

Public

# Demand Flexibility Service

Participation Guidance Document  
V.16

1 July 2025

## Contents

Version Control.....	5
Introduction.....	7
1.1 Changes to The Demand Flexibility Service and key topics for awareness .....	7
In-Merit Margin Tool.....	7
Procurement Timescales .....	8
Stacking.....	8
Sub-metering (Asset Metering).....	9
Performance Incentives.....	10
Process Automation .....	10
MPAN Duplication Process.....	10
Unit capacities and demand reduction volumes.....	10
Data and Process .....	11
1.2 Demand Flexibility Service Overview.....	11
Eligibility for DFS.....	11
DFS Procurement Documentation.....	12
DFS Units.....	12
2. Onboarding .....	13
2.1 Onboarding steps to participate in DFS.....	13
2.1.1 DFS onboarding process.....	14
2.2 Single Market Platform .....	16
Participants in DFS.....	16
2.3 DFS IT process check .....	16
2.4 Register as a DFS provider.....	18
Unit Meter Point Duplication.....	19
2.6 Settlement and Registration process requirements.....	<b>Error! Bookmark not defined.</b>
2.6.1 New provider: bank registration details.....	20

## Public

2.6.2 Applicable Balancing Services Volume Data (ABSVD) .....	21
Industrial and Commercial (I&C) .....	21
Domestic.....	22
2.6.3 Settlement Calendar.....	23
3. Participation in DFS.....	24
3.1 DFS high-level weekly process .....	24
3.2 Communications between Registered DFS Participants, industry and the NESO .....	25
NESO Data Portal communications .....	25
DFS file transfers.....	25
3.3 DFS Tests & Guaranteed Acceptance Price (GAP) .....	27
3.4 Submitting DFS Bids .....	28
3.5 Data Portal Dataset & API .....	29
3.6 Paying for Delivered Demand Reduction .....	30
3.7 Contact details .....	33
Appendix 1 – General information on file submissions.....	34
DFS Assessment Platform (NESO DFS SharePoint Site).....	34
Using and understanding the templates.....	35
Accepted files and naming conventions.....	35
File column headings and their descriptions.....	36
GSP Zones for reference .....	40
Common issues when saving Unit Meter Point Schedule file.....	40
Appendix 2 – Detailed information on file submissions .....	42
1. Weekly Indicative Forecast .....	42
2. DFS Bids .....	43
3. Weekly Settlement Submission .....	44
4. Unit Meter Point Schedule Submissions.....	46
5. File Validation Failure – communications from NESO.....	50
Appendix 3 – NESO communications to Registered DFS Participants and Industry.....	51

## Public

1. Anticipated DFS Requirement Notice (ARN) .....	51
2. DFS Service Requirement .....	51
3. DFS Utilisation Report (DFS Acceptances) .....	53
Appendix 4 – API Submission.....	54
Appendix 5 – Example Operational Baseline calculation .....	54
1. Find Eligible Days (For both I&C and domestic consumers).....	54
2. Unadjusted baseline (For both I&C and domestic consumers) .....	55
Appendix 6 – Post Clock Change .....	56
Example .....	56

## Version Control

Version	Date	Change
V.6	02/02/23	DFS Winter 22/23
v.7	29/08/23	DFS Winter 23/24: Updates following Art 18 Consultation.
v.8	04/10/23	<p>2.6.2 ABSVD – Industrial and Commercial further clarification on definitions</p> <p>2.6.2 ABSVD – Domestic added “Settlement file” in last paragraph</p> <p>3.1 DFS high level weekly process – updated graph</p> <p>3.5 Data Portal Dataset &amp; API</p> <p>Appendix 1 – Further clarification on ABSVD fields definitions</p> <p>Appendix 2 – 3. Weekly Settlement Submission added Validation number 11 repeating last paragraph of 2.6.2 ABSVD Domestic section for clarity</p>
v.9	14/11/23	<p>Appendix 2 – 3. Clarified naming convention and maximum number of rows for each Weekly Settlement Submission File</p> <p>Appendix 2 – 4. Added description of Aggregated Incentive Values file</p> <p>Appendix 2 – 5. Added clarification of different stages of Unit Meter Point Schedule validation checks</p>
v.10	27/11/23	Appendix 2 – 4. Added naming information on the Aggregated Incentive Values file
v.11	11/12/23	<p>Appendix 2 – 4. Further clarification on Aggregate Incentive Values file</p> <p>Appendix 2 – 5. Added paragraph mentioning regular Unit Meter Point Schedule portfolio emails.</p>

