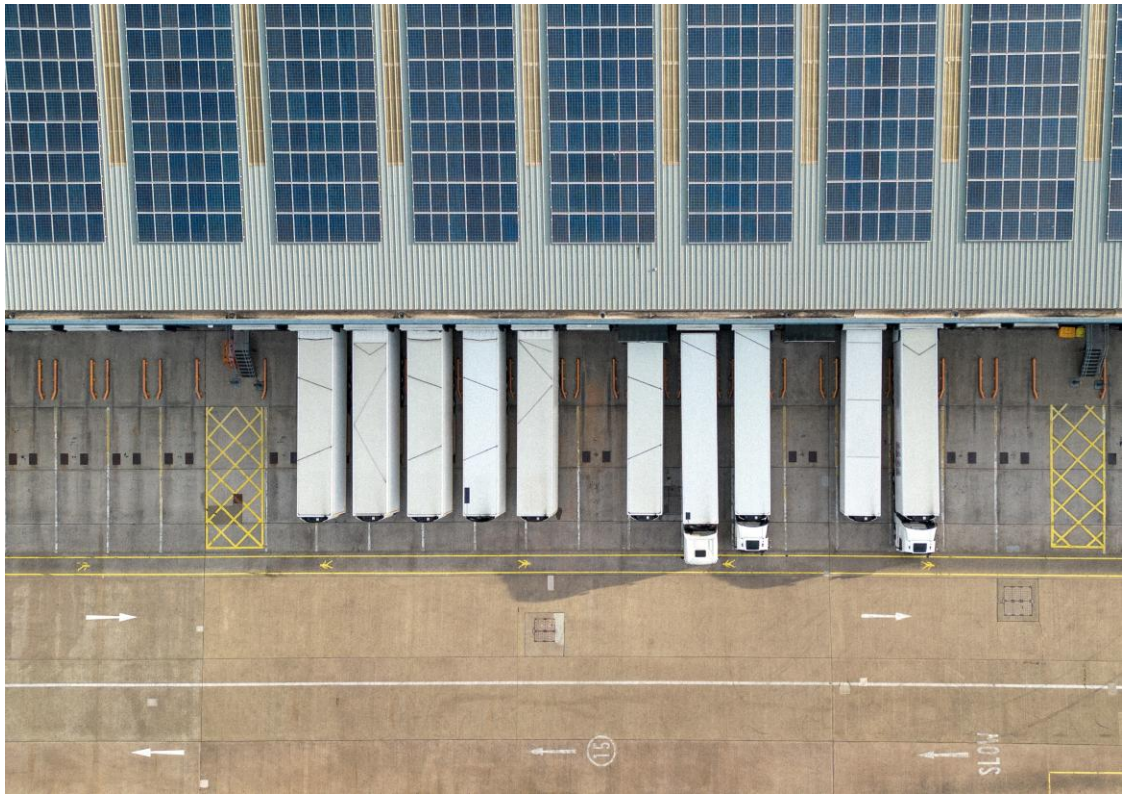
- Introduction of bi-directional capability (Demand Turn Up).
- Reducing unit threshold to 0.1MW.
- Self-nominated baseline option (I&C/intermittent renewables/generation only).
- Introduction of Locational Assessment – the ability to define volume requirements by zone to maximise operational and economic value.
- Facilitating early primacy processes.

Ofgem approved the evolved service design and updated terms on 25 March, with an effective from date of 9 April.

Recent progress in removing barriers

Static Firm Frequency Response (Static FFR)

- In June, internal NESO work to review reforms that shift response services to 30-minute procurement windows will progress.
- NESO published Metering Guidance in Q4 2025 to clarify how aggregated units can implement 1-second metering effectively.
- Included in the Static FFR Article 18 Consultation in November 2025 and in preparation for submission to Ofgem in March proposing the introduction of a Sub-MW and Non-Integer approach for Static FFR.



Recent progress in removing barriers

Balancing Reserve

- Ofgem approved and NESO implemented the updated Dispatch Flexibility Rules to make real-time markets more accessible for Demand-Side Flexibility, by allowing indivisible volumes of up to 25MW for assets participating from 0MW and extending minimum non-zero time to 5 minutes.

Slow Reserve

- The introduction of Slow Reserve on 31st March. The Single Markets Platform (SMP) opened on the 15th January for Slow Reserve unit onboarding, allowing providers to begin registration for the new service.

