Demand Flexibility Service

Winter 2022/23 review

August 2023

ESO

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Executive summary

This report summarises the key findings from the ESO's Demand Flexibility Service (DFS) over winter 2022/23. This report does not contain detail on how consumers participated in DFS; further detail of how households engaged with DFS can be found in the social research report carried out by the Centre for Sustainable Energy (CSE) for ESO.

This report is structured as follows:

- Part 1: The main concepts of DFS
- Part 2: Key Data Points - Results from the 20 Tests and 2 Live events
- Part 3: Next Steps - A future view of flexibility

DFS was launched as part of a range of tools designed to help manage the electricity system during winter 2022/23. DFS was developed to access additional flexibility when national demand was at its highest – generally during peak winter days – which was not accessible to the ESO in real time. This new innovative service enabled domestic consumers, as well as industrial and commercial users, to be incentivised for voluntarily shifting the time when they use their electricity away from the peak. DFS was developed at pace and with strong collaboration with industry.

DFS was one of the enhanced actions the ESO put in place to support the operation of the electricity network. It launched in November 2022 and the service was operated until 31 March 2023. During the 2022/23 winter period, over 1.6 million households and businesses across 31 providers actively participated in 22 service events, achieving a remarkable level of demand flexibility.

The success of both live and test events conclusively demonstrated that the Demand Flexibility Service can effectively provide scalability in flexibility, allowing consumers and businesses nationwide to reap the benefits of shifting their electricity usage away from peak electricity usage periods.

Overall, participants successfully reduced electricity consumption by approximately 3,300MWh during crucial time periods, which is enough energy to power over 10 million homes and accounts for approximately 35% of households in Great Britain. Participants in Southern England, East of England, and East Midlands led the way in participating in the Demand Flexibility Service.

DFS was activated twice for 'live' events which ensured sufficient electricity margins on Great Britain's electricity system in January 2023. The monthly 'test events' conducted to assess service readiness, generated a significant level of interest for consumers who actively engaged with the energy system. Enthusiasm for consumer flexibility reached an unprecedented scale during the 'live events', with consumption reduction 20% higher than test events. The average price paid for tests events was £3,000/MWh. For live events, the average price paid was £4,559/MWh.

The ESO is currently undertaking a holistic review of DFS alongside industry participants and consumers to assess how the service could be improved in the future for further iterations of the service.

Prologue

Creating more flexibility on our electricity system is vital for running a clean, green, and fair system of the future. The Demand Flexibility Service (DFS) is the first-time consumers have had a direct opportunity to participate in flexibility services via retail energy suppliers, aggregators and technology companies. DFS has accelerated flexible energy use by many years and has been watched with much interest by industry stakeholders in the UK and across the world.

In terms of what it means for our electricity system, by reducing/flexing demand by incentivising participating customers to turn down when we need them to, it means we can minimise the use of expensive and polluting fossil fuel generators. This saves carbon and saves money for all electricity consumers. As an enhanced action service across the 2022/23 winter, DFS also allowed the ESO's control room to use additional tools[1] alongside our every day actions to manage system margins when they were at their tightest, reducing the need to consider other emergency actions such as disconnections[2].

This report first provides a general overview of the initial iteration of DFS and offers an overview of the key statistics around number of tests, quantities procured and forecast accuracy. These data points have then been used as references for some of the proposed changes to the service in the future.

[1] Winter Operations - https://www.nationalgrideso.com/industry-information/winter-operations
[2] Order of action – Winter 2022 - https://www.nationalgrideso.com/document/268116/download

Introduction

What is DFS?

The Demand Flexibility Service (DFS) was developed as an enhanced action, to allow the ESO to access additional flexibility when the national demand is at its highest, generally during peak winter days. Broadly speaking, with DFS, the ESO provided a signal to providers to let their customers know when to reduce or shift demand and paid providers for the turn down. In turn, providers incentivised consumers directly for their demand reduction. The service was designed, consulted, and implemented in a record timescale at roughly a third of the time it typically takes to introduce new balancing services. This was against a very challenging geopolitical landscape and uncertain 2022/23 upcoming winter.

Why was it required?

ESO wanted to gain access to new additional volumes of flexibility that we could not currently access through our other market mechanisms or schemes. The aim was to provide additional resilience for the control room during periods where insufficient generation was available to meet demand by reducing demand at certain periods. As an enhanced action, this tool was to be used when normal commercial everyday actions would not be sufficient to meet our total requirements to cover demand and upwards margin. This is most likely to be over the darkness peak (DP) in the early evening on weekdays, typically between 5-6pm.

What were the triggers to use the service?

The service was procured on a day-ahead basis, depending on the anticipated margins and other system conditions. A live event could be triggered when insufficient upwards flexibility was foreseen at the day ahead stage and we believed the inadequacy could not be solved by our existing services and market incentives.

Please refer to our previous Operational Transparency Forum recordings where we ran through how the service is used and where it sits in our order of actions, accessible on our website: https://www.nationalgrideso.com/what-we-do/electricity-national-control-centre/operational-transparency-forum

Who was eligible to participate?

This service was open to both Industrial and Commercial (I&C) users, and domestic participants who were not contracted under other services/schemes (e.g., the Balancing Mechanism (BM), Capacity Market (CM), or other ancillary services). Participants were required to have half-hourly metering and be able to sustain demand reduction for a minimum of 30 minutes. Access to the relevant half-hourly metering and baseline data, as a way of demonstration of delivery, was also a requirement for participants. In our first year of operation, we saw a mix of providers ranging from electricity suppliers, aggregators and technology companies.

Main aspects of DFS

Throughout the development of DFS we held webinars, workshops and consultations and published slide decks and Q&As which provide detail of the design decisions made. These can be found on the DFS webpage in the 'document archive'.

High level process

The process followed by DFS participants is shown in Figure 1. Firstly, eligible providers submitted their volumes of demand and prices for the ESO to assess (accept and reject bids). Once providers were notified of the results, they notified their customers to reduce demand at the times specified. Finally, providers calculated delivery and were paid accordingly by ESO.

Figure 1 Overview of DFS process.

On a more detailed level, the process for DFS Winter 2022/23 could be divided into weekly, day-ahead and within day sections.

Weekly:

- Submissions of Meter Point Administration Numbers (MPANs). This allowed the ESO to perform duplication checks against the portfolios of other participants.
- Indicative forecasts from the participants to the ESO. This allowed the ESO to plan test requirements for the ensuing week and monitor volume growth through the winter.