## Public

v.12	17/10/24	Changes throughout document to reflect movement away from an enhanced action to an in-merit margin tool.
v.13	26/11/24	Added section Unit Meter Point Queries  Added Participating Meter Electricity Supplier to the section File column headings and their descriptions.
v.14	17/03/25	Appendix 6 – Post Clock Change  Added section on post clock change requirements
v.15	02/06/25	Updated Appendix 6 – move all data files to local time.  Changed the DFS query email address to the new NESO address: <a href="mailto:demandflexibility@neso.energy">demandflexibility@neso.energy</a>  Added the new settlements query email address which goes live on 9 June.
v.16		Updated the link for the form to become a registered provider  Updated new settlements & BMU registration emails: <a href="mailto:settlement.queries@neso.energy">settlement.queries@neso.energy</a> <a href="mailto:bmu.registration@neso.energy">bmu.registration@neso.energy</a>

## Introduction

The Demand Flexibility Service (DFS) was introduced in winter 22/23 to allow the ESO (now NESO) to access additional flexibility when the national demand is at its highest, typically during peak winter days. This new innovative service supports suppliers/aggregators, as well as industrial & commercial users, to incentivise end consumers for voluntarily flexing the time when they use their electricity.

As part of the ongoing review and evolution of DFS, we have taken the step to move the service to an in-merit margin tool. As a result of moving away from a winter contingency enhanced action, we have been able to make several developments to the service which are covered in this document.

This Participation Guidance Document should be read in conjunction with the following documents. For the avoidance of doubt if there is any confusion the below documents take precedence:

- The DFS Procurement Rules;
- The DFS Service Terms; and
- The DFS Communication Principles.

These can be found on the Demand Flexibility Service webpage: [Demand Flexibility Service \(DFS\) | National Energy System Operator \(neso.energy\)](#). Specifically, in this Participation Guidance Document, we refer to the Procurement Rules and Service Terms we included as part of our Article 18 submission. These terms and conditions are currently under review by Ofgem, which will make a decision as to whether approve these by 24 November.

## 1.1 Changes to The Demand Flexibility Service and key topics for awareness

### In-Merit Margin Tool

On 6 June 2024, we published our [early view of winter](#), providing early visibility of our security of supply outlooks for winter 2024/25. Our assessment shows that margins are expected to be adequate and within the Reliability Standard for the coming winter. Based on this, we have changed DFS from an enhanced action service to an in-merit margin service for peak demand alongside trading and BM options. This will ensure that participating and new flexibility volume will continue to see a route to market whilst being assessed against the alternative options available.

We have published a DFS Market Guidance document for educational purposes to provide an overview of what margin, why we need it, and how we will consider DFS against alternative margin tools.

## Procurement Timescales

We have transitioned the service to a within day only procurement/dispatch structure, aligning with our wider ambitions to procure as close to real time as possible. Unlike previous iterations of the service, we will no longer be setting a fixed time from which a Service Requirement has to be issued to the market. However, we do recognise that early in the lifecycle of these changes there will be benefits in offering consistency around these to last years' service as to continue to grow volume and confidence in delivery.

We therefore anticipate that any Service Requirements will be issued mid to late morning for a potential evening peak requirement. Building this flexibility within the contractual terms provides us the option to trial different notice periods over time and from an operational standpoint should there be significant changes on the system we still have the capability to access volume later in the day if required. In line with previous years, we will continue to only run one tender for a specific delivery period.

When a Service Requirement is published, this will include the deadline for bid submissions (at least 60 minutes after the Service Requirement is published). We will endeavour to publish results one hour after the bid submission deadline. These results will be shared on our Data Portal to ensure transparency with industry on any actions.

