

Public

Electricity Markets Advisory Council

11 December 2025

Agenda

Item	Lead	Time
<i>Informal lunch and networking (optional)</i>		12:00 – 13:00
Welcome	Rebecca Beresford & Lizzie Blaxland (NESO)	13:00 – 13:05
Enabling Demand Side Flexibility in Markets	Becky Hart & Zohreh Mohammadi (NESO)	13:05 – 13:55
Gas Future Market Plan	Martin Shannon & Max Lambert (NESO)	13:55 – 14:25
<i>Break</i>		14:25 – 14:45
Product and Services Update	Cathy Fraser (NESO)	14:45 – 15:35
Close and Next Steps	Rebecca Beresford & Lizzie Blaxland (NESO)	15:35 – 15:45

Enabling Demand Side Flexibility in Markets

Becky Hart

Zohreh Mohammadi

Agenda

We would like to know your feedback regarding:

- Objective and key results (EDSF Report,). Does achieving the proposed key results enable more demand-side flexibility in NESO services?
- What does good look like for you in 2030 for NESO procurement of demand-side flexibility?
- Any other feedback regarding the pre-read reports

Scope of the EDSF and RTM Review at NESO

Annual
Update

Quarterly
Update

- Clean Power 2030 sets out plans for a two to three-fold increase in clean flexibility capacity, to a range of 51GW to 66GW, by 2030.
- By 2030, demand flexibility from consumers in the Clean Power 2030 pathways reaches 10–12 GW (via both implicit and explicit markets).

**Clean Power 2030
(CP30)**

DESNZ



- The Clean Flexibility Roadmap sets out the government's vision for flexibility required for CP30.
- The roadmap includes actions for government, NESO and Ofgem to enable flexibility, including from demand-side participants.

**Clean Flexibility
Roadmap (CFR)**

DESNZ, Ofgem, NESO



- This programme is NESO's organized effort to unlock participation from demand-side flexibility in NESO markets and achieve coherency, competition and coordination.

Scope:

- All NESO energy services. Voltage, stability and restoration are out of the scope this programme.
- The scope was updated in 2025 to incorporate all the markets and consumer led flexibility actions in the Clean Flexibility Roadmap.

**Enabling Demand-side
Flexibility (EDSF)
Programme**

NESO



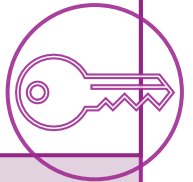
- Routes to Markets review is part of the EDSF programme and aims to increase competition. This initiative addresses the need to create a level playing field by identifying and removing barriers to NESO markets where feasible.

Scope

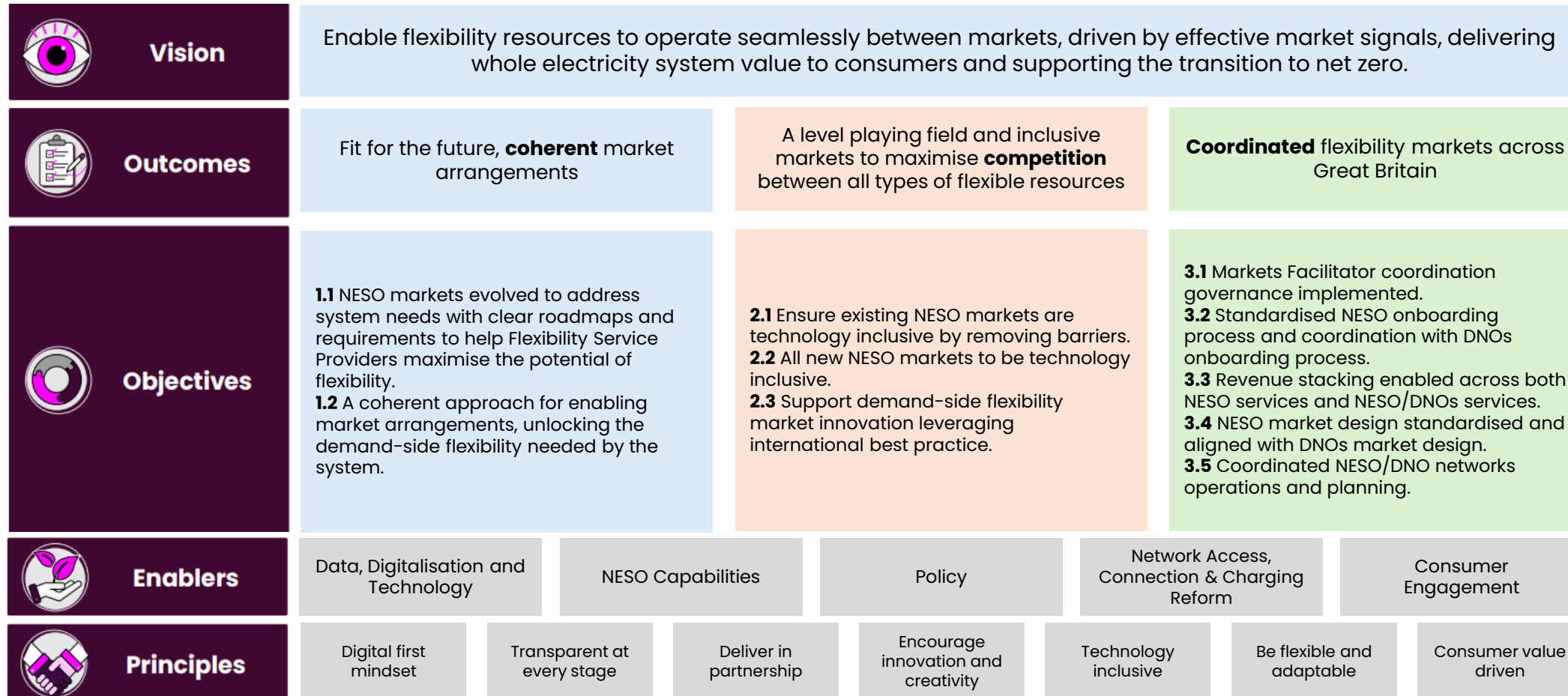
- Identified barriers
- Priorities of barriers
- Progress of removing barriers

**Route to Market (RTM)
Review**

NESO



NESO's vision for demand-side flexibility



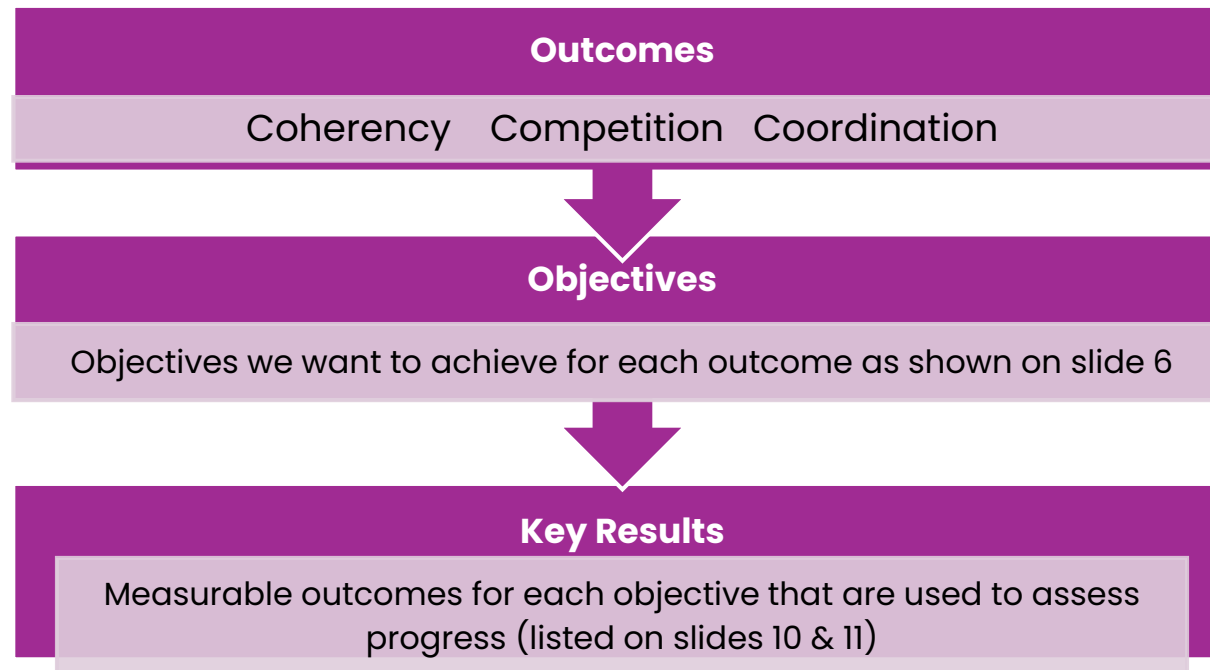
What has changed?

- Clean Flexibility Actions were added to EDSF
- Coordination objectives have been reviewed to reflect the new arrangement with Market Facilitator.