Day-ahead:

- The ESO assessed the expected system conditions and, if deemed necessary, published an Anticipated DFS Requirement Notice at or around 10:00 hours to notify industry of a potential requirement via the ESO Data Portal.
- Depending on the evolution of the forecasted system conditions throughout the morning, at or around 14:30 hours ESO issued a DFS requirement (this included whether the activations were for Regular or Onboarding Tests, and where a Guaranteed Acceptance Price was offered, this was also published).
- Eligible participants submitted bids ready to be assessed at or around 15:30 hours with notifications of results one hour later.
- Following acknowledgment of the assessment results, an updated DFS Utilisation Report was published on the ESO Data Portal.
- Participants with accepted DFS Bids then arranged with their end consumers to reduce demand during the specified contracted window (via either a direct instruction to an asset or a communication to the end-consumer with an acceptance received back).

Within-day:

- Submission of any updated delivery forecasts from the participants

- Update of our Operational Demand Forecast.
- Following these steps, the final action was the actual demand reduction from the end consumers.

MPANs and DFS Units

The Meter Point Administration Number or MPAN, refers to the label that is used in GB to identify electricity supply points. For the correct delivery and settlement of DFS, it was essential that each MPAN was only subscribed to a single market participant. Rigorous checks were performed routinely to ensure each MPAN did not belong to the portfolios of multiple participants.

In the case of duplicate MPAN detection, affected parties were notified and any volume associated to the MPAN had to be removed from the relevant settlement files. After participants resolved the conflict, this MPAN and its volume was allowed back in the portfolio for participating in DFS. ESO supported industry through this process and across the service as a whole we saw duplication resolution required on average for less than 0.5% of the entire DFS portfolio of MPANs.

To enable participants to submit different prices for different segments of demand reduction, we developed the concept of the virtual DFS Unit. The offered capacity from each DFS Unit was bounded between 1 MW and 100 MW. Participants could submit multiple bids from different DFS Units for the same period (at the same or different prices), as well as submit multiple bids for the same DFS Unit but in different periods.

Crucially, the same MPANs could be allocated to more than one DFS Unit. Providers had the opportunity to decide on how best to allocate their portfolio of MPANs to their various units. The only condition being that they must be able to deliver the demand reduction volume procured.

Tests events and Guaranteed Acceptance Price (GAP)

Because of the enhanced action nature of DFS and the associated uncertainty of activation, we developed the concept of test activations. These tests were designed to make the service a viable commercial proposition, and to create confidence it its usage by the ESO. Moreover, tests allowed market participants to improve their processes and gain confidence in their forecasts for delivery. Over winter 2022/23, the ESO guaranteed a maximum of 12 dispatch instructions for participants who signed up for the service from November 2022. Each test activation was for a 1-hour duration.

Tests were structured as follows:

- Two onboarding tests during the first month of service provision,
- Two regular tests per month thereafter

During a test event (onboarding or regular), any participant bid priced at 3,000 £/MWh or lower, was guaranteed to be accepted, introducing the concept of a Guaranteed Acceptance Price (GAP)[3]. Bids priced higher than the GAP were subject to acceptance during tests events, depending on the marginal Balancing Mechanism (BM) price. That is, we could have accepted test bids priced higher than the GAP if the marginal BM price was higher.

Actions taken by the ESO can be classed as “System” or “Energy” flagged dependant on the reason for why the action was taken. Test events were System flagged because they were testing the use of the service; this means that the volume procured, and the relevant price, go into the Elexon classification process for System actions for input into the industry Imbalance Price.

Baselines

The purpose of the baselines was to provide a reasonable estimation of the typical MPAN consumption in days and times similar to that of the flexibility event. The baseline was calculated as per the Balancing and Settlement Code (BSC) P376 baseline methodology, a simplified process is shown in Figure 2.

[3] For more details on how we set up the GAP, please refer to https://www.nationalgrideso.com/document/268856/download

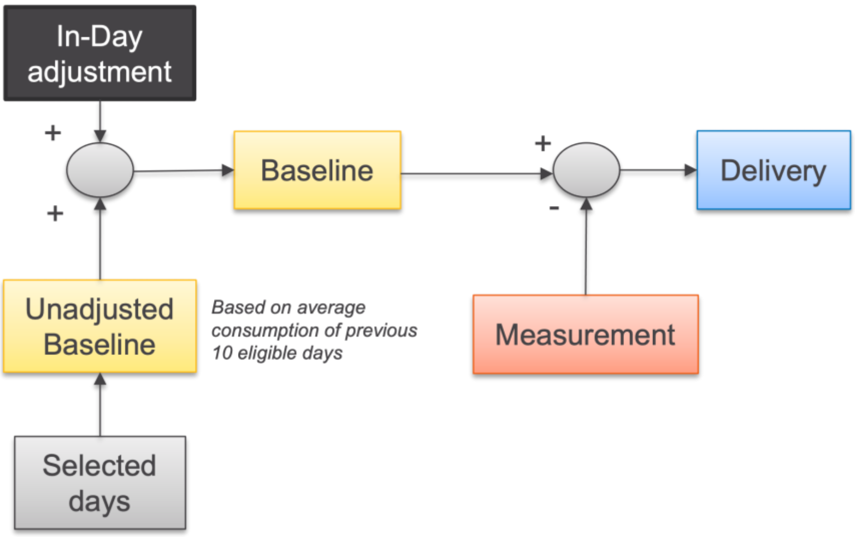


Figure 2 Simplified process of P376 Baseline Methodology

As per P376, the unadjusted baseline was calculated as the end consumer's average usage over the previous 10 eligible working days (or the middle 2 of the 4 weekend days, as applicable). For domestic consumers, the baseline included an adjustment to account for the impacts of weather on day-to-day demand patterns. This "in-day" adjustment was based on the difference between their usage in the period from 4 hours to 1 hour before the delivery period, and the average usage over that same period on the previous 10 working days. Finally, the end consumers actual measured consumption was compared to the baseline, with the difference between the baseline and measured quantity being credited as their delivery.

Metering

Half-hourly metering was a requirement for participation in DFS. The ESO and DFS Providers needed to know that demand flexibility was delivered at the time that it was requested, rather than at another time. This required metering granular enough to give data at a half-hour resolution, which is limited to smart meters. Meter data at the boundary level, rather than at the asset level, was the mechanism chosen for the first iteration of the service; this was to mitigate potential risk of gaming in the scenario where users might simply move load between asset meters with no net demand reduction.

Applicable Balancing Services Volume Data (ABSVD)

To adjust the market position of participants with half-hourly settled volume, the ESO applied the ABSVD process to the energy supplier's base account. This process ensures that volume which deviated from their market position due to DFS is identified to allocate imbalance volumes and undo the impact of balancing actions from ESO. Each participant in the service was required to provide the relevant Supplier Base BMU Elexon ID. Furthermore, the participants submitted their ABSVD volumes to the ESO after DFS event delivery.

