Demand Flexibility Service (DFS) Industry Working Group response to the ESO's Call for Input into DFS Winter 2023/4

2nd April 2023

1. The DFS Industry Working Group (WG)

The DFS Working Group (WG) was set up at the request of the ESO to help coordinate industry input into the rapid development of the Demand Flexibility Service (DFS) over 4 months in 2022. The WG is chaired by Energy UK with support from Octopus Energy which developed the pilot programme (the Domestic Scarcity Reserve pilot) that the DFS is based on. The WG includes representatives from 3 other energy trade associations – the Association of Decentralised Energy (ADE), Energy Intensive Users Group (EIUG) and the Major Energy Users Council (MEUC)

The WG includes both Energy UK members and non-members. The membership was suggested by the ESO, based on initial interest from organisations interested in providing the service.

This response was jointly developed by Energy UK and the Association of Decentralised Energy (ADE). It has the support of the Energy Intensive Users Group (EIUG).

2. Summary of our response

The Working Group (WG) priority for winter 2023/4 Demand Flexibility Service is for a winter contingency or enhanced service along the lines of the 2022/3 service.

To support the continued evolution and development of the sector and improve the utility of the tool for the ESO, the WG have proposed the following design changes:

- Revision of the process for handling duplicate MPANs and customer switching.
  - The current process places an inordinate administrative burden on providers.
  - This was the key barrier to expanding volumes in 2022/23.
  - Implementing a trusted third-party administered switching mechanism is the key change that would enable volumes to expand.

- Closer to real time dispatch, including an option for some volumes to be called at the intraday stage. - This could improve the utility of the tool for the ESO.

- Allowing stacking with the Capacity Market (CM).
  This would unlock large volumes of industrial and commercial DSR.

- Allowing the use of asset metering.
  This would bring DFS into closer alignment with other ESO balancing services.

Alongside the development of a winter contingency service (DFS Day 2), the WG proposes the development of a further DFS iteration to launch in April 2024 (following on from the closure of DFS Day 2 in March 2024).

3. Proposal 1: Winter contingency service (November 2023- March 2024)

Disruption to global energy supply chains is likely to continue this winter, but less coal back-up may be available this winter to support GB system margins.

The first iteration of DFS provided strong evidence that the new tool can provide reliable and consistent energy balancing that can replace dispatchable generation in balancing over a 2-hour period (the longest period tested to date). Whilst the capacity of the current service is currently smaller than the total coal contingency procured in 2022/3, the service could be expanded if the current barriers are removed.

The 'new' demand side response unlocked by the DFS could be harnessed in different ways. However, the likelihood of continued disruption and reduced coal contingency suggests that the best application (of DFS as a vehicle for unlocking additional DSR) would be as an enhanced service to improve security of supply.

Value for money

The value for money will depend on the role it is playing in the system (or what it is displacing). In the role outlined above, the comparator is the cost of coal back-up for winter 2023/4. In winter 2022/23, the media reported the cost of the coal contract as £340 million for 5 units with a total capacity of 2.5GW. The WG are confident that with the changes recommended in this response, industry can expand DFS to fill the potential 1.5GW/ 2GW gap left by coal and provide this system buffer at a lower cost to consumers.

The WG also note that as well as providing an additional reserve and energy balancing (test and Live events), the DFS provides more effective 'learning by doing' than stand-alone innovation projects.

Expanding volumes

During winter 2022-3, the DFS grew to 350MW with 1.6 million registered MPANs. The major barrier to expanding volumes last winter was MPAN duplication. Industry supports switching as a means to drive competition and improve customer outcomes. However, there needs to be a effective and impartial means of managing switching to avoid overburdening participants and locking customers out of the service.

Domestic volumes: Most of the domestic supply market participated in DFS despite the challenging operating conditions and tight set-up times. Octopus Energy offered the service to all customers with a functioning smart meter (delivery averaged 120MW per event). Other suppliers ran the service as a limited trial due to the barriers outlined below. The WG are confident that, with design changes, it would be feasible to deliver 1.5GW of domestic Turn Down this winter[1].

Proposed changes:

- *MPAN duplication*: for an industry agreed, ESO/ third party operated switching process.
- *Successor programme*: The limited set-up time and lack of a follow-on successor service meant that most providers relied on manual processes. Commitment to a successor programme from April 2024, would support providers to invest in software that could be used in future domestic DSR programmes.
- *Greater number of Live events*: A focus on expanding volumes will require provider investment. Retaining the tests and £3,000MWh GAP provides some revenue certainty. For price discovery however, more Live Events are needed, including clearer processes for dispatching the service.