### Publishing an Anticipated Requirement Notice (ARN)

It is also worth noting that whilst we have retained the option to publish an ARN, it is not a required part of the service. As DFS is no longer an enhanced action it should compete on its own merit against alternative actions which do not get advance notice of a requirement. With the service now being called within day, an ARN would only be issued a short time ahead of the actual requirement going out and so we consider it would be of limited value.

## Stacking

We have unlocked the ability to stack DFS with the Capacity Market (CM) and DNO Flexibility Services. With DFS moving to an in-merit service, unlocking stacking with the CM promotes a level playing field for DFS participants with other market participants by allowing access to revenue streams the other market participants have access to.



A list of permitted services that can stack with the Demand Flexibility Service (DFS) can be found on the [DFS Website](#). Click the Guidance Documents tab and look for the latest version of the [DFS Stacking List](#) document.

## Sub-metering (Asset Metering)

For winter 23/24, we incorporated the ability for providers to participate in DFS with sub (asset) meters, as well as boundary meters. This is to allow contributions to DFS from assets that they have control over but removing the noise and uncertainty of the other processes/participants that operate behind the same boundary meter. Providers can still choose to participate only at the boundary meter if they prefer.

Conditions for participating with sub-meters:

- The sub-meters are of the same or better standard than a boundary meter (E.g. they adhere to Elexon's Code of Practice (COP) 11 for meter standards). For further information, please refer to Elexon's website – [New BSC Code of Practice \(CoP11\) sets standards for accuracy of Asset Metering Systems – Elexon BSC](#)
- The associated boundary meter is capable of providing half-hourly meter readings.
- The sub meter(s) and associated boundary meter are not participating at the same time;
- Providers must enter all sub meters they have control of behind a boundary meter into the service – this means a collective *opt-in* or *opt-out* per event for those sub meters.
- Providers must be able to give us the boundary meter data on request for ad-hoc audit purposes, as well as the sub meter data.

Following feedback from industry, NESO have now removed the requirement for asset meters to be associated to a half-hourly settled (HHS) boundary meters to further widen the opportunity for asset meter participation.

Due to the inclusion of sub meters, we will refer to all meters under the general term 'Unit Meter Point' rather than MPAN where applicable.

## Opt-in / Opt-Out

Providers can offer their end consumers different ways to indicate their intent to participate in a DFS event – they can be of the "*opt-in*" type, which means they must give confirmation of participation for each event. Alternatively, they can be "*opt-out*" whereby default, the end consumer participates in the event unless they explicitly opt-out.

In other words, consumers of the "*opt-out*" type, participate on each event by default, unless they choose to opt-out.

The settlement files should only contain data for participating meters. That is, those that opted-in, or that didn't opt-out for an event.

Regardless of whether a consumer is of type “*opt-in*” or “*opt-out*”, both demand reductions or demand increases must be included in their related settlement files.

## Performance Incentives

To incentivise good performance from participating units, NESO has introduced a performance incentive structure that works as follows:

- No penalties when delivery is in the range between 50% and 120% of procured quantities.
- Reduced payments for delivery between 25% and 50% of procured quantities.
- Zero payments for delivery below 25% of procured quantities.
- Cap for delivery above 120% of procured quantities.

Reflecting on feedback received as part of the EBR Article 18 Consultation process, we will limit the volume for which opt-out participants are exposed to penalties. The cap will be 100% of the bid quantity.

## Process Automation

We’ve continued to develop automation and have enhanced API capabilities for interacting with the service. Providers will be able to submit their Weekly Indicative Forecast and Weekly Settlement files via API. Providers will also be able to receive the DFS auction results, meter Portfolios, Summarised Settlement files and Summarised ABVSD reports via API. Providers can use SharePoint or API for their file submissions.

## MPAN Duplication Process

Greater clarification has been incorporated into our contractual documents outlining that providers with the latest timestamp for the sign-up of a Unit Meter Point 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 their 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 NESO.

We have introduced enhanced automation around this process of which we share more information on later in this document and separately on our DFS webpage.