Penalty structure

Participants were settled on delivery achieved. No penalties were used for either under or over delivering the procured quantities. This design was chosen to acknowledge that it was the initial year of the service, which increased the difficulty of forecasting end consumer behaviour. Consequently, any performance penalty could have indirectly stifled potential growth in participating volume.

Key data points

Summary

Table 1 shows the delivery and cost for DFS tests and live events between November 2022 and March 2023. The combined spend was around £11.1 million split up into £8.0 million for tests events and £3.1 million for live events. In total, the demand reduction achieved was around 3,300 MWh.

Table 1 Delivery and cost by month for test and live DFS events.

Month	Tests Events		Live Events	
	Delivery (MWh)	**Cost (million £)**	**Delivery (MWh)**	**Cost (million £)**
Nov 22	568.8	1.71	0	0
Dec 22	662.2	1.99	0	0
Jan 23	414.3	1.24	680	3.1
Feb 23	547.7	1.64	0	0
March 23	474.9	1.42	0	0
Total	**2667.7**	**8.00**	**680**	**3.1**

There were two live activations of DFS over winter 2022/23. These took place on 23 and 24 January 2023 and are summarised in Table 2. An overview of the system conditions on those days was presented at the Operational Transparency Forum on 25 January 2023.

Table 2 Live DFS activations for demand reduction for the week of 21 January 2023.

Delivery Date	Period	Number of participants	Procured (MWh)	Delivered (MWh)	Total cost (thousand £)
23 Jan	17:00 to 17:30	19	161.9	135.9	£539.48
23 Jan	17:30 to 18:00	19	168.4	147.3	£591.75
24 Jan	16:30 to 17:00	19	144.3	116.6	£567.69
24 Jan	17:00 to 17:30	19	157.1	136.8	£663.71
24 Jan	17:30 to 18:00	19	163.6	143.5	£700.18

A total of 20 one-hour DFS tests were performed between November 2022 and March 2023. These tests covered a total of 40 settlement periods (SPs), as shown in Figure 3. Only two tests were contracted in the morning hours with the majority between 17:00 and 19:00. The period most often contracted was between 17:30 to 18:00 (contracted 12 times with a total requested volume of 2,200 MW).

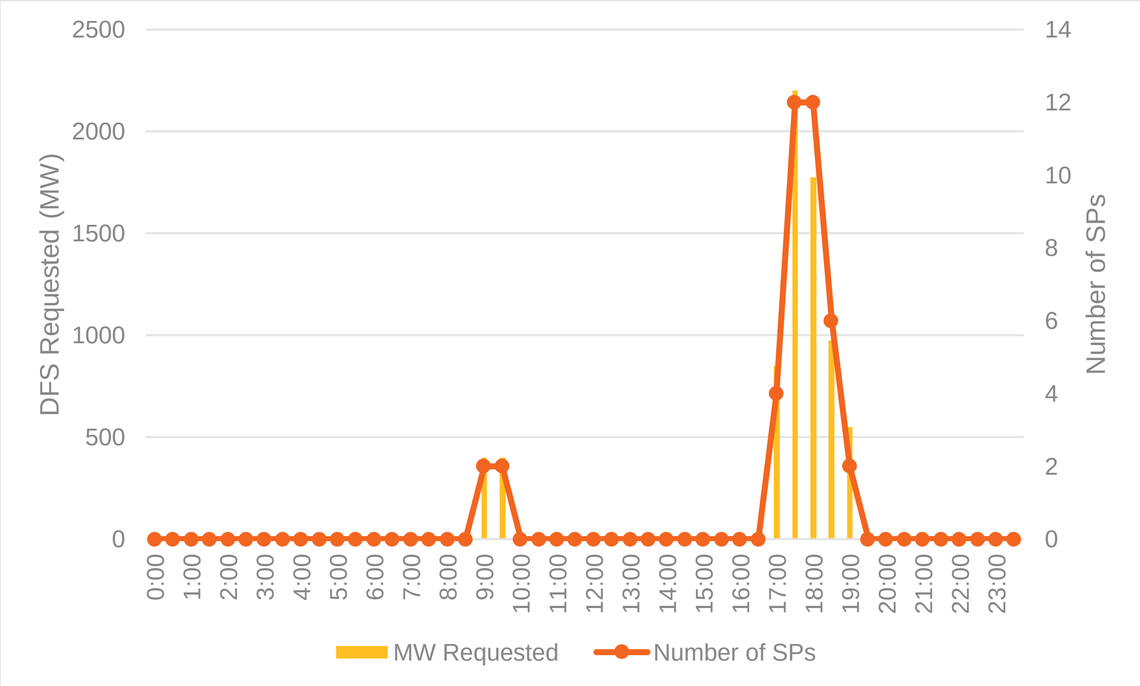


Figure 3 Distribution of DFS tests up to 31 March 2023
The majority of tests were between 17:30 and 18:00

DFS tests were scheduled most frequently for delivery on Mondays and Tuesdays. In total, these accounted for 60% of the test events, with the remaining 40% occurring Wednesday through Friday. There were no test or live DFS events for delivery on a weekend (See Figure 4).

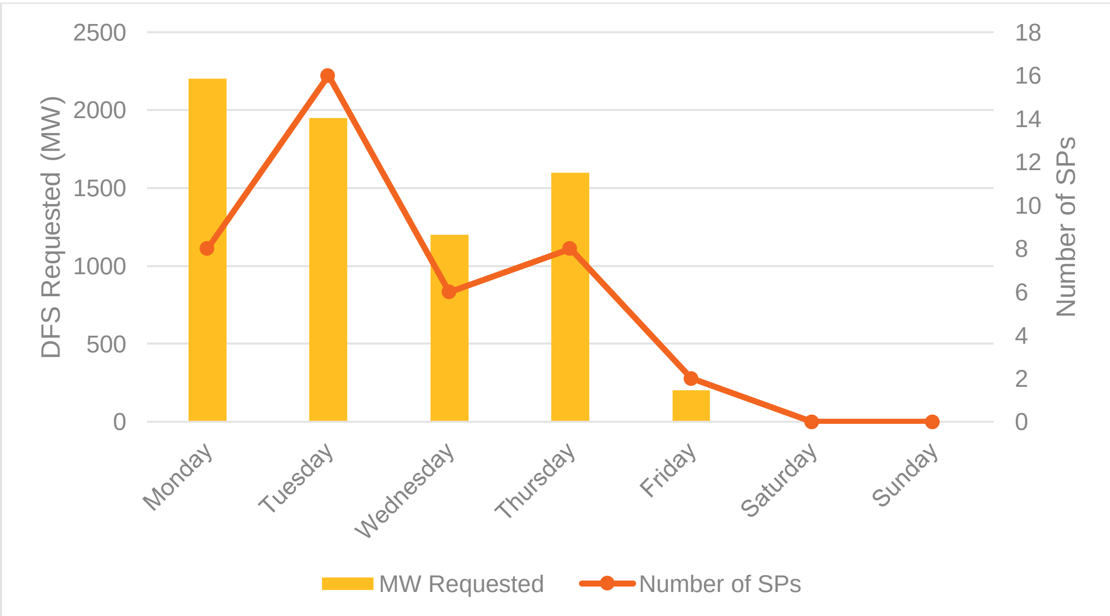


Figure 4 Distribution of DFS tests up to 31 March 2023
The majority of events were held at the beginning of the week

In the first two months of the service, there was general over-delivery. That is, participants reduced more demand than what they were contracted for. This situation reversed in the month of January, when we had two live service activations. In the final two months, the difference between contracted and delivered demand reduction decreased as participants became more adept at assessing their own capacity to deliver. This is represented in Figure 5.

