



Frequency response reform webinar

15 May 2023

The webinar will start shortly. Attendees' microphones are muted with cameras off to minimise disruption. Please post comments or questions using the Teams chat function and these will be answered in our Q&A at the end.

Please note that the webinar will be recorded; the recording and the slides will be published online.

Agenda

Balancing services reform

Release 2 updates and topics

Future changes

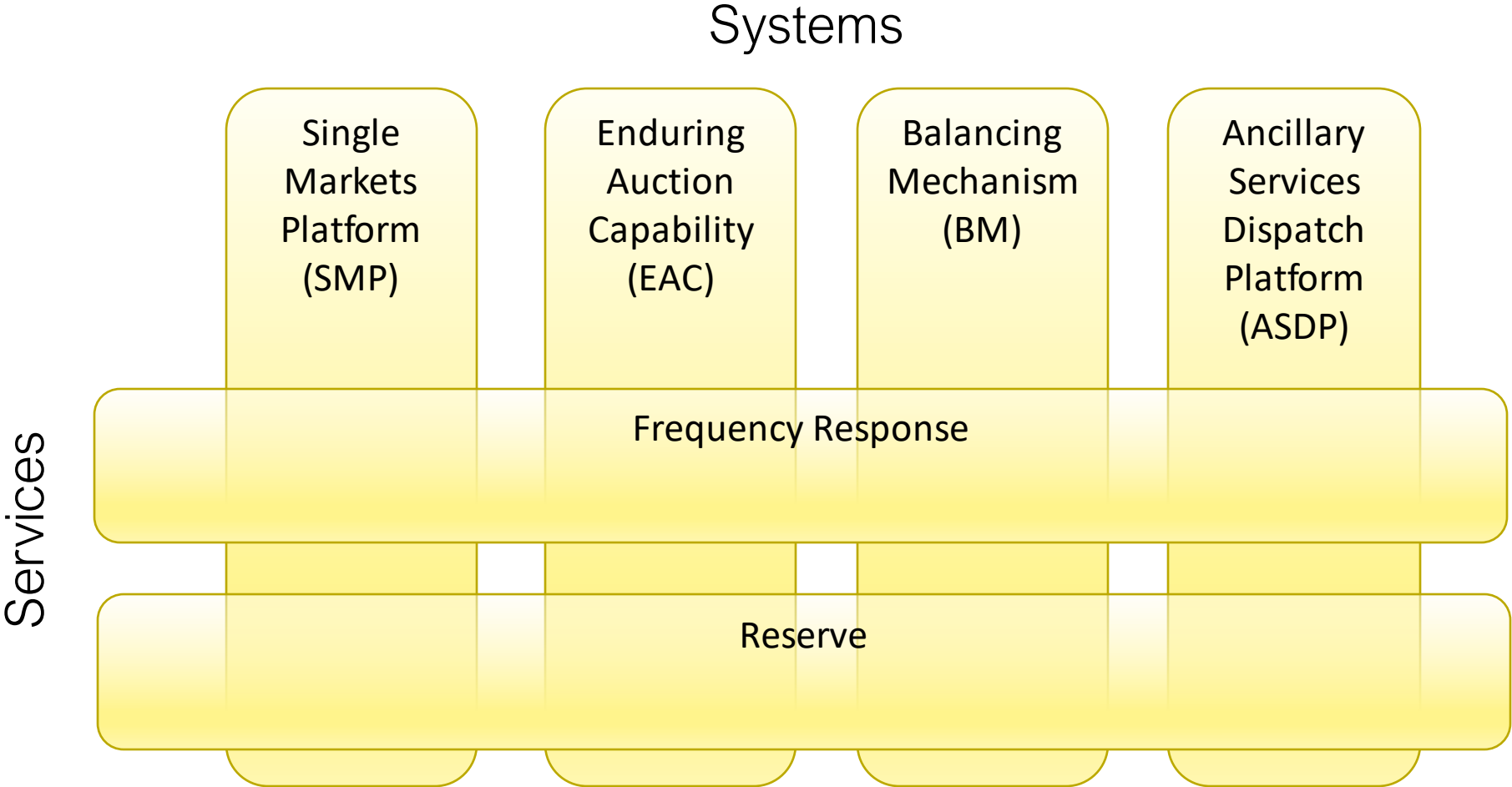
How to get involved

Q&A session

Changing system and market conditions require constant reform of our balancing services

- We need balancing products and services which better serve the new system requirements, from a wide range of providers.
- This means phasing out the legacy products and finding ways to enable more market liquidity, to reduce cost and to provide clear and coherent signals to providers about our requirements.