Industrial and commercial (I&C): Changes (including to the Triad), have reduced the volumes of I&C DSR actively participating in the market from the 2016 estimated peak of around 2.5GW of Turn Down. There is a similar amount (2.4GW[2]) contracted to the CM (for delivery year 2023/4). Allowing stacking with the CM would allow all of this capacity to participate in DFS – meaning the DFS could function as a 'dispatchable CM'. The WG

[1] Octopus estimated 1.9GW domestic Turn Down was feasible if its pilot (with lower prices than the DFS) was scaled up.
[2] The DSR is not split by source but most is likely to be mainly I&C

understands that stacking would require a rule change but are confident that with CMAG support, this could be achieved in time for the anticipated launch in November 2023.

Further volumes from both I&C and domestic customers could be unlocked if Turn Down from asset meters rather than from the boundary meter was eligible. This would improve alignment with other ESO balancing services and help the DFS evolve.

Evolving the DFS

The WG have put forward a number of recommendations that would support the development of the market for DSR. As Ofgem's current Call for Input into the Future of Distributed Flexibility highlights, 2035 electricity demand could be 50 percent higher (with around 15 million electric vehicles and 5 million heat pumps). These new smart assets could either support the system (by helping to integrate intermittent renewables) or, by functioning as 'parasitic loads' could increase peak demand, necessitating additional generation build-out and exacerbating security of supply concerns.

The DFS provides a valuable 'learning by doing' platform for industry to evolve the effective products and services that support customers to use these new assets in a way that benefits the system. Investment here will enable the sector to deliver a leaner and more efficient system with lower costs for end-users.

4. The Transitional Service proposal (April 2024 - December 2026/ 2027)

Beyond this winter, the need for an additional system 'buffer' is likely to lessen as global supply chains readjust. This will provide an opportunity to pivot the unlocked volumes of Turn Down to support a more mainstream balancing role. The 2-week timeframe of this Call for Input did not allow the WG to develop a proposal. However, members would be happy to provide high-level views by the end of May 2023.

The WG envisage the 2024 successor scheme as further bridging product (as with the interim Local Constraint Market). Whilst likely to still need support, it would be closer to a commercial in-market product.

Unlike other 'nascent' technologies or approaches, there are significant potential (but latent) volumes now (+4.5GW[3]) which could be used to provide a range of services to the transitioning system, helping to ease emerging tensions.

These include:

- supporting security of supply as a winter contingency service (a 'dispatchable' capacity market)
- increasing competition in balancing markets (helping to reduce price spikes when the system is tight)
- providing ancillary services
- reducing grid constraints (enabling more low cost, low carbon electricity onto the system)
- deferring investment in local grid improvements
- engaging consumers in the energy system

Whilst DSR does not face barriers of high capital investment or connection delays, it will require time and investment to expand volumes and understand the best means of deployment. A large part of the work required is engaging with end-users to understand what different segments are willing to do, for what price and at what notice – and how to best channel that to meet emerging system needs. The best way of doing this, as the DFS highlighted, is 'learning by doing.[4]'

[3] 4.5GW made up of +2GW domestic (using the Octopus estimate)and 2.5GW I&C (using the I&C 2016 peak)
[4] 'Learning as doing' is seen here as distinct from an 'innovation project' which involves limited end-user and is largely isolated from the wider market. The objective should be to impact (and potentially disrupt) current markets to provide insights into what future changes might be productive.

The Domestic Scarcity pilot (February 2022) found that 100,000 domestic customers could provide grid balancing with no monitoring and verification equipment beyond a smart meter. The DFS (November 2022-March 2023) consolidated this, providing further evidence that whilst individual non-automated domestic loads are not 'firm', aggregated mixed DSR can be 'firm' and provide reliable and consistent grid balancing.

After five months, DSF volumes had increased to 350MW with 30 providers and 1.6 million registered end-users. Furthermore, tests by Octopus Energy showed that at least 100,000 DSF customers were willing to provide demand response closer to real-time – with 4-6 hours notice rather than at the day-ahead stage.

It is likely that volumes can be expanded and the tool better aligned to ESO changing needs. However, this will require a stable environment (rather than start-stop support), enabling policy, a sufficient level of guaranteed revenue for providers to stimulate investment and innovation – and time. The 'work' involved in growing and shaping aggregated volumes to meet changing needs requires data, trial and error, time and investment by providers (in software and business development, in data analysis, and in customer engagement).

