### Respondent 1

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   Yes, Respondent 1 strongly supports the proposal for DFS Day 2 with some important caveats detailed below. We believe the move towards a transitional service while ESO implement the considerable IT changes needed in order to efficiently dispatch smaller volume assets and as MHHS is rolled out is the correct step to take, in line with the recommendations of the BEIS Select Committee in their report on Power Sector Decarbonisation. However, it is critical for the growth of the flexibility sector that DFS does not become an indefinite sandbox that negates, or is even used to justify, delays to other needed ESO IT reforms. This is why we also support the Select Committee's recommendation that ESO reports to Parliament on its progress in this area. Therefore, we echo ESO's desire for increasing volumes, and greater price and lead time discovery.

   **Capacity Market Stacking**

   We reiterate that ESO should allow the almost 20% of DSR CM volumes that we have identified (from conversations with only 3 aggregators) that do not participate in any other flex services to take part in DFS, thereby almost doubling the capacity from last year. As per our co-signed letter to ESO in May, we believe the arguments put forward against CM stacking can be answered as follows:

   - While a lot of this capacity will be capable of participating in other ESO markets, there will be a sizable portion who simply do not cohere with those service terms.
   - From very initial discussions with three aggregators, we have identified 250MW of CM volume that does not participate in other services but would be interested in DFS.
   - Concerns around dispatch transparency and skip rates in the BM mean that I&C customers cannot be offered any revenue certainty for participation and are therefore not incentivised to participate in this service.
   - Furthermore, operational metering requirements impose a high-cost burden on companies which further diminishes the business proposition.
   - Lead times in the BM and STOR can prove difficult for companies that benefit from longer lead times in order to...

   ESO are pleased that Respondent 1 strongly support the proposals for DFS day 2 acknowledging the caveats noted. We would also like to thank Respondent 1 for their continued input and support through the development of the service.

   **CM stacking:**

   Thank you for sharing your thoughts on the topic of CM stacking. We recognise the wider challenges and issues that you mentioned in the response. We are pleased that many of these are being explored in our wider workstreams. We have taken all of these into consideration as part of the consultation process and our positions are outlined in Appendix 1.

   **MPAN Duplication:**

   Thank you for your support on this topic.

   **Number of Test & Gap:**

   Please note that ESO have published our DFS Market Information Report for winter 23/24. This can be found on the DFS webpage.
adjust their business practices accordingly.

- Whilst I&C companies who have been participating in TRIAD may shift towards other services now that TRIADs have ended, any of that volume in the CM will not be able to participate in the DFS. For volume in the CM alone, this means that there will likely be a net increase in system demand following the removal of TRIADs which the ESO cannot influence.

- In practice, the DFS is not only used in addition to CM events but is lower in the merit order.

  - We recognise the ESO’s view that DFS events are only called when forecasting demonstrates that existing reserve capacity, including the CM, will not be sufficient to achieve enough system margin. We also recognise that given DFS was called at day-ahead stage last year, the ESO was managing still relatively imperfect information when it had to make a decision on DFS compared to the closer to real-time trigger for a CM Notice

  - However, last year, 2 DFS events were called without CM Notices either being issued or remaining in force. Whilst theoretically DFS may have taken CM volumes into account, in practice it is clearly the case that for at least those two days DFS was not needed in addition to CM volumes.

- Without a winter outlook, the enhanced nature of DFS 2 is a way of offering ESO flexibility in design.

  - While fully supporting this approach, we also believe it should be used to grow DSR volumes actively participating in balancing, instead of being held in reserve, in order to build the foundations for a flexible future.

  - The unique characteristics of DFS can provide incentives for companies who participate in the CM predominantly for its simplicity. Stakeholders have consistently referred to the CM as a ‘gateway service’ to pique companies’ interest in DSR. However, at present, the next step forward is more of a leap in terms of sophistication. Therefore, the DFS present a natural next step in demand response for many I&C customers.

  - If the DFS is to truly act as a transitional service it should be looking to transition all volumes, not just those completely new to the world of flexibility. Allowing CM volumes is a critical step in this transition.

- If ESO still consider that DFS should be providing additional volume and
that allowing CM stacking outright would constitute ‘double payment’, which for the reasons outlined above we do not consider reasonable, another option would be to include a lead time that takes place after the deadline for issuing a Capacity Market Notice:

- Therefore, ESO should include a variable lead time between four hours prior to event.
- In this scenario, assets with CM agreements could participate without impacting CM volumes since it will be too late to issue a CNM for a time period that would coincide with DFS.
- This would also allow the ESO to put into practice the feedback received in the consumer research studies that consumers are capable of responding within a four hour notice period. Given this feedback, combined with ESO’s desire to test lead times, surely the shortest lead time indicated as feasible via extensive consumer research should be explored in practice.
- We recommend that the ESO would need to alter their proposal from to only have one notice issuance per event. Otherwise, the volumes unlocked by this proposal would only be allowed to participate in one third of events.
- This coheres to the original proposal made by the Industry Working Group in our Call for Input response and 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).
- The following figure sets out the money flows and how this proposal solves ESO concerns on double counting:

Whilst we have focused on unlocking I&C volumes with CM contracts in the comments above, as a principle we believe that stacking across DFS and the CM would be beneficial across all sizes of assets, including domestic as this flexibility sector begins to participate more in such markets.

MPAN Duplication
We applaud the ESO on recognising industry feedback regarding MPAN duplication and the need for more regular checks and the introduction of timestamps.

Number of Tests and GAP
On another note, while we appreciate the desire for a better understanding of winter needs before publishing anything concrete on the number of tests or the GAP, it is
near impossible for industry to build an investment case for DFS without any revenue certainty. In order to grow volumes this year, industry will need to have some indication of what they are selling to customers, even if definitive figures must wait until Autumn.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baseline days)?

   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

   If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

   We supported the removal of the in-day adjustment last year for I&C assets and appreciate ESO’s concerns around gaming and desire to mitigate risks as much as possible. Therefore, we support a change being made for domestic volumes but consider it may be preferable to alter the in-day adjustment for domestics rather than removing it completely. Given it is a winter service, it will help accuracy for providers to be able to account for weather patterns. The key factor to mitigate gaming is that the customer is not able to impact the baseline after they know they will be participating in the service. How this is achieved with the multiple proposed lead times is difficult to decipher. Options for an unknown or random in-day adjustment period are under discussion by some in industry. Alternatively, an extended adjustment period may represent the most feasible solution for the coming winter.

   Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

   3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

   We strongly support the proposal to allow sub-metering and applaud ESO’s ability to move at pace to include this change, noting the caveats mentioned in question 1. We reiterate the reasons outlined in our letter in support of this proposal:

   - It provides greater accuracy as to demand response.
   - This argument holds for both domestic and I&C but given the present purposes, we will focus on I&C. A site with high demand and multiple assets behind the boundary meter will be better incentivised to participate with an asset meter owing to the greater revenue certainty that can be guaranteed through

   Thank you for your comprehensive insights around the enablement of asset metering. These have been taken on board and helped shape the development of the service.

   We acknowledge your position on the HHS requirement for sub metering and this formed a considerable part of our internal review. Whilst ESO recognise that unlocking all asset metering will be challenging, where this is not feasible parties are still able to bring volume forward at the boundary meter as we saw in winter 22/23. We recognise that as the smart meter rollout and transition to MHHS continues, we anticipate this will further support unlocking of asset metering as we have seen in the industrial and
an asset meter undistorted from the load on the rest of the site. It will also provide ESO with a clearer signal for performance monitoring and settlement.

- It better aligns with other ESO services including the BM and STOR.
- Proposing DFS Day 2 as a transitional service without a set end date (even if it remains an enhanced action) demonstrates ESO’s welcome initiative to incentivise providers’ investment in systems and structures that will allow volumes to grow and eventually move into in-market services.
- One such incentive would be for potential providers to seek out new participants and where appropriate install asset meters that will better cohere to ESO markets in the future and provide greater certainty now for the customer, as per the accuracy point above.
- On whether it interferes with net turn down, where to draw the line on demand response has been a debate for many years within the electricity sector and the embrace of asset meters within various services indicates that the boundary meter is not where that line is drawn. Therefore, DFS should be no different.
- It does not interfere with Applicable Balancing Services Volume Data (ABSVD) reallocation.
- Since the asset meters in question are largely designed for use in I&C DSR, they are half hourly settled.
- However, even if they were not, they should not be treated differently than non-half hourly settled boundary meters.
- It does not interfere with any ancillary benefit in enabling smart meter rollout.
- It is highly unlikely that any potential DFS participant who does not yet have a smart meter would forego this option for the much more sophisticated adoption of an asset meter.
- These meters would need to be connected to a high demand appliance such as a heat pump or EV whose very ownership points to a heightened degree of energy literacy.
- It does not pose a different risk of MPAN duplication than that already posed by boundary meters.
- DFS providers using asset meters should be obliged to also produce the boundary MPAN so that duplicates can be easily processed.
- The principle of one provider per MPAN is therefore maintained, even if a provider is aggregating multiple asset

commercial sector. Please refer to Appendix 1 for our position on the topic.
meters behind a single MPAN since the aggregated asset metered volumes will be used to produce a single delivered volume.

- The same processes as proposed by ESO in Deep Dive Session 4 can be used to identify duplicates and assign to the provider as per the rules.

On the proposal as set out in the consultation, we strongly disagree with the stipulation that any participating sub-meter must be associated with a HHS meter for the following reasons:

- ESO have openly acknowledged that this will essentially preclude domestic asset meter participation given the tiny minority of HHS domestic boundary meters. We do not accept that the inclusion of sub-metering is purely for the purpose of incentivising I&C participation. As per our letter, 'Both at the domestic and the industrial and commercial level, asset meters are critical for the future of flexibility. All trends towards widespread rollout of demand side flexibility includes the use of asset meters and the burden of proof should be with ESO to necessitate their exclusion rather than industry needing to justify their inclusion.' This includes caveats such as association with a HHS meter.
- It seems that this exclusion stems from a concern about the potential for domestic gaming where load may be shifted onto the boundary meter load. The only example given of this has been EV load, as it cannot be done with a heat pump. No evidence has been provided for the scale of such a risk and therefore we do not believe the mitigation measure is proportionate.
- We propose that instead of association with a HHS settled boundary meter, sub-meters must merely be associated with a boundary meter collecting half-hourly data (as is allowed for DFS Providers using boundary meters). This addresses concerns in the following way:
  - ESO have proposed that boundary meter data must be available to a Provider using asset meters and be made available to ESO for auditing purposes if requested.
  - Communications principles can demand that Providers using asset meters must make this fact known to customers and that they therefore cannot shift load to the boundary meter. They must also communicate the risks this poses to their asset.
Providers using asset meters must also periodically cross check against boundary meter data and resolve issues with any MPANs suspected of switching load to the boundary meter.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Yes. Thank you for your feedback and support in regard to the development of this service.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No.

6. Do you have any other comments on the Demand Flexibility Service proposal?

We appreciate the changes made by ESO in the time between the Deep Dive Webinars and the consultation publication but note that this may have been a lot smoother for all involved if ESO had taken proactive steps to engage with industry representatives at an earlier stage, perhaps by conducting the CFI far earlier and then moving into a co-creation phase. Respondent 1 co-wrote a CFI response that had been discussed in depth with companies who represented the vast majority of the volume procured in last winter’s DFS and yet the burden to initiate discussion was left with us following the Deep Dives, leaving a very small timeframe, rather than ESO approaching us post-CFI but pre-Deep Dive which would have made the process far easier. Furthermore, although useful, the Deep Dive sessions cannot accurately be characterised as engagement since it is a largely one-way conversation. We suggest ESO reach out to trade groups at an earlier stage in the calendar to have group sessions with industry members that can be conducted in a way where groups are small enough to have cameras and microphones on in order to facilitate dialogue. We also propose better dialogue within teams at ESO so that cross-departmental teams are better aware of crossovers and the precedents that already exist or are being created elsewhere in ESO.

ESO thank you for the constructive feedback on the mechanisms we use to engage with industry. We recognise that striking the balance of the various engagement channels is very challenging when we are dealing with a diverse range of stakeholders that is considerably larger than the majority our other markets. We look forward to continuing our ongoing dialogue and remain open to support the Respondent 1 and their members.

Respondent 2

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Yes, with one key caveat.

The requirement that asset meters must be half-hourly settled effectively precludes asset metering at the domestic level. This provides a substantial barrier to domestic participation, and reduces market

Thank you for feedback and support on this topic, we acknowledge the additional caveat mentioned.
competition, particularly from non-Suppliers.

As far as I’m aware, the concerns regarding gaming have yet to be substantiated with any real-world data, and boundary meters collecting half-hourly data (without HHS) should nevertheless fully address this perceived concern.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length/period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We support a change being made for domestic volumes but consider it may be preferable to alter the in-day adjustment for domestics rather than removing it completely. Given it is a winter service, it will help accuracy for providers to be able to account for weather patterns. The key factor to mitigate gaming is that the customer is not able to impact the baseline after they know they will be participating in the service. How this is achieved with the multiple proposed lead times is difficult to decipher. Options for an unknown or random in-day adjustment period are under discussion by some in industry. Alternatively, an extended adjustment period may represent the most feasible solution for the coming winter.

ESO take on board the comments around adjustments to the baseline methodology. We recognise that finding a fair and level ruleset across a number of different participating sectors/customers is a challenge.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

As outlined in our response to Q1, we’re strongly in favour of enabling asset metering. However, we strongly disagree with the requirement for HHS.

We propose that instead of association with a HHS settled boundary meter, sub-meters must merely be associated with a boundary meter collecting half-hourly data (as is allowed for DFS Providers using boundary meters). This addresses concerns in the following way:
- ESO have proposed that boundary meter data must be available to a Provider using asset meters and be made available to ESO for auditing purposes if requested.
- Communications principles can demand that Providers using asset meters must make this fact known to customers and

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
that they therefore cannot shift load to the boundary meter. They must also communicate the risks this poses to their asset.
- Providers using asset meters must also periodically cross check against boundary meter data and resolve issues with any MPANs suspected of switching load to the boundary meter.

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**

   Yes

   Thank you for your feedback and support in regard to the development of this service.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

   No

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

   No

---

**Respondent 3**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   **Respondent 3 is broadly supportive of the proposals put forward for the evolution of the Demand Flexibility Service, particularly with regards to their ability to unlock greater volumes of flexibility and improve learnings about domestic flexibility within the limited timeframe before this winter. The success of the DFS last winter has shown it can remove the need for ESO to put coal plants on standby, at significant cost to the system and the environment. It is crucial the DFS builds on this momentum, and the need is clear with only ~2GW of coal supply remaining in the GB system. We firmly believe that as the DFS grows in scale, it should replace coal contingency permanently. In order to achieve this, ESO must:**

   - **Maximise procured volumes of flexibility**
     
     In order to maximise the amount of volume the DFS has access to, we recommend that (a) all energy suppliers are obligated to participate in the DFS, and (b) all providers are required to invite all eligible customers to take part in the DFS. This is critical to scaling the service. Evidence of providers voluntarily asking all customers with smart meters to partake was limited in the previous DFS and requires stronger regulation to unlock greater volumes.

   - **Evolve to a year-round service**

     ESO acknowledge the support for the DFS and the benefits it can bring.

     ESO have sought to engage with as many parties as possible to raise awareness of the DFS service. Whilst ESO are engaging with parties to support and facilitate participation, ESO are not in a position to mandate such a service upon parties. We recognise that the regulator and government can support in driving the importance of demand flexibility and welcome their continued support in this space.

     ESO acknowledge the support for not setting an end date within the service terms. As outlined in our communications to date ESO are proposing to continue with DFS as an enhanced action service. In the short term ESO would flag the wider reform work underway to our response and reserve services. In order for ESO to comply with the appropriate legislation we would be required to undertake the necessary consultations should we choose to amend the proposed terms.

     Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published their DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.

     ESO welcome the support regarding introducing closer to real time procurement flexibility and the benefits these learnings will offer.
We strongly support the DFS proceeding without a defined end date, setting a clear direction of travel for consumer flexibility as a business-as-usual part of balancing the grid year-round, rather than just during periods of cold weather. We welcome ESO’s formal recognition of the potential of the DFS in the future to encourage ‘turn up’ as well as ‘turn down’. However, in order to ensure this can be achieved in the near-term (i.e. trialling ‘turn up’ in summer 2024), ESO must make the DFS an in-market service and ensure that the terms of the service are flexible so that its design can be evolved without the need for extensive industry consultation which will slow progress (for example, opting to only undertake a Call for Input).

Confirm sufficient incentive mechanism

The lack of assurance about the DFS Guaranteed Acceptance Price (GAP) risks undermining market confidence in this winter’s DFS. Waiting to publish the GAP in the Market Information Report in September/October risks reducing the number of FSPs willing to participate in the DFS, given the revenue certainty that many will require to prepare for the provision of the service over the coming months. Suppliers need to be sufficiently supported to compensate customers - and customers need to be sufficiently incentivised to take part in the DFS. This means the GAP must be confirmed as soon as possible at £3 per kWh - or increased, to further incentivise sign up to the service, thereby expanding the potential size of procured volumes of flexibility. Anything lower than this figure risks leading to a much smaller scale DFS this winter, undermining the significant progress the trial has made to date.

Assess closer to real time flexibility

We welcome the proposed within-day dispatch time frame. This will help Respondent 3 to better research the question of how late a session can be called, the reliance of faster responding assets and how much forecasting model uncertainty is reduced accordingly. We encourage ESO to call upon closer-to-real-time procurement more frequently, to strengthen learnings we can gather about this service. Getting more granular data about within-day dispatch can help evidence the value of consumer flexibility. However, we should bear in mind that we
will not be able to truly define its benefits at present, given the low penetration of automation and relevant technology in households. Any conclusion we draw from the DFS this winter about the role of within-day dispatch should be seen in the context of a system that will see significant changes over the next decade.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We welcome the removal of the in-day adjustment period. This mitigates gaming risks, as outlined in our previous call for input response, which was the only major negative feedback that the DFS received. However, ongoing issues with adjusted and unadjusted baselines and the underpayment of consumers is an issue that requires deeper consultation. The P376’s shortcomings in accurately assessing baselines at a household level has the potential to undermine consumer trust - which could be a significant barrier to household’s active participation in the future energy system. Respondent 3 is calling for ESO to set up a cross-industry Working Group or Taskforce to ensure we’re able to collectively get ahead of baselining issues.

We continue to undertake research into the accuracy of different rules-based and algorithm-based baselines and plan to release a paper on this topic in winter 2023. We would be happy to share the findings with ESO for the purposes of future iterations of the DFS, including considerations around in-day adjustments.

ESO welcomes the support for this proposal. ESO have taken on board this feedback and we welcome Respondent 3 sharing any outcomes of the further research underway.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Yes, we support this proposal because (a) it will allow consumers to more easily opt-in specific assets to flexibility events, which may be better placed to respond to events closer to real time, and (b) it is critical to unlocking greater demand flexibility in the future. We believe ESO’s proposed key conditions under which asset meters are able to participate

ESO welcomes the support for this proposal and your insights

We thank you for this feedback and recognise that understanding what assets are delivering flexibility will offer valuable insights for future developments and learnings.

ESO would not be in a position to mandate
sufficiently mitigate the risks of double counting and gamification.

Relatedly, Respondent 3 calls upon ESO to consider asking FSPs to group units by low carbon technology (LCT) type. This will become more important when households own multiple LCTs and want to opt in some assets, such as electric vehicles, but not others, such as heating systems. By grouping households by LCT type, the source of flexibility is more explicit, which is beneficial to ESO. Whilst suppliers may not want to share this openly, this could be resolved by using pseudonymised grouping units and sharing metadata about each unit privately with ESO. We believe this approach offers benefits for FSPs too. Given this winter’s DFS will trial closer to real time responses, if households were grouped by LCT type, such as electric vehicles, a retailer could trial only communicating with this group and only source automated flexibility from them.

<table>
<thead>
<tr>
<th>4.</th>
<th>Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes, we support this proposal because (a) it will allow consumers to more easily opt-in specific assets to flexibility events, which may be better placed to respond to events closer to real time, and (b) it is critical to unlocking greater demand flexibility in the future. We believe ESO’s proposed key conditions under which asset meters are able to participate sufficiently mitigate the risks of double counting and gamification.</td>
</tr>
</tbody>
</table>

Thank you for your feedback and support in regard to the development of this service.
during this event, rather than calling upon all households - many of whom typically provide manual flexibility and therefore suffer from higher barriers to access. This could avoid friction in the DFS consumer experience.

5. **Annex 1:** Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No.

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

No.

---

**Respondent 4**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   We strongly support NGESO’s decision to re-introduce the Demand Flexibility Service (DFS) for Winter 23/24.

   We support the decision to not set an expiry date for DFS – provided that future changes to the terms and conditions remain subject to EBR Article 18 stakeholder consultation and Ofgem approval.

   We support DFS continuing to be used as an enhanced action for Winter 23/24, allowing NGESO to structure the design to maximise volumes and learnings. We welcome NGESO’s decision to keep the tests and GAP. We hope to receive further information from NGESO as soon as possible on the number of tests and GAP level as this is important for planning our offering and consumer engagement.

   Both market participants and NGESO need further experience of DFS before taking a view on whether DFS should evolve into an enduring product.

   Looking at the wider NGESO ancillary service markets, including the Balancing Mechanism, we need faster progress in opening these markets to residential DSR so that consumer assets can access a choice of enduring value streams.

   We remain frustrated at the slow progress in delivery of the ESO IT changes needed to efficiently dispatch smaller volume assets and aggregated DSR.

   ESO are pleased for the support to continue the DFS and its use as an enhanced action.

   Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests.

   ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.

   ESO acknowledge the feedback regarding wider deliverables and workstreams.

2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?**

   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?
Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We support NGESO in working to mitigate baseline gaming risks. We agree that the removal of the in-day adjustment would mitigate gaming. However, as NGESO itself has acknowledged during stakeholder webinars, this could result in consumers being under rewarded for their participation – especially on the very cold days when DFS is most likely to be used. Therefore, whilst NGESO would eliminate the potential for gaming, its removal would also reduce NGESO’s ability to use/test real demand flexibility.