ESO is implementing a number of integrated programmes to achieve these goals



Each service is supported by many systems, and each system can support multiple services

Release 2 updates and topics



We have developed a list of topics to focus on for Response Reform this year

Topic	Primary focus	Explanation
Reform of Ramp Rates	Access	Assessment and implementation of changes to ramp rates and monitoring.
Improving Re-submitting of Performance Data	Access	This will improve providers experience of re-submitting data and reduce processing time.
Introducing Data Derived Metering (Baselining)	Access	Potentially removing a barrier to entry for behind the meter assets, lead to increased competition and reduced costs.
Improving Re-submitting of Performance Data	Access	This will improve providers experience of re-submitting data and reduce processing time.
Improving Disarming / Re-arming for Stacking [R1b]	Usability	Further enhancements to disarming by frequency service facilitates a number of enhancements including stacking of response services and lifting the procurement of greater volumes of the dynamic services.
Frequency Measurement Standard	Usability	Provide a guidance document that details the ESOs standard method for measuring frequency. This will bring increased data quality and greater confidence in service delivery.
Automating Buy Orders (proof of concept)	Usability	There is the potential to reduce/remove manual processes and facilitate enhanced procurement options.
Improving PNs	Usability	Improved visibility of response services in ENCC.
Improving Availabilities	Usability	Improved visibility of response services in ENCC.
Improving Disarming / Re-arming [R2]	Usability	Further improvements to disarming and rearming to improve the usability.
Improving ENCC Visualisation and Situational Awareness	Usability	The ENCC will have better situational awareness for response services.

Topic for exploration: Data derived baselines

- Current rules have been highlighted as limiting participation from assets which have complex baselines or are sat behind the meter with other assets.
- We have been looking at ways to support these assets in demonstrating correct Response delivery separate from their baseline through the use of data processing and analysis.
- We have identified a potential solution that we will be exploring as part of Release 2
- Next steps:
 - We will be consulting on changes to the contract terms which currently prohibit of these types of assets
 - We will be working with industry to agree the details of how this data might be prepared to ensure we maintain the required levels of data accuracy and integrity
 - Initiate change project to deliver

12.8 For the purposes of this paragraph 12 and for the avoidance of doubt, where a **Response Contract** is formed with respect to a **Response Unit** which is not registered as a **BM Unit** and with a **Contracted Capacity** which is less than the aggregate **Registered Quantity** of each component **Eligible Asset**, then the making available and/or delivery of services by the **Service Provider** to **NGESO** or a third party from such **Eligible Assets** or any of them with respect to any or all of that excess capacity shall be deemed to impair, and be inconsistent or in conflict with, the delivery of the applicable **Auction Product** pursuant to such **Response Contract** unless such excess capacity is demonstrated to **NGESO**'s reasonable satisfaction to be separately metered so as to enable the production of **Operational Data** and **Performance Data** pursuant to paragraph 15.

15.4 Unless otherwise specified by **NGESO** in writing from time to time, whether or not the **Response Unit** is the subject of a **Disarming Instruction**, the **Performance Data** shall comprise (at a granularity of twenty (20) measurements per second (20 Hz) or alternatively in the case of **Dynamic Regulation** only two (2) measurements per second (2Hz)), for each **Response Unit**:-

- i. date/time stamp;
- ii. **Input Frequency** (for one of the relevant **Eligible Assets**);
- iii. whether or not the **Response Unit** is available for the applicable **Auction Product** pursuant to paragraph 5;
- iv. **Metered Active Power Output** or **Demand** (as the case may be);

Page 12-13 Response Service Terms
<https://www.nationalgrideso.com/industry-information/balancing-services/frequency-response-services/new-dynamic-services-dcdmndr#Document-Library>