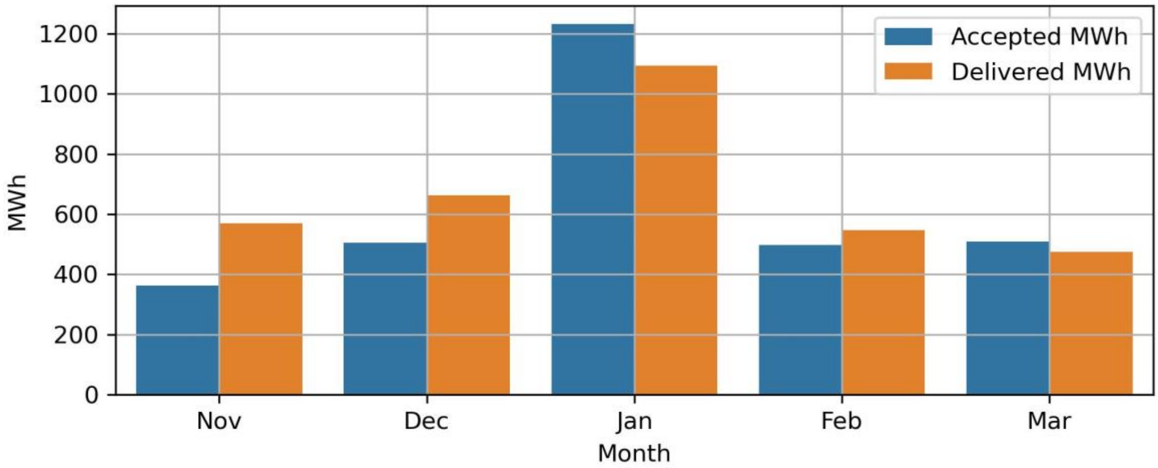


Figure 5 Accepted/Contracted and Delivered MWh
The accuracy of delivery forecasts improved over the course of the winter

Participation

In terms of the number of participants and DFS Units for each regular test, we saw a steady increase in the number of participants from the initial 4 to a peak of 21 concurrent participants (out of 31 approved providers), from 21 February 2023 onwards (See Figure 6). Several approved providers participated via aggregators or were not successful in securing enough volume to participate in DFS events. There were initially 10 DFS units in Nov 22, with this number growing to a sustainable 35 between 21 February and 23 March. this represented a capacity of c.350MW.

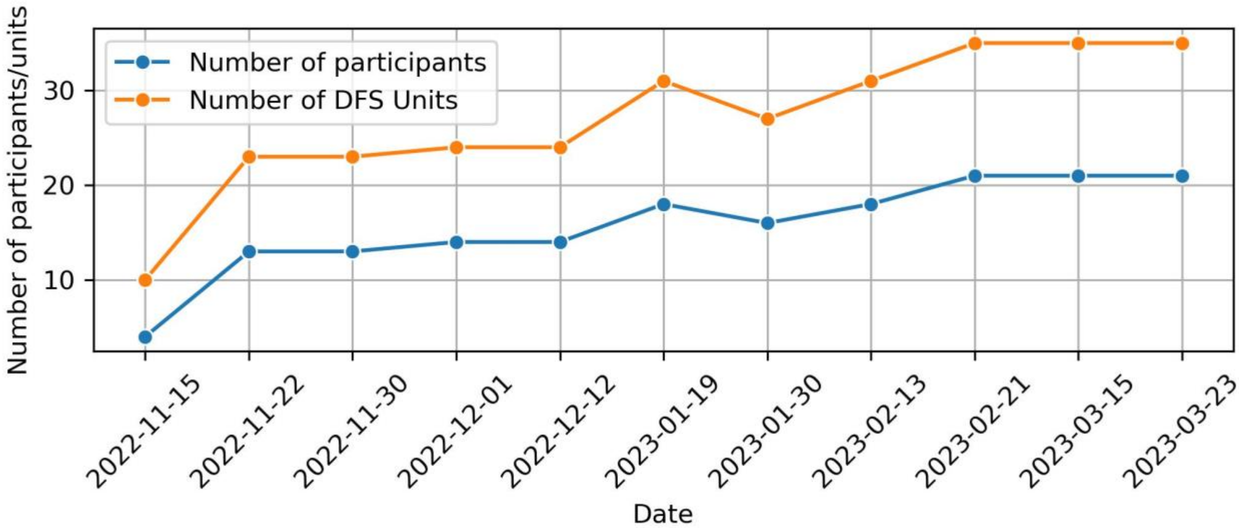


Figure 6 Number of participants and DFS units for regular tests up to 31 March 2023
Participants, units and volume grew steadily throughout the winter

The cumulative cost for all DFS tests up to 31 March 2023 was £8.0 million. The test day with the highest overall cost was 12 December 2022, with an approximate total cost of £1.2 million (on this day we ran two consecutive 1-hour tests). The maximum accepted price for DFS Units in all tests was equal to the Guaranteed Acceptance Price (GAP) of £3,000/MWh.

Service Value and Market Prices

A few providers submitted prices higher than the GAP for tests and were rejected. Given the nature of the GAP and the relatively small number of tests, it is not possible to draw further conclusions on the bidding behaviour present in DFS 2022/23. A histogram for the price offered for a MWh of demand reduction is shown in Figure 7.