We support NGESO in examining alternatives to simply removing the in-day adjustment, so that consumers are more accurately rewarded for their response. The final approach must be easily explainable to consumers. There could be less potential for gaming with within-day (WD), compared to day-ahead (DA) procurement, because consumers have less notice. So, one approach could be to retain the in-day adjustment for WD, especially if it is required to support participation by consumers using a combination of Energy Smart Appliances (ESAs) and on-site generation or storage. However, we note that adopting a twin-track approach adds complexity for consumers and participants. We intend to run a trial during the Winter 23/24 season to find out whether consumers with a greater technical capacity for delivering demand reduction using ESAs are significantly better suited to participating in within-day procurement than those without such capabilities. We will share the results of this trial with NGESO after the next DFS season has ended.

We thank you for your feedback on this topic and look forward to the results of the trial.

Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

<table>
<thead>
<tr>
<th>3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are OK with this approach for Winter 23/24, but a longer-term solution is needed for residential DSR that is equitable to aggregators and suppliers, and supports broader consumer participation in ancillary services markets. This could build on BSC P375. Also, the current proposal may not be well suited to more complex sites that may want to enter DFS in the future, e.g.</td>
</tr>
<tr>
<td>We acknowledge the support for this proposal and the longer term challenges that the DSR arena presents.</td>
</tr>
<tr>
<td>As part of the submission for the article 18 process, ESO have shared an updated Guidance Document (subject to EBR approval). We hope this offers the clarity required regarding the MPAN process. If not, please</td>
</tr>
</tbody>
</table>
homes which have the means to generate and store energy, along with optimising on-site energy consumption. The trial we intend to run during the Winter 23/24 season will look at whether the proposed treatment of sub-metering presents any barriers to such sites participating effectively in the DFS, and we will share the results with NGESO.

Will the ESO’s MPAN duplication proposal capture a case where one provider has put a consumer's asset meter into DFS and a different provider has put the boundary meter into DFS?

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

We agree with the proposal, provided that this is applied to individual MPANs only and that DFS Units can contain a mix of opt-out and opt-in MPANs. DFS Units can have a mix of Opt-in and Opt-out meters.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No

6. Do you have any other comments on the Demand Flexibility Service proposal?

**MPAN Duplication & DFS Incentive Values**

We are pleased the ESO has acted on industry feedback to deliver a solution for MPAN duplication.

It would be helpful for consumers if they access the ESO database as to check which Service Provider the ESO has them registered with.

We support the obligation on Service Providers to submit information to NGESO on the aggregate value of incentives. However, in consumers’ interest and whilst DFS remains an enhanced action, we think that this data could be made available to consumers to inform their choice of Service Provider.

Combining these points, NGESO should consider a use-case for its MPAN checking system where a consumer can check which Service Provider they are registered with and see how that Service Provider’s typical consumer incentive compares with others.

**ABSVD**

Like our response to Q3 on sub-metering (asset metering), we are OK with the proposed approach for Winter 23/24, but a longer-term solution is needed for domestic customers that is equitable to both aggregators and suppliers.
### Respondent 5

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**
   - Yes, addresses many of the key issues with the first iteration of the DFS without completely reinventing the service.
   - Thank you for your feedback and support in regard to the development of this service.

2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?**
   - What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?
   - Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?
   - If not, what length/period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?
   - Yes, mitigates some but not all gaming risks.
   - This may have some impact on being able to accurately deliver the forecast demand reductions, though not expecting this to be too significant.
   - Without looking at a whole lot of data it is difficult to say if making an adjustment based on the whole day will be more effective.
   - No strong opinion on what the adjustment period should be.
   - Thank you for your feedback and support in regard to the development of this service.

3. **Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?**
   - Unlikely Respondent 5 will extend our DFS offering to cover sub metering, given we will continue to focus on domestic.
   - Asset sub-metering will be difficult to manage effectively as it relies on supplier level awareness of whether the boundary meter is HH settled or not (in domestic).
   - Simpler to manage as part of the I&C metering participants.
   - Thank you for your feedback and support in regard to the development of this service.

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**
   - Strongly agree with going to an opt-out per event as opposed to opt-in per event model. Particularly with in-day events, this will improve user experience and we are thinking of ways to better inform users when an event is about to happen and look into automation possibilities.
   - Thank you for your feedback and support in regard to the development of this service.
5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAN conflict resolution system automated via API call is a very positive development Latest registrant system for assigning users should work. Communications Principles should back up with expected conduct and handling of systems where a new aggregator comes in. Requirements in section 10 relating to ABSVD reflect the lack of availability of the HH settled registry of meters to any other party than the energy supplier. Again, another very positive development</td>
<td>Thank you for your feedback and support in regard to the development of this service. Thank you for your feedback and support in regard to the development of this service. We will be sharing an updated set of communication principles as part of the final suite of documents. Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

---

### Respondent 6

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   Yes – Respondent 6 were a provider of DFS last winter and felt the scheme worked well and the proposed changes seem positive on the whole going forward. | Thank you for your feedback and support in regard to the development of this service. |

2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?**

   **What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?**

   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective? If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive? | Thank you for your feedback and support in regard to the development of this service. |

   I do agree with the proposal to remove the in-day adjustment although this wont have a major affect on the Respondent 6 portfolio as we only deal with businesses. As above on all points | Thank you for your feedback and support in regard to the development of this service. |

3. **Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?**

   I do agree and I understand the rationale behind this although I am unsure how ESO will be certain that all asset meters will be opted in as part of the “all or nothing” approach. This may just be due to a lack of knowledge in this area, I assume there is some way to verify any missing sub meters as they must all be registered to a boundary meter and that has to be part of the submission? | Thank you for your feedback and support in regard to the development of this service. As part of the MPAN duplication check process where asset meters are used parties must also submit the boundary MPAN. We will be updating our guidance material which will hopefully bolster any areas of uncertainty from the contractual terms. |

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**
I do agree with this proposal, however I think clarity needs to be provided on the obligations of the provider on this process. Does the provider have to offer both options to the end user or can the provider make the decision based on their portfolio?

Providers are free to choose whether to offer one or both types of Opt-in and/or Opt-out as best suits them.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No

6. Do you have any other comments on the Demand Flexibility Service proposal?

Respondent 7

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Yes - demand flexibility is a key technology. Thank you for your feedback and support in regard to the development of this service.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Partly - this was a massive distortion last year. However it was also a distortion which meant that there was huge engagement - particularly from those with home energy systems (particularly batteries). The logic behind the IDA does still hold. In a day there are 48 settlement periods, and if 3 of those are taken up by a DFS period then there are 45 available to act as the adjustment. That's enough to completely eliminate short term gaming, though the shifted load will obviously fractionally increase the baseline (a good thing I think). Mild gaming could still be accomplished by charging an EV/battery overnight that morning - but those will be needed on enough days anyway… it's not a significant gaming opportunity. Thank you for your feedback on this topic to support the development of this service.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

There was never a cost to opting in, so I don't see why anyone wouldn't opt in for every session. Thank you for your comments.
The “Oh it didn’t register my opt in” was a reasonably common frustration… why not just have everyone’s savings counted.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

6. Do you have any other comments on the Demand Flexibility Service proposal?

   I’d also like to see some export recognition - those with home batteries could arbitrage energy from other times in the day (earlier or later than the DFS session), providing a significant contribution to the grid - a contribution that can’t be recognised when they typically draw ~0 power for most of the day. The current service terms do permit export capability as part of delivery.

Respondent 8

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

   We support the proposed Demand Flexibility Service (DFS) for the upcoming winter as an enhanced action with test events. We share the ESO’s ambition to learn more about demand flexibility, and support the introduction of a variable Guaranteed Acceptance Price (GAP) and procurement timescales. Taking into account any learnings from this winter, we are pleased with the ESO’s commitment to develop a commercial DFS in the longer-term. Thank you for your feedback and support in regard to the development of this service.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks? What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)? Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective? If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

   As a non-domestic supplier, we use demand flexibility from Industrial & Commercial (I&C) customers whose baseline has never been subject to an in-day adjustment. As such, we do not have any strong views on the removal of the in-day adjustment for domestic providers. Thank you for your feedback and support in regard to the development of this service.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

   We are supportive of allowing sub-metered assets to participate in the DFS. In particular, for large I&C customers we have identified instances where this would... Thank you for your feedback and support in regard to the development of this service.
allow us to offer additional flexibility volume. For example, where a site has assets participating in other markets (e.g. the CM), the whole site would have been precluded from taking part in DFS. Using sub-metering would allow us to enter those parts of the site not in other markets into DFS. We have not identified any additional risks and agree that requiring such sites to have HH-settled boundary meters would mitigate the risk of double counting and gaming. However, we note that this requirement will present a barrier to sub-metering for domestic properties.

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**

   We support the proposal to allow providers to utilise an “opt-out” methodology should they wish to do so. This could be particularly beneficial for providers using automated assets. As long as providers can continue to use the “opt-in” methodology without additional complexity, we have not identified any risks to giving providers a choice.

   Thank you for your feedback and support in regard to the development of this service.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

   **Procurement Rules**

   6.3.1 stipulates that registered DFS participants have in “place at all relevant times appropriate policies and/or procedures designed to identify and promptly notify to NGESO in writing, and will so notify NGESO upon becoming aware of, any behaviour on the part of an owner and/or occupier of premises Metered by Unit Meter Point(s) allocated to a DFS Unit which seeks to adjust the Metered Volume of that Unit Meter Point with the intent of artificially inflating the DFS Operational Baseline as described in paragraph 6.3.1”

   Whilst we do have relevant checks in place, additional guidance on what the ESO considers “appropriate policies and/or procedures” is important. Further clarification on this point is important to ensure consistent and robust practices are deployed by all participants.

   **Service Terms**

   We are comfortable with the proposed service terms.

   Thank you for your feedback and support in regard to the development of this service.

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

   **Clarity on GAP and Tests**

   Whilst we are supportive of the variable GAP and tests using different

   Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which
procurement and dispatch windows, it's not clear how the ESO will determine what they will be for any given test. The ESO has also not yet clarified how many tests there will be. Providers are already engaging with customers and such information is important for assessing the value of DFS for this winter and onboarding customers. We understand more detail will be provided in the Winter Outlook and urge the ESO to set out in detail how they expect to determine these variable parameters for each test event as soon as possible.

<table>
<thead>
<tr>
<th>Respondent 9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</strong></td>
</tr>
</tbody>
</table>
| The growing consensus amongst industry, Ofgem and Government that demand side flexibility - and specifically consumer led flexibility - will have a growing role as we work to deliver net zero reinforces DFS as being a critical first step towards unlocking this potential. We are encouraged by the consumer research – both our own internal research as well as that led by the Centre for Net Zero and CSE – which shows significant customer appetite to participate in future iterations of DFS and believe this provides solid foundations upon which to build the service in the future.  

In the spirit of continuing the dialogue between industry, consumers and ESO in order to develop a fit for purpose and enduring DFS product, we would advocate another evaluation exercise be carried out after the Win 23/24 delivery period. This should help us to ascertain any new key learnings, as well as utilise the new dataset which will be available at this point in time.  

We would also like to add that, as per our bi-lateral discussions, we believe that one of the principal issues to address in the near-term horizon is how to unlock greater I&C participation in DFS. Our internal and customer feedback leads us to believe that one of the causes behind low I&C appetite is the inability to stack DFS alongside other ancillary services revenue streams. We have expanded upon this under Question 6, as well as provided some feedback over other key topics. |
| Thank you for your feedback and support in regard to the development of this service.  
ESO acknowledge the benefits further evaluation work could bring to demand flexibility, thank you for sharing these insights.  
Thank you for sharing your feedback on the topic of stacking, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review. |
2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

   If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

   We agree with the proposal to remove the in-day adjustment for the baseline methodology, although we cannot categorically state that doing so would completely eliminate the risks associated with gaming the service.

   In our view, the greater risk lies in inadvertently damaging the service’s credibility in instances whereby the in-day adjustment could negatively impact a customer’s delivery. An example of where this could arise is a scenario whereby a customer happens to leave their home during the adjustment window. This could result in a significant reduction in their baseline with several possible outcomes including baselines which are too low to be hit, negative baselines and/or large swings in financial reward for similar levels of perceived effort.

   For larger customers participating in short-term wholesale markets, baselining could also be problematic due to the incorporation into the methodology of energy consumption patterns over the preceding 10 days. Selected I&C customers, who are able to shift or reduce their consumption, already provide flexibility by selling the reduction in demand into the day ahead and within day markets based on predefined strike levels. If a given customer sold demand reduction for 2 settlement periods across the 10 day baseline horizon, at the point in time at which they reach the DFS delivery day, ESO’s current proposed baselining calculation means that the total volume reduction would not be seen.

   We do not believe the removal will influence our bidding patterns and we are of the opinion that the impacts on actual delivery would be negligible. However further data is required to be able to comment more meaningfully on this question.

   Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
We do not anticipate a marked impact due to weather in between Day 1 and Day 2, believing it would have a low discernible impact due to UK weather trajectories not being linear. Please note this is not based on any dedicated analysis being carried out.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

We are not concerned with the overarching proposal to enable sub-metering. We are, however, of the view that the introduction of such a measure would merit from being postponed until after this winter period. This is to ensure there is sufficient time to word the Service Terms such that the introduction of asset level metering does not come at the expense of a single reliable net energy change measurement being captured at the boundary point.

For larger HH settled customers, it should be noted that this group have other routes to access the wholesale market when margins are tight. Therefore, although this volume could theoretically participate in DFS, it cannot be guaranteed it will be available when it is needed without some level of price guarantee.

In terms of the implications of the asset metering proposals for residential DFS customers, where a domestic household has a functional smart meter with the capability to send half-hourly reads, any additional benefits from the inclusion of asset meters (in DFS) are unclear.

Gaming:

Referring specifically to gaming, and building on our verbal feedback, we recognise the complexities associated with ensuring DFS does not deliver perverse incentives. We also fully endorse all endeavours to ensure “gaming” does not take place – by which we mean consumers falsifying real turn down delivery – on the basis it could undermine the purpose of the service. Clearly, there could also be other unintended consequences through participants gaming such as increased carbon

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

Gaming: We thank you for this feedback and have taken this on board and made appropriate updates to our terms.
emissions or a reduction in energy security.

We are, however, uncomfortable with the current draft wording (6.3.2). We believe it would be challenging to reach a common definition of what constitutes gaming. Furthermore, the current draft wording, which seems to place all liability for gaming - including gaming by a given individual consumer - onto DFS Providers is highly problematic. As per our verbal feedback, this is largely unworkable on several levels. Firstly, it would be impossible to categorically prove gaming. It would also be very resource intensive to monitor/gain robust evidence of this at an individual consumer level. Lastly, we believe it would be unrealistic – were gaming to be proven at an individual level – to enforce at such granularity.

To expand upon the difficulties inherent in proving gaming, we are of the view that isolating consumer motives other than gaming which may determine energy use before and during an event, would be extremely difficult. For example, an EV owner’s charging pattern could be influenced by multiple, sometimes interlinked, factors such as a smart charging tariff, other incentives, as well as lifestyle patterns to which the DFS Provider would not be privy.

There are also the practical considerations to bear in mind, including the manner in which notifications of “gaming” would be issued (and to whom – the provider or the participant) as well as what the expected outcome of such a notification would entail.

Our position as to how a DFS Provider specifically can best mitigate gaming is that this would be best delivered via unambiguous sign posting around what is acceptable consumer behaviour, in line with the DFS terms and conditions, and what is not. We also believe that this must be backed up through robust ESO Guidance, as well as clear Ts and Cs which all participants of DFS can understand and follow.

It should also be noted that this consultation and an evolution of the Ts
and Cs over time present a valuable opportunity to design the best possible base-lining methodology. We believe that, if this optimal base-lining methodology is achieved, it should largely address gaming risk in itself.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

We understand the rationale behind the proposal to enable opt-out per DFS delivery period, provided the option to opt back in is available and clearly communicated. This includes having a provision to allow DFS units to contain both meters which are ‘opt-out’ and meters which are ‘opt-in’.

*Removed for confidentiality*

Thank you for this feedback. We acknowledge the risk and this is why we have put both options in; providers are free to use the most appropriate option for them.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No comments

6. Do you have any other comments on the Demand Flexibility Service proposal?

Notwithstanding our earlier feedback, we have some additional details comments which we have broken into sub-headings.

**GAP:**
At the point in time at which DFS v2 is launched, we believe a fixed GAP with a floor set at the level of the Win 22/23 fixed GAP would help to ensure consistent levels of participation between this trial and the enduring product.

This is on the basis that we now have an evidence base to show that customers will deliver DFS at this price – i.e. the level of disruption to their routines that turn down will require is deemed to be fairly recompensed. At this early stage of DFS, it seems appropriate that the customer incentive should embody a degree of demarcation from wholesale prices.

In the longer term, we believe there is merit in considering a cap and floor for the GAP. The level of the cap/floor could be determined via an annual evaluation exercise carried out towards the end of autumn and using the best available data at the time: Winter Outlook, live market data, etc.

In our view, this approach would allow for the GAP to evolve to become more market reflective and should, in theory, provide a range of bids from which ESO

Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.

**Marketing:**
Through the call for input and consultation ESO acknowledge that a number of parties have faced challenges in maximising their reach to consumers due to legislation around marketing. Whilst ESO cannot provide firm guarantees in this space we hope that the following information will be beneficial in your review of how to approach consumers that could be eligible for the DFS.

Based on the ICO’s published guidelines on electronic direct marketing ESO believe that it is possible for communications with customers telling them about DFS to be written in such a way that they are “service messages” which can be sent to all customers, and not marketing messages which could not be sent to customers who had opted out of marketing. The following paragraphs describe some of the considerations which ESO believe are relevant if the communication is to be a “service message”.

The ICO may view a message from suppliers which actively promotes the DFS and encourages customers to participate as a marketing message, and not a “service
can draw (from within the cap/floor). From the perspective of DFS participants, it would offer a degree of price certainty which - according to our internal research - is as a key lever to encourage sustained sign-up to the service.

In the longer term, assuming that the trigger level for DFS is not adjusted as it evolves into an enduring service (i.e. if DFS ceases to be a last resort service and would be positioned lower down the merit order), another option could be to replace the GAP with an availability payment. This (availability payment) could be structured such that a supplier passes this on to a given customer provided they deliver an agreed number of baseline-passing turn down events in a season.

In terms of aspirations around achieving/understanding market reflective prices, we are of the opinion that both live events, as well as price discovery tests, will inform what this level of payment should be. This is because bid prices should theoretically be self-determined and at the level reflective of the scarcity implied in the need to trigger the service.

Relating specifically to Clause 10.4.2, we believe that if there are any GAP ranges, these should be shared in order to give Providers an idea of how commercially viable DFS is, as well as to inform any marketing activity in good time.

Tests:

We would encourage ESO to instigate a high frequency of test events over Win 23/24 as a minimum. This will allow industry to build upon the highly valuable data set from DFS v1 around likely volumes of participation and will also help with price discovery (assuming the proposal of holding some tests specifically for discovery tests is also instigated).

We would also like to add that knowing the expected number of tests per given time period, as well as having a GAP for a nominated proportion of these is both necessary and also helpful in terms of a Provider/Participants’ ability to evaluate

message”, because explicitly or implicitly it is intended to encourage the customer to stay with that supplier by taking advantage of the fact that the supplier offers the scheme. It therefore indirectly promotes the suppliers’ interests. The ICO guidance says that “If you want to send a message that actively promotes or encourages people to make use of a particular service, special offer, or upgrade, then it is likely to be direct marketing”.

ESO recognise that if DFS is classified as a “service messages” rather than marketing for the purposes of the electronic direct marketing laws that consent is not required for service messages. The ICO’s view is that a service message covers messages that aren’t promotional but are for administrative or customer services purposes, such as messages to remind customers how to contact the supplier in the event of a problem, to check their contact details are correct or update them on terms and conditions, etc.

The ICO gives the following examples of what may constitute service messages:

• factual information reminding customers of a benefit on their account but not encouraging them to use the benefit (eg reminding customers that their bank account includes free travel insurance);
• advising customers in a factual way of the options available to them at the end of their contract without encouraging or promoting one option over another; and
• automatic renewal notices that are worded neutrally and don’t encourage customers to renew.

The ICO’s guidance places emphasis on service messages being worded “neutrally”.

ESO believe it could therefore be acceptable for DFS providers to provide their customers with factual information, using neutral wording, about the DFS, including details of what it is and its purpose (including details of why the scheme has been devised), and information about how customers can take advantage of the scheme if they wish. ESO believe providers could legitimately also provide general factual examples of the savings that can be made and statistics about the take up of the scheme and its results to date. Providers could therefore give examples of savings that customers can make provided they do so in a neutral, factual way and are not actively encouraging the individual customer to sign up.

ESO believe that providers should avoid:
expected financial rewards against the inevitable (at least low level) disruption participation in DFS will entail. This not only helps Providers to manage customer expectations but should incentivise sustained customer participation.

Marketing:

We require confirmation from ESO as to whether DFS will be defined as a service or a commercial proposition.

Removed for confidentiality.

Automation:

One proposal in ESO’s Consultation is for automated opt in. Under this proposition, in the scenario whereby a customer does not participate, our understanding is that the Provider becomes liable for the volume. We have raised the fact that this could be interpreted as acting, in effect, as a penalty (towards the Provider).

Clearly, if a Provider were to incur what is, in effect, a penalty, this would also reduce the ability of Providers to share the benefits of incentives across all customers.

Evidently, automating turn down will become a more and more effective means of reducing the risks around non-participation (particularly in instances where a customer has not actively chosen not to deliver). However, widespread automation is predicated on the roll out of measures such as smart devices and will be encouraged in uptake via mechanisms such as Time of Use (ToU) tariffs as well as MWHHS. Whilst this landscape is being put into place, we believe consideration should be given to incorporating wording into the Service Terms which would allow for the benefits associated with smart customers to be accommodated – these could include two interlinked incoming data channels (one smart and one analogue).

APIs:

As shared verbally, there is a not insignificant lead time (minimum of three months) required to accommodate IT changes within our systems. Therefore, as a high-level principle, the greater the level of automation/incorporation of APIs

• implying that the scheme is a special feature of their service or a scheme they have devised themselves, or that they are the only (or one of only a few) providers participating (this may be viewed as an attempt to deter the customer from moving to another party)
• making the message in any sense “political”, for example implying that participating is a way to help the party achieve its ESG objectives by reducing carbon emissions for the public benefit. ESO do not however see why providers should not make general statements about the scheme operating for the benefit of society.

ESO recognise that this is a challenging topic and ultimately it is the participants responsibility to ensure that they comply with any relevant legislation when approaching customers. ESO have sought to update our communication principles to support on this topic.

MPAN Process:

ESO thank you for your insights on this topic and are pleased Respondent 9 recognise the benefits of the proposed changes to support a clear, efficient process whilst offering consumers maximum flexibility with their provider choice.