Measuring progress in the EDSF programme

We are using an objectives and key results framework to turn the EDSF programme's objectives into actionable, measurable key results. We will use these clearly defined, 'key results' as the reference point against which to track progress towards each objective.

We will use a RAG system to visualise the risk and progress of each key result. In this document we provide: (1) list of key results defined for each objective; (2) progress update of each key result.



Green: Key delivery is on track and meeting its goals.

Amber: Some issues or risks exist, but they are not critical and there is a plan to resolve them.

Red: A significant issue or risk exists that put the timely delivery of the key result at risk.

Blue: Completed

Key Results – Targeted outcomes for each objective to achieve by 2030

Key results are targeted, measurable outcomes defined for each objective. They are used to assess progress towards achieving the EDSF programme's objectives.

Question:

- Do you think the key results in slides 7,8, will enable more demand-side flexibility in NESO markets?
- What does good look like for you in 2030 for NESO procurement of DSF?
- Any other feedback of EDSF and RTM Review?

Key Results for each EDSF objective

Coherency

Key Results – Targeted outcomes for each objective to achieve by 2030

Objective 1: NESO markets evolved to address system needs with clear roadmaps and requirements to help Flexibility Service Providers maximise the potential of flexibility

- 1.1** 2030 within-day flexibility requirements are modelled and communicated through Operability Strategy Report.
- 1.2** NESO to publish non-domestic flexibility capacity target (**CFR Action**).
- 1.3** NESO to share its vision for demand-side flexibility in its markets in the 2026 Markets Roadmap.
- 1.4** Longer term direction of travel for LCM and DFS is designed and communicated (**CFR Action**).

Objective 2: Deliver a coherent approach for enabling market arrangements, unlocking the flexibility required for CP2030

- 2.1** Clean flexibility roadmap is published (support role).
- 2.2** Market reform options post-REMA decision are designed with demand-side flexibility in mind (support role).

Competition

Key Results – Targeted outcomes for each objective to achieve by 2030

Objective 1: Ensure existing NESO markets are technology inclusive by removing barriers.

- 1.1** Barriers are identified & prioritised through quarterly engagement with stakeholders. Internal NESO processes are in place to assess and remove barriers if appropriate and to communicate the progress update to both stakeholders and Clean Flex Governance. (**CFR Action**)(**Route to Market Review**)
- 1.2** NESO has explored the potential to report on consumer carbon savings resulting from flexibility actions (**CFR Action**)
- 1.3** NESO teams have access to the distributed energy data and capabilities required to operate a clean power system with increased volume of distributed energy assets, including forecasting and operating demand flexibility. (Publishing the roadmap by Q1,2026 is part of the **CFR Action**)

Objective 2: All new NESO markets to be technology inclusive.

- 2.1** Demand-side flexibility capabilities are fully understood and incorporated into new NESO markets including Slow Reserve and Static FFR, balancing reserve, LCM, DFS

Objective 3: Support demand-side flexibility market innovation leveraging international best practice.

- 3.1** Flexibility availability and dispatch behaviour of residential demand, EVs and low carbon heating are studied via innovation projects.

Objective 4: Engage & support non-domestic flexibility capacity and providers to enter NESO markets

- 4.1** Increased NESO engagement with non-domestic flexibility capacity and organisations, to promote NESO markets (**CFR Action**).
- 4.2** NESO has Increased onboarding support for non-domestic consumers and their suppliers/aggregators (**CFR Action**)

Key Results

Coordination

Key Results – Targeted outcomes for each objective to achieve by 2030

Objective.1 Markets Facilitator coordination governance implemented.

1.1 NESO's internal governance and ways of working with the Market Facilitator are designed and implemented.
1.2 Flexibility market rules designed by the Market Facilitator are implemented as required.

Objective 2: Standardised NESO onboarding process and coordination with DNOs onboarding process*

2.1 NESO Services: Balancing Mechanism and Slow Reserve registration have moved to the Single Markets Platform(SMP).
2.2 Coordination with DNOs: NESO has integrated with the Flexibility Markets Asset Registration (FMAR) platform and process.

Objective 3: Revenue stacking enabled across both NESO services and NESO/DNOs.*

3.1 NESO Services: Overview of revenue stacking in NESO services and next step is communicated to stakeholders.
3.2 Coordination with DNOs: Stacking principles in ways of working (designed by ENA) is implemented by NESO.

Objective 4: NESO market design standardised and aligned with DNOs market design.*

4.1 NESO Services Standardisation challenges across NESO services are identified and prioritised including services window, procurement and performance monitoring.
4.2 Coordination with DNOs: Market Facilitator will be assigning further priorities to coordinate NESO/DNOs market design.

Objective 5: Coordinated NESO – DNO network operations and planning.*

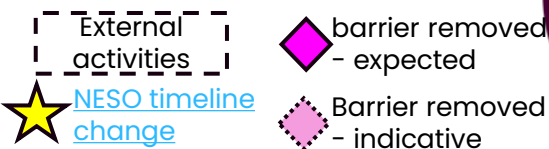
5.1 Coordination with DNOs: Regional Energy Strategic Plans are established to enable whole system planning.
5.2 Coordination with DNOs: Primacy rules across NESO/DNOs designed by Market Facilitator are implemented in NESO's internal operation.

* We expect the Market Facilitator to define further key outcomes to coordinate NESO-DNOs services

Additional information:

- Routes to Market Review
- Demand-side Flexibility Data Dashboard

Barrier removal programme plan (Q4 '25)



Quarters are calendar years throughout this report		2025	2026				2027				2028			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Onboarding	B16 Registration & onboarding	Continuous improvement of onboarding & registration systems, processes & information												
		Flexibility Market Asset Registration (FMAR) design				Flexibility Market Asset Registration (FMAR) build								
	B15 Visibility of service information	Onboarding team supporting non domestic consumers & aggregators/suppliers & improved digital experience												
Procurement & Dispatch	B10.1, B10.2 Sub 1 MW & non integer	Sub 1MW & non integer options assessment		★	Detailed design & implementation subject to outcome of Options Assessment.						◆			
		DFS & Static FFR consultation & assessment		◆										
	B13 Aggregated BMU location	assessment		★										
	B12 Skip rates	"Skip Rate" reporting	★	Ongoing Skip Rate programme activities										
	B4 Static FFR metering	◆	Metering guidance for Static FFR											
	B11.1 DNO DTU limits	Primacy data exchange capability & DFS primacy live		Enhanced Primacy capability development										
Settlement	B9 Imbalance & compensation	BSC modification for NESO ancillary services							◆					
Metering & Baselines	B1.1, 1.2 BM Ops metering	Implementation		◆	Synthetic metering workstream									
	B2 Smart meter data access	Consumer consent solution MMP					◆	Consumer consent solution iterative releases						
	B5 Measuring Instrument Regs	MIR consultation government response (estimated)												
	B14 Static resp. EFA blocks	Needs assessment standardised 30 minute for Response services				★		◆						
	B7.2 Cross Service Baselines	NESO and DSO services aligned , in line with Market Facilitator Flexibility Market Rules												



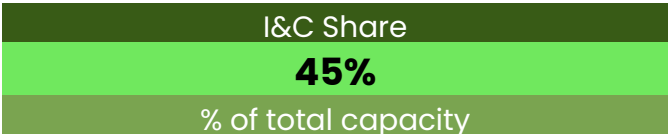
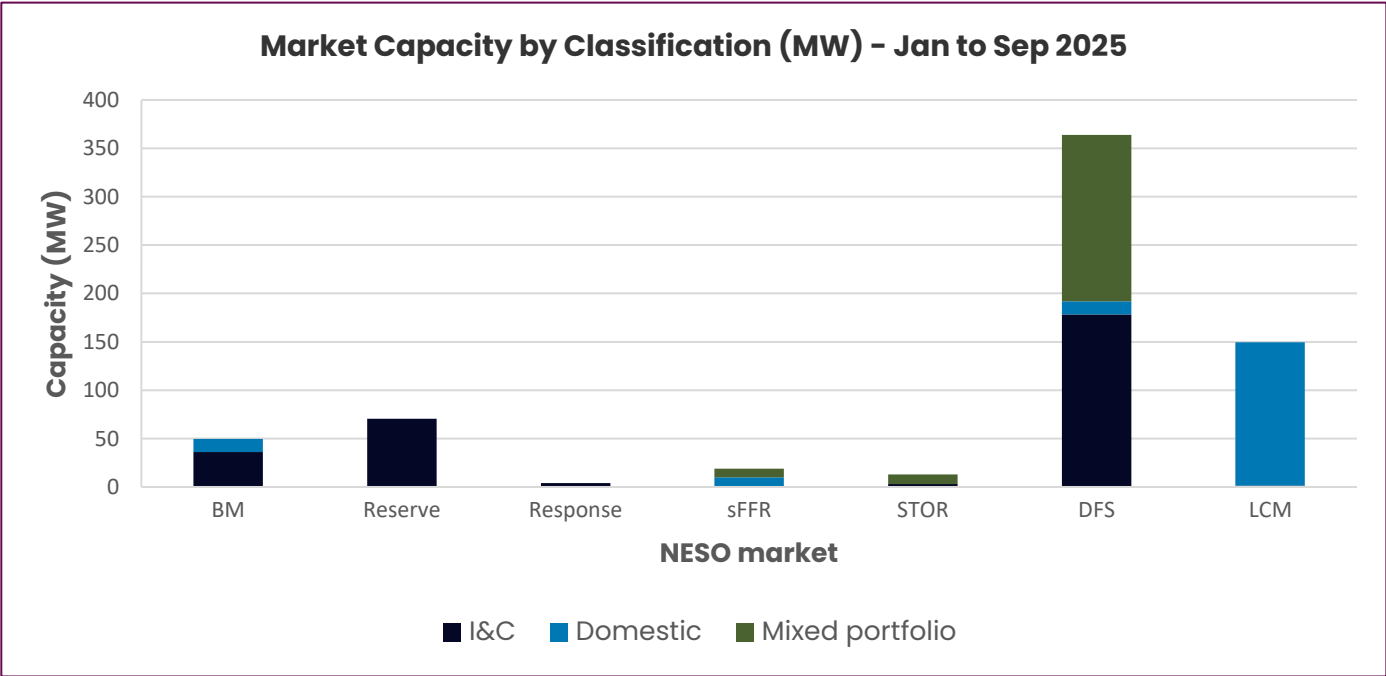
Service barriers summary V3