Current market structures mean that the full value of demand response does not accrue to the participant. Even where revenues from several markets can be stacked together, it is often not enough to incentivise end-users. There is further friction (and loss of revenue/ opportunity) since, as these markets and the associated dispatch platforms were not designed for DSR, they are suboptimal (when they work) with aggregated loads.

The scale of interest, new entrants and engagement by end-users this winter indicates the potential of the available untapped resource compared with business-as-usual markets. However, unless there are active steps to address this, DSR may not play a economically optimal role in the transition.

Whilst changes to dispatch platforms/ capability and market-wide half-hourly settlement in 2026 will reduce the market barriers, it is unlikely to deliver 'optimal' DSR. To assume otherwise downplays the work (and development time) required of the DSR provider to grow and actively 'shape' the raw demand response potential to meet evolving system needs. If the basic business case does not stack up until 2027, then providers will not start engaging customers until 2027 (let alone evolving and refining products).

This is too late. The grid is already facing multiple issues now - from the disruption to global supply chains from the Russian invasion of Ukraine, to the delay to network investment, the mushrooming connections queue and record £4.2 billion balancing bill for the past 12 months.

Much of the discussion of how to build on the DSF's momentum has centred on how the new volumes could be 'rehomed' into existing products and services. However, whilst DFS has been a milestone in engaging end users and kicking off wider engagement about consumers role in the energy transition, it has not changed the underlying fundamentals - the current market design, products, service and dispatch infrastructure do not work for DSR (and may not for sometime).

For this reason, the WG has proposes that, alongside the winter contingency product, the ESO should collaborate with industry to develop a transitional product that could evolve and bridge the gap until DSR becomes more viable in current markets. This would mean that the learning and development can accelerate now rather than waiting until 2027. It would also provide the ESO with a further tool (s) which when developed (expanded and shaped) could be deployed in different ways to cut consumer bills.

Responses to Call for Input Questions

Q12. Acknowledging the challenging timescales for a potential winter 22/23 service shared at the beginning of this Call for input, would participants prefer to have more time upfront for engagement on the development of the ESO service design and reduce the 2 months for provider onboarding or continue with the current proposed 2 months for onboarding and engagement timescales. If so by how much?

There was strong support for prioritising design over onboarding (especially if providers will be able to join throughout the service).

Providers emphasised, however, that key design features needed to be set at least 6 weeks beforehand the start to allow sufficient time for software changes. Note design changes that may seem 'minor' can requirement significant process changes for providers.

Q13. Priority Ranking

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Through our workshops and industry engagement to date, the topics below represent the main challenges and opportunities we have heard regarding development of a potential future service. Based on the current DFS, please select your 5 highest priorities to explore improvements for a potential future Demand Flexibility Service. In the options please add any other topics you have identified that are not listed.

Please select at most 6 options.

- **Alignment with Balancing Mechanism & Ancillary Services (timescales, price points, processes etc)**
- **Baseline methodology (inclusion of a within day adjustment etc)**
- **Bidding process & mechanism (linking bids, mutually exclusive bids, pay as bid vs pay as clear, virtual units etc)**
- **Boundary vs. asset metering**
- **Closer to real-time procurement/dispatch**
- **Consumer elective half-hourly settlement**
- **Event opt-in (opt-in vs opt-out)**
- **Driving consumer participation and exploring consumer incentives**
- **Guaranteed Acceptance Price (GAP) & price discovery**
- **Locational element**
- **MPAN process/duplication resolution**
- **Process improvements & automation**
- **Supplier-led vs. ESO-led vs. National alert options**
- **Tests: role and number of test**
- **Turn-up and turn-down**
- **Maintaining consumer engagement including marketing consent (classification of DFS as a product vs service for contacting consumers)**
- **Applicable Balancing Services Volume Data (ABSVD) for half-hourly settled MPANs (impact for HH settled MPANs and non-HH settled MPANs)**

Commercial

The commercial structure of the DFS for Winter 22/23 was designed to stimulate the market and support organisations moving at pace to deliver volume. Analysis from year one (winter 2022/2023) suggests a need to reduce, remodel or remove the Guaranteed Acceptance Price (GAP) to ensure value for end consumers. Please share your thoughts regarding shaping future commercial terms of the DFS.

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Please indicate preference for whether this service should progress as an enhanced action (taken after all other normal ESO actions are expected to have been taken) or transition towards a commercial in-merit service competing against other ESO actions, and why.

As outlined in the cover letter, the WG agrees that the current and potential DSR volumes unlocked by the DFS are best used as an enhanced service to support system margins this winter.