## Unit capacities and demand reduction volumes

We are proposing to allow providers to register units with capacities specified in MWs to one decimal place. Similarly, we propose to allow providers to bid demand reduction volumes in MWs to one decimal place. The previous Procurement Rules restricted unit capacities and demand

reduction volumes to integers. We are not proposing to change the minimum and maximum unit capacity and bid size (1MW to 100MW).

We did not include this proposal in our submission document published on 25 September, though we have since submitted this proposal to Ofgem for its approval. We think this change can offer providers more flexibility and improves the effectiveness of our performance incentive regime, especially for smaller demand reduction volumes.

## Data and Process

We've made a number of data and process changes to DFS moving forward.

- Removing the obligation for providers to send an incentive file sharing how providers opt to incentivise/pay their customers.
- Include and share delivery data from all unit meter points that have participated in events.
- Unit meter points can only be allocated to a single DFS Unit.
- Reflecting feedback received from industry as part of the EBR Article 18 Consultation process, we have moved the Unit Meter Point Schedule validation from 11:00am to 9:00am. We consider this is an effective change as it will allow all new accepted Unit Meter Points following validation to participate in the service on that day.

## 1.2 Demand Flexibility Service Overview

### Eligibility for DFS

To participate in the DFS, Registered DFS Participants, and associated DFS Units (and their constituent Unit Meter Points), need to meet the below:

1. Have half-hourly metering.
2. DFS units must be able to respond for a minimum of 30 minutes.
3. Be half-hourly settled for all meters, except providers participating on a domestic boundary meter/sub-meter or where Industrial and Commercial Unit Meter Points are in Profile Classes 3 or 4.
4. Unit Meter Points cannot be allocated to more than one Registered DFS Participant or DFS Unit.
5. Cannot form part of a BM Unit (*except a Supplier Base BM Unit*).

6. Cannot be providing any NESO Response or Reserve balancing services.
7. 1 MW minimum DFS Unit size, up to 100 MW maximum DFS Unit size. Parties can register multiple units.
8. Be able to respond to an instruction for within-day delivery.
9. DFS Units can be aggregated on a national basis.

## DFS Procurement Documentation

To complete registration via the Single Markets Platform (SMP), providers will be required to accede to the DFS Procurement Documentation through submission of the DFS Declaration and Adherence Form.

The DFS Procurement Documentation consists of:

DFS Procurement Rules; and the

DFS Service Terms.

Other relevant documentation include:

The Communication Principles

The Common Flexibility Service Terms and Conditions:

[ON21-WS1A-P4 Standard Agreement for procuring Flexibility Services \(Version 2\) \(13 Aug 2021\).docx \(live.com\)](#)

The Balancing Services Glossary of General Terms and Rules of Interpretation:

<https://www.nationalgrideso.com/document/246716/download>

*Please note, these documents are currently under review and when the new versions go live, we will update these links.*

## DFS Units

A [guidance document](#) for how to register DFS Units on the SMP is accessible on our [webpage](#).

Section [3.4](#) outlines how you can structure your DFS Units when submitting DFS Bids and allocating Unit Meter Points to DFS Units.

It is the providers responsibility to ensure that unit size and details are kept up to date in SMP to reflect the size of a provider's portfolio. NESO recognise this was not standard practice for previous iterations of DFS but would flag the importance of ensuring this information is kept up to date.

## Onboarding

This section explains what steps are required to become a Registered DFS Participant and be ready to participate in the DFS.

### 2.1 Onboarding steps to participate in DFS

- Register on Single Market Platform:
  1. Register as a provider on the Single Market Platform (SMP) – (skip to step 2 if you are already registered in SMP.)
  2. Register DFS Units – (skip to step 4 if you are a Winter 23/24 Registered DFS Participant and no more DFS Units are required.)
  3. Pre-qualify DFS units by acceding DFS Declaration & Adherence Form (form B).
  4. Validate/update existing approved DFS Units (only for Winter 23/24 Registered DFS Participants with units approved that are likely to be used again).
- Complete DFS IT process check (see section 2.3).
- Submit an [online form](#) to become a 'DFS Registered provider' on our website:
  - Provide details of your campaign;
  - Confirm completion of all the onboarding steps.
- You are now ready to participate in the Demand Flexibility Service.