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Recent progress in removing barriers

Other progress

- Resulting from Issue 1 in Issue Group 114, NESO raised BSC Code Modification P502 in November 2025 to introduce a consistent compensation mechanism for Ancillary Services.
- NESO is supporting DESNZ to assess the benefits of, and options to, remove Final Consumption Levies (FCLs) from Demand Turn Up (DTU) in the BM and balancing services.
- As part of the Constraints Collaboration Project, NESO are continuing to progress with the detailed design of 'Demand for Constraints' (DfC). This is a long-term contract to incentivise new, flexible demand capacity in certain areas to alleviate thermal constraints. We encourage engagement with the DfC RFI process via the webpage.

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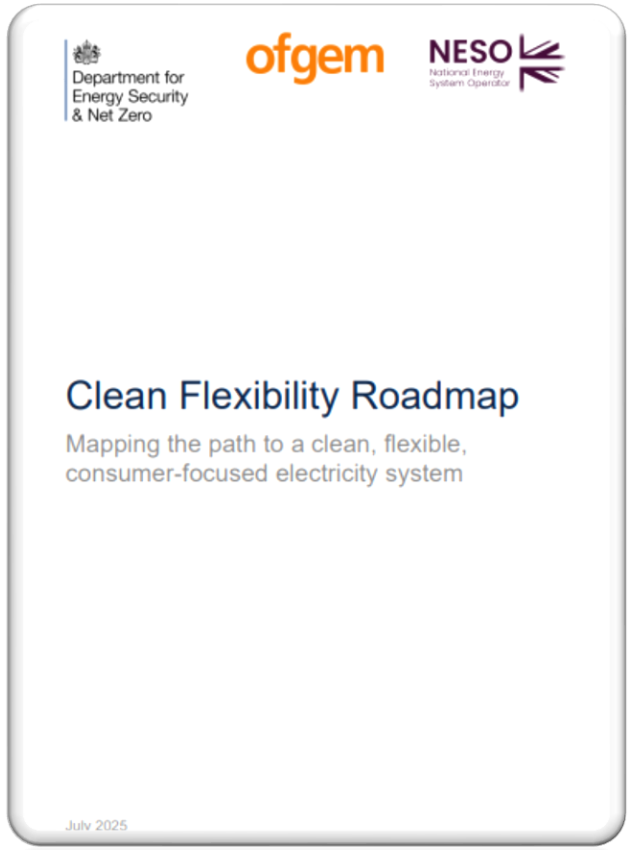
Recent progress in delivering CFR Actions

Clean Flexibility Roadmap (CFR)

The Clean Flexibility Roadmap was published in July 2025 in collaboration with DESNZ and Ofgem.

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.
NESO large loads engagement. (7b)	NESO's outreach campaign to non-domestic groups went live in October 2025.
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.
Consumer carbon savings report. (7d)	By April 2026, NESO will explore the potential to report on consumer carbon savings resulting from flexibility actions. This would enable large industrial and commercial consumers to see the carbon savings directly attributed to their flexibility to further support their commitments to reducing emissions.
Non-domestic evidence base. (7e)	NESO is supporting DESNZ and Ofgem to compile the evidence base.
Route to Market (RtM) Review. (33a)	This report published on 27th March, is the second 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)	An update on LCM was published in July 2025 and NESO also held a webinar on DFS evolution in July 2025. In November 2025 we updated stakeholders on the evolution of DFS with regards to bi-directional and locational procurement. Progress on LCM is being tracked, and we will provide updates on evolution regularly.
Distributed Energy Resources (DER) integration. (33d)	NESO's Transformation to Integrate Distributed Energy (TIDE) programme will publish the TIDE roadmap consultation this March.