The WG highlight that significant volumes are yet to be unlocked, and therefore, there is ample reason to treat the coming Winter as a Phase 2 discovery process, implementing significant changes to the current service design.

The WG propose the parallel development of a Transitional Service to run from April 2024 to December 2026/ early 2027. From 2027, it is hoped that the industry changes (MHHS, ESO / DNO platforms) will mean that all forms of DSR can participate, at scale in all relevant balancing and ancillary markets.

15
For our first year of the DFS the terms offered up to 12 tests with a GAP of £3000/MWh, and no GAP was applied for Live events. What role, if any, do you think tests should play in a future service and what role do you think a GAP should play? (Does the current DFS GAP deliver consumer value? How could an enhanced action service GAP be determined, e.g. a market linked GAP? An in-merit commercial service would not require a GAP.)

Depending on the approach taken to availability payments, the GAP and number of tests should remain as is for Winter 2023.

The success of the service, given the small number of Live events, has been entirely dependent on the GAP and frequent tests. The participant profile for DFS is radically different than any other 'regular' ESO service and this should be appreciated and valued.

Given the reported value of coal reserve contracts for Winter 2022, it is both more economically efficient and better aligned with 2035 decarbonisation goals to incentivise DSR. Furthermore, as we move closer to MHHS, the DFS and its future iterations will lay the essential foundation for those assets entering commercial services quickly and smoothly.

As highlighted in the cover letter, in a further winter contingency service, the DSF would be functioning as an alterative to coal-backup to support security of supply rather than as a regular balancing tool.

16
As part of developing a potential future service, ESO would like to see greater price discovery. What mechanisms/options could we consider to facilitate this, for both tests and real events? What other bidding mechanisms do you think could be suitable to introduce to encourage price discovery? E.g. linked bids, mutually exclusive bids, virtual units, pay as bid vs pay as clear utilisation and/or availability payments.

Industry, too, is keen to see greater price discovery and increased accuracy this coming Winter. We believe there are three crucial steps to achieving this:

1) Dispatch transparency: In order to enable price discovery, the service must be called. This is not something industry has any control over and therefore, processes for triggering the service must be reviewed and given greater transparency. Just as we saw provider forecasting steadily increasing across Winter as tests progressed, price discovery and forecasting must equally be given the opportunity to be sharpened.

2) Day-ahead and intraday auctions: While day-ahead (24hr lead time) service calls should remain the default, it may be useful to divide the volumes procured between day-ahead and intra-day (4-8hr lead time – to be discussed at design stage). Therefore, providers who benefit from longer lead times can bid into the day-ahead while providers who gain certainty closer to real time can bid intraday. This also allows ESO the opportunity to adjust volume targets closer to real time should margin forecasts tighten (and allows providers the scope to innovate and evolve their service). This will provide a highly

beneficial learning opportunity for ESO to compare delivery within different timescales and advance the service going forward.

3) Auction structure: True price discovery is only feasible through a pay-as-clear auction structure. Owing to the pay-as-bid structure, and lack of Live events, Winter 2022 did not offer market wide insight into what price can actually drive DSR. Bidding structures drastically changed between the two days of live events and while this may, in theory, get us to the same place as pay-as-clear eventually, it will not do so while DFS remains an enhanced action. We recall ESO concerns that a lack of market depth could lead to unintended consequences within a pay-as-clear auction. However, with the changes considered below (CM stacking, asset metering, loss of TRIAD avoidance etc.), we believe significantly higher volumes can be expected for Day 2. Furthermore, now that providers and potential providers are more familiar with the service, greater participation can be anticipated.

17

The current DFS does not have penalties for over or under delivery and pays for actual delivery. Some market participants have indicated that penalties or incentives for accurate delivery by providers might be appropriate. If penalties were included for a future service, what would be the barriers/impacts of this? Do you have suggestions for how we could ensure certainty in the delivery of the procured volume?

As above, the characteristics of DFS participants are markedly different than any group ESO services have catered to before and this requires a different approach.

Industry accepts that in time, and as we develop routes to commercial entry, penalties will be an important part of the conversation. However, introducing these in the next iteration could prove a barrier to the main objective of expanding volumes and could reduce opportunities for learning.

The WG would support the introduction of alterative approaches to support providers to improve the accuracy of their forecasting and delivery. As a provider group, we are committed to expanding the role of DSR in the energy system. This means evolving DSR into a tool that the ESO can dispatch regularly and with confidence.

There are different ways that forecast accuracy could be improved and the WG would welcome the opportunity to discuss these options at the design stage.