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	●	●	●	●	◐	●	◑	◑	◑	●

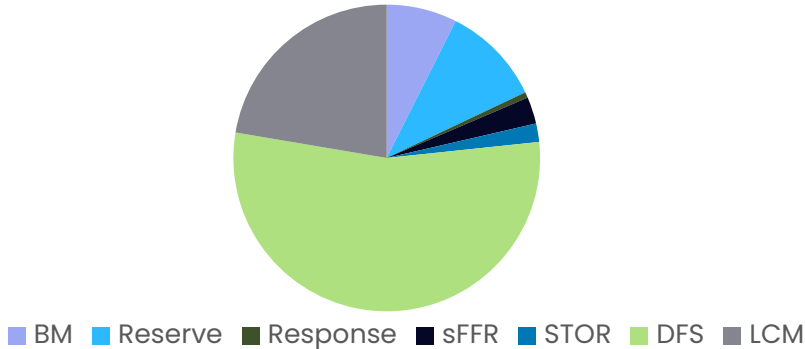
●	Not aware of any insurmountable barriers
◐	Barriers or design requirements are likely stopping some of the market
◑	Barriers or design requirements are stopping all of the market
●	Not capable of participating in service

Market metrics dashboard

We have published a Demand-side Flexibility in NESO markets [data dashboard](#), which will be updated on a quarterly basis. Below is a summary of the total volume of Demand-side Flexibility¹ that is active² in NESO markets currently. We have reached out to all providers recently to update SMP data. If you believe your units are missing from the below data, please reach out to us so we can update data in SMP.



Total Market Distribution Jan 2025- Sep 2025



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.

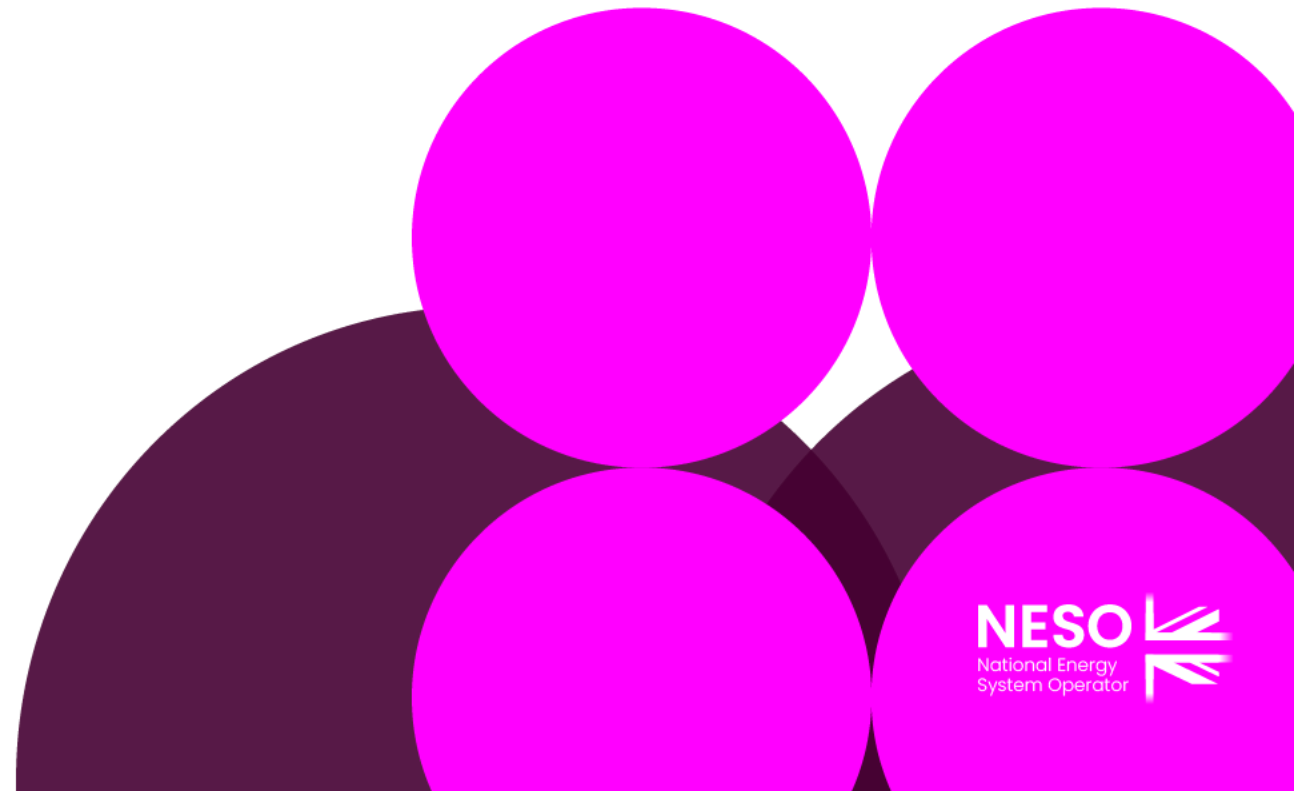
2 Active means units that have been active in bidding in markets within the last 12 months.

Thank you



If you have any feedback regarding the key results and progress, please email us at:

flexibilitystrategy@neso.energy

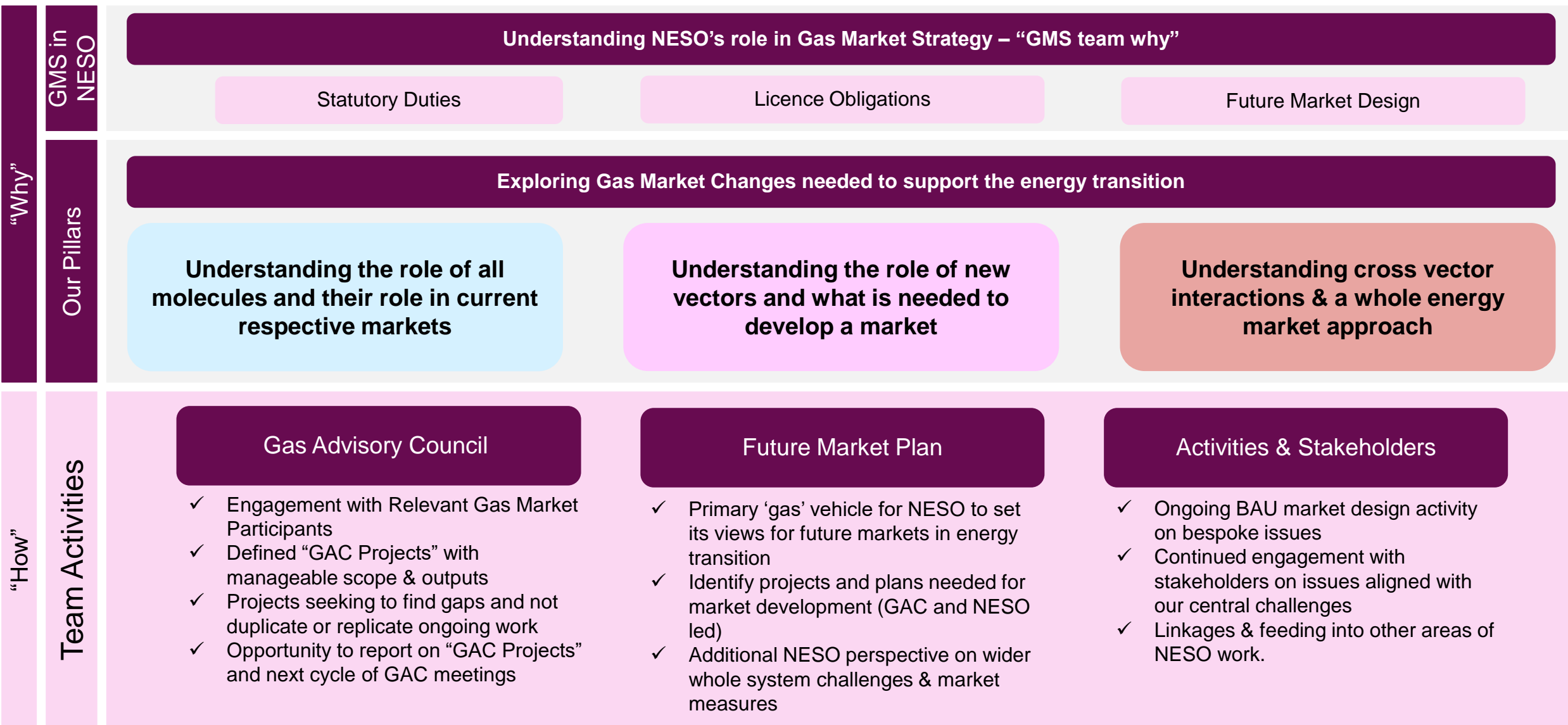


Gas Future Market Plan

Martin Shannon

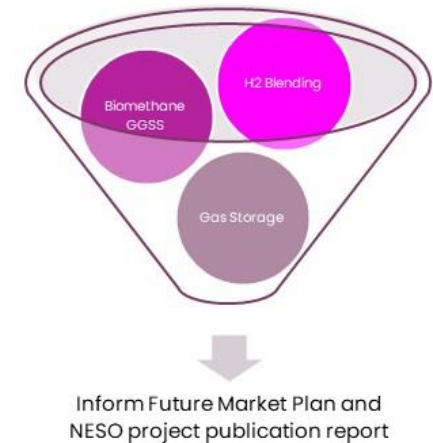
Max Lambert

Gas Future Market Strategy in NESO



NESO licence obligations

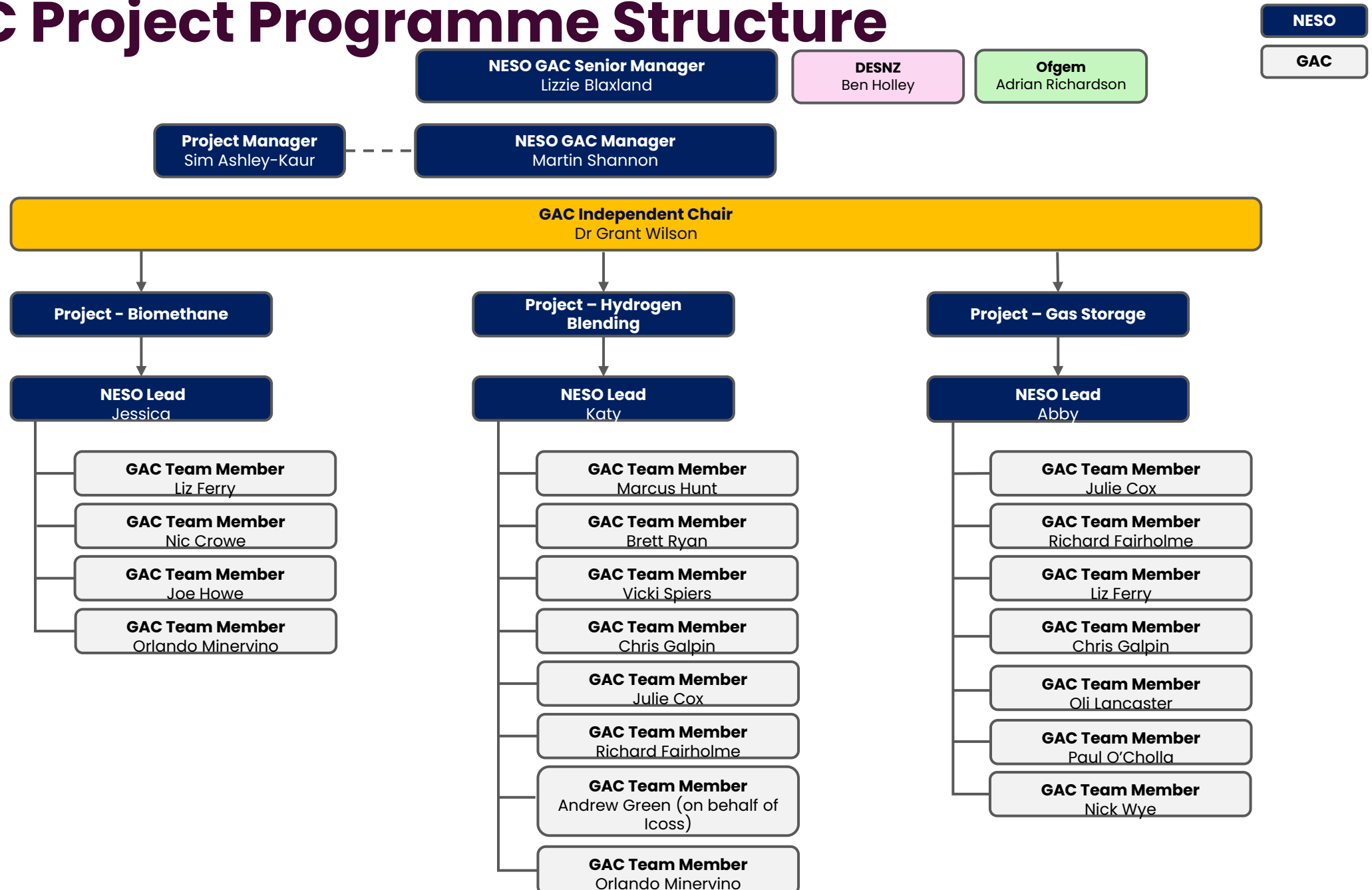
- C7.1** “The purpose of this condition is to set out the licensee’s obligations to support potential future scenarios.”
- C7.2** “The licensee must provide to the Authority and Secretary of State information and analysis on any risk or threat that the licensee has identified, where such a risk or threat may, in the licensee’s view, compromise or detrimentally impact the safety, security or resilience of any significant part of the whole energy system.”
- C7.3** “The licensee must use reasonable endeavours to ensure that the Future Market Plan contains:
- (a) a description of projects and plans (set out in the Future Market Plan pursuant to paragraph C7.2) that the licensee and other Relevant Gas Market Participants intend to progress;
 - (b) an initial view of which parties are best placed to deliver projects and plans referred to in paragraph C7.3(a), whether the licensee, any Relevant Gas Market Participant or any third party; and
 - (c) where applicable, a summary of the progress, projects, engagements, issues and plans set out in the most recent Future Market Plan.”
- C7.4** “The licensee must use reasonable endeavours to engage and consult with Relevant Gas Market Participants in development of the Future Market Plan, including:
- (a) within 90 days of this condition coming into effect, establish a group for engagement, to include Relevant Gas Market Participants, to contribute insights, expertise and information to develop the Future Market Plan; and
 - (b) coordinate and periodically hold meetings of a forum with the group established under paragraph C7.4(a) to propose and develop projects and plans to progress the Future Market Plan.”