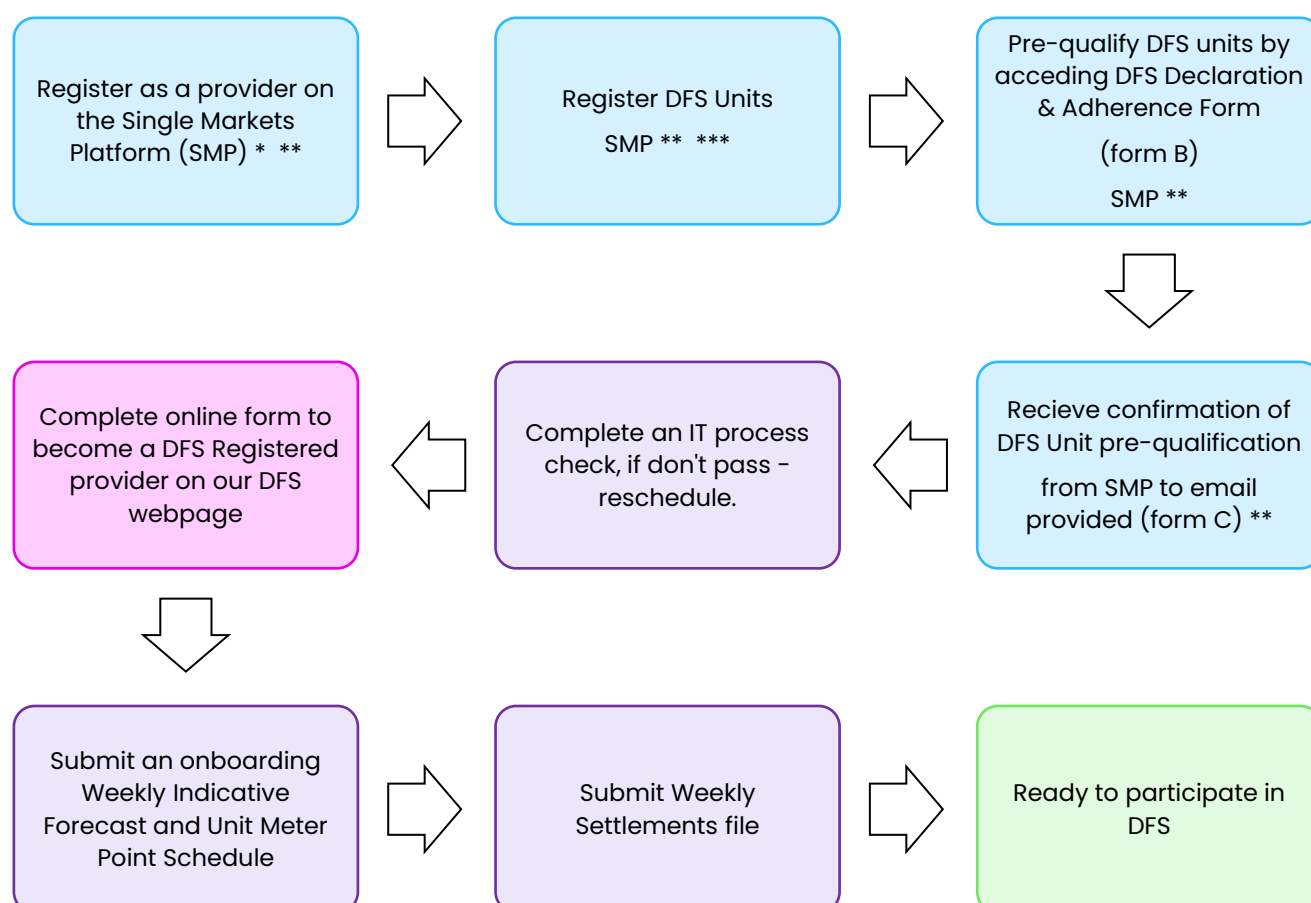
Further information on the processes within the steps is shared in section 2. Onboarding.