18

As flexibility delivery evolves, would parties see commercial benefit in grouping flexibility types within their delivery portfolio. E.g. those actions that are automated vs manual consumer/industry actions. Please share any insights.

The WG's preference, in this stage of market development, is for responses to be categorised by the lead-in time that they require. Some consumers can respond quickly with 4-8 hours notice, whereas others will need notification at the day-ahead stage. Given this the categorisation of day-ahead versus within day or 'fast responding' versus 'slow responding' seem more relevant rather than automated versus manual.

If a segment of consumers can be both 'fast responding' and 'reliable' delivering in a manual (or semi manual way) then it would seem appropriate to reward them for what has been delivered. If manual DSR within a provider's 'fast responding' portfolio became less firm for any reason (thereby reducing the accuracy of forecasting / delivery of the portfolio), then the onus should be on the provider to take relevant steps to remedy this (rather than for the ESO to pre-determine this in advance).

As the market matures and the volume of smart devices increases, more segmentation may be warranted. However whilst the sector is nascent, it is beneficial for providers to have more scope to see what works.

19

How do you view the wider market impact of the current DFS (both anticipation of it being called and use of the service for real events vs tests) on wholesale prices and cash-out price? How could we improve/reduce any impacts of the DFS on these market prices?

The WG considers the wider market impact of the DFS limited, and believe any anticipatory impacts are for more attributable to the simultaneous warming of coal rather than DFS notices. The data from the ESO Operational Transparency Forum suggests that if anything, the impact of the enhanced measures this winter has damped prices in the Balancing Mechanism. The largest price spike this winter, for example, was on the 12th December when the scarcity price was reached. This occurred after a decision not to hold a DFS 'live event.

20

If you took part as a provider for the current DFS Winter 22/23 service, did you test consumer responses closer to real time? Please share any results and learnings below.

- Octopus Energy tested a 4-6 hour notice period with our customers and delivered over 100MW of volume, with over 300k customers opting-in.
- This shows that customers are willing and able to deliver demand response at short notice.

21

What are your thoughts on a potential future service moving to closer to real-time procurement and dispatch? From a commercial perspective are there any considerations participants would like to flag when considering such a development? How would this impact both provider and consumer participation?

The WG current view is that much of the current domestic volume could move in-day, potentially to 4-8 hours before dispatch. However, for at least some industrial and commercial participants, longer/ 24hr lead-times are crucial in planning business operations to align with the needs of the service.

An optimal solution which could support the service to both expand volumes and evolve closer to an in-market product would be to design a service that allowed for different lead-in times This would support providers to see how different customer segments respond in different timeframes and the impact on forecasting accuracy.

A design that allowed the ESO to call both day ahead and intraday auctions could do this and could increase the utility of the tool for system balancing.

Note whilst most/ some I&C volumes may require day ahead notice, there may be scope for the day ahead auction to be moved closer to real time by moving (for example) from the current 3pm slot to early evening.

22

Does industry anticipate that moving within day would provide them with greater certainty around delivery volumes. Please share insights on this topic. Please also indicate your views on what dispatch timescales would facilitate the greatest volume participation (assuming core dispatch across evening peaks). For example, how would you expect volumes to change if they were called at: 24hrs, 12hrs, 6hrs, 4hrs, 2hrs, 1hr or 30 min lead-time?

As per the WG response above, different segments of DSR can respond with different lead-in times. As a WG, our priority is to develop the role for DSR in all its forms – as a resources that can be deployed now. We would support a design with auctions at both the day-ahead and intraday stage.

Please see individual member responses for more detail.

23

To date, DFS has operated by running a tender process with set timescales. Would participants be interested in exploring a more flexible procurement option such as an optional call off or ad-hoc auctions to support the ESO's balancing needs, like some of our other ancillary services markets? For example, prices and

availability are submitted ahead of time and ESO dispatches when required based on pre-determined delivery/response times. Please share your thoughts on this.

See above. In addition, we believe the suggestions here deserve greater examination in the development of an Transitional Service.

Process

The DFS for winter 22/23 was developed under a significantly compressed timeline and the processes were stood up at pace to facilitate implementation and delivery. As we continue to support and grow flexibility, improving the processes associated with how a future service may operate is a key consideration. Timescales to launch a potential future service this winter 23/24 could also be challenging, and we will face a number of constraints should this route be progressed. We welcome insights into the below questions around process and proposals, acknowledging such constraints will come into play.

24

Would there be any minor adjustments to the current processes that would deliver benefits? If so please articulate which process and why.