RACI for NESO Led-GAC projects

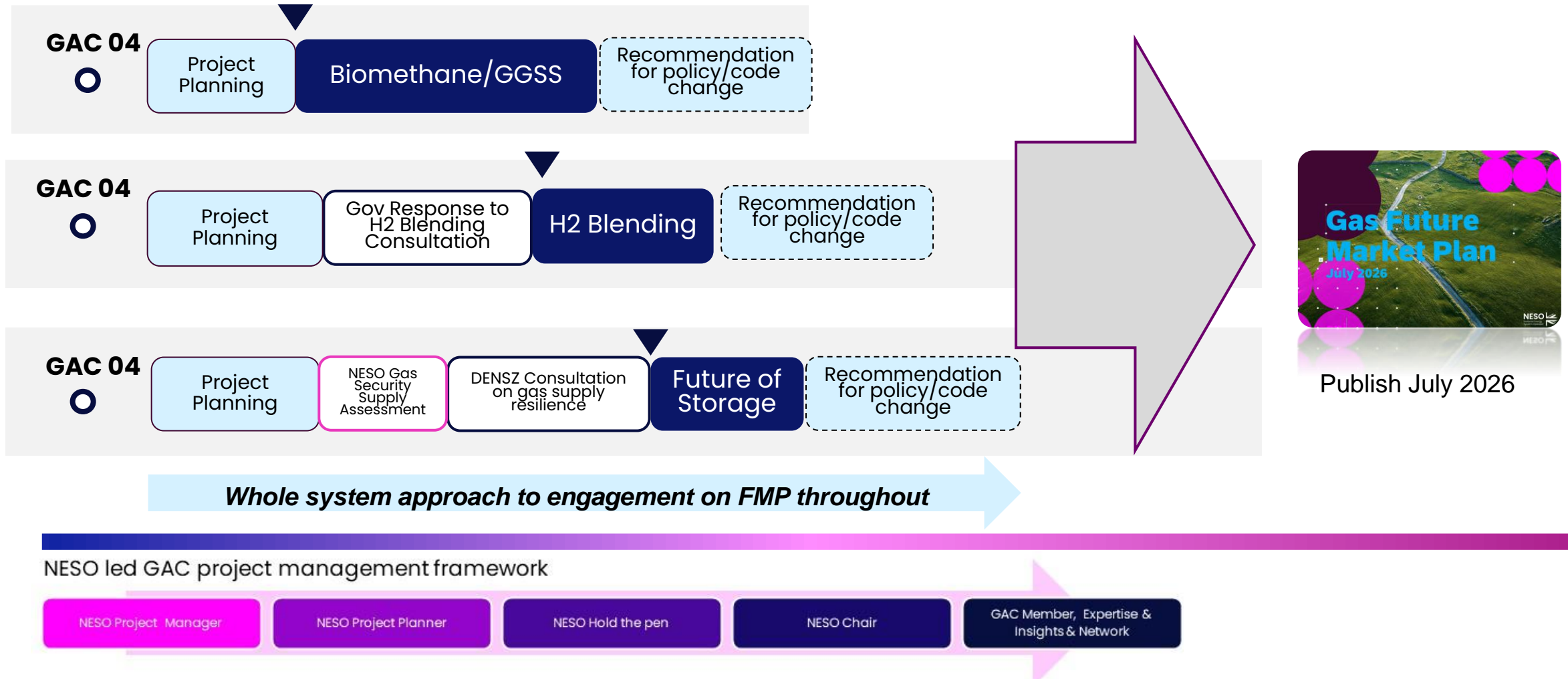
NESO	GAC member	DESNZ and Ofgem
Responsible & Accountable for the project identification and content drafting to inform the Future Markets Plan (FMP)	Consulted & Informed members will be consulted on the project through out its lifecycle, leveraging their Expertise and Insights that will support the project delivery.	Informed – observer role in the GAC meaning they will be informed of the project development but not directly input. DESNZ and Ofgem publications will though directly inform the projects.

Public GAC Project Programme Structure



FMP development process

Agreed with DESNZ NESO-led GAC projects that will inform the Future Market Plan will build on DESNZ minded to position and be sequenced to make best use of their outputs.

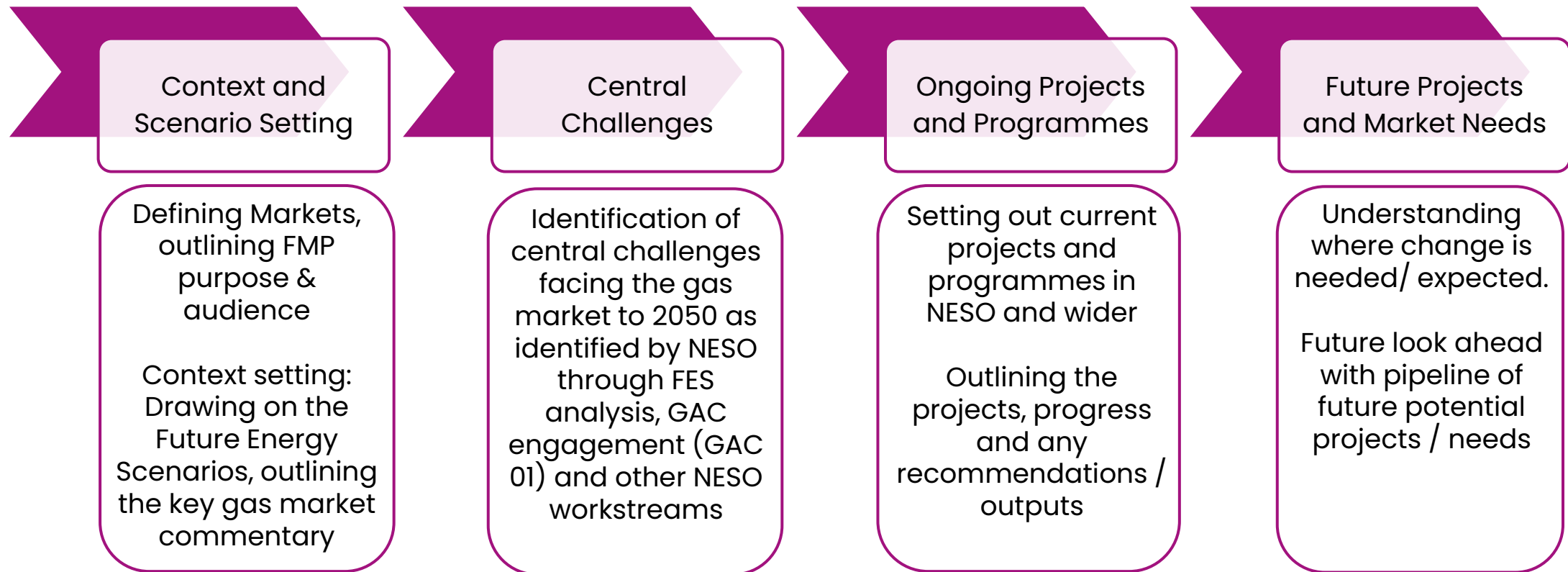


Future Market Plan – Contents

Licence Condition – NESO must

...Produce, in cooperation with Relevant Gas Market Participants [GAC], a Future Market Plan...which:

- a) sets out actions, projects and plans to facilitate the transition of the gas market to a decarbonised energy system; and
- b) assesses the required transition of the market and industry arrangements for gas against potential future scenarios.



Industry Engagement on the FMP

Industry Engagement

The Gas Future Market Plan will be built through collaboration with Industry and Gas Advisory Council

Context and Scenario Setting

Informed

Building on the Future Energy Scenario's and projections for gas market transition we will set the context and scenarios being discussed within the Future Market Plan.

Expectations & Cadence

Information will be shared by webinar on this during the first phase of engagement.

Central Challenges

Consulted

Initial view of 5x central challenges are currently being developed and tested with the Gas Advisory Council.

Expectations & Cadence

We hope to test this central view of challenges with the GAC and broader industry to embed industry views within the challenges.

A webinar / consultation will be targeted during the first phase of engagement.

Ongoing Projects and Programmes

Informed

Section detailing the plans and projects – and associated actions – proposed and undertaken as part of the GAC

Expectations & Cadence

Timings aligned with the project plans and frequency of live GAC Projects. We will report back on the progress of these projects during events in the future.

Future Projects and Market Needs

Informed

Sharing NESO's view of future priorities, projects & needs cases as part of next cycle of FMP.

Look ahead to understand and recognise where change is needed, linked to NESO's priorities/duties and our stakeholder engagement (e.g. at GAC and more widely)

Expectations & Cadence

As per the ongoing projects and programmes, we hope to share with industry in the future our thinking as it develops in the Future Market Needs / Actions space.

Industry ask

We are currently developing our view of the central challenges facing gas markets. We would like to test this thinking with you and understand more about energy market participants view of what the central challenges are.

In light of which we will be hosting a series of webinars and engagement events to run through this in more detail to sign up to be invited to this series please use the QR code and enter your details.

