Frequency response reform

This webinar will be recorded and the slides will be published online.

Please ask questions in the Teams chat

Please post your questions in the Teams chat

Agenda

1. Progress to date
2. A summary of proposed changes
3. Timelines
4. Firm Frequency Response
5. How to get involved

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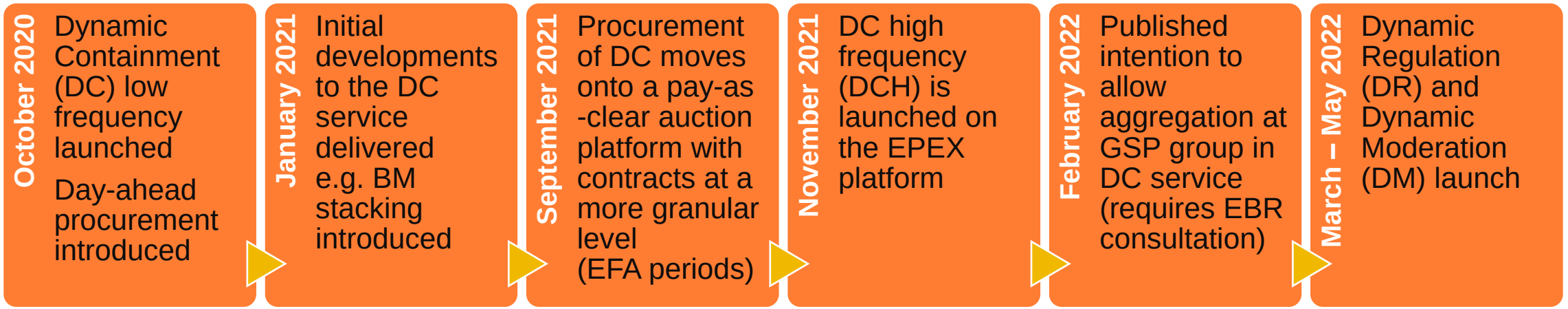
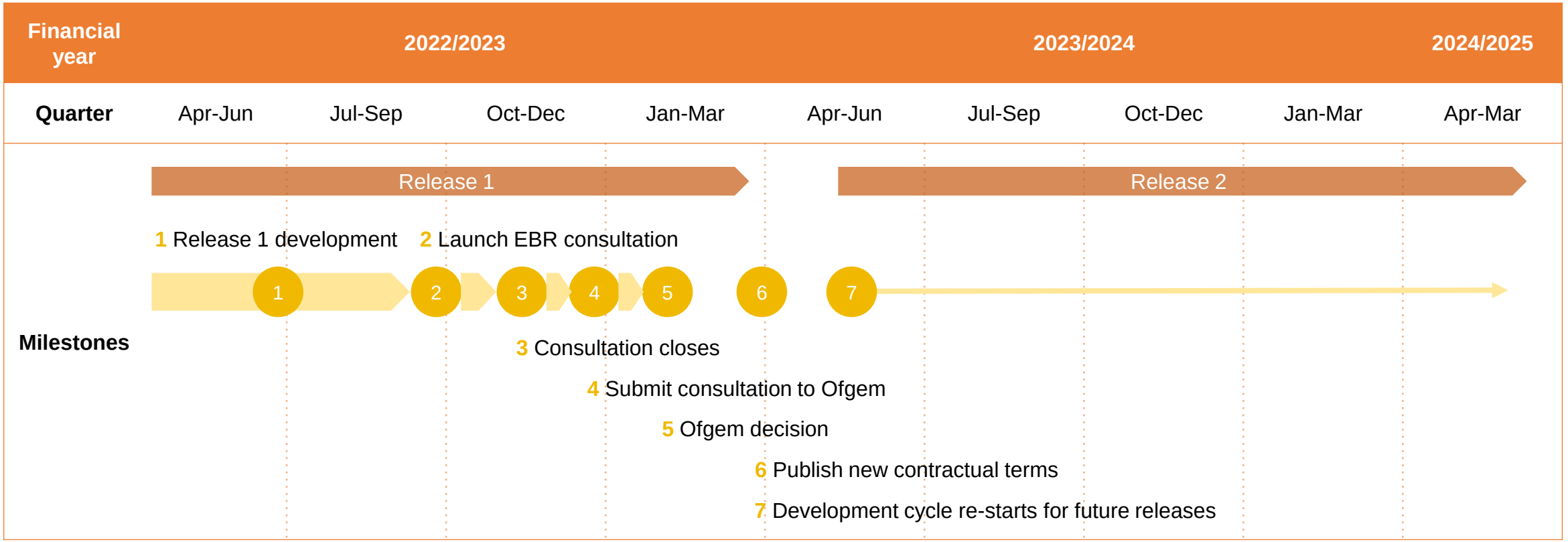
Response reform: progress to date