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 (Q1 '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											
		FMAR design				Flexibility Market Asset Registration (FMAR) build & integration							
	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.							
		DFS	sFFR										
	B13 Aggregated BMU location	Assessment											
	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									
Settlement	B9 Imbalance & compensation	BSC modification for NESO ancillary services											
Metering & Baselines	B1.1, 1.2 Operational metering	Stage gate 1	Stage gates 2 & 3										
	B2 Smart meter data access	Consumer consent solution MMP				Consumer consent solution iterative releases							
	B5 Measuring Instrument Regs	DSIT response (estimated)											
	B14 Procurement in EFA blocks	Needs assessment standardised 30 minute for Response services											
	B7.2 Cross Service Baselining	NESO and DSO services aligned, in line with Market Facilitator Flexibility Market Rules											

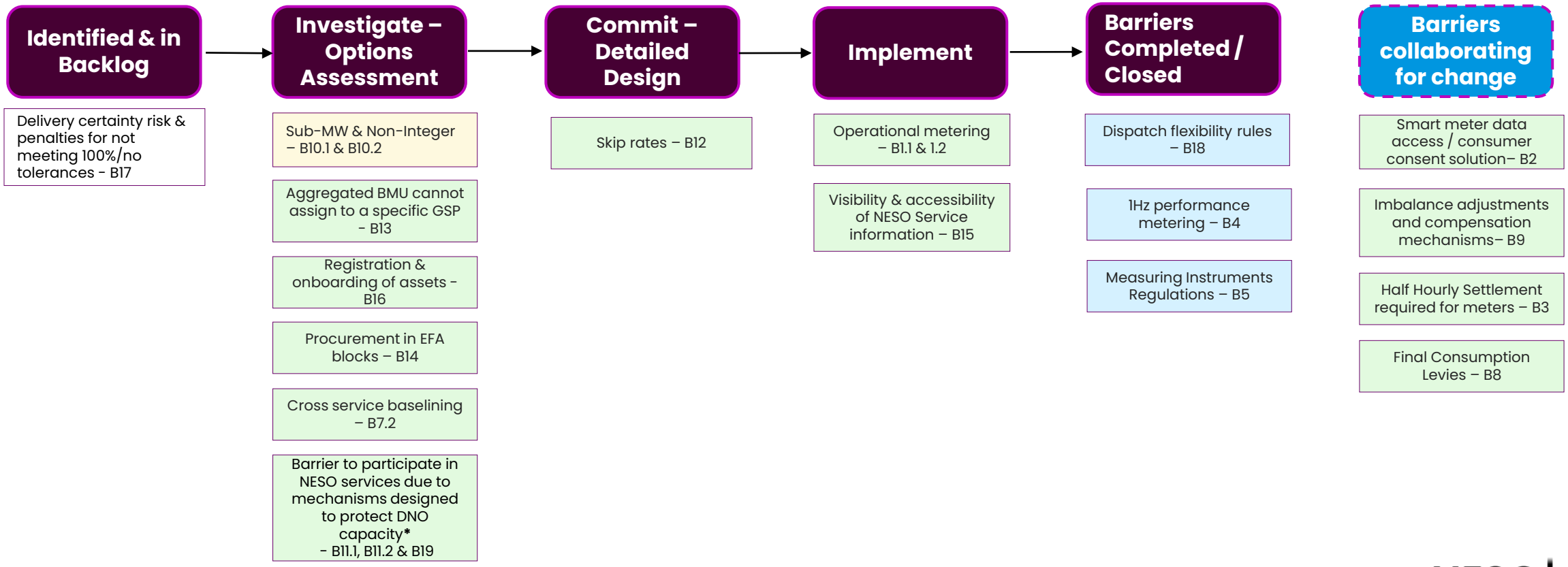
Zooming in: Detailed Project Updates

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.



* 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

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Barriers Identified & in Backlog

Barrier	Description	Affected Services	Proposed work	Latest update	Ref
Delivery certainty risk & penalties for not meeting 100%/no tolerances	Some Demand-Side Flexibility Providers are concerned about penalties and the lack of tolerance for not delivering 100% of committed capacity across NESO services. 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. 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. 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.	All	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: • **Consolidation and clarification** • **Benchmarking and design options** • **Future framework development**	Not currently prioritised, workplan to be set out and start in **Q2 2026**.	B17