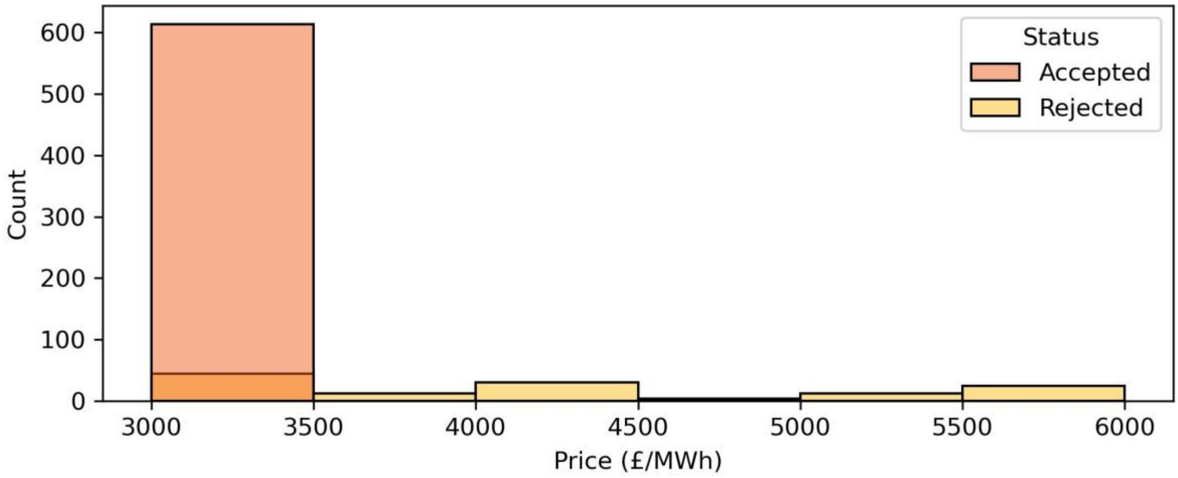


Figure 7 Histogram for offered prices to reduce demand on DFS tests
Prices higher than the GAP were rejected for test events

For live events, the average price for demand reduction was £4,559/MWh and the highest accepted price was £6,500/MWh, although a sizeable portion of participants were accepted at £3,000/MWh (see Figure 8).

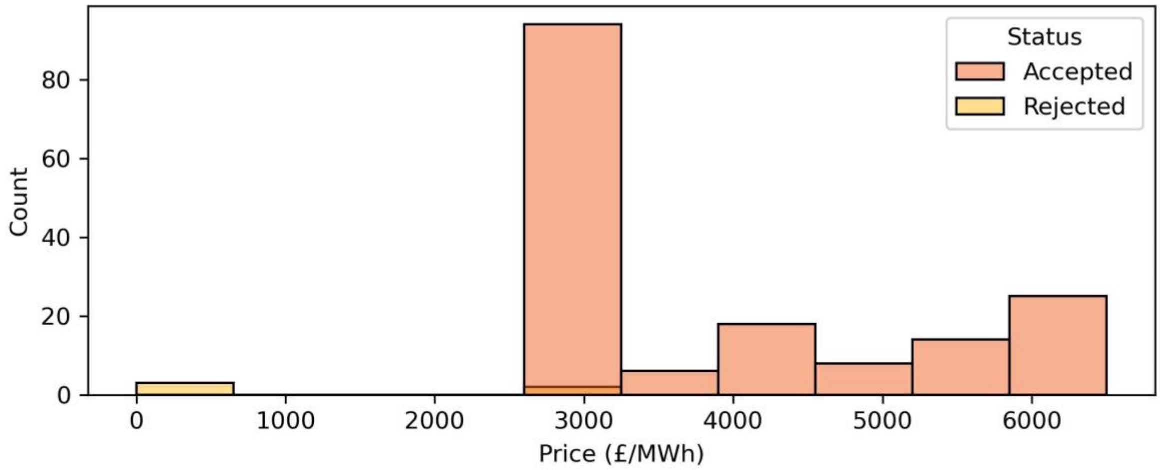


Figure 8 Histogram for offered prices to reduce demand on DFS Live activations.
The average price for live events was £4,559/MWh

Forecast accuracy

This section presents details on the progression of the forecast accuracy over time. The forecast used in this analysis is the within-day forecast that participants prepared based on their end consumer base feedback and which was submitted to the ESO on the day of delivery. The average forecast error, defined as the difference between forecast and delivery, for each test day can be seen in Figure 9. On average, the error decreased as the service progressed (the average forecast error was around -2 MW). It is reasonable to assume that providers improved their forecast processes as the service progressed, resulting in a decrease of forecasting error.

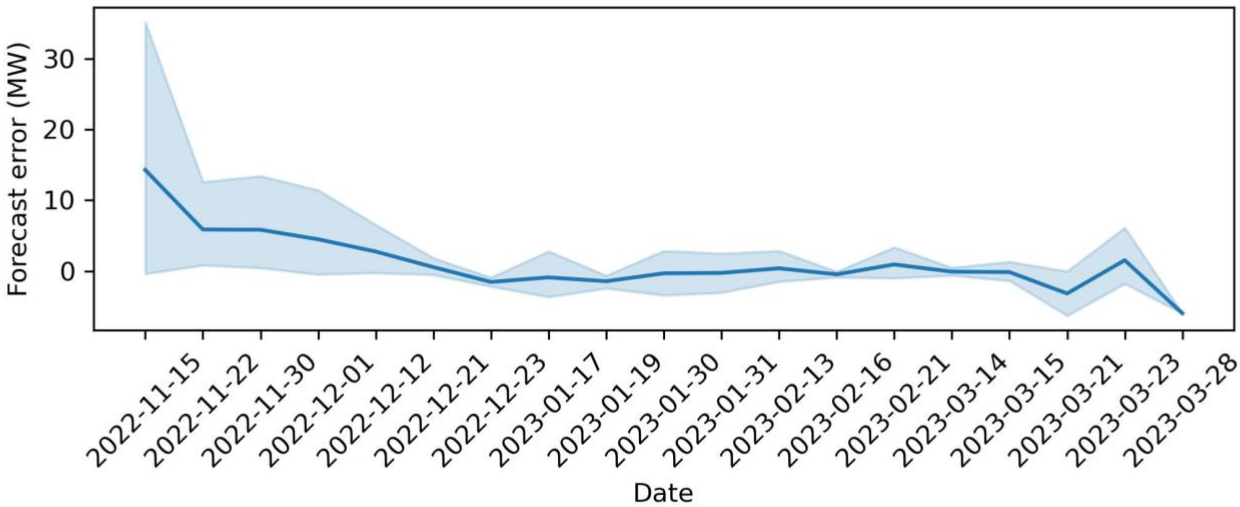


Figure 9 Difference between delivery and within-day forecast (Forecast error), in MW, for tests up to 31 March 2023
Generally, forecast errors improved over winter

However, this aggregated view masks any high variance from some participants. Figure 10 shows the within-day forecast vs delivery for all participants. The black dashed line represents a perfect agreement between forecast and delivery. Each point represents the data for one DFS Unit for each contracted period.