This question deserves further consideration with providers in the design phase, owing to lack of clarity on what constitute minor adjustments.

However, it is important that design changes that may appear minor to ESO are not introduced within weeks of service launch when providers have already built, or are finalising, their systems.

Providers need at least 6 weeks between the confirmation of the design and launch to ensure that relevant software is ready.

25

Please provide a view on the continued use of our Single Market Platform (SMP) to onboard for a future DFS for areas such as contracts, company registration and unit registration?

This question deserves further consideration with providers in the design phase.

Providers have noted however that the initial SMP registration process took up to 6 weeks last time.

26

Does the current structure of submitting files to a sharepoint site provide a feasible solution for winter 23/24? Please share any considered viable alternatives. In an ambition to move a potential future service to within day, would the current submission process for prices and availability still be fit for purpose (acknowledging timings would change)? Please share insights behind this.

This question deserves further consideration with providers in the design phase.

27

ESO do not currently receive real time/close to real time view of delivery. If a solution could facilitate an aggregated metering feed could your organisation provide such information and under what granularity/latency?

This question deserves further consideration with providers in the design phase.

Rulebook

Through our engagement with providers on the current DFS, we have a sound understanding of the challenges and concerns parties hold such as MPANs and baselines, many of which were because of the compressed

timescales. In this section we seek to explore proposals and potential solutions as to how we could take these topics forward for a potential future service.

Whilst we do have the opportunity to review these, significant amendments such as building new platforms or running tenders to select partners may not be feasible for this winter 23/24 and we ask parties to be cognisant of such factors when sharing their proposals.

28

Do you have any specific recommendations to amend the current baseline methodology which you believe would provide benefits such as reduced gaming risk, enhanced accuracy, reducing perverse incentives and ease of application? We welcome thoughts on the assumption a future service is dispatched within day. Are there any additional considerations regarding baselines and performance verification you believe that need to be catered for in moving a future service to within day?

This question deserves further consideration with providers in the design phase. Options include removing the in-day adjustment.

29

What developments and enhancements could parties foresee being beneficial for providers in managing/resolving their customer base regarding multiple sign ups and customer ownership resolution?

Duplicate MPANs was cited by providers as the single biggest issue they faced in DFS and the key barrier in expanding volumes.

An estimate from one provider was that it took, on average, 2 hours to resolve a duplicate MPAN. As MPANs were often duplicated across a number of providers at the same time (e.g. 5) that could mean that providers were spending 2 x 5 hours to resolve the issue for a single customer. MPANs were running into ten of 1000s per week at one stage. This is a resource requirement that providers had not anticipated. In addition to resource implications it led to unhappy customers and stranded MPANs – all risks for the emerging sector.

Solving this issue within the service design is critical and will be essential to increasing both volumes for 2023/4 and developing the service to a stage where it could transition to an in-market service.

Resolving multiple sign-ups has placed large administrative costs on providers in Winter 2022/23 and in many instances, prevented providers from actively working to expand volumes.

The WG has previously proposed a process for resolving duplicated MPANs. The process aimed to seek a balance between the following objectives:

- Supporting customers to switch and to confirm their preference
- Avoid incentivising high levels of churn (for example, several times per month)
- Minimise the resources required from providers to resolve duplicated MPANs. This can disproportionately fall on suppliers which have public facing call centres.

The previously mooted process required providers to timestamp the customer sign-up date and time when submitting MPANs and an initial 30-day period before customers could switch to a different provider. When a duplication was detected, the MPAN would default to the later provider (if after the initial 30-day period). An email would then be sent to the customer requesting that they confirm their preference. The customer would then switch in line with their stated preference.

There has not been sufficient time to review this process. However, it is likely that providers will have different views and a consensus will be difficult to find. The WG therefore urge the ESO to take the lead here.

Once the process has been agreed, the switching process could be delivered by a third party (with any customer communications branded as NGESO). An alternative option could be to further develop the DFS webpage on the ESO site to include a new tool. When a duplication is identified, providers would provide

customers with a secure link to access this webtool and ask them to state their preference (with, for example, the MPAN number functioning as the password). Note: there are some concerns from providers that without a third party managing the process and resolving disputes that it could again fall to them to resources disputes.

Where there is strong consensus is that the ESO need to determine the process, the implementation must be fair and transparent, it should be managed by a third party (or ESO), minimise resource requirements from providers and minimise/ avoid stranded MPANs and dissatisfied customers.