ESO have added additional clarity in the contract terms of when any changes become effective which we hope will support providers in offering a very clear, concise consumer experience through the switching process. ESO has also sought to update our communication principles to further support providers in ensuring the consumer experience is always striving to be a good one.

Opt-in/ Opt-out

Thank you for this feedback. We acknowledge the risk and this is why we have provided the choice for participants. Providers are free to use the most appropriate option for them and their customers.

API:

Thank you for your insights on this topic. ESO are pleased to have published our guidance material on the API information, this is now available on our DFS webpage. We can also confirm that the SharePoint process will remain in place as both a backup and for those parties who choose not to adopt the API option.

ESO received a large amount of feedback during the call for input and deep dives that the market wanted us to give parties the ability to add and remove MPANs at much greater granularity than weekly that was resulting in
from the outset, the lower the risk of ongoing IT issues/protracted lead times becomes.

We also strongly recommend back up/non-API solutions/processes be made available where APIs are currently planned to be introduced at a later stage. The lack of visibility around API specs presents a delivery risk which will need to be managed to ensure there is no exclusion to participation in the service in instances where IT specifications have not been delivered according to plan.

It is our marked preference that, where possible, all communications around MPAN rejections coming back to Suppliers would be via API.

Finally, under Clause 9.4 (requirement for notification via API), we do not believe that daily manual adjustments of validated MPAN schedules are tenable due to resource constraints.

**I&C Sector Participation:**

Further to our verbal feedback, we have re-iterated below some of our key discussion points over how to most effectively and efficiently encourage I&C participation in DFS.

As a reminder, Respondent 9 has two key I&C subsections. There is the B2B Solutions division which supports I&C customers in accessing energy solutions. Critically in terms of the debate around DFS, this segment (B2B Solutions) often facilitates customer participation in ancillary services markets, with a view to enabling them to stack multiple revenue streams. There is also our Npower Business Services (NBS) segment which delivers the supply of energy to I&C customers.

From internal discussions with these two business areas there are 2 key perceived/real barriers to participation in DFS.

**Subsection 1: Revenue Certainty/Requisite Level:**

consumers potentially left stranded.

Note parties do not have to submit everyday and could choose to batch these updates accordingly, acknowledging that if you are subject to a duplication change this could happen daily but provides a day to factor in such changes. We have amended our terms to reflect this feedback as part of the consultation.

ESO welcome your feedback on the I&C insights and appreciate these collaborative discussions.

**CM Stacking:**

Thank you for sharing your feedback on the topic of stacking, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on the topic of CM stacking, following the consultation review.

**Volume:**

Thank you for this feedback. This is something we intend to take on board and look forward to the learning we receive from the service this year.

**MPAN Process – Registration & File Submissions:**

Thank you for flagging this clarification, we have taken this onboard and sought to make our terms and guidance clearer.

Please note that a file only needs to be submitted for any MPANs that are being added or removed. There is no requirement to submit an entire portfolio each time. This process is outlined in our guidance documents.

**MPAN Timestamp:**

Thank for feedback and note we have taken this onboard and sought to make our terms and guidance clearer.

**Bidding:**

Thank you for this feedback. Please note we have updated our terms, and we confirm there will be a period of at least one hour between the DFS service requirement being published and the DFS Bid Submission Time.
Firstly, there is a degree of reticence around what is perceived to be a greater level of uncertainty around prospective revenue from DFS when compared with other ESO products/services such as the Capacity Market. The feedback is that, the greater the levels of certainty around the level of £/MWh payment available, as well as the frequency of tests/live events (and over what time period), the more likely this sector is to want to participate.

We acknowledge that there are some useful indicators available at this stage in the sense that ESO have indicated there will be a GAP for a portion of test events, and we also understand it is likely there will be a published number of tests expected across the Win 23/24 period.

As per our comments under “GAP”, one way of addressing this concern, which has been raised in several fora, is to incorporate an availability payment, in addition to delivery payments, into the service terms. We are not necessarily advocating this as the solution in the near-term but we believe this avenue would merit from further consideration, especially should the low uptake from I&C persist. Another option could be to have two distinct DFS Ts and Cs with an I&C specific £/MWh.

Another means of incentivising additional volume from those customers who are set up to be responsive in the wholesale market would be to address the baselining issues we have outlined under Question 2.

Subsection 2: Revenue Stacking:
The other key issue which has been fed back is that the inability to stack DFS revenue with other ancillary services income creates a significant barrier to access.

As discussed via our bi-lateral and, taking the example of the Capacity Market (CM), evidence from Win 22/23 DFS shows that CM Warnings did not coincide with either DFS live or test events. The differing time horizons for issuing notifications for the
two services (four hours ahead for CM as opposed to 24 hours ahead for DFS) creates opportunities to either actively address the prevailing conditions leading to system strain, or for the market to adapt accordingly thereby resolving the tight margin leading to the CM Warning. This means it is by no means guaranteed that the two sets of volume would be “competing” with one another.

We appreciate that the primary purpose of DFS is to deliver new volume at times of system strain and fully support the position that ancillary services need to be mutually exclusive – both in terms of delivery as well as remuneration - but believe this risk could be addressed via the introduction of primacy clauses between the two respective service terms. For CM providers specifically, in order to avoid duplication of payment, clearly a proportional reduction in their CM availability payment would also be required were this resource to participate in DFS events.

*Removed for confidentiality.*

We would be happy to support any discussions to this end.

**Volumes:**

In terms of assessing prospective volumes of DFS participation, we believe it is worth exploring the option of evaluating likely of DFS volumes ahead of the auction stage and comparing these with actual volumes delivered.

**MPANs and Registration/File Submissions:**

MPAN schedule: we believe that clarification is required as to whether a Provider should be submitting a whole new file once a new MPAN is added, or whether the requirement is that it is only newly registered MPANs which need to be added.

**Timestamp:**

As an administrative point, we have noted that the timestamp (for registration) needs to include hours as well as the date to avoid potential conflicts (under Clause 4.3.2). We believe this has already been addressed but are including in this document for 100% clarity.

**Bidding:**
Under Clause 10.6 (bid submission deadline), we believe that there should be a period of at least an hour after the service requirement is published to submit bids to allow sufficient time to undertake this process.

<table>
<thead>
<tr>
<th>Respondent 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</strong></td>
</tr>
<tr>
<td>Yes, this proposal focuses on improvements to the existing service rather than wholesale changes to the procurement process and service design which we support. We also support it being an enhanced service that will only be utilised when all other ESO actions through the BM etc. are utilised, however greater clarity on the commercial terms will be important as these will ultimately determine whether the service is successful. Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
<tr>
<td>2. <strong>Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?</strong></td>
</tr>
<tr>
<td>What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)? Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective? If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive? We would support removal of the in-day adjustment for the baseline methodology to simplify the service and because it is not that necessary to ensure forecasting accuracy. DFS events are called due to tight system margins, with levels of wind perhaps the main factor in determining system margins. The change in weather on the event day is most likely a drop in levels of wind compared to conditions over the period when the baseline was calculated, which does not impact consumer demand. The ESO could retain a market-wide adjustment factor that is added to providers’ forecast submissions retrospectively if this is deemed necessary to assist with forecasting, although we agree with the draft proposal that this is ultimately not needed. Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.</td>
</tr>
</tbody>
</table>
3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>We agree that gaming should be minimised as much as possible and support any design initiatives that close these loopholes. If asset metering opens up DFS to a wider range of participants then we would support the ESO with this as well.</td>
</tr>
<tr>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I anticipate we will designate all our customers opt-in as this reduces the risk on us as the supplier and helps with forecasting accuracy. Customers designated ‘opt-out’ who do not opt out and go on to increase their consumption during a DFS event will also be settled, meaning across the ‘unit’ we will be settled the total MW of turn-down minus the MW of turn-up. As we will not charge residential customers who increased their consumption but need to accurately settle those customers who did deliver turn-down, we will take on the loss associated with customers not opting out and increasing their consumption.</td>
</tr>
<tr>
<td>Thank you for your insights on this topic.</td>
</tr>
</tbody>
</table>

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>None.</td>
</tr>
</tbody>
</table>

6. Do you have any other comments on the Demand Flexibility Service proposal?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ESO needs a robust plan to further promote the installation of smart meters and the uptake of market wide HH settlement in order to grow residential flex volumes. We note that the uptake and further success of this service also depends on the GAP for the tests that the ESO is envisaging (this November?) and it would be good to get an early view of whether it will continue to be at £3k/MWh or other. ESO acknowledge that the Demand Flexibility Service is a positive driver in raising awareness to support energy suppliers in their requirement to deliver the smart meter rollout. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.</td>
</tr>
<tr>
<td>Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests.</td>
</tr>
</tbody>
</table>

Respondent 11

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 11 agrees with the proposal for the Demand Flexibly Service (DFS) this winter and ESO’s commitment to use it on a longer term basis as a route to commercialise demand-side response (DSR). It is a useful tool to mitigate the risk of security of electricity supply issues.</td>
</tr>
<tr>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESO acknowledge that the Demand Flexibility Service is a positive driver in raising awareness to support energy suppliers in their requirement to deliver the smart meter rollout.</td>
</tr>
<tr>
<td>Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.</td>
</tr>
</tbody>
</table>
What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Applies to the domestic sector.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

<table>
<thead>
<tr>
<th>Respondent 11 has previously argued for allowing sub-metered assets to participate in their own right in DFS as expanding the scheme to asset metering can unlock potential demand response.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both at domestic and industrial and commercial (I&amp;C) level, asset meters are critical for the future of flexibility. In particular at I&amp;C level, use of asset meters provides greater accuracy of demand response as aggregation at boundary meter might distort data, thereby giving I&amp;C customers less of an incentive to participate in DFS. Industrial sites with multiple assets behind the boundary meter will be better incentivised to participate with an asset meter due to the greater revenue certainty such a sub-meter can provide, undistorted from the load of the rest of the site. Furthermore, allowing asset metering better aligns with other ESO services, such as the balancing market and STOR.</td>
</tr>
</tbody>
</table>

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

<table>
<thead>
<tr>
<th>The proposal of opt-out would align the DFS with the proposals in the gas DSR National Gas is currently consulting on.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

<table>
<thead>
<tr>
<th>No</th>
</tr>
</thead>
</table>

6. Do you have any other comments on the Demand Flexibility Service proposal?

<table>
<thead>
<tr>
<th>Capacity Market (CM) Stacking Respondent 11 thinks that a considerable amount of extra volume could be unlocked if ESO were to allow CM volumes to participate in the DFS. Respondent 11 recognises the ESO’s view that DFS events are only called when forecasting demonstrates that existing reserve capacity, including the CM, will not be sufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank you for sharing your feedback on the topic of Capacity Market Stacking, we welcome the insights you have provided on potential volume and have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.</td>
</tr>
</tbody>
</table>

ESO acknowledge the changes in the TRIAD avoidance landscape. Through our engagement with the I&C sector we have been encouraged by the number of parties who have noted they could see DFS as an option for flexibility that
to achieve enough system margin. It also recognises that, given DFS was called at day-ahead stage last year, the ESO managed the DFS under relatively imperfect compared to the closer to real-time trigger for a CM notice. Nonetheless, ESO called 2 DFS events without CM notices either being issued or remaining in force. Whilst theoretically DFS may have taken CM volumes into account, practice shows that for at least those 2 days CM volumes were not needed in addition to DFS volumes. CM and DFS – though intuitively linked – are separate markets.

Only few energy intensive users have assets that participate in other NG ESO balancing products, like frequency response or STOR. Unlike power generators or storage providers, the wholesale electricity or balancing market is not their main business – that is manufacturing. Moreover, the uncertainty around dispatch frequency and skip rates in the BM for example, mean that it cannot offer I&C customers enough revenue certainty to cover the cost of adjusting their manufacturing process. Furthermore, the process and requirements for these additional balancing services deter energy intensive industries to participate, in particular compared to the simplicity of responding to TRIADs.

Nonetheless, energy intensive industries can have flexible assets that can support the objective of DFS.

If ESO were to keep to its proposal not to allows CM and DFS stacking, it should consider allowing those flexible assets that are not in the CM of organisations that participate in the CM. This could unlock additional DSR volume and the proposals to allow asset metering can support this.

Not allowing stacking or flexible non-CM assets of organisations that participate in the CM in the DFS means that this cost will likely be higher than what they otherwise could be. Foregoing this volume means that DFS is less VfM and higher cost to consumers.

In its bilateral calls with individual energy-intensive industries, the ESO should have an idea about the potential additional volume that stacking could deliver.

they previously used for TRIAD avoidance. We look forward to continuing our engagement with the I&C sector and how we can help facilitate their entry into both DFS and our wider range of commercial services.
Respondent 11 would like ESO to review the interaction between the capacity market and DFS and publish such a review.

**TRIAD**
Passed winter has seen the last of TRIAD. They provided a strong incentive to I&C customers to reduce their consumption over expected periods of peak demand during winter to lower TNUoS charges. Its charging methodology deliberately included an incentive to reduce demand on the electricity system at peak times aimed at reducing the overall level of generation needed to support the GB market, and importantly the very high cost of providing marginal capacity on transmission and distribution networks. TRIADS provided an estimated maximum demand reduction of 1.3 GWh over winter 2021/2022. This volume is therefore likely to be lost for this and future winters.

Though some I&C companies may shift some of their volume to DFS, it is unlikely that something like 1.3GWh will move to DFS. Its removal will likely lead to a net increase in system demand in this and future winter periods.

Though DFS and TRIADS are somewhat different, both are DSR incentives and support NG ESO in maintaining security of electricity supply. We urge ESO to reflect how it can best incentive the likely volume of DSR lost due to their removal and reform any of its DSR instruments, including DFS, so I&C customers can support ESO in its ability to manage system operability.

---

**Respondent 12**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**
   Yes we agree with the proposal. The proposed approach to ABSVD provides the right balance between accuracy of settlement and impacts to systems.
   Thank you for your feedback and support in regard to the development of this service.

2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?**
   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?
   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?
<table>
<thead>
<tr>
<th><strong>3.</strong></th>
<th>If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3.</strong></th>
<th>Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double-counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes. Alignment with Code of Practice (CoP) 11 requirements for meter accuracy will bring DFS into line with other schemes such as Asset Metering being used as part of a Secondary BMU and the Capacity Market to allow the use of metering behind the Boundary Point Metering System. For industrial and commercial sites the Asset Meter, or sub-meter, will likely be connected to current transformers (CT) (and if a high voltage circuit a voltage transformer (VT)), which has an associated error that is introduced in addition to the error of the meter. Where the meter may be compliant with the relevant accuracy class the CTs/VTs may not be of a metering accuracy class that would impact the quality of the meter data. CoP11 specifies an accuracy class for all Metering Equipment (Meters, CTs and VTs) and an overall accuracy of the Asset Metering System. To ensure meter data quality CTs, VTs and overall accuracy should be included as well as compliance with the accuracy class requirement of the Meter. The accuracy class requirements for CTs and VTs is covered in section 6.2 of CoP11. The overall accuracy allowable limits of error are specified in section 5 of CoP11 for the five levels of Asset Metering Type. The BSC processes have a compliance testing requirement for the Meter that confirms the accuracy of the meter and confirmation of the relevant internationally recognised standard the Meter was manufactured against. As an assurance technique we recommend the Meter Type and accuracy class be provided under 4.3.2 (c) in the DFS procurement rules.</td>
<td></td>
</tr>
<tr>
<td>We thank you for this detailed feedback and insights. ESO have taken this on board as part of our consultation review.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4.</strong></th>
<th>Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>5.</strong></th>
<th>Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</th>
</tr>
</thead>
<tbody>
<tr>
<td>We note that the DFS Article 18 mapping reproduces the majority of the Article 18 mapping in Annex F-2 of the BSC, but We thank you for this feedback and have taken this on board as part of our consultation process.</td>
<td></td>
</tr>
</tbody>
</table>
with a couple of apparent differences:
• The document maps Article 18.2 to BSC Section G3, whereas BSC Annex F-2 additionally maps it to BSC Sections P1.6, P5, Q4.3.4, Q5.4, Q5A and T1.7.
• The document maps Article 18.4b to BSC Sections K3.3, K8, S6.2, S6.3 and S11, whereas BSC Annex F-2 additionally maps it to BSC Sections S12, S13 and S14.

It’s not clear to us whether these are intended differences; if not we suggest that the mapping is aligned with BSC Annex F-2.

6. Do you have any other comments on the Demand Flexibility Service proposal?
   No

---

**Respondent 13**

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

   Yes – Respondent 13 welcomes the return of the DFS this winter and the ESO's commitment to use the innovative vehicle on a longer term basis as a route to commercialise demand response.
   Within day auctions: Respondent 13 also welcomes the inclusion of design changes to further learnings (particularly on closer to real time auctions). Respondent 13 notes, however, that the proposed design restricts the ESO to one auction per event. This restriction means that if the ESO calls the service at the day-ahead stage, it would not be able to call it again on the event day to 'top up' volumes. The experience of last winter highlighted the extent to which the system 'need' can change from the day-ahead forecast. Having the additional option of 'top up' auctions would improve the utility of the service and increase understanding of available volumes under different scenarios.
   Respondent 13 recommends that the restriction is removed.

   CM stacking: The Respondent 13 is disappointed that the design still excludes stacking with the Capacity Market (CM). This locks out I&C (and other) assets that could otherwise be involved in providing active balancing this winter. WG members involved in the set-up of the CM note that the CM was designed to be stackable with other system services rather than to 'lock' assets with CM contracts out of other markets.

   ESO are pleased that Respondent 13 welcome the continued use of DFS and the design changes proposed.
   Within Day Auctions:
   ESO believe that sending a clear simple service requirement to the market is crucial. ESO believe that if we could run all three timescales for any given delivery period this would risk providers potentially holding back volume and being left uncertain if we would call a subsequent procurement time. We therefore believe making a clear outline to the market will ensure that we get maximum volume bid for every service requirement that we publish, maximising the benefit of the service.
   CM Stacking.
   Thank you for sharing your feedback on the topic of CM stacking, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
Enabling stacking with the CM would increase the incentive for I&C customers to engage in DSR. This is needed, both to build the market for DSR, and to counter the impact of the removal of the Triad (which by removing the incentive for I&C demand to avoid peak periods, will increase demand at peak times and with it, any associated congestion).

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

The Respondent 13 supports the removal of the current in-day adjustment.

The Respondent 13 had two discussions here. In both discussions, there was agreement on the removal of the current in-day adjustment but less certainty on whether the best replacement would be:

i) for a longer in-day adjustment (12-24hr – excluding the event hours)
ii) to remove the adjustment completely
iii) an alternative approach such as a National in-day adjustment

There was general agreement that the change should be one that effected the best trade-off for mitigating gaming risk whilst reducing error and keeping the service as straight-forward as possible to communicate to end-users. It was noted that there would be winners and losers whichever option was chosen and more analysis on the implications of different options would be welcome.

No adjustment: there was support for no adjustment as it would reduce complexity for consumers and so increase uptake. Whilst no adjustment would increase forecasting error, change is usually linear, a gradual increase or decrease, which could suggest less need for adjustment.

Correcting for weather variance: Other members were concerned that weather variance needed to be accounted for in some way. Without an adjustment, providers risk under-forecasting and under-rewarding customers for TURN

Thank you for sharing your feedback and detailed insights into the various replacement options on the topic of baselines. We recognise you are overall supportive of removing the within day adjustment. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
Down on very cold days (when the service is more likely to be called). This impact would be more pronounced with a steep decrease in temperatures from one day to the next (conditions which due to the uptick in demand would be more likely to trigger a DFS event).

There was some support for a longer in-day adjustment to correct for weather. These members felt that a longer 10-12 hour in-day adjustment should remove the economic basis for gaming the adjustment (as the cumulative additional energy spend would be likely to outweigh the additional DFS revenue).

There was also interest in exploring alternative approaches such as a national adjustment factor, that could be calculated by the ESO on a GSP level and applied by providers. This would be more straightforward to communicate to customers and perceived as ‘fairer’.

Note added: 17/07/23: Analysis from a provider circulated to Respondent 13 on 14/7/23 suggests that, whilst removing the in-day adjustment (and not replacing it with an alternative means of adjusting for weather) would increase forecasting error, it would reduce both gaming risk and complexity for consumers.

Whilst the workgroup did not have time to discuss the findings, this approach would seem to reflect the Respondent 13 priorities for reducing gaming whilst reducing the complexity.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

The Respondent 13 has previously recommended that sub-metered assets be permitted to participate in their own right.

Industrial and commercial (I&C)

The Respondent 13 agree that the proposal will increase volumes from the I&C sector. Last winter, assets were unable to participate if another asset/ part of the site behind the same boundary meter was involved in another market or service (such as the Capacity Market).

The proposed change will allow these assets to participate. As the change will mainly affect larger customers, it could unlock a reasonable amount of additional volume. The inclusion of asset meters for I&C customers will also mean that

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

ESO acknowledge that your insights have been broken down into both industrial/commercial and domestic volumes which has provided a good view on the different sectors, that we have taken into consideration alongside the asset metering quality observations.

We recognise that as the smart meter rollout and transition to MHHS continues, we anticipate this will further support unlocking of asset metering as we have seen in the industrial and commercial sector.
Demand response from sub-metered assets can be more accurately measured (without distortion at the boundary meter). This will enable the demand response to be better compensated, increasing the incentive for these customers to engage.

The change better aligns the DFS with other ESO services, such as the balancing market and STOR.

The Respondent 13 supports the proposal on asset meter quality (to use COP 11) on the proviso that it is the same or equivalent to the asset meter standard used by the Government in administration of BEIS exemptions.

Domestic volumes

The proposal seems unlikely to deliver an increase in volumes from the domestic sector. By requiring the boundary meter associated with participating asset meters to be half hourly settled (HHS), the proposal will exclude most asset meters.

Members highlight that only a few percentage of meters are formally settled by Elexon on a half-hourly basis. A wider group of customers are informally settled by their supplier, on a half hourly basis as part of their time-of-use tariff (such as electric vehicle charging tariffs), but without the supplier having formally migrated them to the central settlement system. The proposal would exclude these customers.

Respondent 13 members understand the rationale for the ESO wanting (where possible) to expose end-users to half hourly pricing (to mitigate the economic incentive for customers to shift demand outside of DFS events). This unwanted behaviour could include either demand ‘pumping’ or a more sustained shift of regular loads to peak hours. Driving more demand at peak times outside of DFS events increases the cost and complexity of managing the system so would be an unwelcome side effect of the DFS.