The data shows that forecasts for DFS Units smaller than 20MW were, on average, reasonably accurate. However, any forecast for a DFS unit larger than 40MW appears to deviate much more from actual delivery. This indicates that, in subsequent revisions of the service, we may be able to structure penalties for under/over-delivery based on the size of DFS Unit. Although, at this stage we judge that introducing penalties in future iterations of the service may stifle growth and facilitation of this relatively immature market.

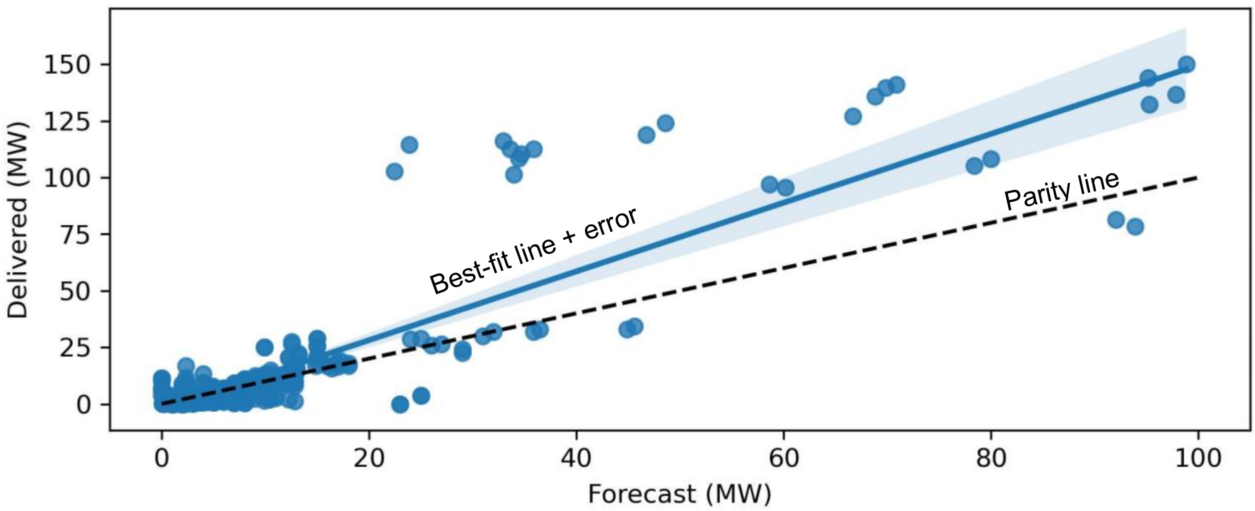


Figure 10 Delivery vs forecast for each contracted period of tests up to 31 March 2023
The size of unit impacted forecast accuracy

In general, we tended to see similar patterns regardless of the hour of activation. Some participants showed a positive correlation between the forecasted value on the day of delivery and the actual delivery value. For others however, there was positive correlation between forecasted value and delivery except for those events held in the morning. In the morning tests, forecasted values for these participants were larger than actual delivered values. This indicates that participants are still in the process of learning how their end-consumers would respond to demand reduction instructions at different hours of the day.

The high variance observed in the forecast error decreases the utility of the within-day forecast for our downstream operational processes. Looking forward to Winter 2023/24 and the next iteration of DFS, we are proposing to remove the need for participants to submit within-day forecasts of their delivery.

Over-delivery

Over-delivery, in this context, is defined as the difference between delivered and procured values. Figure 11 shows delivered vs procured quantities for all DFS test events. Each point shows a DFS Unit for a contracted period and the blue line is the linear best-fit to all points. The parity line represents a perfect agreement between procurement and delivery.

The points appear to cluster into two groups, depending on the procured amounts i.e., less than 20 MW and between 50-100MW, with the latter group mostly over-delivering. The delivery can be reasonably predicted by fitting a linear model to the procured values. But, as in the case of the forecast error, the over-delivery also revealed a large variance among DFS units of different sizes.

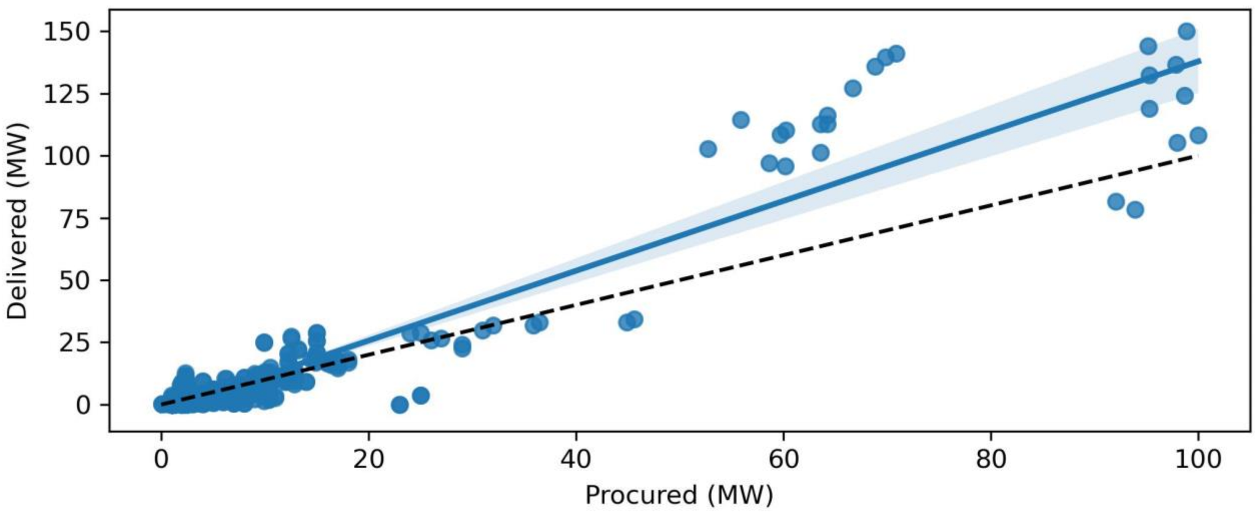


Figure 11 Delivery vs procured for each for each unit and contracted period for tests up to 31 March 2023 Larger units tended to over deliver

Figure 12 shows the delivery vs procured quantities but grouped by contracted period rather than by DFS Unit. Each dot represents the aggregated values for all providers and DFS Units for a given contracted period. As all units for each contracted period are combined, the uncertainty of the linear best-fit is reduced substantially. The chart reveals how, on average, the over-delivery was positive throughout the length of the service as the best-fit line is above the parity line. In other words, when combined, participants delivered more demand reduction than what was originally contracted.