30

Under the current rules for DFS, it is not permitted to use asset metering. ESO are aware of ongoing work regarding Measuring Instrument Regulations and the impact this potentially has on the ability of asset meters to participate in ESO services. Please share your views on the impact of this on your business and delivery volumes for a future DFS, and the type of flexibility it could unlock.

As highlighted in the cover letter, asset metering could unlock greater volumes of flexibility and help to evolve the service/ market. At industrial, commercial, and domestic level, the use of asset metering will also increase accuracy of forecasts since the procured DFS load is separated from the rest of the 'noise' present on the site.

As with expanding volumes however, proving a clear process for resolving duplication and one that is not resourced by providers, will be essential here.

Whilst further discussion with industry is required to agree a fair and transparent approach for duplicate MPANSs (see above), once agreed, this process could be extended to asset meters.

Asset meters have been participating in ESO ancillary services for well over a decade and steps to include asset meters within DFS would support its evolution to an in-market service and aligns well with the ESO and Ofgem vision for RIIO-2 BP2 for service design to remove market barriers for entry and incentivise greater participation of flexibility.

As for the MIR, ADE and Power Responsive are continuing to work with government to clarify these issues but no public guidance has yet been issued by OPSS, the regulations' enforcement body. No action should be taken by ESO without such guidance, especially given the requirements imposed by CoP 11 for asset meters more generally and the intentions laid out by government in the EV Smart Charging Action Plan, a follow-up from the Electric Vehicles (Smart Charge Points) Regulations 2021.

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What role do you see consumer elective half hourly settlement playing in ensuring the right incentives are in place for providers and end consumers, and any other benefits and challenges that would arise from adopting elective half hourly settlement?

Please see responses from individual members here

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Participation and protection

ESO have been pleased to see a high level of consumer/industry engagement in the DFS and are keen for this to continue. It is important that consumers/businesses are able take part in the energy system and that protections are in place so they are able to participate safely when shifting energy demand.

What are the key areas ESO should consider to enable wider access for consumers, and to ensure they receive a fair, clear service across what we foresee as being a competitive marketplace. Also recognising that providers (rather than ESO) own the direct relationship with end consumers, what additional support is needed for providers and/or consumers. We welcome insights and thoughts on how to enable and facilitate increased participation in the service.

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Access to volume within the DFS has been a key driver for ESO for winter 22/23. What barriers could be removed in addition to the areas already outlined in this call for input to increase the volume participation in a potential future DFS, can we increase participation from consumers/businesses and reach a wider audience to unlock more volume?

Aside from the design improvements discussed, there are four main barriers that are impeding volume growth:

1) MPAN Duplicates: As above, disentangling duplicate MPANs has placed a large administrative cost on providers and diminished the business case for the service. Having a centralised and automated process for handling this on Day 2 is highly important.
2) Transitional Service: As above, certainty that any investment in a Day 2 enhanced service is not merely a 6 month investment will incentivise potential providers to fully commit to system and business model development.
3) Stacking with the Capacity Market: The two predominant arguments against allowing CM stacking for Winter 2022/23 were: a) The purpose of the service was to uncover additional volumes (which it has); and b) The likelihood that any DFS events would coincide with CM events (which they haven't). Therefore, these reasons are no longer relevant. Another concern raised at the recent webinar was concerned with the timelines of having DFS added as a relevant balancing service under the BM rules. However, Ofgem has an urgent rules change process and with the CMAG now up and running, this could foreseeably be facilitated. Allowing CM stacking would unlock significant I&C volumes, bolstered even further by the removal of TRIADS which, if disallowed from participating, will arguably be putting further tightness on the system that DFS then has to counteract.
4) Asset Metering: As above, asset metering would improve I&C participation and open the service to ESA aggregators.

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The current DFS model requires access to half hourly data so we can confirm demand reduction but limits access for the wider public who may not have access to a fully working smart meter. Do you have any proposals on how we could enable wider access while still maintaining the ability to know what was delivered at the times the ESO required the flexibility?

Whilst lack of half hourly meter/ smart meter access is a barrier to engagement, it is unclear how the service could operate without this.

Furthermore, a co-benefit of the DFS is the 'pull' factor that provided for customers to take up smart meter offers from their supplier. Current data suggests that around 25 percent of domestic households (15 million individual MPANs) do not have a smart meter and are unwilling to engage in discussions about taking one up. If DFS and other products in this space can help engage at least part of this hard to engage segment, then that would be a valuable output of the service.

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Do you have any views on the fairness of incentives for consumers given the range of benefits / incentives offered by different providers? What incentives, other than financial, have you experienced consumers participating in the DFS for, such as supporting stability of the system or reducing carbon impact?