Whilst the motivation to mitigate gaming or unwelcome side effects is understood by the group, some members strongly disagreed that the mitigation was proportionate to the risk. As most domestic customers with large automated loads such as EV charging, will not be formally HHS, their demand response would need to continue to be measured at the boundary meter rather than the asset
meter. This is less accurate and introduces risk for the provider, especially if the provider is not also the energy supplier (the supplier in this case would have no incentive to move the customer to HHS).

These members highlight that the presence of a HH tariff would be sufficient to mitigate the risk (it would expose the customer to HH pricing, removing/reducing the economic incentive to alter demand). If a solution could be found that allowed customers on a HH tariff to participate directly via their asset meter even where the associated boundary meter is not formally HHS, then that could enable more volumes whilst mitigating the identify risk is a more proportionate way.

The recently announced delay to market-wide half hourly settlement (to 2027) increases the need to find creative solutions to prevent the delay hampering the development of an active demand sector (and increasing the costs and complexity of the energy transition).

Members acknowledged the challenging nature of the issue with some members feeling that either the mitigation was proportionate to the risk of gaming or introducing sub-metering risks adding too much complexity to the service.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Some members queried if the change was necessary and whether the change risks adding unnecessary complexity. A member working with automated assets suggested that the proposal would introduce risks for parties who do not have full control over the automated assets. Where the flex provider has full control of the asset then the risk allocation was deemed appropriate but the proposal introduced risks for providers where the customer can (deliberately or accidentally) override controls.

ESO have facilitated this change based on industry feedback. We recognise that is may not be an option all parties choose to follow but we have received feedback through our engagement to date that this could support further growth especially around automated setups. Providers are free to choose whether to offer one or both types of Opt-in and/or Opt-out as best suits them.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

6. Do you have any other comments on the Demand Flexibility Service proposal?

Urgent need for clarity on volumes and revenue

As providers do not receive an availability payment in DFS, the test payments are the only means of recouping their investment/ongoing costs. As the service was only dispatched ‘in anger’ for 2 hours last winter, providers will base their Commercial Offering

ESO have published our latest DFS Market Information Report that covers the topic of tests and guaranteed acceptance price for winter 23/24. This can be found on our DFS webpage.

We are pleased to have supported industry feedback to enhance our automation, rules, and
resourcing decisions on 'test events' only and treat 'live events' as additional (and potentially unlikely).

Last winter, most suppliers ran a limited service as the tight implementation timeframes meant that high degree of reliance on manual processes, limited staff and limited time to develop customer offers (as well as uncertainty on end-user demand). This limited volumes, made it harder for eligible customers to participate and reduced learnings. To increase volumes, providers will need a clear and early understanding of the volume that are required (in MW/ GW rather than 'maximum volume') along with the revenue that will be available in return for developing this capacity.

The Respondent 13 highlights that based on the experience of last year, it would be feasible to grow volumes so that back-up coal contracts were either not needed or could be significantly reduced. Based on the reporting spend for both DFS (£111 million) and coal contracts (£340-£375 million), using an expanded DFS as back-up capacity instead of coal would deliver both short-term savings for end users as well as an investment in a future, lower cost energy system.

Analysis by a provider suggests that 2GW of DFS capacity is achievable if all customers who were eligible for the service and interested in engaging were able to do so.

The Respondent 13 agrees that this would be feasible but highlights that providers would need the summer to develop the software, communications and internal processes required. The WG here highlight that customers are diverse and some segments will need more support and tailored products to engage successfully.

Customer switching, MPAN duplication, new process

Last year, a lack of a customer switching process significantly hampered volumes. The administrative burden, particularly on suppliers of managing duplicate MPANs was the key reason cited by suppliers for process around the MPAN process. API guidance material is now available on our webpage, we look forward to continuing to engage with parties to support this process.

We thank you for your insights and thoughts on the changes to the established TRIAD avoidance landscape. ESO recognise that if parties have previously participated in TRIAD avoidance schemes and have access to flexibility DFS could be a viable option to consider.

ESO thank you for the constructive feedback on the mechanisms we use to engage with industry. We recognise that striking the balance of the various engagement channels is very challenging when we are dealing with a diverse range of stakeholders that is considerably larger than the majority our other markets. We look forward to continuing our ongoing dialogue and remain open to support Respondent 13 and their working members.
restricting their products to a limited pool of customers last year.

Members note the changes to automate much of the process for resolving duplicate MPANs. It is not yet clear if these changes will resolve the issue sufficiently and members look forward to further information which we understand will be published later this month.

Larger providers have highlighted that the proposals to mitigate the administrative burden do not go far enough. To MPAN duplication from acting as a barrier to future growth, the Respondent 13 strongly recommend that the ESO facilitate an industry discussion to agree a way forward.

Energy prices are still high so this winter will be challenging for customers. This will mean significant pressures on domestic suppliers and their call centre teams. Supporting struggling customers will always take priority, meaning that reducing complexity in additional non-core work (such as the DFS) will be a key means of supporting providers to expand domestic volumes in what is likely again to be a challenging winter for both suppliers and their customers.

Triads
Triads provided a strong incentive to I&C customers to reduce their consumption over expected periods of peak demand during winter to lower TNUoS charges. Triads provided an estimated maximum demand reduction of 1.3 GWh over winter 2021/2022. This volume is therefore likely to be lost for this and future winters.

The TNUoS charging methodology deliberately included an incentive to reduce demand at peak times for the electricity system aimed at reducing the overall level of generation needed to support the GB market, and importantly the very high cost of providing marginal capacity on transmission and distribution networks.

Though DFS and triads are somewhat different, both are demand side response
incentives and support NG ESO maintaining security of electricity supply.

We urge NG GSO to reflect how it can best incentivise the likely volume of DSR lost due to the removal of triads and reform any of its DSR instruments, including DFS, so I&C customers can help NG ESO in its ability to manage system operability.

Stakeholder engagement
Programmes focusing on the demand side, like the DFS are inherently challenging because the current electricity system was built around supply. The recent FES 2023 publication from the ESO showed clearly how an active and flexible demand side can reduce the costs of the transition, not just by reducing the costs associated with managing the system (constraints, balancing and network reinforcement) but by avoiding the far more significant costs of additional generation and network infrastructure.

Getting this change will require the ESO to go beyond standard stakeholder practices to be more collaborative (as the early stages of DFS last year necessitated). The Respondent 13 would welcome more open forums with a greater focus on collaboration and co-design with industry as a means of accelerating change.

The Respondent 13 thanks the ESO for its engagement to date, noting especially recent ESO input into a session that focussed largely on the challenging area of asset metering.

Respondent 14
1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

The DFS is a good stepping stone to realising the opportunities of distributed flexibility. We will continue to work with NG ESO and others to deliver such services effectively.

As an independent aggregator, we are excited by the possibilities and potential new markets and use cases that the DFS

Thank you for your feedback and support in regard to the development of this service.
may open up. Ideally, we would like to see a process that is simple and transparent for the consumer at registration and operation, and that produces high-quality data that will inform future design of the program, markets and business models. We support a registration process that is easy for consumers to navigate, with no unnecessary obstacles or barriers to participation. There will be a greener future for all if we can reach more customers and engage them in demand flexibility services even if (for example) they do not yet have a SMETS2 meter with a reliable connection.

Ideally the DFS will work in a way that offers consumers choices about how they engage with flexibility services, with transparency about each option. For example, some customers will want to engage with the service at “household” level, adapting the load of the entire home in response to signals. Others will prefer to participate at asset level, whether that is the EVSE only or whether it is a combination of two or even three assets. We want to work with ESO and our industry partners to help design and deliver a service that supports these choices and continues to support switching.

In the simplest form, we support an approach where we contact our customer about DFS participation, the user agrees and from that point everything is automated from the customer’s point of view - unless they decide to manually override the action. We enrol the user’s asset based on existing data (no further customer input required), provide forecasts to the ESO, dispatch the asset and pass the value through to the customer.

We support the NGED fixed baseline approach for flexibility services that are procured and dispatched with day-ahead notice. This provides transparency and simplicity, incentivises correct behaviours, and addresses the issue of gaming.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?
If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We support proposals to ensure that in-day adjustments to Operational Baselines are no longer used to calculate Operational Baselines for Domestic DFS Units.

We would not in principle support proposals to extend the in-day adjustment period. This adds complexity and does not resolve the general problem of using historical baselines for a seasonal service that is dispatched/instructed day-ahead.

We oppose the use of historic baselines. Historic baselining over multiple days providers perverse incentives, including by offering greater rewards to users of peak power for occasional off-peak use than it offers to habitual users of off-peak power. Unmitigated, a multi-day historic baseline incentivizes consumers and aggregators to deliberately charge at peak times in order to gain greater credit for occasional off-peak charging. For example, there could easily be a situation where a consumer using peak power for two days out of three is rewarded for one day of off-peak charging to a greater value than the reward for a consumer who only ever charges with off-peak electricity.

Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

<table>
<thead>
<tr>
<th>3.</th>
<th>Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an independent aggregator, we support asset metering for the DFS rather than limiting to boundary supply point meters. Asset metering creates new opportunities for diverse service offerings, and the few risks are manageable. We expect asset metering to be essential to any future demand flexibility service market. This method of metering has already been tested and proved effective in DSO flexibility service and is also facilitated in the Balancing Mechanism through P375. Asset metering will help us understand better how flexible energy assets are being used, particularly in a domestic setting where the majority of traditional load measured at the boundary meter is inflexible. This will help flexibility providers target their services towards the large dispatchable loads in the home (EVSE, heat pump, battery) without inflicting price volatility on low-income consumers who rely on electricity for cooking at peak times. ESO are pleased that you support the move towards unlocking asset metering and the benefits this brings. As per the Procurement Rules we have noted all meters including asset meters must be HH settled (with the exception of domestic boundary meters.) This ensures any asset metering has the correct mitigations in place to remove any perverse incentives. We received feedback from industry than a minority of market players were actively utilising such perverse incentives for their commercial gain so it is important for ESO to ensure appropriate mitigating steps are in place where possible. ESO acknowledge that there is an exception in the terms to domestic boundary meters. Without this exception ESO would not be able to access the majority of the volume we procured last year. We recognise that whilst these developments around unlocking asset metering are a good first step further developments will be needed by both ESO and wider industry as we transition on this journey. For the avoidance of doubt all parties have the ability to present</td>
<td></td>
</tr>
</tbody>
</table>
However, there are two issues with the current proposal that prevent the removal of these barriers. The first is an apparent double standard in that s4.7.4 removes this opportunity by requiring that domestic asset meters be associated with a boundary meter that is half-hourly settled. The other is the apparent need for a SMETS smart meter; the SMETS rollout is still far from complete, and access routes for independent aggregators to HH data are still in development.

Asset sub-meter’s associated half-hourly settled boundary meter requirement (s4.7.4)

Why has NG ESO waived the requirement for domestic boundary meters to be half-hourly settled (4.7.3) but retained that requirement in 4.7.4 where an asset is metered? This seems like a double standard and we want to understand what purpose it serves, and whom it protects.

Boundary meter data reporting requirement

Almost half, 45%, of GB households do not have a suitable smart meter to participate in DFS, according to the most recent government smart meter statistics. The requirement effectively prevents a customer with an EV but no smart meter from taking part.

As an independent aggregator, accessing smart meter data is challenging and creates points of failure. In last year’s DFS, 32% of our users who signed up to participate were unable to do so due to boundary meter issues. The DFS sign up process required further input from the customer, creating a challenging customer journey.

Last year, we had 8,500 EVs that we dispatched for DFS via a shadow program but only 230 of these were able to partake officially and earn money. This shortfall was due to the smart meter requirement and data integration challenges.

Asset gaming risk

We accept that there is some risk of gaming in an I&C context, for example by turning down an asset and claiming a DFS benefit without reducing the overall load in the property. But this risk seems vanishingly small in a domestic building. If NG ESO has evidence to the contrary, we

customer flexibility at the boundary meter similar to last year where we saw a good diverse set of participants deliver volume.

We take on board your comments regarding the challenges around data access and remain on hand to support wider industry in such improvements and have the backing of our Power Responsive campaign in this space.

Please also refer to appendix 1 for further insights into our asset metering decisions.
would be interested to see it.

We expect the boundary meter data reporting and 4.7.4 requirements to reduce the quantity and quality of data that the next DFS phase could provide. We can share boundary meter data where we have it, in order to better understand the relationship between the asset response and household response. The exercise would explore such (hypothetical) edge-cases, like a domestic customer participating in DFS with one asset but turning up another in the same property.

Double-counting risk
We commit to provide the MPAN for each participating user and believe that NG ESO’s proposed mitigating measures on double-counting will remove this risk.

Identify half-hourly settled meters
We appreciate the importance of identifying any asset meters that exist behind an elective half-hourly settled boundary meter. We can identify such meters through our ECOES integration where we receive profile classifications. Currently, 7% of our users have half-hourly settled meters. Where one of our DFS participants is half-hourly settled, we will work to retrieve the meter readings as this will provide important learnings for DFS and other residential flexibility programs. We attempted to gather this data for such users last year, but the process was not feasible for an independent aggregator such as us.

Metering Accuracy Requirements
As settlement is based on aggregated data, it is not clear whether the accuracy requirement of 2.5% should apply to the aggregated data or each individual asset meter. It would be good to understand what accuracy the ESO needs and to be clear that such requirements do not present an unreasonable barrier to participation.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

6. Do you have any other comments on the Demand Flexibility Service proposal?

Some thoughts and feedback on the reporting process (from last year):

1. ESO has shared guidance on the new automated processes on our webpage. This is
Some of the reporting requirements last year were onerous and difficult. Here are some recommendations to improve and streamline the reporting process.

1. The instructions were long, complex and in places difficult to understand and follow. They were also provided only a short time before the DFS went live. It would be good to have all the guidance for the November (or enduring) phase well in advance, with the possibility of at least one session for participating companies to go through this guidance.

2. We suggest enabling a default forecast or report, such that if the report provided is the same as the previous report then no further action is required on the part of the reporting company. Thus, a report or forecast would only need to be resubmitted on the day of dispatch if the volumes have changed. This will save significant time, effort and resources (especially for smaller companies).

3. One requirement was to advise which MPANs are half-hourly settled. This information was sometimes impossible to find. We were required to provide an Elexon BM Unit ID, which was not easily available and required guesswork.

4. Many test events were scheduled to take place on a Monday. This meant that our engineers had to work on their Sundays, to submit estimates/forecasts and to contact our customers. It also meant that sometimes our customers got less than 24 hours’ notice because we were not always able to email them on a Sunday. We expect that this requirement is particularly burdensome for a small company, without a large enough workforce to roster employees for work on weekends.

We would like to understand why ESO needs to know which MPANs are HH-settled. Can that reporting process be simplified and the reporting responsibility pass to NG? It was a significant reporting burden on us and constituted a barrier to participation. As a non-supplier, we were unable to get the Elexon BMU ID and thus report accurately, and NG was unable to help us. We suggest that if HHS is going to be required in future, NG should have the responsibility to provide the BMU ID because it is not available to non-suppliers.

Is this satisfactory? Have you made an assessment of how non-suppliers can comply with this requirement to provide a BMU ID?

2. ESO see value in getting updated forecasts as per the proposed service terms. We recognise that parties could automate this their side should their positions change infrequently. It is important for ESO to ensure we get up to date reliable forecasts for the service.

3. We acknowledge this feedback, thank you for sharing.

4. ESO operate the system 24/7, 365 days per year. It was important that we ran tests which coincided with our peak demand days. ESO recognise that parties will need the ability to operate across weekends should we require the service on Mondays or Sundays.

5. ESO take this feedback on board. Last year we noted that a number of parties were able to provide ESO this information but that it was a challenging aspect to the process. Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

ESO welcome these insights to help us as a part of the consultation review process thank you for sharing these.

We have shared our rationale for these requirements over the course of the engagement we have done across the various in-person and only sessions throughout the first half of 2023, including the DFS deep dives and the pre-consultation webinar, and one-to-one sessions with providers and industry forums.
Other notes:
The first DFS trials demonstrated a positive level of consumer engagement and a willingness to engage with demand flexibility services. However, the trials did not closely resemble an enduring approach to demand response. Specifically: Dispatch was processed manually, and consumer benefits of turn-down or turn-off tended to be low (most measurable in pence rather than pounds).

The current proposals may be more valuable if they more closely resemble an enduring market for demand flexibility services, for example by allowing an option to automate the dispatch process for those with the ability to participate in that way.

This may need to be balanced against the benefits of opening the service up to a greater number of people. More providers, more variation between offers, more participation opportunities and more consumers engaging with the service are all desirable outcomes.

Proposal to support asset metering in DFS

As stated above, we are concerned that the DFS rules requiring that asset meters be associated with a HH-settled boundary meter will unnecessarily restrict access to the service for domestic consumers. We understand the desire to encourage participation from I&C users, so we propose an amendment to the rules that will continue to support I&C participation but also remove barriers to domestic users.

We believe the solution is to follow a clear precedent already used elsewhere by ESO (in the Balancing Mechanism, in P375) and allow asset metering in the DFS trial. This is likely to have a significant beneficial effect on the amount of domestic flexibility in the DFS. To illustrate:

● there will be roughly a million EVs registered in the UK by winter 2023/24
● the GB smart metering rollout is only 55% complete (full SMETS2)
● therefore around 450,000 EV drivers do not have a smart meter and are thus unable, in the absence of asset metering, to participate in DFS

If we assume that:
● Respondent 14 and other aggregators were able to sign up just one
in four of these non-smart metered EV drivers

- ~1kW of flexibility per EV during dispatch time at system winter evening peak

Then this would deliver more than 100MW of additional flexibility to the DFS.

This estimate does not take account of the many consumers who buy their energy from a retailer that does not participate in the DFS. Those consumers should be empowered to participate in the DFS regardless of their choice of energy supplier.

In this sense, allowing asset metering in the DFS should be seen as an important way of delivering consumer choice, improving opportunities for domestic consumers to participate in DFS, and increasing the volume and quality of data and evidence that the DFS provides.

The gaming risks that have been identified in the consultation relate primarily to baselining and are not directly related to allowing asset metering in the DFS. If the ESO still has concerns, we propose using this trial as a way to gather essential data on how much of a risk it actually poses. ev.energy would provide boundary meter data where we have it, which would provide the evidence base for what we expect would be a very small, edge-case, prevalence of attempts to game the system. To do this effectively, a consumer would need two EV chargepoints, one registered for DFS and one not, and then manually switch between them around flexibility events.

We invite the ESO to contact us directly about our concerns on this issue, and if need be to agree an approach to testing the impacts that allowing asset metering will have on the DFS.

Summary of our questions and uncertainties for NG ESO:

1. What is the rationale for the restrictions set out in s4.7.4? What specifically is the risk that is being mitigated by this requirement, and who is being protected?
2. Is there evidence that domestic customers are gaming DFS by turning down one asset but turning up others so as to not reduce the overall property load?
3. Does NG ESO agree that the requirement for a half-hourly settled
boundary meter where an individual asset is also being metered is likely to create more obstacles and barriers to participation for consumers, and that this effectively limits DFS participation to households with a SMETS2 meter and reliable WAN connection?

4. We would like to understand why ESO needs to know which MPANs are HH-settled. Can that reporting process be simplified and the reporting responsibility pass to NG? Have you made an assessment of how non-suppliers can comply with this requirement to provide a BMU ID?

5. What metering accuracy does the ESO need, and are we confident such requirements are reasonable and do not present a barrier to participation?

Respondent 15

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

   Yes. Respondent 15 supports the continuation of DFS for winter 2023/24, as the service looks to procure previously untapped volume from both the domestic and I/C space.

   DFS in winter 2022/23 has shown that domestic and I/C customers have an appetite for participation in demand flexibility through both suppliers and aggregators, setting a baseline which ESO can build on out to Market-wide Half Hourly Settlement. The proposals for DFS in winter 2023/24 make clear improvements to the service which will benefit consumers.

   The proposals outlined in the new service terms and procurement rules will support aggregators in particular, as the changes to asset metering will enable further capacity to become eligible for participation in 2023/24. Further comments on asset metering have been provided in our responses to this consultation.

   Thank you for your feedback and support in regard to the development of this service.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

   If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?
The baselining methodology requires sixty days of data to calculate the baseline, which takes data points from the previous 10 non-event days of the same type, i.e., working or non-working. Removing the within day adjustment does not increase the gaming risk due to the number of data points required to calculate the baseline in the first place. Respondent 15 supports the removal of the within day adjustment as we agree that this reduces the possibility that an end-consumer would gamify the in-day adjustment period to boost their perceived baseline and it also reduces the administration burden on aggregators as these providers do not always have readily available access to customers data. Furthermore, the introduction of asset metering will support baseline analysis as delivery from assets in a DFS test or event will now be isolated from the "noise" of other consumption assets on site. This will provide the ESO with a more accurate picture of actual delivery. As we agree with the removal of the in-day adjustment, we do not have any comments on the length or proposal to increase the length of the in-day adjustment.

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Respondent 15 agree with the inclusion of asset metering. This has been used by ESO for many years in reserve and response services such as STOR and FFR and is the preferred metering option for settlement in ancillary services.

Aggregators, in conjunction with the ADE, have been pushing for asset meters to be included as this will overcome some barriers to entry that were experienced in DFS during winter 22/23. Asset metering will allow I/C volume to participate at sites with other components behind the meter are often picked up as noise. This means the settled volume is less accurate. This could result in over delivery as well as under delivery, both creating higher cost to the ESO as suspected under-delivery could result in the control room having to take alternative actions, which gets passed on to end consumers. Asset metering will reduce this inaccuracy for the ESO, in turn opening up DFS to more volume and more accurate delivery.

Respondent 15 believe the procurement rules sufficiently cover the risk of double
counting as the boundary MPANs to any related meter point must also be included in the registration process. We particularly welcome the requirement that asset meters should be of the correct quality and accuracy, with reference to the BSC CoP11 standards for asset metering.

In the new service terms, the ESO states that all asset meters should be behind an associated half-hourly settled MPAN. We strongly suggest this should be altered to half-hourly metered MPANs. To reduce the potential of gaming and disincentivise shifting load during the same period, NGESO can ensure that half-hourly metered MPANs are on a half-hourly tariff with their energy supplier. This would disincentivise load shifting by gaming behind non-half-hourly settled MPANs and could be verified via the suppliers sending through a declaration, or a customer invoice/confirmation email from their supplier detailing their tariff information. This could be presented at initial registration and then audited on spot-checks during the service period.