box.Gas.Market.Strategy@neso.energy

To sign up for these sessions please use the form below or scan the QR code

<https://forms.cloud.microsoft/e/E2D982WfVs>



Break

Product and Services Update

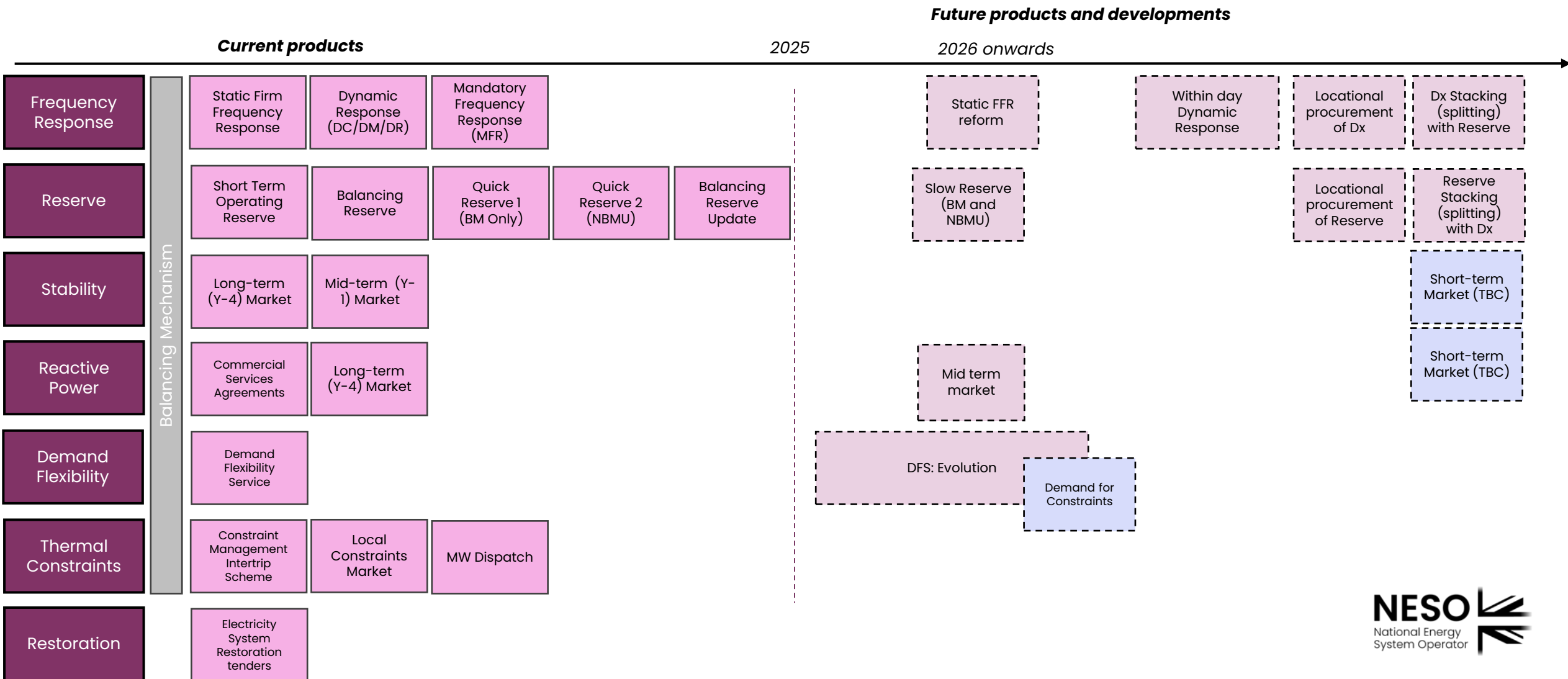
Cathy Fraser

Agenda

1. Overview & Roadmap
2. Consultations timelines
3. DFS Evolution
4. Response (Dynamic Response & Static FFR)
5. Reserve
6. Long Term Service changes

Market and Ancillary Services – Overview and Roadmap

To operate a safe and secure power system, NESO procure a suite of ancillary services through designated markets and via Bid Offer Acceptances (BOAs) in the Balancing Mechanism.



Consultations timeline

Requirement	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	Apr 26	May 26	Jun 26	Jul 26
Dynamic Response		Consult			Ofgem review period			Consult	
Static FFR		Consult			Ofgem review period				
DFS		Consult		Ofgem review period					

Public

Demand Flexibility Service (DFS)

Key Statistics

**152
Events
&
Contracted
121**

**2.31m
Registered
MPANs**

**776
tonnes of
CO2
saved**

**99.58%
MPANs
manually
instructed**

**£1,290
Per MWh
Highest
Accepted
Bid Price**

£1,926,140 Total Accepted Bids

Total Volume Bid MWh **49,342.3MWh**

Total MWh Accepted **21,516.2MWh**

196.7MW Peak SP volume

**746 MW
Peak
Winter
Volume**

**634 MW
Peak
Summer
Volume**



DFS Evolution



Demand Turn-Up

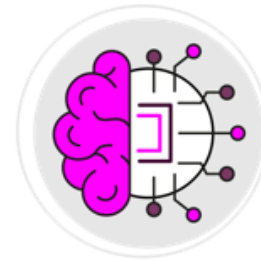
Add a Negative Margin element to the service



Locational Procurement & Primacy

5 Locational Zones

Introduce early Primacy process



Baselines

Introduce an additional Baseline for renewable assets (Wind & Solar)



Eligibility Rules

Reduce eligibility criteria from 1MW to 0.1MW

Public

Response Services

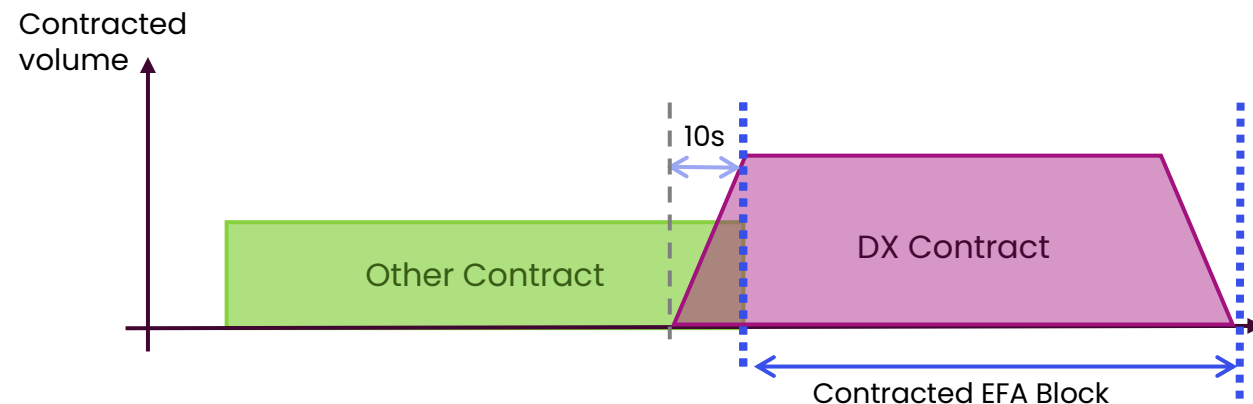
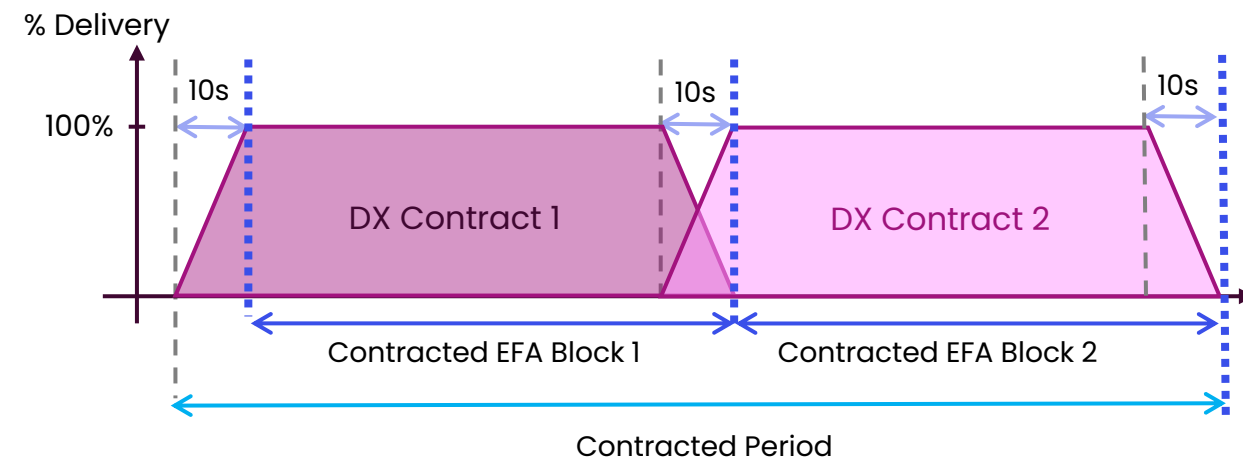
Dynamic Response Consultation.

Continuous Transition Period

We are proposing Continuous Transition Periods (CTP) to our Dynamic Response Services (DC/DM/DR) to reduce operational risk and ensure better control of response across the service window boundaries.

CTP will replace Grace Period 2, and cases of new contracts from Grace Period 1.

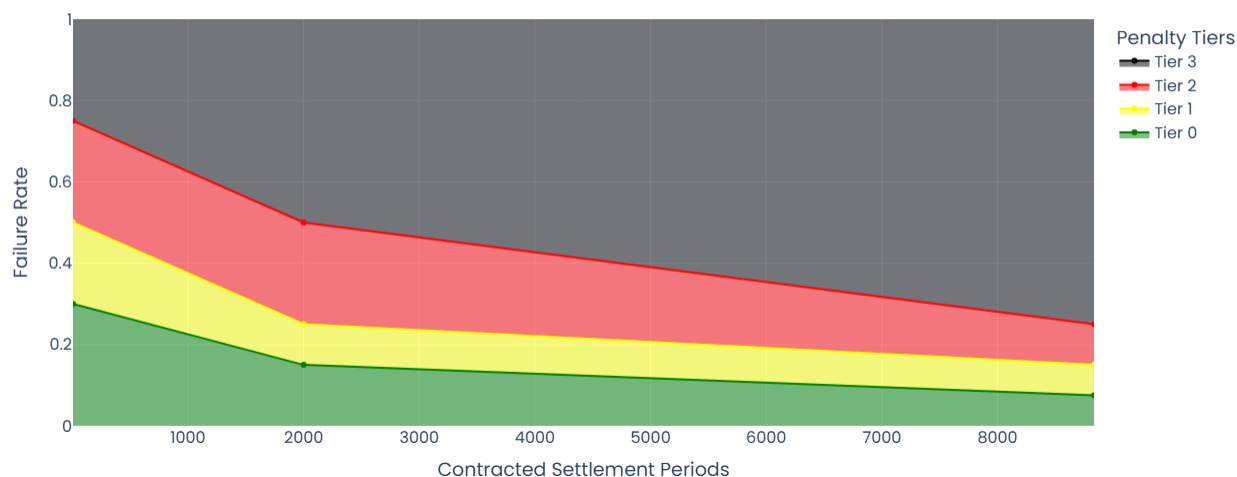
Providers will have to begin ramping 10s before the start of the contracted EFA block, which is likely to impact providers jumping between services.