Providers offered a range of incentives this winter. As a nascent sector, it is important that providers have scope to innovate and test different propositions to better understand different customer segments. The switching process means that where customers are not happy with the offer, they can switch provider.

The WG would not support moves to reduce the range of incentives/ benefits that providers can offer as this could reduce early stage learning and innovation.

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How can ESO/industry support consumers choice and switching between DFS providers more freely and in a timely manner? What information or service provision do you think is required to mitigate issues of MPAN duplication?

As above, we believe the ESO must play an active role in resolving duplicate MPANs as the public face of the service. The ESO web resource that listing (and linked to) registered providers played an important role last year.

In the next iteration providers would like to see this role expanded by implementing a third party switching service which will support customer switching without overburdening providers.

A fair and effective process here would be an important step in expanding domestic DSR. It would also protect the nascent sector from the current risk that unscrupulous actors could abusing the current provider-based approach.

It is also important that, although providers are free to brand their offerings individually, mention of the 'Demand Flexibility Service' is prominently addressed when onboarding customers. As per recent research undertaken by the Centre for Sustainable Energy for the HOMEflex project, standardisation and transparency within contract terms and conditions and highlighting the most essential elements of a contract in plain language was of high importance to research participants. Therefore, it is important that customers are made aware from the outset that they can only sign up to DFS with one provider and they will be notified if their premises has been signed up more than once. It may not be necessary to have the exact process outlined above explained at the sign up stage, but it should be present within the terms and conditions.

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We will be conducting a Consumer Evaluation of the DFS which will be feeding into the development of the DFS. What learning have you taken from your customers that can be shared? What further guidance is required to support accurate information and protection to support consumers?

Please see responses from individual members.

Note: while bilateral communication with providers will be needed to answer this question, it is important from and industry-wide perspective that this evaluation includes sufficient feedback from all types of DSR presented in the DFS - domestic (automated and non-automated), I&C, customers who participated via their supplier and those who participated with an aggregator.

Wider market initiatives

37
Are you aware and informed about the upcoming consultation for the launch of our new Reserve services, that offer both positive and negative delivery? https://www.nationalgrideso.com/industry-information/balancing-services/reserve-services

Please see responses from individual members here

38
If you are an existing provider, do you intend to migrate any of your current volumes to these new markets next winter?

Please see responses from individual members here

39
Have you considered offering flexibility into the Balancing Mechanism (BM) through our Wider Access scheme? https://www.nationalgrideso.com/industry-information/balancing-services/balancing-mechanism-wider-access What are the barriers for offering flexibility into the BM and how can ESO help support removing these?

WG members that participate in the BM note the issues with smaller volume MW dispatch and operational metering requirements. These present a consistent barrier to entry for DSR that will not be solved by the conclusion of Winter 2023/24.

Similarly, service designs for the new ancillary service suite, and frequency response in particular, are not welcoming to DSR at present, especially behind-the-meter assets. This is why a Transitional Service will be needed to keep the volumes unlocked by DFS Day 2 active as needed reforms are enacted.

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Are you familiar with the various trials/innovation projects underway helping to unlock flexibility, e.g. Electric Vehicles into the BM and Crowdflex (https://www.nationalgrideso.com/future-energy/virtual-energy-system/crowdflex)?

Members note that the DFS has acted as a 'gateway' for new entrants to the sector. Navigating the current balancing and ancillary markets is not easy for new entrants and a roadmap from the ESO setting out its future plans for developing different types of DSR and integrating them into its existing/ emerging services would support new entrants.

A future roadmap could also highlight relevant workstreams (such as Power Responsive), innovation projects (such as Crowdflex) and other industry changes so that interested parties could clearly identify the current barriers to participating and how proposed changes/ pilots could reduce/ remove these barriers and the relevant timeframes.

WG members who are familiar with these projects highlight the role that the Power Responsive Operational Metering Trials could play in moving some DFS volumes within market by the conclusion of the Transitional Service.

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ESO are encouraged to see a number of early adopters delivering their own flexibility services to their customers. Is there any support ESO can offer to help drive and grow industry led markets/initiatives around flexibility? Anything else to share

A clearer roadmap setting out the role of DSR, the value it can deliver to the system and the steps that the ESO plans on taking to develop the sector would support industry to invest and resource this area.

If this roadmap could highlight relevant workstreams (such as Power Responsive), innovation projects (such as Crowdflex) and other industry changes (code modifications etc), it could serve as a guide for new entrants to the sector.