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Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Sub-MW & Non-Integer	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. Currently: • **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.	Sub-MW: all except LCM Non-Integer: all except DFS & LCM	NESO are reviewing reforms to allow Sub-MW & Non-Integer bids in all NESO markets: • **Balancing Mechanism:** options assessment to be concluded by **Q2 2026.** • **Frequency Response & Reserve:** options assessment to be concluded by **Q2 2026**. • For sFFR in particular, 0.1MW was broadly agreed in the Static Response Consultation (**Nov 2025**) and is being prepared for submission to Ofgem **end of March**. • **DFS:** Consulted on DFS 0.1MW reform (**Nov 2025**). Ofgem approved the proposal on **25 March** with an effective from date of **9 April**.	BM and Frequency Response & Reserve continues to go through options assessment. This is currently slightly behind schedule. sFFR in preparation for submission to Ofgem in March. Ofgem approved the DFS proposal on **25 March** with an effective from date of **9 April**.	Sub-MW: B10.1 Non-Integer: B10.2	
Aggregated BMUs cannot assign to a specific GSP	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. 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.	BM	**AIM integration:** • 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. **Downstream systems:** • 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	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. Asset registration systems are not standardised, which results in: • **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	**Improve internal NESO registration processes** • 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. • Migrated BM registration into the SMP. • Integrating the Aggregator Impact Matrix into the SMP. • Process changes aimed at handling high volumes of small assets. **Develop the Flexibility Market Asset Registration (FMAR) solution** • NESO is supporting the Market Facilitator (Elexon) in developing FMAR - a single, common, cross-market registration system. **Onboarding team support** • 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.	FMAR is not currently used for asset registration in SMP. However, NESO is working with the Market Facilitator to consider plans for future integration with FMAR for more granular asset data and consent management.	B16	
Procurement in EFA blocks	EFA (Electricity Forward Agreement) blocks are **rigid 4-hour procurement windows** used in UK electricity markets. 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.	SFFR, DC, DM & DR	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. This approach would also align response services procurement more closely with other Reserve Services (BR, QR and SR) and the Wholesale Market.	An Options Assessment has already been completed. A decision to progress to detailed design will be taken in **June** this year.	B14	

Barriers in Options Assessment

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Cross service baselining	Different methodologies are used to calculate the baseline (expected consumption/generation). NESO compares the baseline to actual delivery to determine performance and payment. 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). A general hierarchy of baseline methodologies is: **Historic < Fixed < Physical Nomination** **NESO Services:** • All NESO Services, except DFS, use Physical Nomination (PN) as their baseline methodology • DFS currently uses a Historic 30-day average baseline. **DNO Services:** • DNOs use Fixed Profile baseline methodologies.	All	**NESO Services:** • 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. **DNO Services:** • 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.	Cross service baselining was included as a topic in the DFS Consultation. In **January**, NESO submitted the DFS proposal to Ofgem, and they approved it on **25 March 2026** with an effective from date of **9 April 2026**.	B7.2	

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	NESO currently has limited mechanisms to coordinate flexibility procurement from DER with distribution network capacity constraints. 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. Why this is important: • 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	• Subject to Ofgem approval, we are introducing primacy arrangements into DFS. This has meant we have removed a provision in the pre-qualification process that we will not normally pre-qualify ANM connected assets, as we can use closer to real time data from DNOs to determine whether assets should be eligible for a given auction (**April 2026**). • We will monitor the effect of the primacy arrangements in DFS, including the extent to which DNOs' signals of conflicts with distribution network requirements leads to exclusion. • 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. • 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.	Combined the below barriers to summarise into one here as they overlap: • Localised DNO limits on capacity limiting participation • Flexible connections & Active Network Management (ANM) prequalification assessment • ANM impacts on Demand Turn Up & Demand Turn Down	B11.1, B11.2 & B19	

Barriers in Detailed Design

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Skip rates	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. Why this is a barrier: • **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	NESO is improving transparency and understanding of skip rates so Demand-Side Flexibility Providers can better assess performance and revenue risks: • **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. These actions give Demand-Side Flexibility Providers clearer visibility of when and why skips occur, helping them make more informed participation and investment decisions.	**Phase 1:** • Skips Rates Dashboard has been published on NESO's webpage. **Phase 2:** • Root Cause Analysis: understanding the different components causing skips. This continues to validate initial identified hypotheses and identify causal factors. • Skip rate materiality and initial target proposals: understanding cost of skips (£2.9m per month, equivalent to 3.5% of energy balancing costs). This analysis has been shared with industry (**January**). Proposed target for an average skip rate of 30% from **January to June**. • Skips behind constraints: Work to define a methodology for skip rates behind constraints. Plan to have this methodology agreed within **this financial year** and implemented in the **next financial year.**	B12	