Performance Regime

Incentivises good behaviour
 Appropriate penalties for continual rule breaks
 Proportionate approach avoids unintended penalties for less/more active units
 Realistic targets for providers

Proposed Penalty Thresholds



Penalty Tier	Maximum allowed failure %		
	6 SPs	2000 SPs	8834 SPs
Tier 0 - SP availability deduction	30%	15%	7.5%
Tier 1 - EFA availability deduction	50%	25%	15%
Tier 2 - unit suspension	75%	50%	25%
Tier 3 - de-registration	N/A	N/A	N/A

Requiring Operational Metering and Operational Baselines at all times

- This proposal remains the same as we previously consulted in 2024
- Submission rate below 80% will lead to suspension from the service
- Measured on a rolling 28-day assessment period

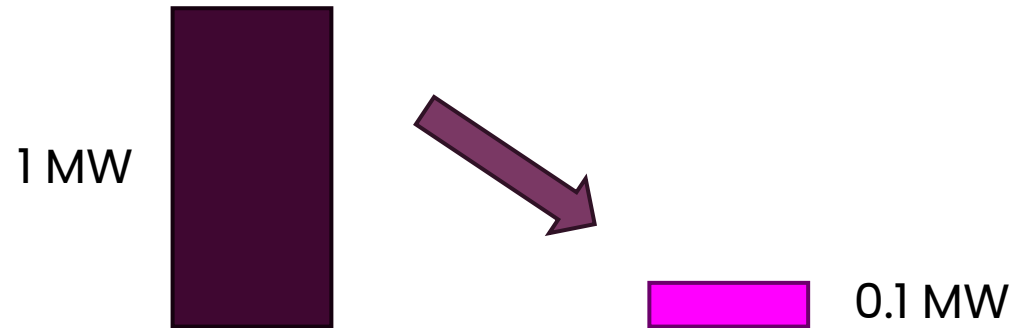
This proposal supports greater visibility of our service providers
Accelerating the benefits of DER visibility work
Resulting in more efficient balancing decisions

Public

Response Static Firm Frequency Response

Reducing minimum bid & unit size

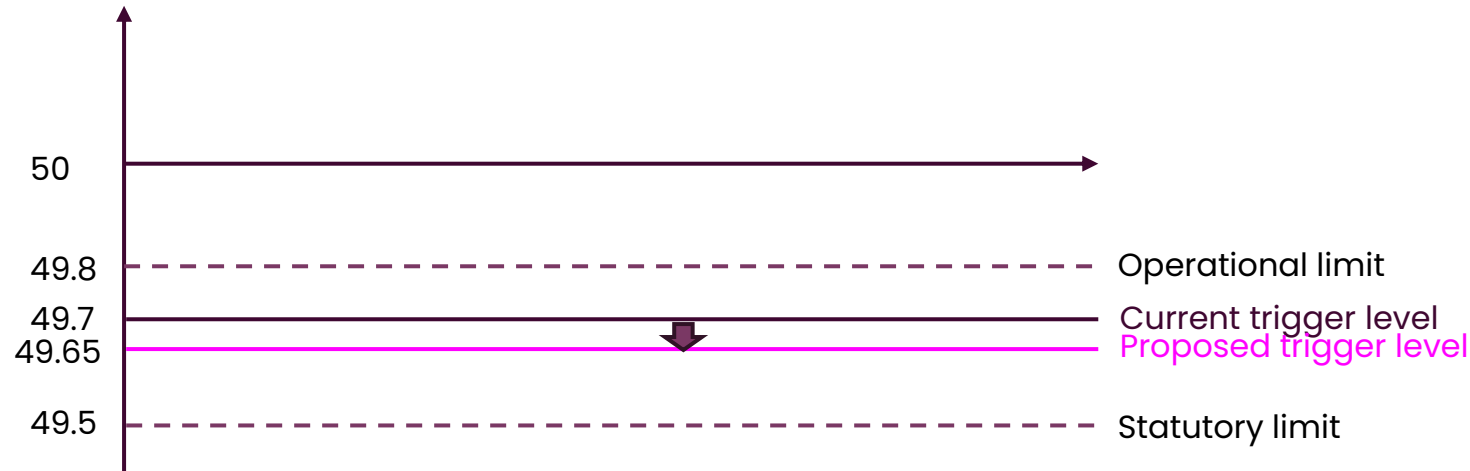
Proposal is to reduce the minimum bid & unit size from 1 MW to 0.1MW



Improve access to the market
Increase delivery accuracy
Facilitate aggregation at a local level
Alignment with other services

Reduce Trigger Level

Proposal is to reduce the trigger level from 49.7Hz to 49.65Hz



Improve access to the market
Cost benefit
Reduce risk of service triggering in non-fault situations

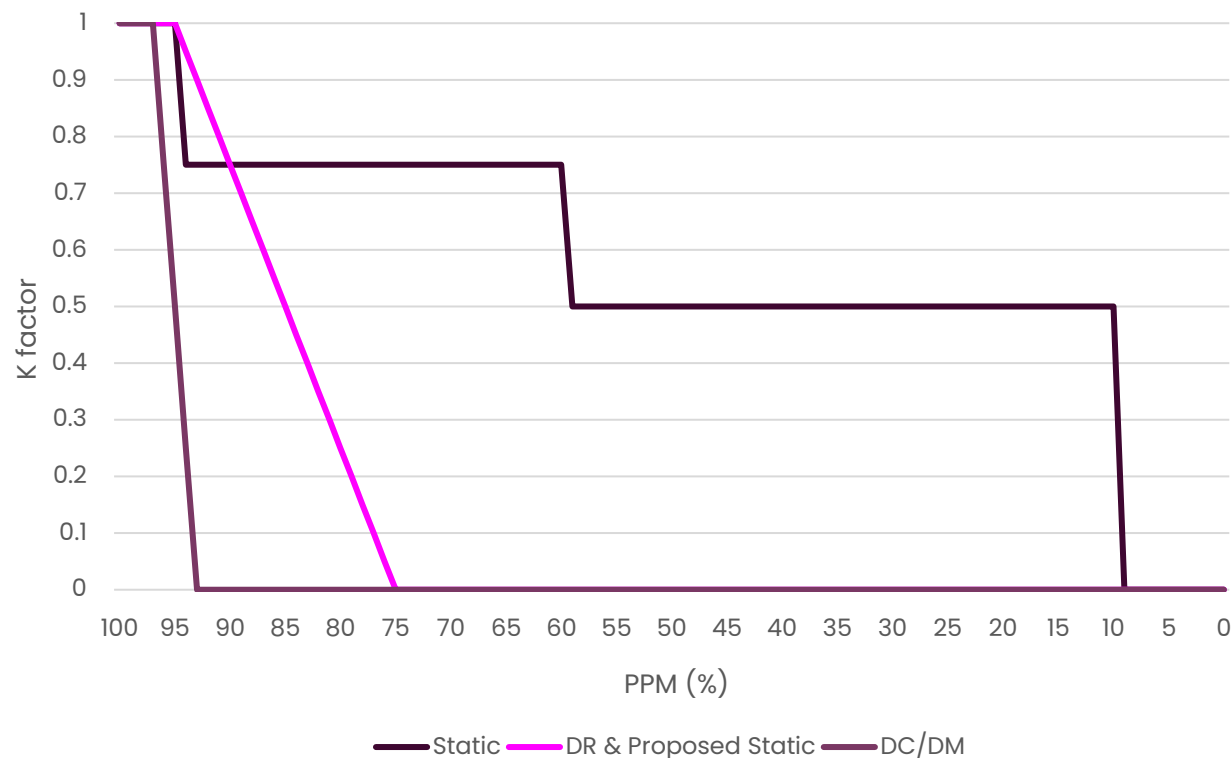
Performance Monitoring – New Requirements

Update Percentage Performance Measure (PPM), to aligning with DR requirements.

Removing current stepped approach with more proportional penalties for performance.

We are proposing to introduce an escalation process for poor delivery with ability to suspend units and de-register providers.

Ability to investigate delivery that could be detrimental to system frequency.