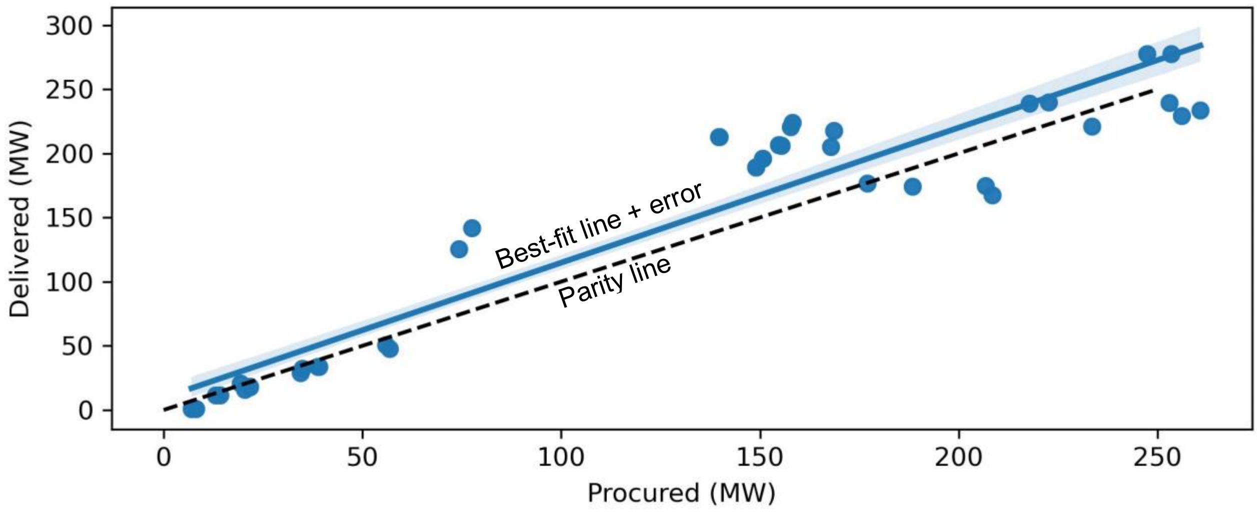


Figure 12 Delivery vs procured for each contracted period for tests up to 31 March 2023
More demand reduction was delivered than procured

For the two live activations we observed a slight under-delivery with respect of the procured quantity, although some participants delivered above their contracted values. Table 3 shows that the delivered values of demand reduction were around 85% of the procured quantities which is admirable, given that these were the first nation-wide live events of DFS.

Table 3 Live activations detailed delivery data

Delivery Date	Procured (MWh)	Delivered (MWh)	Over-delivery (MWh)
23 Jan	330.4	283.2	-47.2
24 Jan	465.0	396.8	-68.2
Total	**795.4**	**680**	**-115.4**

The combined over-delivery data across tests and live events that we observed during winter 2022/23 is encouraging from a system security perspective, as the chief aim for developing the service was to have an additional, enhanced tool to manage situations where system margins do not look to be met by the regular actions. Therefore, it was important to have certainty that the expected demand reduction from DFS will materialise when requested. This allows ESO to consistently rely on DFS for national balancing enhanced actions.

Delivery by GSP Group

For each DFS activation and each unit, providers submitted their forecasts on the Grid Supply Point (GSP) Group breakdown of their bid. These forecasts, in combination with GB wide aggregated delivery data, allows us to estimate the proportion of demand reduction that was achieved from each GSP Group, which is shown in Figure 13. The highest values appeared in the East England, East Midlands, and Southern England regions. We can estimate that each region delivered an approximated demand reduction of over 370MWh across the duration of the service.

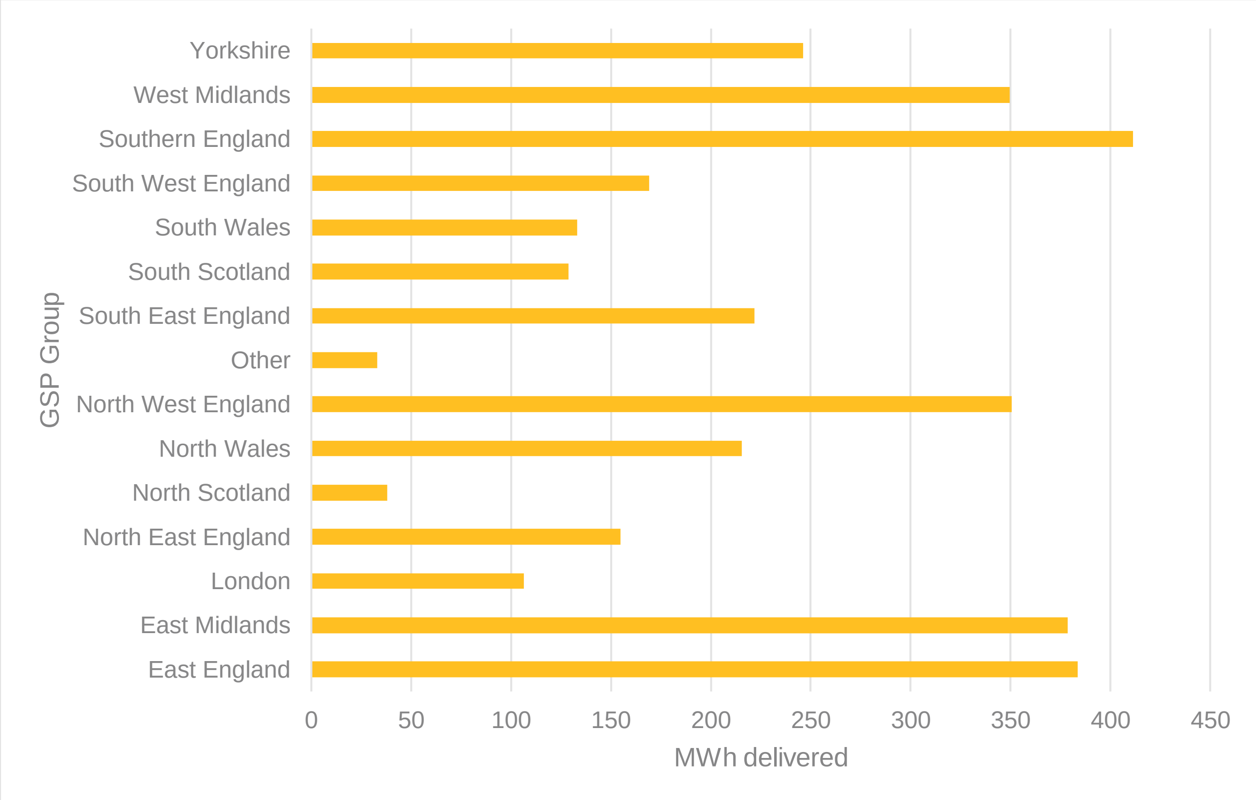


Figure 13 Aggregated delivery by GSP Group for DFS Test events updated to 31 March 2023.