Barriers in Implementation

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Operational metering	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. 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. 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.	BM, BR	NESO reforms to Operational Metering Requirements: **Stage Gate 1** • Delivery: **March 2026**. • Status: Short-term metering solution approved by OpCo in **Summer 2025.** • 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. **Stage Gates 2 & 3** • Delivery: **2026-2028**. • Scope: Focuses on longer-term metering solutions, including synthetic metering and further operational metering reforms.	Completion of Stage Gate 1 – the new BM Operational Metering requirements went live this **March**. Stage Gate 2 commences from **April 2026**.	B1.1 & B1.2	
Visibility and accessibility of NESO service info, standards and policies	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. 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.	All	**NESO actions:** • 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. **Market Facilitator actions:** • Elexon will also be publishing information in one place for all DNO & NESO services.	NESO: • NESO have a new Business Development Lead (**January**) who will be producing tailored sectoral guidance based on learnings from non-domestic engagement as well as exploring how NESO could provide a better "self service" functionality via the website.	B15	

Barriers Completed / Closed

Barrier	Description	Affected Services	Proposed work	Latest update	Ref	RAG
Dispatch Flexibility Rules (1MW/1 min)	The Dispatch Flexibility Rules barrier stems from strict technical requirements for activating flexibility assets in real-time markets. 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.	BR	NESO relaxed the Dispatch Flexibility Rules to make real-time markets more accessible for Demand-Side Flexibility: • 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.	Ofgem approved and NESO implemented the updated Dispatch Flexibility Rules. Guidance has been clarified and the barrier is now closed.	B18	
1Hz Performance Metering	Performance metering is used by NESO to assess the delivery of a service by a provider. Historically, the 1Hz metering requirement meant recording data every one second from all assets providing the sFFR service. High resolution metering is expensive and technically challenging, especially for smaller aggregated assets, creating a barrier for Demand-Side Flexibility participation.	sFFR	The requirement for 1Hz metering was assessed across the specific requirements of sFFR. NESO published Metering Guidance in **Q4 2025** to clarify how aggregated units can implement 1-second metering effectively.	Published Metering Guidance.	B4	
Measuring Instruments Regulations (MIR)	The Measuring Instruments Regulations 2016 (MIR) impose strict and outdated compliance requirements on metering equipment. For instance, the requirement for physical displays means that around 99% of meters used by flexibility assets are non-compliant. This prevents Demand-Side Flexibility from participating in markets.	All	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.	This barrier has now been resolved following DSIT's Consultation Response publication this **February**, which included removing the requirement for a physical display. No further action required from NESO.	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	Smart meter (MPAN-level) data is essential for providers to baseline consumption, verify delivery, and settle services accurately. 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. Without timely access, Demand-Side Flexibility Providers cannot confidently participate in NESO markets.	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	Imbalance adjustments to supplier positions were introduced to support the provision of Balancing Services when flexibility is delivered via aggregators. 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 e.g., **no direct compensation** between suppliers and aggregators. This has led to ongoing concerns about incentives, fairness, and consistency across markets.	All	**DESNZ/Ofgem:** • 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. **NESO actions:** • 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 is raising a new BSC Code Mod, P502 to introduce consistent 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.	Closure of Issue Group 114 (**Jan 2026**), and P502 workgroups commenced to discuss the introduction of Direct Compensation for Ancillary Services.	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	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. Installing these meters increases cost and operational complexity for aggregators and consumers, limiting how quickly Demand-Side Flexibility can scale in real-time markets. 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.	BM, BR, Phase 1 QR & SR	**Supporting the Market-wide Half-Hourly Settlement (MHHS) Programme** • 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. **Collaboration and Alignment** • 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.	NESO have removed HHS requirements from all services where we have the ability to do so (DFS & LCM). 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). The Market Wide HHS Programme (MWHHS) began migration of domestic meters to HHS **in October 2025**, the transition is expected to complete **Q2 2027**.	B3	
Final Consumption Levies (FCLs)	Final Consumption Levies (FCLs) are fixed charges applied to every unit of electricity consumed. 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.	All with DTU	NESO is engaging with DESNZ and Ofgem to support ongoing policy discussions on the role of FCLs and their interaction with flexibility markets. NESO continues to provide analysis and whole-system insight to inform these discussions and help ensure a level playing field for flexibility participation.	DESNZ has announced an innovative trial, which aims to ensure that demand turn up would become a more cost-effective option compared to curtailment. NESO continues to support assessment of options to mitigate the impacts of FCLs on DTU with DESNZ and Ofgem, including supporting trial design.	B8	

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KPIs

Service barriers summary V4

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

No change in service RAGs since last update, however upcoming changes expected (DFS & sFFR) as proposals have been submitted to Ofgem.