Public

Reserve Services

Key updates

Quick Reserve

Phase 1 implemented Dec 2024

Phase 2 – Introduction of Non-BM units from September 2025

Co-optimised with Response and other Reserve services in one auction

Slow Reserve

New Service for BM and Non-BM Units March 2026

Co-optimised with Response and other Reserve services in one auction

Replacement for STOR, which will continue until SR go live

Balancing Reserve

Co-optimised with Response and other Reserve services in one auction

Changes to Dispatch Flexibility Rules:

- allowing units dispatching from a 0 FPN to provide 25MW of indivisible capacity, therefore allowing a SEL and/or SIL of up to 25MW
- allowing units to set a MNZT of up to 5 minutes

Slow and Quick Reserve

Slow Reserve:

- SR Go-live announced as 31 March 2026 with STOR ending on 30 March 2026
- Additional information available in the Transition Plan on the [website](#)
- Current STOR providers will have new Registration, Auction, Balancing system (non-BM), Operational Metering (non-BM), and Settlement requirements
- NESO are committed to working with all existing STOR and new providers that wish to participate in SR from go-live and have onboarding plans and discussions in place.

Quick Reserve

- The first Quick Reserve (QR) non-BM auction took place on 2 September at 2pm for Service Day 3 September 2025, allowing non-Balancing Mechanism (NBM) providers to take part in the daily QR auction.

Balancing Reserve – Ofgem approval and go live

We are delighted that Ofgem have approved our proposed changes to the Balancing Reserve service, including the move to a co-optimised afternoon auction with Quick Reserve (QR) and the Dynamic Response(Dx) Services.



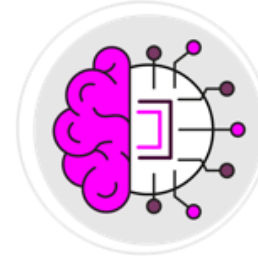
Changes to Auction timing

Auction moved from 08:15 to 14:00 Local time (UK)



Dispatch Flexibility Rules

Changes made to the Dispatch Flexibility Rules



Excessive Pricing clause updated

Deemed unavailable for excessive pricing



Contract Transfer clause updated

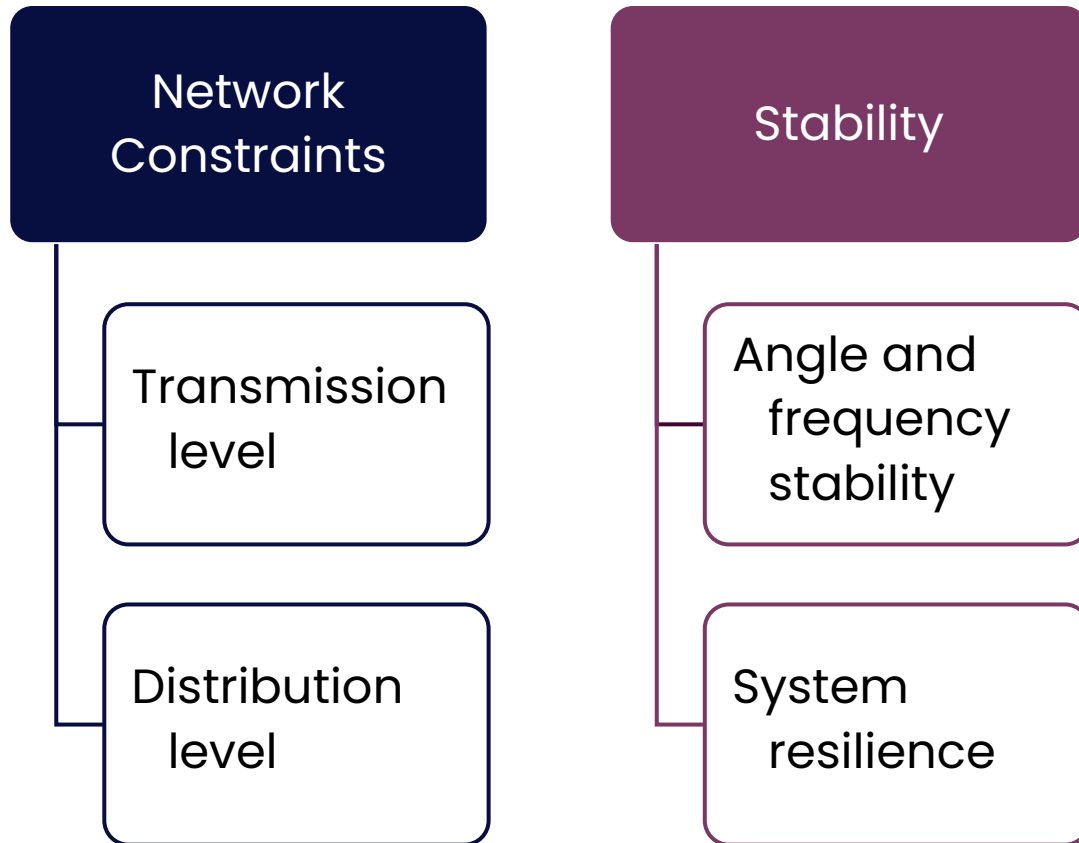
All obligations aligned to the secondary provider

Public

Cross service changes

Locational
Procurement

Drivers for Locational Procurement



Delivering value to end consumers through effectively procuring and utilising services

Our goal is to incorporate details regarding the physical transmission layer into the ancillary service market, **enabling the procurement of such services where they are feasible.**

Benefits of Locational Procurement

The expected benefits include:



Reduction of repositioning costs and actions within day.



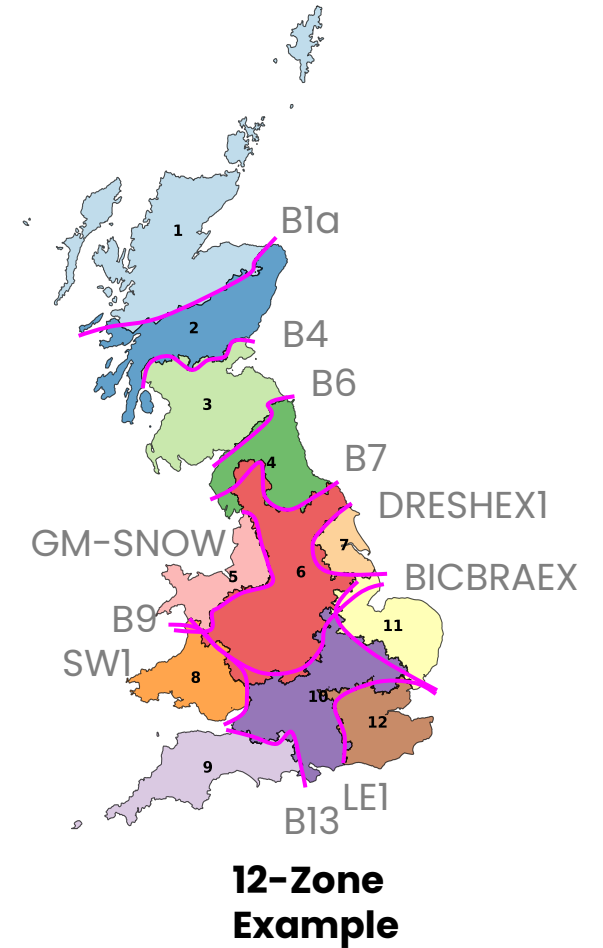
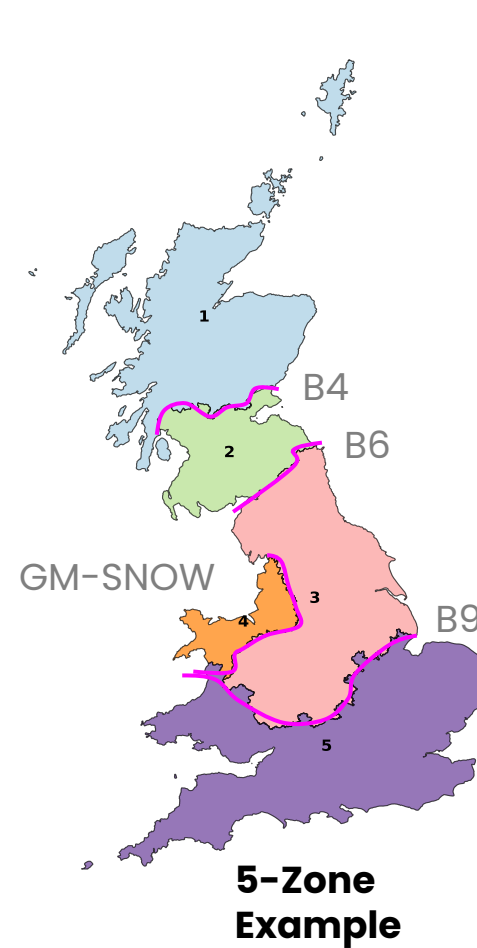
Fewer repositioning actions reduces complexity of scheduling and dispatch processes, reducing operational risk.



Improvement to market signals in investment and dispatch timeframes.

Zones & Unit Aggregation

- The following principles are followed to set the new zones:
 - **Transmission Constraint Alignment**
 - **Market Liquidity**
 - **Operational Simplicity**
- **Participants are permitted to aggregate units at the zone level.**
- Little or no change to participant's existing EAC bidding process.



Thank you