Progress and learnings to date



Response reform delivery plan 2022-23



We are working towards an annual development cycle for response, where the timelines align with the C16 consultation, and IT development, industry engagement and formal consultation under EBGL is conducted around the same time each year.
If this approach is successful we will use it across ancillary service development

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Changes we're proposing (Release 1)

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Making the service terms more user-friendly

Old format	DC, DM or DR	New format	DC, DM & DR	Additional content
Service Terms	One for each service	**Service Terms**	One document to cover all 3 services	Will include Service Glossary terms
Service Glossary	One for each service			
Auction Rules	One for each service	**Procurement Rules**	One document to cover all 3 services	Will include Service Glossary terms and key information from Auction Rules, Participation Guidance & Testing Guidelines
Participation Guidance	One for each service			
Testing Guidelines	One for each service			
Balancing Services Glossary	One document to cover Response & Reserve	**Balancing Services Glossary**	One document to cover Response & Reserve	Same content as before

- Content not included in contractual terms such as transitional arrangements will be captured in supporting guidance documents
- Stakeholders will be able to share feedback on the guidance documents and the ESO will be able to change the content without triggering another consultation

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State of Energy

Clarifications on SOE monitoring

- Purpose – Identify situations where the unit is allowed to declare unavailability without performance penalties due to the excessive delivery of the response services.

- Method – Monitor the lower boundary of the required SOE calculated using Response Energy Volume and Energy Recovery defined in Service Terms.

We are reviewing the maximum ramp rate limit

- Current approach – 5% of Contracted Quantity per minute.

- Under review – Maximum ramp rate on baseline change aligns to the energy requirement for each service.

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Performance monitoring

Topic	Old approach	New approach
Grace period	1 second (1s for DC/DM, 10s for DR) grace period when there is a change in P or Q	Review of grace period length including multiple switching scenarios. Error tolerance during the grace period for switching contracts
K factor for bundled services	Single K factor calculation for bundled services (e.g. DCLH) based on performance of both contracts	K factor separation for bundled services
Availability payment formula	Market clearing price in GBP/MW/h	Clarification on the availability payment formula in regards settlement period payment
Availability payments		Clarification on payment calculations for missing data
Arming/disarming (DM/DR)	100% delivery assumption for disarmed periods	Monitoring of arming/disarming signals

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Frequency Measurement Standard

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Frequency Measurement Standard

- The purpose of Frequency Measurement Standard (FMS) is to set up a minimum requirement in monitoring system frequency and service response. FMS will help minimise system risks caused by measurement errors.

Parameter	Description
Nominal frequency f_0	System frequency
Compliance range	Frequency range in which accuracy is secured
Accuracy	Maximum frequency measurement error allowed
Time precision	Maximum time measurement error allowed
Time synchronization	Time traceable to UTC
Alignment with industry standards	IEEE/IEC

- ESO is reviewing past performance data to understand all potential system risks when the FMS is missing.
- We aim to introduce a cost effective standard that can be met by service providers whilst ensuring system security.
- ESO would like to understand the current monitoring method applied by DC/DR/DM service providers.
- Future - The standard is aimed to align with ECC.6.6 Monitoring and Technical Specification in GC.

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Firm Frequency Response

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Service transition

	Dynamic FFR	Static FFR
FY 2022-23	- Dynamic service (as-is) - Procured monthly	- Static service (as-is) - Procured monthly
FY 2023-24	- Dynamic service (as-is) - Procured monthly	- Static service (as-is) - Procured day-ahead
FY 2024-25	- Ceased	- Static service (as-is) - Procured day-ahead

- Following the delivery of Release 1 we intend to explore the role that a static response service might play in our enduring suite of response and reserve products, and what that static service looks like.
- We expect to continue to procure dynamic FFR during the warmer months in 2023 until the DM and DR markets develop. This is subject to extending a derogation against the Clean Energy Package regulation.

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Release 1 timeline

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Release 1 timeline

Webinar (25 Aug)
Response reform

Launch (28 Sept)
Response reform consultation

Close (28 Oct)
Consultation closes

Decision (February)
Ofgem consultation decision

Go-live (01 Apr)
- Daily Static FFR
- New service terms for DC/DM/DR and static FFR

Roadshows							
	Consultation		Review & submit			Onboarding and support	
	Provider 1:1s						
August	**September**	**October**	**November**	**December**	**January**	**February**	**March**

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How to get involved

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How to get involved

Informal Feedback (now – 28 Oct)	Formal Feedback (28 Sept – 29 Oct)
Email mailbox for: - Direct feedback - 1:1s	- Access consultation documents online - Pro-forma returned to mailbox during consultation window

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Questions

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Thank you

Contact us:

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