Applicable Balancing Services Volume Data (ABSVD)

Of the 2,668 MWh of demand reduction that was delivered throughout all test events, around 759 MWh had ABSVD applied. Of this half-hourly settled volume, around 620 MWh[4](~83%) originated from I&C consumers and the remaining 139MWh (~17%) stemmed from domestic consumers.

For live events, of the 680MWh of demand reduction that was delivered, around 179MWh[5] (26%) was adjusted via the ABSVD process.

Wider DFS data and insights review

We are continuing to review data received as part of DFS and these insights are being used to develop the service further as well as to deepen our understanding of participation in demand flexibility from domestic consumers and industrial & commercial businesses.

In addition to this report, we commissioned an independent consumer evaluation of DFS by the Centre for Sustainable Energy (CSE), funded through the Network Innovation Allowance (NIA). This evaluation aims to understand why and how consumers participated in DFS and identify and explore barriers to participation. The scope was developed in conjunction with Citizens Advice, Ofgem and the Department for Security and Net Zero (DESNZ). The social research captured views through diaries, an opinion poll, an online survey and interviews. Insights have informed the design of future iterations of DFS. All DFS providers that had participating domestic consumers were invited to promote the research with their customers. Further to the social research, we are carrying out analysis of smart meter data from consenting households and will publish this analysis and datasets in due course. The analysis will be available through the DFS webpage and the Energy Networks Association (ENA) Smarter Networks Portal.

We have also welcomed DFS insights from third parties. Centre for Net Zero, powered by Octopus Energy, has published a report that explores the behaviours of households who participated in DFS with a more detailed focus on Octopus Energy customers. Power Responsive is continuing to engage key stakeholders

[4] Subject to change as we receive ongoing updates from Providers.

[5] Subject to change as we receive ongoing updates from Providers.

with a primary focus on Demand Side Flexibility looking to reduce the barriers to entry for both domestic and I&C participation in our ancillary services. These include topics of operational metering, small scale aggregated assets accessing the balancing mechanism, measuring instrument regulation (MIR) and more recently opening discussions around the blockers for I&C entering DFS service. We plan to continue to support I&C providers with potential challenges and opportunities outside of DFS, looking at what is possible post TRIAD[6].

[6] TRIADS are the three half-hour settlement periods with highest system demand. We use them to determine charges for demand customers with half-hour metering and payments to licence-exempt distributed generation. More information can be found here: https://www.nationalgrideso.com/industry-information/charging/triads-data

Next Steps

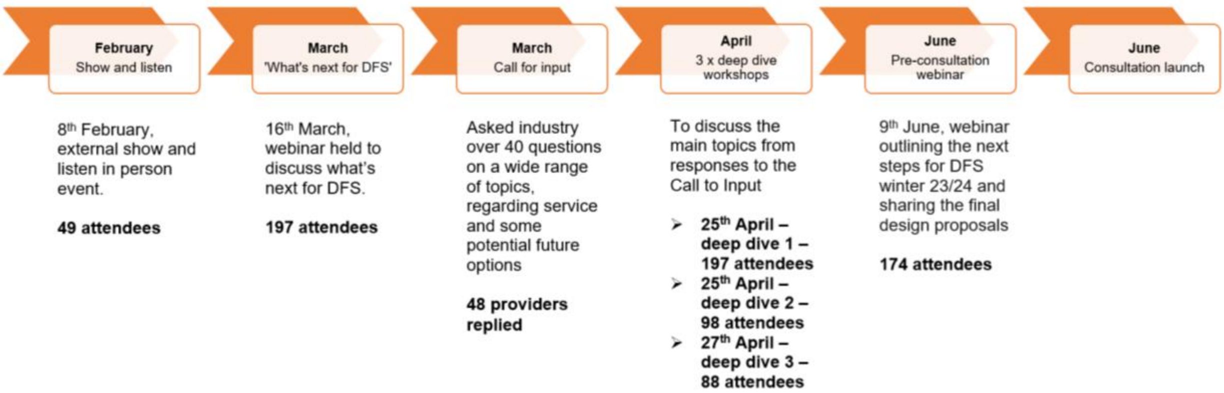
Winter 2023/24

Following the closure of the first year of DFS in March 2023 we have been reviewing the service design and how the service is positioned in the market. The early view of the Winter Outlook was shared in June 2023 which outlined our developing view of both system margin and daily operational surplus that we expect throughout winter. It will set out further details on some of the steps ESO is taking for winter 2023/24. In September/early October ESO will publish the full Winter Outlook report. As ever, we will continue to monitor the situation and outlook for the electricity system and keep stakeholders up to date with any changes via the ESO Operational Transparency Forum.

As well as its primary role providing risk mitigation for security of supply, DFS also marked the first large-scale demonstration of demand flexibility and created good momentum in this arena. Ultimately, our Ancillary Services and Market-wide Half-Hourly Settlement (MHHS) will deliver the right opportunities and incentives for providers and suppliers to provide and use flexibility. In the meantime, there is a broad consensus across the industry, ESO, Ofgem and DESNZ that maintaining the momentum of DFS is a good thing to do to facilitate this transition and to enable and grow the role of flexibility; it is still a relatively new and immature service that needs to build for the future and champion and protect end consumers.

We have been working with industry to review and develop DFS to ensure we maintain the momentum created by DFS during winter 2022/23, the below diagram demonstrates the engagement that has been undertaken.

DFS – moving into phase 2 – engagement to date and timelines



A number of priority areas have been developed for the next iteration of DFS. These are baseline methodology, test designs, dispatch timeframes moving closer to real-time, automation of processes, and enabling of asset meters. Consideration and feedback has been taken in to account following industry collaboration and the learnings from the initial service in Winter 2022/23. Following several months of industry co-creation, we published our Article 18 consultation for feedback on Wednesday 14th June 2023 which contains all of the developments. This can be found on the DFS webpage.

Beyond winter 2023/24

ESO are encouraged by the step change in accessing and engaging new forms of flexibility for the purpose of both the energy transition and system resilience. We recognise that a fixed end date of the service for year 1 did not provide the future confidence required for industry to fully commit to such a market and this was in part due to the speed that DFS was developed and introduced.

We did not consult on a fixed end date service for the next iteration of DFS. ESO see DFS as not only a great service to offer our control room enhanced options in their toolkit but also a key enabler of market facilitation to unlock flexibility as industry moves towards market wide half hourly settlement and beyond. The changes proposed are part of the designs for DFS winter 2023/24 and act as stepping stones to move the market forwards, as we continue to learn and develop markets for demand flexibility.

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