If it is the case that asset meter participants must be behind both half-hourly settled and half-hourly metered boundary points, there will be a significant barrier to market entry erected for domestic customers whose supplier has not registered their meter for HH settlement. Since ESO published the DFS consultation Ofgem has approved the MHHS programme request to delay the final deadline by over a year, on the basis that the majority of MPANs’ suppliers will not be able to migrate customers to HH settlement in the next 18 months. If ESO require HH settlement of boundary meters for asset metered DFS customers to participate then, for example, a domestic consumer with a CoP11 meter on their EV charge point would be excluded from DFS participation through an aggregator. In contrast, the same customer, could participate using the boundary meter if their supplier offered a HH-settled tariff, reinforcing a two-tier market access divide between suppliers and aggregators. We strongly encourage ESO to clarify as early as possible the necessity for HH settlement or metering associated with asset metered DFS customers.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Respondent 15 agree with the opt-out process instead of the opt-in process. This particularly supports participation

Thank you for your feedback and support in regard to the development of this service.
from the I/C sector, as it is not their day job to participate in balancing services. The opt out process allows them to continue their day job and participate in DFS, only advising aggregators of their intention not to participate when they cannot do so. This reduces the communicate on burden on both end consumers and on providers, which was particularly onerous in winter 22/23.

There is no unintentional consequence that we can foresee by moving to opt-out rather than opt-in. If a site did not intend to participate and forgot to opt out, but still delivered turn down, then the ESO does still see benefit and should renumerate end consumers for this.

We hope that providing both options to the market will support the growth of volume and improve end customers interaction with such markets.

<table>
<thead>
<tr>
<th>5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Do you have any other comments on the Demand Flexibility Service proposal?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 15 acknowledge that introducing DFS for winter 2022/23 was achieved under very tight timeframes. This year development of DFS 2.0 was left until relatively late in the spring, meaning that our ability to recruit new participants is constrained by the short lead in times to the launch of the new service. We urge ESO to begin engagement on DFS or similar services for winter 2024/25 significantly earlier next year so that we have time to recruit more new participants.</td>
</tr>
<tr>
<td>Service Stacking with DFS</td>
</tr>
<tr>
<td>We are disappointed to see that service stacking is not available for DFS in winter 23/24 because it is still considered an enhanced action for the control room.</td>
</tr>
<tr>
<td>Respondent 15 has volume totalling 59MW across 10 CM units in the current delivery year, which would otherwise have offered value in the DFS last winter. The same is true for winter 23/4.</td>
</tr>
<tr>
<td>These consist of DSR components such as refrigeration which are not directly instructible (no outstation fitted). They are not compatible with the current dispatch and lead times in STOR or BM.</td>
</tr>
<tr>
<td>There is untapped I/C volume which primarily have a day job but would be interested in turning down their load on an ad hoc basis (instead of making themselves widely available and distracting from their day job).</td>
</tr>
<tr>
<td>Service Stacking with DFS</td>
</tr>
<tr>
<td>Thank you for sharing your feedback on the topic of Capacity Market Stacking, we welcome the insights you have provided on potential volume and have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.</td>
</tr>
<tr>
<td>Guaranteed Acceptance Price</td>
</tr>
<tr>
<td>Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.</td>
</tr>
<tr>
<td>ABSVD</td>
</tr>
<tr>
<td>Thank you for your feedback. ESO plans to apply Applicable Balancing Services Volume Data (ABSVD) process to HH-settled volumes covering 1) the Industrial and Commercial (I&amp;C) consumers at MPAN level (via P354 ABSVD process with further details to be released in the Participation Guidance and ABSVD Methodology) and 2) Domestic consumers whose MPAN is signed up to provide DFS with supplier, via BMU ID ABSVD process.</td>
</tr>
<tr>
<td>Due to the complexity of the data and the proportional impact on load-profiled demand, ABSVD will not be applied to non-HH settled volume.</td>
</tr>
</tbody>
</table>
It also seems less desirable to aggregate I/C volumes for BM dispatch when each one has a different schedule and day job with varying times, they would wish to reduce their load.

From previous communication with ESO on CM assets, there is the assumption that introducing the multi-dispatch tool would allow CM only assets entry into the BM. This is not the case for the above I/C assets, which would not enter due to scheduling and dispatch uncertainty.

We know there is capacity currently in the CM which would consider entering the DFS and not the BM as an enduring position.

Respondent 15 would like the ESO to provide clarity on the asset meter/boundary meter with regards to the Capacity Market. An example has been provided below – we would appreciate a discussion on this as we believe it would be allowable with the Service Terms as they are written, but there has only been verbal discussion about this point which has been contrary to the Service Terms.

Example: Horticultural site with gas fired CHP and industrial lights.

CHP is an Existing Generating CMU and holds a CM agreement. To deliver against the CM contract, the CHP must be generating via the export boundary meter. The import boundary meter is not associated with the CM and is not required to as this is a Generating CMU technology type (not DSR technology type);

The lights are sub-metered and do not participate in the CM. If the lights are on during a CM event, the export at the site boundary would be reduced, hindering CM delivery. The import would also be increased, but this has no bearing on the CM Agreement. The lights could participate in DFS using the submeters and the baseline methodology as outlined in the Service Terms, and the associated import MPAN would not be registered to a CMU and so would not be flagged as service stacking.

Respondent 15 believe this is acceptable given the lights and import baseline has no bearing on the CM agreement or delivery to the CM. It would be helpful, however, if the ESO could confirm this

The impact of not applying ABSVD to non-HH settled volume is minimised by the fact that the net change in the supplier’s imbalance position is small, as the overall imbalance is shared across multiple Settlement Periods and across all suppliers in each GSP group, due to the way the Elexon load profiles work (i.e., average load profiles and Group Correction Factors).
understanding with some worked examples.

Guaranteed Acceptance Price

**Guaranteed Acceptance Price**

DFS does not include availability payments and as an enhanced action there has little price discovery in 22/23 except the two live tests. The only guaranteed income that providers can rely on is via the test events. The lack of clarity on the GAP for the coming winter will delay uptake in the service and potentially reduce interest from providers. ESO should be looking to publish further information on the GAP as far in advance of the Winter Outlook report in Set/Oct. This is particularly important for I/C customers who need to assess the cost benefit of participation at a business level.

**ABSVD**

The new service terms continue to state that ABSVD will continue to only be applied to HH settled meter points. NGESO needs to approach ABSVD in the same way for both HH settled and non-HH settled. As DFS develops into a full service rather than an enhanced action, price discovery this winter and creating a competitive market for all capacity types is key. Applying ABSVD to HH settled meter points only will cause disparity in market participants pricing, which will not aid price discovery or fair competition.

---

**Respondent 16**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   Yes because the Demand Flexibility Service provides an entry point for commercial energy consumers into flexibility markets. Other flexibility services are not possible as an entry point because of cost of high frequency metering and high minimum entry volumes.

   Thank you for your feedback and support in regard to the development of this service.

2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks? What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?**
Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We are dealing with commercial customers, so there is no change to the in-day adjustment for these customers.

Thank you for your feedback and support in regard to the development of this service.

<table>
<thead>
<tr>
<th>3.</th>
<th>Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes. This will support entry of assets where their overall contribution to the fiscal meter is too small to be effectively measured. The requirement to enter all sub-meters for the site will be a good protection against on-site gaming.</td>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.</th>
<th>Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, having the option to opt-in or opt-out will enable higher participation levels.</td>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.</th>
<th>Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 4.7.2 of the DFS Procurement Rules, excluding non-half-hourly settled commercial energy consumers from participating, is in contravention of Articles 18.4.a, 18.4.b, 18.4.c, which stipulate that energy consumers have the right to participate as balancing service providers. Unfortunately, Elexon has not released data on how many commercial consumers are non half-hourly settled and does not provide a lookup tool to check if an MPAN is half-hourly settled. This makes the procurement rules anti-competitive as only the energy suppliers know which business MPAN is half hourly settled, excluding aggregators for easily participating. The exclusion of non half-hourly settled commercial consumers will disproportionately affect smaller businesses and sole-trader businesses because they are more likely to have non half-hourly settled meters than large businesses. This means small businesses and small traders are unfairly excluded from participating under the proposed DFS procurement rule 4.7.2. It also does little to meet the Government objective of supporting flexibility as a key components of reducing energy consumers bills, which will have a greater impact on smaller businesses that are less resilient.</td>
<td>Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Following feedback in the consultation we have made some amendments to the rules and classification around industrial and commercial parties that should support those smaller non-domestic parties outlined. Please refer to Appendix 1 which outlines our position on these topics, following the consultation review.</td>
</tr>
</tbody>
</table>
The DFS program is especially important for these smaller businesses, who are likely to have smaller flexible capacity which is harder to bring to market in the main ancillary services, because of the cost of high frequency metering.

Customers can use initial revenues from DFS to invest in automated monitoring and control, a pattern of behaviour we have observed in our customers at Gridimp, so the exclusion of small businesses from DFS also excludes them from progressing into other ancillary markets.

The DESNZ has released a funding competition called “Non-Domestic Smarter Tariff Comparisons SBRI Innovation Programme”. Which seeks to solve the problems that smaller non-domestic energy consumers face in participating the DSR, the competition guidance says:

“TOU tariffs and Demand Side Response (DSR) services are novel in the market for smaller non-domestic energy consumers, unlike the developing market for larger non-domestic consumers where higher energy consumption means there is often significant benefit to the consumer for using these services and there is a regulatory and policy environment that enables suppliers and consumers to engage in flexibility services (e.g. mandatory half-hourly settlement and metering arrangements). However, this environment does not extend to the market for smaller non-domestic consumers and as a result TOU and DSR products and services remain nascent, despite potentially significant system and consumer benefits.”

The guidance goes on to state that:

“The risk that smaller non-domestic consumers will be left behind has been recognised and already reflected in several current policies to encourage greater flexibility (principally the introduction of market-wide half-hourly settlement by Ofgem). The smart meter roll-out will also introduce the required half-hourly metering across the smaller non-domestic market.”
However, as outlined above, there are several additional barriers in this market which will need to be overcome."

So, excluding small non-domestic energy consumers from participating in DFS would exacerbate the recognized problem that these customers will be left behind in smart energy participation and run contrary to the “Non-Domestic Smarter Tariff Comparisons SBRI Innovation Programme” aims and objectives.

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

Clause 4.7.7 disallows the use of MPANs register to provide balancing services or similar services. Although it is not explicitly specified this is thought to apply to DSO flex services.

We believe it should be possible to include DSO flex providers as participants in DFS because there will be a big benefit with little adverse impact to DSO system operation.

Since all DSO individual respondents are not in CM/BM, they would benefit from admittance to DFS as a pathway to providing balancing services flexibility. The revenues made in DFS can be reinvested to install the monitoring or control needed for other services.

Larger DERs are likely already in the CM or balancing services. We are concerned with other smaller DSR not ANM connected DERs. There shouldn’t be any conflict in operating non ANM/DER assets under the DFS programme, as the normal DSO dispatch is designed mainly for reinforcement deferral.

ANM already mitigates any possible adverse impacts. Larger DER assets are highly likely to have ANM connections already so conflict with ANM services can be easily avoided – through ANM the extra data has already been made available & connection protocols already implemented. If an asset is likely to cause issues for distribution network operation, then logically it is recruited into ANM.

Thank you for this feedback. ESO believe it is an important mitigating action to ensure HHS is in place for industrial and commercial parties given the potential size of their volumes both individually and aggregated. We welcome regulators and suppliers to move faster in the space of transitioning over to the appropriate HHS setups which enable participation in such flexibility services. Acknowledging this feedback, we have sought to introduce a similar exception in the domestic landscape for those who have not been mandated to change who sit in profile classes 3 and 4. Please refer to appendix 1 for further insights into this topic.

---

**Respondent 17**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   Removed for confidentiality
2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Removed for confidentiality

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Removed for confidentiality

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

6. Do you have any other comments on the Demand Flexibility Service proposal?

Removed for confidentiality

Respondent 18

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Respondent 18 is a manufacturer of energy smart technology targeted at the domestic sector, we are predominantly interested in the opportunity for demand side response services from residential customers. Respondent 18 is pleased to see the continuation of the Demand Flexibility Service for Winter 23/24 and agree with the proposal to use the DFS again, following the success of last years’ service. We are also pleased to see that NGESO have taken industry feedback to improve the Demand Flexibility Service, and attempt to reduce the barriers to entry for small aggregators entering the flexibility market.

As evidenced from last years Demand Flexibility Service, there is huge untapped potential in the domestic flexibility market. The government’s ambition to reach net zero means that the UK will be running mainly from renewable energy and flexibility is the only logical way of achieving this goal successfully.

Thank you for your feedback and support in regard to the development of this service.
The proposal to continue the service with no end-date is welcomed and will allow us and other DFS providers to learn more about this service and consumer behaviour. We believe that there is opportunity to explore demand flexibility in response to ‘turn up’ events. As the Spring/Summer approaches, there may be solar generation excess that can provide market learning opportunity as the UK establishes a smart and secure energy system.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Respondent 18 agree with the proposal to remove the in-day adjustment period. We understand that including in-day adjustment to compensate for weather impacts was a method to provide a more accurate representation of demand reduction, allowing for both positive and negative weather impacts. We believe that removing the in-day adjustment will most likely affect consumers who are participating in the service by manually turning down their appliances, especially for those controlling their heat loads. However, if NGESO have evidence of end consumers abusing this service and using gaming to create financial gains, then including the in-day adjustment in the Winter 23/24 service and any service moving forward may leave the service open to more abuse. We feel that it is important that if the Demand Flexibility Service continues, it needs not to be viewed as a national initiative that is open to abuse. Therefore, the proposal to remove the in-day adjustment seems fair and a balanced approach to mitigate the gaming issue. Removing the in-day adjustment will have little impact on Respondent 18 ability to accurately deliver the contracted demand reduction within the delivery period. Whilst electric vehicles are less efficient in cold weather (therefore will have a higher demand), overall the impact of this...
proposal will be modest. Also, being able to use asset meter data within this service will give an accurate representation of the turn down of the device that is participating in the event, without including the whole home usage (including heating and lighting).

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Respondent 18 is pleased that NGESO have proposed to enable sub-metering within the Demand Flexibility Service. The decision to only use boundary meter data when calculating demand reduction gives an advantage to energy suppliers and will lead to energy suppliers having a monopoly in the demand flexibility market, therefore, we feel allowing the use of asset metering is a positive move and will encourage more participation within the service.

Asset meters can be used for other flexibility services, and they provide the same data as a smart meter, but can be much richer. For example, myenergi’s EV charger (zappi), solar power diverter (eddii) and home battery storage system (libbi) are capable of meter import, export, and generation (from behind the boundary point generation – such as solar panels) telemetry and can measure the energy delivered to the electric vehicle up-to every second. A smart meter can only show energy usage at a half-hourly interval, unless a separate internet-connected Consumer Access Device is installed – which is not common.

Whilst enabling asset metering is a great positive step, there are still elements of this proposal that we feel need addressing to explore the full benefits of using asset metering within the Demand Flexibility Service.

One of the conditions of using asset metering is that providers must be able to provide boundary meter data when requested to do so. However, we question the benefit of being able to use asset meter data if the implication is that all providers also have access to boundary meter data. There can be challenges for third parties accessing smart meter data via the DCC Other User links such as costs, and quality of the data received. Access to this data is not established enough to create a level playing field, and as stated above, gives energy suppliers

Thank you for your detailed feedback on this topic and we are pleased that you support the proposal to move towards unlocking asset metering.

ESO understand that data access can be challenging, and we are committed to supporting industry to removing such barriers where possible. We have outlined in appendix 1 why we believe maintaining access to this information is important and this received positive feedback as part of the consultation.

ESO are pleased to be adopting a recognised code of standard for metering as part of the contract terms. This should outline meters of an appropriate standard that can participate in the DFS. We would welcome further insights into the volumes that may not fall into this category and explore how we can best support these volumes in alternative routes to market such as the EV balancing mechanism trials or other innovation projects.

ESO recognise that there is still further work to do around the topics of asset metering but was largely very well received as a development in the consultation. We remain committed to removing barriers across our services and look forward to continuing our learning and evolving our services on the topic of metering with the wider support of our reform work and Power Responsive workstreams.
an advantage in this market.

We also wish to address the proposal that the asset meter is of the same or a better standard than a boundary meter. Historical devices are unlikely to be Code of Practice 11 compliant, therefore by proceeding with this requirement, NGESO may be excluding devices from the service, therefore reducing the volume of participation and demand reduction. We feel that a grandfathering should be explored in relation to this issue that allows historic devices with meters not compliant to latest standards to participate – these early-adopting customers are the flexibility market-makers and it is essential to ensure that they are not excluded from residential demand-response.

Although Respondent 18 understands that requiring asset meters of this standard will provide more accuracy to the Demand Flexibility Service, the level of accuracy would only be slightly improved. We believe that it is more important to ensure higher levels of participation within the Demand Flexibility Service even though there may be a small percentage of uncertainty. There are mechanisms that could be put into place to account for this uncertainty that Respondent 18 would be happy to explore further.

As the UK moves towards complete decarbonisation and decentralisation, consumer assets will play an important part of facilitating flexibility, therefore we believe there should be no barriers of access for domestic flexibility. Although NGESO have allowed asset metering to participate within the service, we feel that there are still barriers that need addressing.

| 4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period? |
|---|---|
| Respondent 18 agree with the proposal to enable opt-out per DFS delivery period. Manually opting into events is severely limiting, and could potentially cause user fatigue. We feel that allowing opt-out per DFS delivery offers a more discreet service. We also feel that this proposal mimics the standards set out within the Electric Vehicle Smart Charge Point regulations. Consumers are automatically set up to participate in demand side response, | Thank you for your feedback and support in regard to the development of this service. |
however, they have the ability to override this default mode of charging (opting out).

One risk that we recognise is a consumer deciding to opt out of an event after the provider has submitted their bid. It is not clear how much notice a consumer needs to give to be able to opt out of an event and would like more clarity on this issue, as this may have an impact on providers meeting their contracted demand reduction, or cause consumer dissatisfaction.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

Respondent 18 have no comments regarding the highlighted mapping for the Demand Flexibility Service.

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

Although we overall agree with the changes that NGESO have made to the Demand Flexibility Service, there are a few proposals that Respondent 18 believe will hinder the ability to learn about consumer behaviour.

NGESO have stated that they will no longer commit to a minimum number of regular tests. As this is still a relatively new service, Respondent 18 believe that test events should still play a role moving forward. The Demand Flexibility Service is an excellent opportunity to study and learn more about consumer behaviour relating to demand flexibility, therefore NGESO should try and maximise the number of events, instead of using this service as a last option. Respondent 18 suggest that a minimum of one guaranteed test should be agreed as part of the Winter 23/24 service.

NGESO have requested that providers retain their Unit Meter Point Schedule data for 15 months, compared to the 6 months that was specified last year. Whilst retaining data is not an issue, we would prefer that NGESO specify what data they require for audit purposes in advance, rather than ad hoc. If consumers choose to opt out of a service, the provider would need to remove this data before it can be provided to NGESO. NGESO needs to guarantee that their new request is GDPR compliant without increasing the legal burden to individual providers.

We understand that NGESO will contract the provider to submit the total value of incentives that are provided to any

Thank you for your overall agreement with the changes we are proposing as part of the service developments.

ESO would like to confirm that like winter 22/23 we are again committing to a number of tests and a Guaranteed Acceptance Price. Information regarding test/GAP can be found both in our Procurement Rules and DFS Market Information report Winter 23/24 which are now available on our DFS webpage.

ESO has outlined the various data templates in our guidance Material and would view this as the reasonable type of data parties are required to store.
consumers that participate in the service, and that this information will remain confidential. Whilst Respondent 18 are not opposed to this, we feel it important to highlight that if NGESO decide that it will publish this information, that this should be consulted with industry first. We feel that this information is commercially sensitive and should not be available publicly.

Respondent 19

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.
   We agree with the general proposal for the service. Thank you for your feedback and support in regard to the development of this service.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?
   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

   If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive? N/A

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?
   We agree with the general proposal. There are some differences compared to what we allow for our services, and we would welcome the opportunity to standardise this across the industry. Thank you for your feedback and support in regard to the development of this service.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?
   N/A

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?
   N/A

6. Do you have any other comments on the Demand Flexibility Service proposal?
   We have 2 additional comments:
   - The stacking of DFS with DNO services should be clarified. Do they fall under a “similar service to any third party”? We would encourage stacking where this does not impinge on the ability to deliver either service.
   - We are keen for the ESO to collect more granular data on the demand response.
   Yes, to clarify: DNO services fall under the definition of “a similar service to any third party. Thank you for these insights. ESO will continue to monitor and review the delivery of the service and share these findings as appropriate with industry.
seen. To allow us to model our network effectively we need to understand Latent Demand at a granular level (Primary substation), and so need to be able to determine the impact of the DFS service on our peak demands.

Respondent 20

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**

   **Procurement:** we agree with the proposal to introduce in-day dispatch additionally to day-ahead dispatch. A closer to real-time service offers the ESO better visibility of system needs, plus more certainty to providers about their technical capabilities & ability to deliver on their commitments. A closer to real-time dispatch allows for strategically opting in/out with more certainty. We welcome the ESO’s intent to examine both day-ahead dispatch and multiple in-day dispatches, to understand how DFS interacts with other markets and how the system is affected by the increased flexibility in decision-making.

   **Delivery & process:** the proposed revisions are mainly targeted at domestic customers, who are not part of our flexible portfolio. In our view, other than the formalisation of some participation aspects, the implementation of the opt-in/out option will not have a major impact on service delivery, as indicated in our response to question 4.

   **Automation:** we welcome any change that increases the level of automation and facilitate our participation in DFS. The proposals are a step in the right direction.

   **Tests:** we generally agree with the ESO’s proposals on DFS tests. However, we note that the reasoning behind originally splitting tests between “onboarding” and “regular” served a distinct purpose: it allowed the ESO and providers to adjust expectations about delivery volume & importance, depending on test categorisation. Under the uniform “DFS Test” umbrella, it is unclear how short or long the onboarding/learning process is, or how each test informs the ESO about a provider’s credibility and actual flexibility potential.

   **Participation:** we generally agree with the...
introduction of sub-metering as a natural evolution of DFS. However, we express our skepticism about several aspects of it, as indicated in our response to question 3.