[V3 barriers and change log]

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 3rd 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). Change proposed.		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). Change proposed.	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 V4

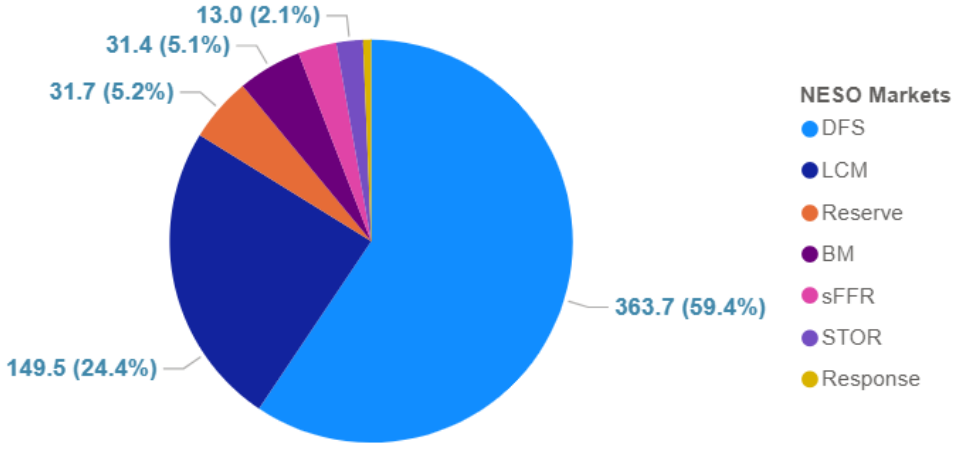
Service	Change
Demand Flexibility Service	Subject to the Article 18 consultation and Ofgem approval, as well as future Demand-Turn Up actions, there may be future changes to RAG ratings.
Local Constraint Market	
Slow Reserve	
Balancing Reserve	
Quick Reserve	
Static FFR	Subject to the Article 18 consultation and Ofgem approval, we propose to change the RAG to green if proposed changes are approved.
Dynamic Response - DC/DM/DR	
Balancing Mechanism	

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 Flexibility[1] that was active[2] in NESO markets from **January to December 2025**. The full dashboard can be found on this webpage.

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

Total Demand-Side Flexibility Market Distribution



***Total Demand-Side Flexibility (MW)**

592.42

I&C Share

47.85%

*Total Demand-Side Flexibility in NESO markets capacity reflects unique units only. Capacity for units participating in multiple markets has been counted once to avoid duplication.

Demand-Side Flexibility Market Capacity by Classification (MW)

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.

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We appreciate your feedback

This is the second 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 (Q1 2026)

This change log represents changes to the plan from the first quarterly update report published in December 2025.

Barrier	Change
Sub-MW & Non-Integer	Have kept the 'options assessment' stage as the majority of NESO's services are in this stage (BM and Frequency Response & Reserve), with some NESO services (DFS) being further ahead as it is with Ofgem for approval.
Access to smart meter data for 3rd Parties / Consumer Consent Solution	Have combined and moved from 'options assessment' stage to 'collaborating for change / outside of NESO control' as RECCo are leading on this solution.
1Hz Performance Metering	Removed it as 'no change' and marking it as 'barrier completed and closed'.
Dispatch Flexibility Rules (1MW/1 min)	Now marked as 'barrier completed and closed' as Dispatch Flexibility Rules have been implemented by NESO.
Visibility and accessibility of NESO service info, standards and policies	Moved from 'Detailed Design' to 'In Implementation' as NESO have set up an onboarding flexibility webpage and support team, which they continue to build upon.
Barrier to participate in NESO services due to mechanisms designed to protect DNO capacity	To avoid overlap, '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. • Flexible connections & Active Network Management (ANM) prequalification assessment. • (new) ANM impacts on Demand Turn Up & Demand Turn Down.
Measuring Instruments Regulations (MIR)	Moved from 'barriers outside of NESO control – collaborating for change' to 'barrier completed and closed' following publication of DSIT's Consultation Response.

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