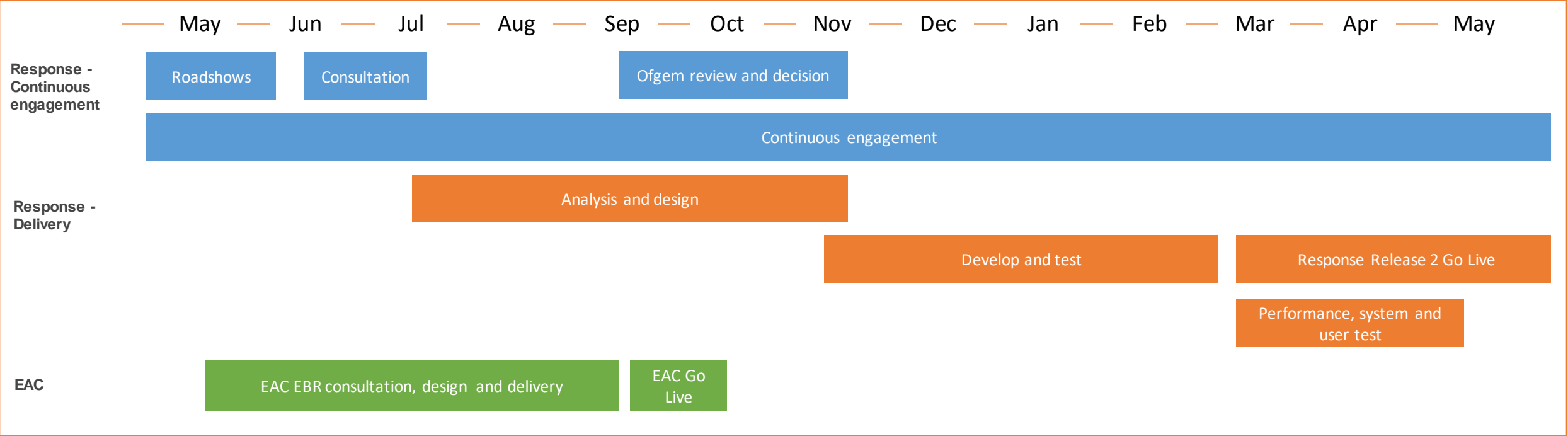
Topic for exploration: Ramp rates

- The current ramp control measures were put in place to prevent uncontrolled energy swings following Response events. Industry have advised that the implementation of these controls limit options for participation in other markets.
- Currently we are not looking to enforce the contractual terms specific to ramping rates, we see there is still an enduring requirement for ramp restrictions to remain in place and further analysis is ongoing to quantify this requirement. As part of the decision around updates to ramp limits we will be introducing more robust monitoring solutions.
- We are conducting an initial assessment as to whether we can lift the overall cap from 5%/min to another (higher) value.
- Following this we will progress a more in-depth piece of work to investigate a more nuanced approach, for example by selectively limiting ramping restrictions at certain key periods. We believe we should be in a position to start this second stage of work in Summer of this year, following this Release 2 consultation.
- The consultation will be seeking views on changes to ensure that these contractual documents do not present a barrier to reform this topic

Maximum ramp rate for Baselines	The maximum ramp rate per minute permitted at any point within a baseline submitted by an energy limited provider as a percentage of contracted quantity $Q_{contract}(h,l)$	$RR_{bp}(h,l)$	5% per minute	5% per minute	5% per minute	The ramp rate limit can be calculated from the contracted quantity. There will be a different maximum ramp rate if the volumes of high/low response are different.
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Page 24 Response Service Terms
<https://www.nationalgrideso.com/industry-information/balancing-services/frequency-response-services/new-dynamic-services-dcdmdr#Document-Library>

We will be adopting a more agile reform and transforming our engagement approach



- We will make greater use of the Guidance Document to allow us flexibility to provide clarifications outside of the consultation cycle and implement change in a more agile way
- We will consult when making changes to the services, providing opportunity for feedback
- In support of this we will be implementing a new engagement approach with regular sessions to provide updates and gather input on reform topics throughout the year
- Appropriate notice for any changes to be implemented

A landscape photograph featuring rolling hills under a cloudy sky. The foreground is a field of harvested crops, possibly corn, with a path leading towards a large, dark tree on the right. The text "Future changes" is overlaid on the left side of the image.

Future changes

We are also considering longer term reforms

Longer term topics that we will be investigating this year include:

- Locational procurement
- Intraday procurement
- Enduring static Response service
- Removing barriers to entry for wider technologies

A landscape photograph of rolling hills at sunset. The foreground is a field of harvested crops, possibly corn, with a path leading towards a large, dark tree on the right. The sky is filled with soft, golden light and scattered clouds. The text "How to get involved" is overlaid in white on the left side of the image.

How to get involved

Roadshows

- For the second year we will be running Response roadshows to allow open discussions with industry on Response reform and our proposed Release 2 changes.
- We will have material to share but the focus of the event is to discuss specific topics representing areas of interest for individual attendees.
- There is no defined agenda so drop in for a quick chat or stay for longer to talk through topics in as much detail as you like. All welcome to join us for a working buffet lunch around 1pm at both events.
- This year we are expanding the scope to include wider balancing services reform projects including: Single Markets Platform (SMP), Enduring Auction Capability (EAC), Reserve, Balancing Reserve and our Markets Roadmap.

Edinburgh	London
Date: 18 May 2023 Venue: Radisson Blu Edinburgh City Centre Registration: Edinburgh	Date: 24 May 2023 Venue: The Clermont Charing Cross Registration: London

There are a number of ways to engage with the wider programmes

EAC webinar

We will be hosting a webinar w/b 22nd May to provide an update on our Enduring Auction Capability (EAC) platform.

Whilst we will endeavour to answer all the questions raised in this webinar, if you have any questions relating to EAC we request that these questions are put to them directly.

Invites to this will be sent out from the FOBS .box this week.

SMP show and listen

The SMP Programme hosts a monthly Show and Listen session to share progress and get feedback.

You can register your interest in joining the sessions [here](#)



Any questions?

Please use the Teams Q&A feature
to ask your questions





Thank you for attending

Contact us:

box.futureofbalancingservices@nationalgrideso.com