Minor changes: we support the majority of the ESO’s proposals. However, we question the need for providers to submit the incentive values for acquiring the rights to provide DFS. It is unclear why the ESO requires this information or how it intends to process it in the future. Even if kept for bookkeeping purposes, providers are oftentimes bound by confidentiality agreements, and it may not be in their prerogative to disclose information. The ESO has not provided strong justification for why it should have access to a provider’s commercial strategy for its clients, nor an explanation on how this will inform the ESO’s approach for future iterations of DFS. It would also be interesting to understand how the ESO would check the validity of the submitted information. In summary, we do not believe that sharing this information with the ESO is necessary, nor will it justifiably lead to a non-negligible improvement of DFS.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length/period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

The proposed revisions are mainly targeted at domestic customers, who are not part of our flexible portfolio. As in our response in the first DFS consultation, we note our support for an in-day adjustment that covers the whole event day, as a strong mitigation strategy against baseline gaming.

As noted in our response to question 3, half-hourly metering is essential to have for DFS, and so is the necessity to ensure that a half-hourly tariff is also active for associated boundary meters. If a provider is not on a half-hourly tariff, the half-hourly settlement condition does not mitigate the gaming risk, as there is still sufficient financial incentive to artificially drive up the baseline.

ESO welcome your support with regards to in-day adjustment.

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

We generally agree with the proposal to allow sub-asset participation into DFS. In theory, this offers better visibility & accuracy of volume delivery and settlement. It also offers the possibility of multiple providers behind the same boundary meter. However, it is questionable whether this will unlock significantly more flexibility. The mechanics to deliver the service remain virtually identical, and the ESO still relies on boundary meters for validation and benchmarking. A higher number of providers behind a boundary meter does not necessarily translate to a higher flexibility potential, due to the resulting non-uniformity in achieving the turn-down. Though some respondents in the first consultation expressed the view that sub-metering will lead to higher delivery volumes, this claim has not been backed by sufficient evidence other than being considered axiomatic. The introduction of sub-metering is a logical development, birthed out of the need for more granularity and from industry feedback. While it will probably have no negative impact (assuming proper risk mitigation), we express our skepticism about the additional volumes of flexibility that it will unlock.

Though the ESO has correctly identified the perceived risks and proposed some sound mitigation strategies, the gaming risks have not been fully addressed:

Half-hourly metering is essential to have for DFS, and so is the necessity to ensure that a half-hourly tariff is also active for associated boundary meters. If a provider is not on a half-hourly tariff, the half-hourly settlement condition does not mitigate the gaming risk, as there is still sufficient financial incentive to artificially drive up the baseline.

Allowing multiple providers behind the boundary meter could, however unlikely, affect reliable DFS providers. Unsuccessful providers (in the clearing process) may shift their planned demand turn-up to the DFS timeslot in light of their failed bid. This will be registered in the boundary meter and affect the returns of reliable providers, despite the action being out of their control. This potentially negative effect should not be considered in the settlement process for remaining

Thank you for this feedback. We believe that reflecting the financial incentives of Half-Hourly Settlement on suppliers will give the incentive to ensure that the tariff of their end consumers are sufficiently reflecting of half-hourly prices.

With regards to sub-metering, the DFS rules state that participation may be on either the boundary meter or one-or-more sub-meters, but not both the boundary and sub-meter at the same time. This mitigated the double-counting risk, and the risk that the behaviour of one participant affects the delivery of another.
4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**

Enabling opting-in/out formalises a provider’s choice to deliver/not deliver on their commitments. Though it offers greater visibility to the ESO and more flexibility to providers, asset participation and delivery remain relatively the same (mechanically). Assuming that this option is used in good faith, we expect this revision to have a minor impact on the DFS service as a whole.

However, the Delivered Demand Reduction Volume considers the behaviour of opt-out meters in its aggregation methodology (be that sub-meters or regular unit point meters). Thus, it is unclear why providers would feel obligated to correctly declare their meter status. A non-participating meter is still considered during the settlement process, meaning providers have little motivation to update their status. Providers are not remunerated for opt-out meters, even though they are considered in calculating how much turn-down is delivered. Providers would thus have no incentive to not continually maintain their assets as “participating”.

If an Opt-out meter is “Participating” (i.e. had not opted-out) then its “Delivered Demand Reduction Volume” will be included regardless of whether it shows an increase or a decrease.

Providers are therefore incentivised to update the “Participating” status of someone who has opted-out, as otherwise any demand increases from that participant will reduce the overall “Delivered Demand Reduction Volume” you are settled on.

Notwithstanding this, we expect that providers will always be providing honest, accurate and reflective data into the service.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

No additional comments on Article 18.

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

No additional comments on the current version of the proposal. However, we reiterate our view, expressed in our response to the first DFS consultation, that the service should eventually evolve into a long-term/enduring, national energy efficiency product, with additional dispatch instructions topping up the already lowered demand. An enduring flexibility approach will reward consistently beneficial demand habits and foster more commitment rather than one-off demand reductions or opportunistic attempts to game a short-term market (besides the complexity of understanding the various market dynamics when a disruptive service like DFS is temporarily introduced). A long-term programme which rewards decarbonisation also eliminates much of the need for DFS participants (many of which are domestic) to constantly monitor the market for updates and engage in significant back-and-forth with the ESO. This would result in similarly effective

Thank you for your feedback and support in regard to the development of this service. We recognise that this consultation is focused on the short term changes to the service. We welcome your thoughts on the longer term strategy around flexibility services and will ensure this is shared with our Future of Flexibility strategy team.
results but without much of the administrative burden.

Respondent 21

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Yes, Respondent 21 welcomes the return of DFS. The past winter proved the potential of domestic flexibility as a tool for grid balancing. Now, the service needs to drive to gigawatt volumes through much broader customer and C&I engagement.

The Service can work this winter as an enhanced measure but more clarity is needed on the future of domestic demand shifting and ESO and industry should set out a roadmap to creating an in-market service or participating in existing services in the future.

ESO’s priority this winter should be increasing volumes to demonstrate the potential for permanent use in grid operations and replacing other sources of contingency, such as coal. It can do this through ensuring a sufficient Guaranteed Acceptance Price, dispatching the Service more frequently, and through encouraging providers to do more to recruit their customer bases.

Respondent 21 proposes several key changes to the service design, including:

- Removing the in-day adjustment to allow for easier communication of baselines to customers and mitigate gaming risks,
- Allowing stacking with the Capacity Market and other DNO flexibility services - these two types of service represent around 200MW of volume that will otherwise be excluded from taking part this winter (and this volume is growing rapidly),
- Facilitating ongoing MPAN sign-ups by requiring a timestamp of when an MPAN signs up so that “last in wins”, and allowing easy addition and removal of MPANs via an ongoing API vs. weekly CSV file submissions,
- Confirming a sufficiently high Guaranteed Acceptance Price (GAP) level to ensure customers are adequately compensated to participate. A GAP at similar or higher levels to the past winter should be sufficient,
- Removing the limit on one auction per event - ESO should have the option to use the in-day procurement option to “top up” volumes after the day-ahead auction, and limiting to just one auction will reduce learnings here,
- Ensuring that all providers state clearly that customers can only take part in one DFS scheme during the onboarding journey, and
- Encouraging providers to invite all eligible

ESO thank you for your comments and are pleased Respondent 21 are supportive of the Demand Flexibility Service.

In response to the proposed key changes to the service design please find our comments below:

- Removal of within day adjustment – this has been removed following consultation review. Please see appendix 1.
- CM stacking – ESO have maintained our position on the ability to stack other services. Please see appendix 1. There are a number of wider workstreams that are exploring trying to address these issues and ensure that we can reduce barriers across our services to facilitate appropriate stacking.
- MPAN process and timestamp rule - both of these have been incorporated into the development of the service.
- Number of tests and GAP – ESO have published our DFS Market Information Report that outlines the number of tests and guaranteed acceptance price for winter 23/24.
- Auction limits - ESO believe that sending a clear simple service requirement to the market is crucial. ESO believe that if we could run all three timescales for any given delivery period this would risk providers potentially holding back volume and being left uncertain if we would call a subsequent procurement time. We therefore believe making a clear outline to the market will ensure that we get maximum volume bid for every service requirement that we publish, maximising the benefit of the service.
- Clear communication principles – Following consultation feedback ESO have made a number of updates to our communication principles and additions to our contract terms that help support these comments.
- Please refer to appendix 1 for our positions.
customers so that DFS accesses maximum volumes.

To expand on a few of the points above:

DFS should be stackable with DNO flexibility services

DNO flexibility services and DFS meet needs for different parts of the system. If customers are forced to choose between DFS and DNO services, this is likely to remove much-needed capacity at the distribution level as DFS will be more financially attractive for customers. If DFS and DNO flexibility service events overlap, MPANs should only be allowed to take part in one to avoid double counting.

DFS should be stackable with the Capacity Market

The Capacity Market (CM) is stackable with all ESO services, so should be stackable with DFS as well.

Despite both being enhanced measures, the Capacity Market holds volumes in reserve, whereas DFS has been successful in allowing assets to participate more actively in balancing - DFS was called 13 times last year, whereas the CM has never been called. It is essential that as much volume as possible can take part in DFS if it is to move to a transitional service in the near future.

CM and DFS events have not overlapped so risks of double counting are low. Another way to ensure this would be to include a dispatch time after the CM notice deadline, so that if ESO anticipate a CM event, they can use the later dispatch for DFS, and not trigger DFS if a CM event is called.

DFS should be utilised more frequently - this can be done through closer to real-time dispatch

The DFS was called very infrequently last winter, despite several opportunities where coal was called or where grid conditions suggested it should have been called. ESO’s reasoning was that the need was hard to predict at the day ahead stage and that uncertainty ranges changed meaningfully. Same-day dispatch is one key way to increase use of the Service. Respondent 21 demonstrated that it was possible to get 100MW+ response from its customer base with notification of less than six hours. The ESO should make full use of this route and ensure that the Service is dispatched more - this is key for engaging providers and customers and gives greater
justification for the number of trial events.

To that point, we are concerned that the option to dispatch at a single of the three windows may reduce utilisation. By restricting auctions to just once per event, this means the in-day option is likely to be called less and will reduce learnings from faster responding assets. National Grid ESO should have the option to call at any or all of the three timeframes.

ESO should also publish clearer dispatch rules / logic to clarify to industry when the Service is and is not called. This is a necessary level of transparency to ensure that decisions are being made fairly and consistently.

Duplicate MPAN process

We broadly agree with ESO’s proposal, although favouring ‘last-in’ sign-ups will penalise first-mover companies. ESO must ensure that there are customer protections in place and sufficient sanctions if these are violated by providers, up to removal from the Service.

The ESO must also give clarity on the future of DFS, and ensure We understand that the Service cannot include demand turn up without a further consultation. This is a missed opportunity - turn up can help increase the use of renewables and reduce curtailment; Respondent 21 proved the potential of this in a trial with a DNO. ESO should start planning for turn up inclusion as soon as possible, to be delivered through a mini-consultation. The service designs are flexible enough to allow for a turn up element to the service, without needing to relaunch a consultation.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Yes, we agree with the removal of a 3-hour in-day adjustment. A personalised adjustment is difficult to communicate to customers, encourages gaming, and penalises customers who turn down prior to the event (e.g. if they leave the house). DFS will reach a much larger customer base this year - gaming

Thank you for sharing your feedback on the topic of baselines and the additional analysis you have undertaken to support these positions. We have taken your comments/analysis into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
could easily get out of hand with an in-day adjustment. We also note that while obvious tactical improvements to the baselining methodology can be identified (and should be actioned), we recommend a greater strategic focus from industry - e.g. via a baselining taskforce - to establish best practice across different products/markets. We are happy to support this.

Respondent 21 analysis shows that both baselines predict lower demand than actual during cold days. This gap is greater for the unadjusted baseline. This means that both would underpay customers for their turn down. However - we note that the in-day adjustment penalises customers who turn down prior to the event, during the adjustment period, so it is unlikely customers will see an overall reduction in payment with the unadjusted baseline.

No, extending the in-day adjustment to 6-hours or longer is not effective enough to implement. Respondent 21 analysis shows the 6-hour adjustment baseline performs with an error of -0.037kWh/hh per customer, whereas the unadjusted baseline performs with an error of -0.043kWh/hh - i.e. they are close in accuracy. The whole day adjustment performs even closer to the unadjusted, with an error of -0.042kWh/hh. Therefore, it does not make sense to include a longer adjustment, as the communication difficulties to customers still remain for no significant added benefit.

There should be no adjustment factor in the DFS baseline. Respondent 21 looked at a GSP-level adjustment factor, by taking the percentage difference between actual and baseline during the 3-hour adjustment period for everyone in a GSP participating, and then applying that percentage difference to each individual customers’ baseline in a GSP - this did not perform better than the unadjusted baseline.

Removing the in-day adjustment will mitigate gaming risks and allow for easier communication to customers, which will drive engagement.
### 3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

<table>
<thead>
<tr>
<th>Yes, we are happy with the proposal to extend DFS to sub-meters. Sub-metering will be an important part of demand flexibility in the future and should be accommodated here. Gaming risks will be mitigated by requiring all associated boundary meters to be half-hourly settled and by settling on net volume turn down/up of all associated boundary and asset meters. Issues of double counting will be avoided by requiring providers to submit details of all asset meters and boundary meters associated with each other.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 21 thinks opportunities for gaming should be reduced in general, such as through the removal of the in-day adjustment, which addresses customer gaming. ESO should be vigilant to provider gaming, e.g. encouraging customers to use more energy in the evening or scheduling load to drive the baseline up, and if providers are seen to be gaming, ESO should retain a right to remove providers from the Service. Such behaviour undermines trust in the Service.</td>
</tr>
<tr>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

### 4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

<table>
<thead>
<tr>
<th>Yes, we are happy with ESO’s proposal to include an opt-out option per DFS delivery period as this will make the customer experience smoother for those with automated assets. For manual shifting, an opt-in option is effective in driving engagement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

### 5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

| No |

### 6. Do you have any other comments on the Demand Flexibility Service proposal?

<table>
<thead>
<tr>
<th>&quot;While we support DFS as a transitional measure this winter, in the long-term, DFS should move to fully market-based service, including turn up and locational procurement. To ensure this can be done easily, ESO should make the service terms flexible enough that a formal consultation is not required, but rather a Call for Input. Failing this, ESO must at least commit to design a turn up and location procurement option this winter - we are very keen to engage on the design and provide learnings. &quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;ESO must also provide details on the operational elements of the service as soon as possible so that providers can start building necessary process and technology. File submission and API details are especially important.</td>
</tr>
<tr>
<td>ESO has published the API scheme and further guidance will be shared in our updated Guidance Document as part of the conclusion to the consultation process.</td>
</tr>
<tr>
<td>&quot;We thank you for your thoughts on the future strategy and landscape around flexibility services. ESO recognise there are wider workstreams underway that are looking at some of these topics such as Local Constrain Market and other Power Responsive trials.</td>
</tr>
<tr>
<td>ESO recognise that there are challenges around the regulatory landscape and legal obligations in terms of how we amend our service terms. This is a regulatory process we are obligated to follow and offers industry a fair and transparent process to help shape our developments.</td>
</tr>
<tr>
<td>ESO will encourage all relevant parties to participate and raise awareness of the Demand Flexibility Service. We recognise that not all commercial parties may choose to participate in our flexibility service.</td>
</tr>
</tbody>
</table>
"Finally, ESO must ensure all smart meter households in GB are invited to participate in DFS this winter so that they can access the volumes required to replace coal with consumer flexibility. Respondent 21 was the only supplier to invite all households with a working smart meter (subject to marketing preferences). ESO can ensure greater uptake by:

- Requiring or incentivising providers to reach out to a broader set of customers - for example, requiring maximum invites to be sent out or placing providers who have invited a larger percentage of their customer base at the top of the merit order;
- Giving providers more confidence in the Service by confirming its implementation by early June with certainty from ESO and Ofgem, signposting to an enduring, in-market service in the future - providers will not invest in a one-off product;
- Providing value to customers, e.g. maintaining prices at £3/kWh for Test events; and
- Laying down the challenge publicly to suppliers who are not inviting customers."

Respondent 22

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Future Energy Scenarios recognise that the UK needs to significantly increase its energy “flexibility” via Demand Side Response if the UK is to achieve its net zero ambitions.

However, to unlock and realise this potential Flexibility Service Providers will need to develop engaging, trusted value propositions, appealing to a broad set of consumer needs and use cases with scaleable, mass market appeal. The Leading the Way scenario assumes that smart charging delivers 8GW of peak demand reduction by as early as 2030. This step change in consumer understanding, engagement and action from today’s behaviour will only be realised if consumer needs are put at the heart of developing the future energy system, rather than legacy industry markets but that by facilitating competition and lowering barriers to entry end consumers should have the ability to access such services."

We thank you for your feedback acknowledging the concerns flagged around baseline methodology and boundary data. These were topics that we received a wide range of views, please refer to appendix 1 to see our detailed view on these topics and associated feedback.
thinking driving this development.

Respondent 22 welcome the proposals to continue with the DFS for Winter ‘23 / ’24 and stated objectives to maximise volumes through demand flexibility through new routes to market, whilst also enabling and supporting the development of future services.

However, we have some concerns that the proposals may have some unintended consequences for EV drivers which are likely to reduce consumer participation and damage consumer trust, therefore undermining the future potential for demand reduction through the increasingly important segment of EV consumers.

Two areas of concern relate to the proposals to the baselining methodology and the continued requirement for boundary metering data, even though participation via asset metering is being encouraged.

| 2. **Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?**
|---|
|What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?
|Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?
|If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?
|No. This proposal will significantly undermine trust with EV drivers and will ultimately result in NGESO failing to realise the vast potential of flexibility being delivered from electric vehicles.
|EV drivers typically charge their vehicles 2-3 times per week, meaning that at a household level this increased consumption is simply smeared over a 10-day period in the proposed baselining methodology.
|For drivers regularly ‘max charging’ at peak times, the benefits they can realise by changing their behaviour will be at a maximum, c. 30% of the true benefit.
|Drivers who usually charge outside of the peak window but need to charge on the day of the ‘event’ will receive no benefit whatsoever from this proposed service as any change in behaviour will not be recognised versus the household baseline.
|We thank you for the insights to outline the context to your position.
|We do not believe it is appropriate to have different baseline rules for different technology types as this would likely create an incredibly complex service offering and may require in excess of 10 different methodologies for the varying types of technology, we see being able to offer flexibility.
|Where parties’ flexibility may not work for the DFS service we do recognise there are other services or commercial opportunities that may be more appropriate. Should DFS not be the best fit for certain consumers but can still provide valuable flexibility we do hope parties will consider our wider workstreams to unlock access through things such as Balancing Mechanism EV trials that are currently underway and our wider reform/innovation work.
From a consumer perspective, drivers wishing to participate in DFS events will expect to be rewarded for the full impact of not charging during the event window, e.g. 7.4 kWh for a typical single phase EVSE. However, with the revised methodology will now only receive a maximum payment for c. 2.5 kWh, (7.4 / 3), and in many cases will receive nothing. This will be difficult to explain, will drive dissatisfaction / complaints and will undermine trust and participation from these consumers which are ultimately one of the key driving forces for increased peak demand. As such, Respondent 22 would not expose our customers to this confusion and would therefore not participate in DFS if this baseline methodology is implemented. The existing P376 methodology provides a mechanism to mitigate this impact and enable the delivery of the entire 7.4 kWh reduction, (as charging prior to the event window increases the baseline). We therefore propose that this methodology is retained for EV charging devices / customers, where charging is being controlled automatically via a smart charging platform, and customer 'plug-in' behaviour signals a clear intention to charge their vehicle and contribute to increased peak demand.

On the topic of controlled automated delivery, ESO are pleased to offer parties the option of "opt out" this year which through the consultation received positive feedback around supporting those assets which have greater automated control.

Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

<table>
<thead>
<tr>
<th>3.</th>
<th>Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whilst we welcome the proposal to enable Asset Metering, (to COP11 standard), to participate in DFS, the continued requirement to provide boundary metered data, (if requested), means that this proposal only favours suppliers and aggregators with access to boundary meter data.</strong> In addition, this requirement for boundary metered 'smart' data effectively prevents c. 50% of UK consumers from again participating in this service. Respondent 22 urges NGESO to reconsider this requirement, enable all Energy Smart Appliance Manufacturers and Providers to participate in DFS with their Asset Meters, with analysis being undertaken post event, to better understand the true risks of double counting which are understandably of concern.</td>
<td></td>
</tr>
<tr>
<td><strong>Thank you for feedback</strong> ESO understand that the smart meter rollout has been slower than anticipated and we look forward to the uptake of smart meters increasing and believe DFS represents an incentive to support the wider energy sector in that area.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.</th>
<th>Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</th>
</tr>
</thead>
</table>
If different service providers are offering different methodologies to potentially the same end consumer, there is a very real risk that this will cause confusion, generate complaints, and erode consumer trust. Respondent 22 would urge that only one methodology is used, preferably opt-in, and this is utilised consistently by all providers.

ESO have acted on industry feedback that having the opt in and opt out structure will add benefit. As end consumers are only allowed to sign up with one provider at a time, there should be no opportunity for conflicting instructions to an end consumer. We recognise the importance of clear communication to customers and hope our communication principles helps in that space.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

None

6. Do you have any other comments on the Demand Flexibility Service proposal?

Whilst many of the proposed changes are welcome, it does appear that the primary objective is to reduce risk for NGESO rather than encouraging consumer participation and making this service as simple and as accessible as possible.

Domestic flexibility provides a clear opportunity to support NGESO in managing the Future Energy System, and as such Respondent 22 believes that consumer understanding, engagement and trust are key in accessing the full potential of this new, emerging market, and should be at the forefront of any service design principles and processes.

ESO have proposed our developments based on several months of engagement and consultation with industry. We hope that we can continue to grow on the success of the service from last year.

We recognise that providers communication and marketing to their end consumers being clear, concise and transparent is really important in maintaining the engagement trust in flexibility.

Respondent 23

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Removed for confidentiality

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Removed for confidentiality

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Removed for confidentiality

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Removed for confidentiality
<table>
<thead>
<tr>
<th></th>
<th>Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do you have any other comments on the Demand Flexibility Service proposal? Removed for confidentiality</td>
</tr>
</tbody>
</table>

**Respondent 24**

<table>
<thead>
<tr>
<th></th>
<th>Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</th>
</tr>
</thead>
</table>
| 1. | Broadly we are enthusiastic about engaging with this service this year, to enable the automatic flexing of as much of our >1GW of EV charging nameplate capacity as possible, and to engage as many of our ~200k customers as possible in behaviour-change. However there is one area of the current proposal that we believe is not correct, which is the requirement for metering to be half-hourly settled. This would:  
   a) preclude most of the domestic market from participation (we believe only ~2% of domestic meters are on elective HH settlement today?)  
   b) exclude 3rd parties (entities which are not energy retailers) like ourselves from engaging our customers in DFS, because we cannot unilaterally transition our customers to elective half-hourly settlement without the involvement of their energy retailer, creating a huge and unnecessary barrier to entry to DFS for us.  
   Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.  
   ESO acknowledge this year following feedback predominantly in the industrial and commercial space that asset metering would unlock additional volume. We would like to confirm that under the current ruleset, those customers who do own an EV asset are still eligible to participate via the boundary meter with their load even if they are not HHS. |
| 2. | Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?  
   What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?  
   Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?  
   If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?  
   No opinion |
| 3. | Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?  
   We have metering within our EV chargers and so we are strongly supportive of the proposal to enable sub-metering. But as above we are strongly against the requirement for HH settlement as this excludes most of today’s domestic market from participation and prevents non-energy-retailers such as ourselves from |

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.  
We do not believe this should prevent parties from engaging their customers. We saw a large number of aggregators and third parties sign up
engaging our customers and their assets in DFS.

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Yes

Thank you for your feedback and support in regard to the development of this service.

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

No

6. Do you have any other comments on the Demand Flexibility Service proposal?

No

Respondent 25

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Yes, we welcome the return of the DFS service for this winter. However, in order to resource and commit fully to the service for the short-term, and implement an enduring service, it is important to have visibility of price signals and requirement volumes earlier in the process. Any visibility of the following elements, be it estimates or forecasts would help us to participate:

- Estimated timeframes
- Estimated frequency of tests
- A guaranteed minimum number of tests
- Estimated GAP price

Thank for your feedback on the topic of the Guaranteed Acceptance Price (GAP) and Tests. ESO have published our DFS Market Information Report (MIR) for winter 23/24 which outlines the commercial offering around test events for this winter. This can be found on our DFS webpage.

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

We are in agreement that there needs to be consistency across the industry for baseline methodology that allows for fair compensation while also combatting the risk of perverse incentives and gaming.

However a longer in-day adjustment period may be more beneficial than removing the adjustment altogether to help mitigate the risk of under/over-forecasting caused by unexpected changes in weather/temperature. An alternative approach could be to apply a national adjustment factor. This could be calculated and/or set out by the ESO and applied by all providers.

Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
3. **Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?**

   We agree with the proposal to enable asset metering as part of a service like DFS. However, there is a risk that expanding the current DFS service to asset metering at this stage (less than 4 months before the service launches) could be restrictive and premature and that more time could be taken to understand both any risks, whether the proposed mitigations were sufficient and possible implications on different participants.

   Thank you for raising these concerns. ESO understand from industry feedback that this could unlock more volume in particularly from the I&C sector and believe we have introduced appropriate risk mitigations around any concerns.

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**

   In order to simplify the process, we prefer the opt-in route for our customers at this stage, however we can see the opt-out process working in the future (when automation is in place).

   Thank you for your feedback and support in regard to the development of this service.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

   No comment

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

   **Uncapped Indemnity Clauses:** 11.2 Third Party Claims (T&Cs) and 13 Warranties and Undertakings (Procurement Rules) contain uncapped indemnities in favour of NG ESO. Although we are aware that this clause is unlikely to be triggered, and are not aware of any instances of it being invoked during service so far, we do not feel comfortable with the liability being uncapped. For Respondent 26 to accept these clauses and take part in the DFS service, we propose that NG ESO put forward a cap amount they would feel comfortable with that we can review.

   NGESO’s exposure to a third-party claim related to delivery of DFS, whilst arguably a remote possibility, is potentially unlimited. As such, NGESO requires an uncapped indemnity, although in return NGESO has limited its recourse by (1) providing that the indemnity in paragraph 11.2 of the service terms only applies to claims resulting from a breach by the provider of any agreement with a third party, and (2) conceding conduct of claims to the provider under paragraph 11.3.

   The uncapped indemnity in paragraph 13.3 of the procurement rules applies only as and when a provider submits a bid into the auction, so as to place the onus on the provider to ensure that it is in a position to comply with the requirements of the service including by securing relevant consents and permissions from occupiers of participating premises and ensuring that MPANs are not participating across multiple providers etc. Without an indemnity, NGESO would have limited recourse by virtue of the standard limitations of liability restricting damages to property loss only.

   Providers can, of course, seek to back off liability to NGESO in their contract terms with participants. These provisions follow equivalent clauses in other service documentation for example those governing the dynamic response services.
**Respondent 26**

<table>
<thead>
<tr>
<th>1.</th>
<th><strong>Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>We agree with the proposal for the new DFS service. Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.</th>
<th><strong>Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?</td>
</tr>
<tr>
<td></td>
<td>Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?</td>
</tr>
<tr>
<td></td>
<td>If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?</td>
</tr>
<tr>
<td></td>
<td>We agree with NGESO’s proposal to remove the in-day adjustment from the baseline calculation.</td>
</tr>
<tr>
<td></td>
<td>Having the baselines for Domestic and for Industrial &amp; Commercial participating customers being calculated in the same manner is a good step. The playing field should be level.</td>
</tr>
<tr>
<td></td>
<td>The in-day adjustment was an overly complex step for many Domestic customers and led to many complaints from customers unable to understand why their outturn during DFS events or tests was different from expectations. It is already difficult to communicate how DFS is measured as a difference between actions and a baseline rather than actions and the immediately preceding customer behaviour. Adding the additional step of an in-day adjustment made matters much more complicated for many customers. In cases where the in-day adjustment reduced outturn volume through no fault of the customer it became difficult to explain internal DFS operations.</td>
</tr>
<tr>
<td></td>
<td>In the case of gaming, those participating customers who understood the in-day adjustment were certainly able to exploit it to enhance their baseline. The removal of the in-day adjustment will make the baselines more reliable and more robust to gaming.</td>
</tr>
<tr>
<td></td>
<td>We understand that weather events around the time of an event may have some effect on the baselines of participating customers and that the removal of the in-day adjustment may make these effects more pronounced on occasion. However, the set of asset types generally used by Domestic customers, in</td>
</tr>
</tbody>
</table>

Thank you for sharing your feedback on the topic of baselines, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.

Thank you for your detailed insights and proposals in how we could further monitor for future developments.
particular, are not necessarily all that weather-affected. Gas heating still predominates, rather than electric units, for water and space heating and air conditioning remains uncommon in domestic premises in the UK. Most assets turned off or down during a DFS event will remain those for cooking or entertainment for some time yet, and the removal of the in-day adjustment to correct for weather will probably not have that noticeable an effect.

We suggest that NGESO examines the domestic asset base to see if they are assets which would be affected by weather in the same way that larger industrial or commercial sites may be. We also suggest that NGESO examines customer HH data and publishes a report on the actual scale of the effect of the in-day adjustment on Domestic and I&C customer data.

<table>
<thead>
<tr>
<th>3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
</table>
| We agree with the proposal to enable sub-metering in DFS. However, we do not agree that sub-metered assets should necessarily have to be Half Hourly Settled – or be associated with a Boundary Meter which must be Half Hourly Settled – before they can participate.

There is no requirement for such meters to be Half Hourly Settled. The primary requirement is to be Half Hourly Metered so that relevant data can be collected to create a baseline against which Delivered Demand Reduction Volume can be calculated.

We understand NGESO’s concerns around gaming and we agree that customers should be encouraged to not shift demand into or away from times of the day advantageous to the creation of a high baseline. However, we feel a better balance needs to be struck between trying to prevent all gaming potential and the ease at which existing flexibility volumes can be brought to the DFS.

Price signals from Half Hour Settled contracts may very well provide this encouragement, but it is not strictly the case that all Half Hourly Settled customers will see a different price signal in each Settlement Period, or even different blocks of prices across the day. |

Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.
A supplier may choose to settle customers half hourly in order to internally manage imbalance risk or to settle more correctly against Use of System charges, or for any number of other reasons, and the customers themselves may remain oblivious, seeing a single price across the day.

It is not necessarily the case that NGESO will see customers with active price signals by insisting on Half Hourly Settled arrangements. Properties that are half Hourly Settled may not have time of use tariffs so the anti-gaming incentive would not exist.

Given that there are so few Half Hourly Settled Domestic customers, and that so few Suppliers actively offer Half Hourly Settled contracts, we believe it is exclusionary of NGESO to state that non-Half Hourly Settled sub-metered (or boundary metered) customers cannot participate in DFS.

4. **Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?**

We agree with the proposal to enable opt-ins and opt-outs for the delivery of DFS.

It is fair to include demand increase volumes (in MWh) as well as demand reductions for any opt-out Unit Meter Points. We acknowledge that NGESO is taking a risk by including baseline data from customers who have not actively acknowledged their participation in each separate dispatch event.

This, however, is the chief risk we see with the proposal. Customers who actively opt-in, and are registered as such, may also inadvertently increase their demand though this increase is not counted towards the delivered volume of the Unit.

With the different Opt-in/Opt-out methods, the reported results from the complete set of customers may not accurately reflect the real volumes delivered by the cohort attached to each DFS Unit.

Thank you for your insights on these topics. We believe that our proposal strikes the best balance between certainty for providers, choice for participants, and protection for end consumers.

5. **Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?**

No

6. **Do you have any other comments on the Demand Flexibility Service proposal?**

(1) We support the introduction of timestamps as part of the MPAN registration process. Timestamp formats should be clearly specified in the service and procurement terms. NGESO should

We thank you for your detailed feedback on the various topics. We have tried to answer these in the same order as they were outlined in the text.
specify the accuracy of timestamp required so that successful comparisons can be made in cases where there is a clash of ownership of a given MPAN between various DFS Providers. For instance, there are no rules to govern what happens in the case where one DFS Provider supplies a timestamp for a given MPAN at the resolution of 1 second or better and another DFS Provider submits a timestamp for the same MPAN at an hourly resolution. It is not clear in this case which DFS Provider should be allocated the MPAN.

(2) The service and procurement terms should make clear at what point a DFS Provider can consider an MPAN to be part of its portfolio. For instance, will this be when NGESO publishes updated MPAN schedules at 16:00 or will it be at some later time to account for consumers changing DFS Providers within event days?

Here is a scenario highlighting the issue. Consider the case where a DFS Event will happen on a given day, “D”:
- An MPAN is registered with DFS Provider A.
- The MPAN registers with DFS Provider B at D-2 (2 days before a DFS Event).
- On D-1 DFS Provider B submits the MPAN to update their Unit Meter Point Schedule.
- On D-1 an event is declared for D.
- Both DFS Providers A and B have bids accepted for the event.
- DFS Provider A issues an opt-in for the MPAN and is unaware at this point that the MPAN has registered to DFS Provider B.
- Later that day DFS Provider B is notified that the MPAN is accepted, and DFS Provider A is notified that the MPAN has been deregistered/rejected.
- It is unclear if DFS Provider B may now issue an opt-in for the MPAN for the event.
- If so, DFS Provider A must then rescind opt-in for the MPAN and notify the customer.

This may be simplified if the transfer of registration does not happen until D+1, regardless of the timing of the customer action or the timestamp of the action, so that the MPAN remains registered with DFS Provider A for the event scheduled for the following day.

We request that NGESO studies the

1. We thank you for your support on this topic. We have taken this feedback on board and updated our contract terms and guidance material to factor this in.

2. ESO have taken this feedback on board and provided greater clarity in our contract terms when MPANs are considered to be part of a portfolio.

3. Providers will be able to update their portfolio’s on a daily basis. We believe that the scenario outlined is very unlikely given the additional importance ESO has placed on providers around their messaging to providers, but parties do have the ability to update their submissions ahead of the daily cut off. ESO have received positive feedback through the consultation around being able to update MPAN portfolio’s on a daily basis from last year’s weekly process. We look forward to continuing to learn around bringing our processes and systems closer to real time.

4. ESO will not be sharing the timestamp of other parties when notifying providers of MPANs that have been removed from their portfolio. This aligns with how we handle/treat providers aggregated customer portfolios across our other services.

5. ESO have taken this feedback on board and sought to make the importance of provider communications to their customers clearer through updating our contract terms and communication principles. We hope that this will support the topic around customer journey and acquisition.

6. ESO have taken this feedback on board and adjusted the wording of this clause. ESO has outlined in our guidance material the various data templates that are required as part of the DFS and the personal data provided in these templates remains broadly in line with the information required last year. We view these personal data types as all the personal data required for the operation of the DFS as per the terms wording, and which the provider will be required to retain for 15 months. With regards to data retention, this was something that was in the terms last year, but we acknowledge the increase in retention period, which we regard as appropriate in the context of the DFS. We consider that retention of the data types specified in the data templates for 15 months for DFS purposes to be compliant with the GDPR. Should a customer deregister with a provider we do not believe that these changes place additional GDPR risk on the provider.
edge cases featuring a change of DFS Provider for a given MPAN close to the days containing a declaration of and dispatching of a DFS Live or Test event. Appropriate rules should be put in place to manage MPAN transfers which deal naturally with these edge cases.

(3) It is unclear if a DFS Provider can update the registration timestamp of an MPAN that is currently registered to them. The facility to do this is required to account for cases in which a customer switches from one DFS Provider to a new DFS Provider, then back to the original DFS Provider (or another client of the original DFS Provider) within the same day.

(4) It is unclear if the timestamp that a customer registers with a new DFS Provider will be included with the deregistration notice provided to the initial DFS Provider. This would be useful as it would allow both DFS Providers to verify that a new registration from the customer will be accepted before submitting it for a DFS event or test.

(5) The service and procurement terms should specify that each DFS Provider must market their participation in DFS by clearly indicating to their customers that regardless of the name of their particular service there is one Demand Flexibility Service in which they are all taking part.

Much of the confusion with duplicated MPANs during last year's DFS delivery window came about because many customers thought that there were a multitude of different and entirely separate services to which they could simultaneously sign up.

These terms, to which all DFS Providers must accede, should state that customers should be informed up front in clear language that all branded services are simply ways of signing up to the same DFS service. Such statements should not be buried in the Terms and Conditions, which few if any customers actually read, but up front at the point of signing up to the given DFS Provider.

(6) Paragraph 4.3.3 of the Procurement Rules states that each DFS Provider must
provide all such information as may be required by NGESO. If NGESO intends to request data from DFS Providers, then the exact data categories must be set out in the service and procurement terms before commencement of the new DFS service to enable this requirement to be factored into consumer Terms and Conditions.

(7) Paragraph 4.7 of the Procurement Rules sets out the conditions under which each Unit Meter Point can participate in a DFS unit. The terms “Domestic” and “Industrial & Commercial” are used here to indicate which participating MPANs must be Half Hourly Settled and which may be Non-Half Hourly Settled.

We ask that NGESO provides a more detailed breakdown of these terms.

The Balancing and Settlement Code (BSC) states that all SVA metering systems that are 100kW Metering Systems are to be Half Hourly metered and settled.

BSC Modifications P272/P322 state that, of the 8 Profile Classes which categorise all meters below the 100kW Metering System limit, Profile Classes 5-8 must be Half Hourly Settled.

Meters which fall under the description of Profile Classes 1-4 may be Half Hourly Metered and either the customer or the relevant Supplier may arrange for those meters to be Half Hourly Settled. However, this is not guaranteed to happen in all cases.

Profile Classes 1-2 are described in the BSC as being “Domestic”, and Profile Classes 3-4 are described as “Non-Domestic” with no connection to a Maximum Demand value. Profile Classes 5-8 are “Non-Domestic” and linked to a Maximum Demand value. There is no mention of the term(s) “Industrial & Commercial”, and so DFS Providers are left to make assumptions about which sites fit which categories.

We suggest that NGESO changes the definitions of “Domestic” and “Industrial & Commercial” to accommodate the BSC’s requirements for which sites must be Half Hourly Settled.
Profile Classes can be checked against each customer’s MPAN via any consumer bill. Customers with a 100kW Metering System will most likely be aware of this, as well as the fact that they are Half Hourly Settled.

In this way, the set of Domestic and Non-Domestic customers who are registered as Profile Class 1-4, who are not required to be Half Hourly Settled but who have the option to be so, will be clearly distinguished from those customers with meters registered as Profile Class 5 and above. This will serve to distinguish to both DFS Providers and to NGESO the set of MPANs which can legitimately be expected to be Half Hourly Settled.

We request that NGESO either sets out a clear list of definitions of the following terms, or makes clear within Paragraph 4.7 directly that the following definitions apply:

(i) “Half Hourly Settled Industrial & Commercial” customers are customers who are required to use either a 100kW Metering System or a meter within Profile Classes 5-8, and that both of these sets of customers are required by the BSC to be Half-Hourly Metered and Settled;

(ii) “Optionally Half Hourly Settled Industrial & Commercial” customers are “Non-Domestic” customers who are required to use a meter within the Profile Classes 3 or 4 and that these customers have the option but not the obligation to be Half Hourly Settled;

(iii) “Domestic” customers are customers who are required to use a meter within the Profile Classes 1 or 2 and that these customers have the option but not the obligation to be Half Hourly Settled.

In this way we believe that clear dividing lines may be drawn between the sets of customer MPANs that NGESO should and should not expect to contribute to ABSVD and to experience active price signals which will act to deter gaming.

We note here, at the same time, that all customers regardless of whichever of the above definitions they fit who sign up to deliver a DFS service via any non-
Supplier route will still have to furnish their DFS Provider with the details of their Supplier to enable ABSVD-related information to be gathered and passed to NGESO for DFS operation. We do not see how any amendments to the DFS Service Terms or Procurement Rules will compel Suppliers to provide this information in a timely manner. This may prove a bottleneck in non-Supplier DFS operation, as it does in non-Supplier DSR Capacity market participation.

To help with customer comms when someone switches:

“To enable clear customer service, we would like to be notified of which DFS provider our duplicate MPANs have been assigned to and what time the consumer signed up to that DFS provider. This is to support the case when a consumer queries our clients about why they are no longer signed up to DFS with them. With the requested information we can inform the consumers that they are no longer signed up to our client as they subsequently signed up with XX company for DFS at YY time.”

Respondent 27

<table>
<thead>
<tr>
<th>1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</th>
<th>Yes, we believe this is a step in the right direction to increase consumer involvement in providing demand flexibility services. Thank you for your feedback and support in regard to the development of this service.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?</td>
<td>What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)? Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective? If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive? We advocate for keeping the in-day adjustment as it allows for more flexibility services to be procured if required. N/A We agree that will be more effective. We would support a 4-6 hour period. Thank you for your feedback and support in regard to the development of this service.</td>
</tr>
</tbody>
</table>
3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

| Yes | No, we believe additional metering requirements disincentivises procurement of aggregate flexibility services. We believe that asset monitoring data which provides an accurate picture of the asset performance should be adequate without posing additional asset level metering requirements. Please note that this is an additional option we have introduced and not compulsory. Parties are still able to participate at the boundary meter and aggregate those. |

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

| Yes | We support the opt-out option. Thank you for your feedback and support in regard to the development of this service. |

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

| Yes | No |

6. Do you have any other comments on the Demand Flexibility Service proposal?

| Yes | No |

**Respondent 28**

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

   a) We see Demand Flexibility Service ("DFS") as part of a customer's journey to their Net Zero ambitions. It could also be the first step to a customer moving into Demand Side Response ("DSE") services.

   b) Yes, Energy Solutions agree that DFS could be a supportive balancing tool to help the ESO manage the system during peak periods. Demand-side flexibility is an important development and should be seen as a key growth area and driver to a cleaner and more flexible Power Grid.

   However, whilst we are supportive of the DFS changes proposed we do have some practical concerns about the interaction with other demand reduction tools. As we set out in late January to the ESO (via four questions submitted to the OTF PowerPoint Presentation (nationalgrideso.com) see slide 40 of 46 – answers to which we are still waiting from the ESO) and more recently in discussions with the ESO’s Market Change Delivery Senior Manager, we are concerned that the activation of demand reduction by the ESO could arise from at least three, entirely separate, tools: namely (i) DFS, (ii) contracted voltage control, such as via STOR / Project CLASS, and (iii) one or more of the Grid Code Demand Control measures as it is credible that one, two or all three tools

   Thank you for your feedback and agreement that DFS will be a supportive balancing tool. Please also find information relating to the query discussed at OTF. Given this is a wider ESO query we have also responded to you on this topic separately outside of the formal consultation.

   Use of different tools to manage the system:
   • The ESO believes that it is correct for it to preserve demand by taking every available commercial and market action (including accepting costs above the administered VoLL) as well as using emergency actions where necessary. Disconnection of demand will be a last resort emergency measure taken only when all other options are exhausted.
   • It is therefore possible that DFS could be used at the same time as STOR to manage margins and avoid the use of OC6 demand control. However, in an event where these actions are not sufficient (and all other actions have been exhausted) it is technically possible that we could use DFS, STOR and OC6 demand control at the same time.

   DFS interaction with OC6:
   • If DFS is operated at the same time as OC6 then ESO would settle DFS delivery as described within the DFS Service Terms.
   • Payment for the DFS will only apply to volumes that have registered to participate in the DFS and have delivered as per the service terms and procurement rules. The calculation for payment will be as per the terms of the
may be activated / operational simultaneously (depending on market/system conditions).

However, for the avoidance of doubt, if the ESO disagree with this point – that is the ESO believes that only one of the three tools (and never two or three tools) can be active at any one time then our concerns can be simple overcome by the ESO (a) confirming this in writing to all stakeholders and (b) bringing forward the requisite code changes to ensure that it cannot happen: absent such assurances (and code changes) from the ESO then this reinforces our point that this is a relevant concern.

Given our concern, the ESO needs to be open and transparent (both ahead of time and in real-time when using one or more of these three tools) to all stakeholders as to how it will (ahead of time) ensure and has (real-time) ensured that where it (the ESO) activates one or more of these three tools (i-iii above) it will be clear that this demand volume has not double or triple counted the same ‘MW’ of demand reduction.

For the avoidance of doubt, this (in our view) is the duty of the ESO - and not the providers of (i), (ii) or (iii) - to understand about the interactions of (i), (ii) and (iii) as only the ESO has visibility of it (the ESO) calling upon one, or two or all three tools simultaneously (something that, understandably, the providers of (i)-(iii) are not privy too) and to guarantee that GB consumers will not be charged for 2MW or 3MW (using a simple illustrative example) of demand reduction when only 1MW has actually been achieved (where more than one of the three tools, of reducing demand, has been activated by the ESO).

Notwithstanding the above, and as we also flagged recently to the Market Change Delivery Senior Manager, the ESO also need to do an appreciation of how DFS would work if, before, during or after DFS has been ‘called’, ESEC rota disconnections were also activated (at the direction of DESNZ, but instructed, real time, by the ESO) and, as with (i)-(iii) above, advise stakeholders as to what treatment will be applied by the ESO, in that situation, to DFS to avoid (using the simple illustrative example) 2MW or 3MW or 4MW of demand reduction when only service.

- This is to ensure that the voluntary demand turn down that we get through the DFS is not penalised during an OC6 demand control event meaning that we maintain the volumes for future events.
- Any volume that has not registered to participate in DFS will not be paid if disconnected through OC6 demand controls.

DFS and ESEC Rota-load Disconnection:
- The ESO considers that it will continue to use the DFS as long as the use of the service provides a benefit to managing margins through Winter 23/24.
- The response to the DFS Article 18 consultation is not able to comment more broadly on the treatment of other technologies/services that may be impacted as a result of ESEC rota disconnection.
1MW has actually been achieved whilst also ensuring that if the ESO is to pay for DFS during times when ESEC rota disconnection is active that it (the ESO) does not discriminate in its treatment of all affected customers whose demand has been reduced at this time.

To help illustrate the point, if DFS users have, say, been contracted to reduce their expected demand by 20% for one hour and a three hour rota disconnection occurs during the DFS period, then how does the ESO propose to deal with the demand reduction (at DFS sites) during that rota disconnection in terms of:

1) The demand reduced by 20% (due to rota disconnection) for one hour of DFS (paid / not paid);
2) The demand reduced by 20% (due to rota disconnection) for the other two hours (paid / not paid);
3) The demand reduced by 80% (due to rota disconnection) for one hour of DFS (paid / not paid); and
4) The demand reduced by 80% (due to rota disconnection) for the other two hour (paid / not paid)?

In the context of (1), (2), (3) and (4) it is also important for the ESO to clarify how it proposes to treat the equivalent demand reduction achieved by other, non DFS, users (paid / not paid)?

Finally, on a related point (in terms of equivalence of treatment for delivery / non-delivery) the ESO should also clarify (depending on its answers to 1-4 above) how the ESO propose to treat embedded generation and storage which is unable to export / operate during a rota disconnection situation (paid / not paid)?

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?
### In-day Adjustment:

Thank you for your insights and feedback and support in regard to the development of this service.

| 2.1. | Seems to make sense. Helps avoid manipulation and gaming. As it was, the within day adjustment potentially increased the cost of DFS without delivering extra demand reduction. |
| 2.2. | Having the baselines for domestic and for Industrial & Commercial participating customers being calculated in the same manner is a good step. The playing field should be level. |

| b) | 2.1 Yes, we agree to the in-day adjustment removal as this creates a greater level of accuracy of the service with the removal of the non HH domestic meters. Also removing the gaming risk. |
| 2.2 | As a prudent and diligent provider we have a high level of self-regulation that ensures we aim to be clear and transparent over our participation in the service. We will always aim to be as accurate as possible in our forecasts and delivery and expect others to do the same. |
| 2.3 | This may be a more effective disincentive to gaming as consumers would need to alter their behaviour over a longer time period. It would be more costly for users to increase their usage over a longer period, which would reduce or negate any potential benefit or payment during the event period. |
| 2.4 | An analysis could be undertaken to understand the minimum adjustment period required such that any incentive payments received during the event period would be negated by the increased cost during the within-day adjustment period. Alternatively, if the primary purpose of the within-day adjustment is to allow for changing weather conditions, the within-day adjustment could use regional weather data directly in a regression model to correct the baselines. This would remove the need to use user's within-day data, although it would complicate the baseline methodology and require external data to be used. |

| 3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks? |
| a) | We agree with the proposal to enable sub-metering in DFS. Allows participation for more complex sites. How will NG ESO police/manage that asset meters and boundary meters are not |

Sub-metering / Asset Metering: Thank you for your feedback and support in regard to the development of this service.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1. | Presented for DFS participation? Again, how will NG ESO know whether all asset meters behind the boundary meter have been entered?  
   b) We agree that the proposal is improved with the inclusion of asset metering particularly on more complex and integrated BTM sites. This allows a more accurate assessment of delivery however it should be recognised that only a small proportion of potential customers will have asset metering available. Allowance of asset sub-metering is consistent with other ESO services such as DFFR too. |
|   |   |
| 4. | Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?  
   a) As long as the rules are explained to the participants, then we see no issues with opt in/ opt out. If customers do not opt in, then no settlement should be provided regardless of if there is demand reduction.  
   b) We don’t fully see the value in this. Available volumes from opted in/out providers would already be reflected in adjusted bids at the DAH/intraday day stage. It is the providers core role to ensure accuracy of available volumes and delivery, which necessitates close proximity to client’s availability.  
   Opt out/Opt in: Thank you for your thoughts on this topic. We recognise that based on industry feedback this is a feature that some parties find valuable and appreciate this is an option parties/consumers can choose between. |
|   |   |
| 5. | Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?  
   a) No comments.  
   b) No comments. |
|   |   |
| 6. | Do you have any other comments on the Demand Flexibility Service proposal?  
   a) We support the introduction of timestamps as part of the MPAN registration process. Timestamp formats should be specified in the service terms. NGESO should specify the accuracy of timestamp required so that successful comparisons can be made in cases where there is a clash of ownership of a given MPAN. It should be clear in the terms, at what point a DFS provider can consider an MPAN to be part of its portfolio i.e., when NGESO publish updated MPAN schedules at 16:00 or some later time to account for consumers changing DFS providers on event days.  
   b) (1) Allowing 1 Hour only from ‘service requirement instruction’ to submit bids, is a very small timeframe – could this be lengthened to ensure sufficient time to assess and update Bid volumes – particularly for those with significant client bases; (2) Some customers may need a |
|   | Thank you for your feedback. We have taken this on board and added further clarity regarding the timestamp format in our contract terms and guidance material. We have also added clarity around the point at which portfolio changes become effective following feedback.  
   With regards to the bid closing window, ESO recognise that when utilising this service under a live event our ENCC will operating in challenging circumstances through calling enhanced actions and believe that a minimum of 60 minutes as outlined in the contract terms is an appropriate timescale. ESO have also committed when possible to share an early view through the Anticipated Service Requirement Notice which should support parties readiness but acknowledge that this may not always be possible depending on operational conditions.  
   We acknowledge the comments regarding within day adjustments and confirm this has |
longer notice period in which to prepare any delivery and hence will need the day-ahead commitment with which to ready their DFS preparation (people, plant, resource). It should be noted that in-day adjustment does not help in all cases.

<table>
<thead>
<tr>
<th>Respondent 29</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</td>
</tr>
<tr>
<td><strong>2.</strong> Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?</td>
</tr>
<tr>
<td>- What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?</td>
</tr>
<tr>
<td>- Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?</td>
</tr>
<tr>
<td>- If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?</td>
</tr>
<tr>
<td><strong>3.</strong> Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</td>
</tr>
<tr>
<td><strong>4.</strong> Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</td>
</tr>
<tr>
<td><strong>5.</strong> Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</td>
</tr>
<tr>
<td><strong>6.</strong> Do you have any other comments on the Demand Flexibility Service proposal?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respondent 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.</td>
</tr>
<tr>
<td>We welcome the continuation of the Demand Flexibility Service (DFS) into winter 2023/24. We recommend that NGESO works with stakeholders to evolve the DFS into an enduring flexibility service which considers transmission and distribution constraints.</td>
</tr>
<tr>
<td>During winter 2023/24, we strongly encourage NGESO to repeat the consumer research undertaken for participants in the DFS during winter 2022/23.</td>
</tr>
<tr>
<td>We agree with the Centre of Net Zero Thank you for this feedback. We will take on board the comments around how we can continue to learn about the benefits and insights into flexibility.</td>
</tr>
</tbody>
</table>
recommendation to require supplier participation in the DFS. Similarly, all providers in the DFS should be mandated to participate in all aspects of the consumer research as a condition for participating in the DFS. There is no commercially sensitive information in the CSE consumer research.

We recommend that the consumer research explores how people adjusted their demand, e.g. which Energy Smart Appliances they turned down. This will help NGESO and providers to offer products that maximise flexibility.

We would like to see the consumer research explore any regional variations in participation in the DFS. Such variation would help DSOs (or RSPs in future) and energy suppliers to understand where demand may be more responsive to price signals.

We recommend that NGESO considers how to maximise the potential flexibility offered up by small businesses. This may include promoting the scheme with business groups, as well as non-domestic-only suppliers.

Finally, we agree with the recommendation from the Centre for Net Zero to require DFS suppliers to compensate households for flexibility at a minimum rate. We recommend that this involves a cash payment or discount on bills, putting flexibility on the same footing as import and export.

<table>
<thead>
<tr>
<th>2.</th>
<th>Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?</td>
</tr>
<tr>
<td></td>
<td>Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?</td>
</tr>
<tr>
<td></td>
<td>If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?</td>
</tr>
<tr>
<td></td>
<td>We recognise the potential gaming issue that NGESO is trying to resolve. We recommend that any adjustments to the scheme design consider the impact on participation rates and end-users’ understanding of the scheme, as well as the impact on gaming.</td>
</tr>
</tbody>
</table>
| | In the medium-term, we expect turndown

Thank you for this feedback and support in the development of this service.

We take on board the feedback regarding wider reform and hope that our Power Responsive campaign that is focussed on precisely these areas will help support.
<table>
<thead>
<tr>
<th>3.</th>
<th>Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We recommend that all meters, both asset and boundary meters, participating in the DFS are at least read on a half-hourly basis. NGESO could ask for evidence from suppliers and aggregators to show that meters are actually read on a half-hourly basis. We encourage NGESO to explore whether meters, both asset and boundary meters, that participate in the DFS are settled half-hourly. As the DFS develops into a commercial product after winter 2023/24, we recommend exploring whether requiring half-hourly settlement for DFS participation would drive more suppliers to move customers into elective half-hourly settlement.</strong></td>
<td><strong>As part of the service development ESO has facilitated the participation of asset metering with a number of rules to ensure we have appropriate protections in place. We are pleased these are welcomed from industry. Thank you for sharing your feedback on the topic of metering, we have taken your comments into consideration. Please refer to Appendix 1 which outlines our position on this topic, following the consultation review.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.</th>
<th>Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We agree that people should be able to opt-out per DFS delivery period. This is consistent with the HomeFlex code of conduct for flexibility providers.</strong></td>
<td><strong>Thank you for your feedback and support in regard to the development of this service.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.</th>
<th>Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>6.</th>
<th>Do you have any other comments on the Demand Flexibility Service proposal?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We recommend an earlier review of the DFS than 2025. We recommend that NGESO works with stakeholders to evolve the DFS into an enduring flexibility service which considers transmission and distribution constraints. We also recommend that the DFS requires that people receive real money for offering their flexibility. This would put flexibility on a level playing field with import and export.</strong></td>
<td><strong>ESO will continue to develop and evolve the DFS and this will include learnings from the coming winter. We also have a newly formed Future of Flexibility Strategy team who are focussing on the longer-term vision and direction of flexibility. Please note that whilst ESO does pay for all delivered volume to participants the commercial offering parties make to their customers is their own commercial choice. ESO has stipulated in the contractual terms this year that all parties must share on a confidential basis with ESO what incentive they are offering their customers.</strong></td>
</tr>
</tbody>
</table>

---

**Respondent 31**

1. **Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.**
   Removed for confidentiality
2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Removed for confidentiality

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Removed for confidentiality

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Removed for confidentiality

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

None not discussed above

6. Do you have any other comments on the Demand Flexibility Service proposal?

Removed for confidentiality

Respondent 32

1. Do you agree with the proposal for the Demand Flexibility Service? Please provide rationale.

Removed for confidentiality

2. Do you agree with our proposal to remove the in-day adjustment for the baseline methodology, and do you agree this effectively mitigates baseline gaming risks?

What impact does this have on your ability to accurately deliver the contracted demand reductions in the delivery period(s) (including if the weather on the event day is different to the preceding baselining days)?

Alternatively, if we were to extend the in-day adjustment period, would an adjustment period covering the whole of the event day other than the DFS delivery period(s) be more effective?

If not, what length / period do you suggest would be suitable, noting that it needs to be longer than the previous 3-hour period to provide a sufficient economic disincentive?

Removed for confidentiality

3. Do you agree with our proposal to enable sub-metering (asset metering) as part of DFS? Are there other risks we should be aware of in addition to the identified meter quality, double counting and gaming risks? How well does our proposal mitigate those risks?

Removed for confidentiality

4. Do you agree with our proposal to enable opt-out per DFS delivery period? Do you foresee any risks and impacts on having a choice between opt-out or opt-in per DFS delivery period?

Removed for confidentiality

5. Annex 1: Do you have any comments on the highlighted Article 18 mapping for the Demand Flexibility Service?

None not discussed above

6. Do you have any other comments on the Demand Flexibility Service proposal?
ESO experienced a record number of consultation responses to our DFS consultation. Given the breadth of topics that we received feedback on and the number of varying views we thought it would be beneficial for parties if we laid out some of the most popular topics that we received feedback on throughout parties’ responses and outline our final position. We hope this information is useful context alongside our final published suite of documents that are now pending approval from the regulator.

Baselines: Within-day adjustment

We included the removal of the within-day adjustment period for domestic participants in the consultation, in response to the feedback we received over the course of developing the new iteration of the service. In the consultation, we asked whether this would have negative impacts in baseline accuracy, and whether a longer adjustment period might be preferable.

The reason for the proposal was to mitigate the perverse incentive for end consumers to “boost” their baseline by artificially increasing their consumption in the adjustment window, resulting in higher payments without any additional reduction in their demand during the delivery window.

Feedback indicated that in general, respondents favoured the consulted position of removing the within-day adjustment period. Analysis indicates that there is only a small difference in accuracy between the different options of the status-quo (3hr period), a longer-period (e.g., 10hrs) and removing the adjustment all together. It was acknowledged that on especially cold days it might be slightly harder for end consumers to reduce their demand below their baseline. However, most respondents view was that the trade-off is worthwhile, as removing the adjustment means that baselines can be calculated and communicated in advance, alongside dispatch instructions, simplifying and improving the end consumer experience.

We are therefore retaining the proposal to remove the within-day adjustment period for domestic participants.

Baselines: Half-hour settlement

We included a requirement that all participating meters must be either a Half-Hourly Settled (HHS) boundary meter, or a sub-meter behind a HHS boundary meter. An exception had been included for domestic boundary meters and an additional exception for Industrial and Commercial customers in Profile classes 3 & 4, based on the challenges and timescales associated with Market-wide Half-Hourly Settlement (MHSS) and lack of mandated changes to certain groups of users.

The reason for the proposal was to mitigate the perverse incentive for end consumers to “boost” their baseline by moving consumption to the peak of the day from other periods, resulting in higher payments without any additional reduction in their demand during the delivery window, and increasing overall demand on the system on non-event days, driving higher wholesale and balancing costs in general, and making it more likely that we encounter margin shortfall and the need to use DFS.

Most respondents to the consultation understood the rationale, that the perverse incentive would lead to negative outcomes, and that some form of mitigation is necessary. However, there were a range of views on the manner and extent of that mitigation, ranging from only requiring half-hour metered data through to full support of the proposal. Many respondents raised that this increases the difficulty of providing DFS on domestic sub-meters, owing to the small proportion of HHS domestic consumers.
The proposed alternative or only requiring half-hour metered data does not provide a financial incentive to avoid the perverse incentive, and so is not a viable option. Another proposed alternative was to require Time of Used (ToU) tariffs rather than HHS. However, analysis of the available tariffs indicates that (1) very few tariffs are available, and (2) where they are available, they do not fully mitigate this behaviour due to caps of the unit price, meaning the increased cost of moving demand would be more than offset by the revenue from DFS tests.

We believe that directly reflecting the behaviour of end consumers on suppliers through HHS will provide the right signals to ensure that ToU tariffs are offered to participating end consumer in such a way that the right price signals are in place to avoid the perverse incentive.

We are therefore retaining the proposal that all participants are either a Half-Hourly Settled (HHS) boundary meter or a sub-meter behind a HHS boundary meter, with an exception for domestic boundary meters and an additional exception following consultation feedback for those in Profile Class 3 and 4. ESO recognise that the majority of industrial and commercial users have been moved to HHS through various code modifications, however there is a proportion of volume left stranded under profile classes 3 & 4 which is potentially able to deliver valuable flexibility. Recognising that industry is yet to transition the majority of these two profile classes ESO believe they should be subject to the same exception to those in a similar position in the domestic landscape and maximises the access to new additional volume.

Providers (including aggregators) can still participate in DFS on the boundary meter rather than sub-meters, as many successfully did in winter 2022/23 and plan to do again for this winter.

**Sub-metering (also known as asset metering)**

We included the ability for providers to participate with one or more sub-meters behind a boundary meter, so long as providers collectively enter all sub-meters that they control behind that meter. Participation can be either at the sub-meter level or boundary-meter level for a particular boundary meter, but not both together.

This is to allow providers to deliver DFS from assets that they have control over, removing the noise and uncertainty of the impact of other parties that also operate behind the same boundary, while mitigating the risks around double counting of delivery and the ability to game the service by shifting load from one sub-meter to another.

We have received positive feedback from a range of participants that unlocking sub-metering is a good step for DFS, and that it will help deliver new volume and new entrants into the service.

**Boundary Meter data for audit**

We included a requirement that providers participating with a sub-meter must be able to provide data for the associated boundary on an ad-hoc basis.

This is for audit purposes and to give us access to data to be able to learn how sub-meter behaviour and boundary meter data correlate (or not), improving our understanding of how flexibility works at various levels, and the potential to detect any form of gaming that we have not identified, or not successfully mitigated.

This has been widely supported by most respondents who are keen for the ESO to learn from DFS and to grow the collective knowledge and understanding of participation in the service at different metering levels. A few respondents noted that this added complexity and cost of their operation, and that it can be difficult to obtain data.

We are retaining the requirement that providers participating with a sub-meter must be able to provide data for the associated boundary on an ad-hoc basis for audit purposes in the terms. As many providers (including aggregators) successfully participated in DFS on the boundary meter in winter 2022/23, we
believe that the requirement for audit data is achievable and provides overall value to the service, both for the short-term and for the future developments of flexibility.

Opt-in and Opt-out

We included the option for providers to offer their end consumers diverse ways of signalling their intent to participate in a DFS event, either “opt-in” (per the winter 2022/23 terms), or a new optional “opt-out” version.

For “opt-in” consumers, their demand reductions must only be included in settlement if they actively said “yes” to participating in advance of a DFS event (i.e., they opted in). Any demand increases from an “opt-in” consumer can be excluded from settlement.

For “opt-out” consumers, both demand decrease or demand increase must be included in settlement, unless they said “no” to participating in advance of the DFS event (i.e., they opted out) in which case both decreases and increase must not be included.

The addition of an “opt-out” option was welcomed by respondents, as it gives an additional choice that may be more suitable for some end consumers. Some stated that they are unlikely to use the new option, but that does not preclude the option being available and it was recognised this method is a positive for improving automation within the flexibility landscape.

Stacking

The Procurement Rules do not allow stacking of Capacity Market Units (CMUs), assets that participate in the Balancing Mechanism, or assets that provide Balancing Services to the ESO or similar services to third parties (e.g., DNOs) in the Demand Flexibility Service. These were part of the original terms from winter 2022/23.

We had a number of responses to the consultation indicating that opening up DFS to CMUs would facilitate the transition of assets into balancing services for the first time, as a stepping-stone to the Balancing Mechanism, ancillary services, or other markets. Feedback also indicated that respondents feel that DFS events and Capacity Market events are not linked.

DFS will only be used in a live event when we expect that all normal market mechanisms and everyday actions will be insufficient to meet the total demand + reserve requirement, i.e., with insufficient margins. In this scenario of insufficient margin, we would also expect a Capacity Market Notice to be automatically issued.

We are therefore retaining the stacking exclusions, on the basis that DFS is still an enhanced action on top of normal market mechanisms and everyday actions, including the Capacity Market, and so allowing such stacking would not bring in new volume that we are seeking to access.

The ESO will continue to work with industry to facilitate CMUs into our existing everyday actions, such as the Balancing Mechanism and our reserve and response services. Examples of this work include our Power Responsive teams’ trials of electric vehicles in the BM and our Market Change Delivery functions response and reserve reform workstreams. We welcome parties to continue to engage in these forums and help us lower barriers to entry for parties who are seeking to stack CMUs with other commercial services.

MPAN duplication process

We included a rule that the providers with the latest timestamp for the sign-up of a meter would be deemed to be the sole provider for that end consumer, and that the provider with an older sign-up timestamp would be obliged to de-register the meter from the service.
This was introduced to provide a clear, unambiguous rule to avoid MPAN ownership duplication, which provided challenges in winter 2022/23 to providers, end consumers and the ESO. Most respondents were largely in favour of the rule. Parties also welcomed the ability to amend portfolios daily through the enhancements to the duplication process and additional automation options.

**Closer to real-time procurement**

We included the ability for the ESO to run the procurement of DFS at different lead times, aiming to bring this closer to real-time. The ESO plan to use one of three different lead times for a DFS service requirement, namely: Day Ahead (afternoon), In-day (morning) and In-day (lunchtime). These will have an associated time for ESO to publish our requirement, a deadline for bid submissions (at least 60 minutes after the requirement is published), and the time for the ESO to publish the results. These times will be specified and published in the Service Guidelines, so that they can be updated as the service grows and evolves over the coming years based on our learnings.

ESO also see excellent value in moving flexibility towards gate closure and BM timescales. We look forward to the learnings of what adding within-day capability will offer to the DFS from a volume, pricing, engagement, and operational perspective. Two within-day procurement options have been proposed so that we can understand what different lead times offer in terms of volumes and prices. These options also allow us to monitor how close to real time providers can participate and provides the ESO sufficient flexibility to assess and access the requirement closer to real time.

Respondents welcomed the introduction of closer to real-time procurement as a stepping-stone for getting DFS procurement more closely aligned with gate closure and other Balancing Services, noting the importance of learning how this affects the available volume.

**Process improvements & automation**

We included the option for providers to use more automated process for participating in DFS, spanning the entire process. This aims to improve the provider experience and reduce the workload and administrative burden associated with running the service.

This has been well received by industry, who see it as a positive step forward.