Public

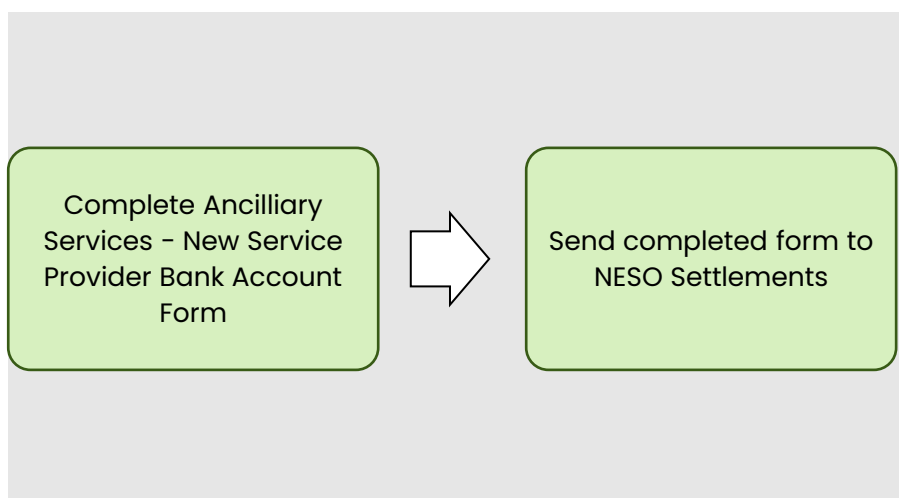
## 2.1.1 DFS onboarding process

The following flow diagrams show the steps required to onboard with the DFS. Asterisks indicate points in the flow where there are sub-steps or additional steps based on the nature of individual providers. These are detailed in subsequent diagrams. Detailed explanations of all steps are shown on the following pages.

Systems Key:

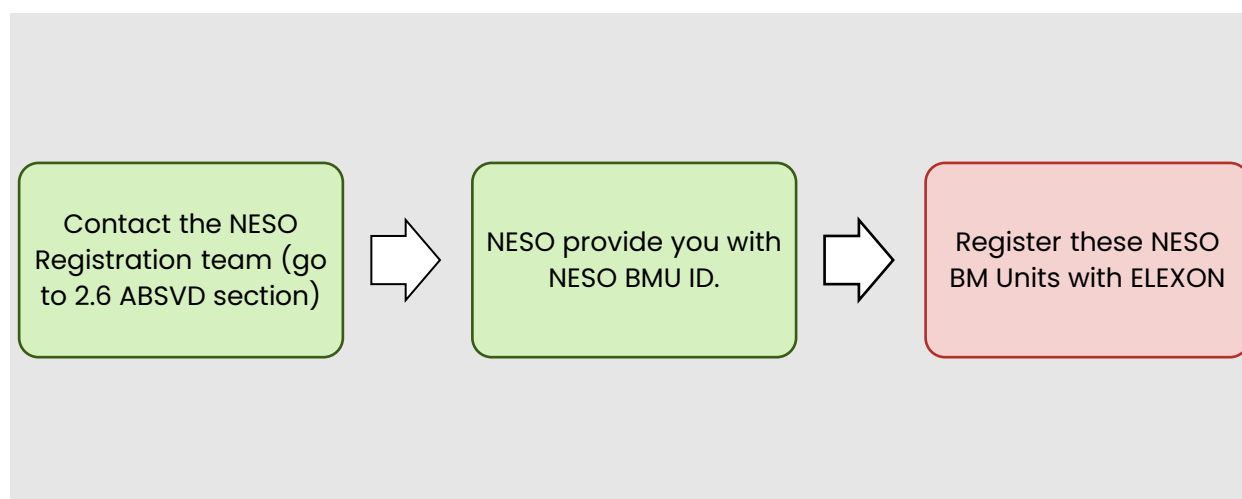


\*If you are a new provider to NESO, go to section [2.6](#) for more details on the below required steps:



\*\*If you are a Winter 23/24 DFS participant and want to reuse previously approved DFS Units, and you will need to update unit(s) details for these DFS Units by sending email request to [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy)

\*\*\*If you are representing Domestic consumers whose MPAN is signed up to provide DFS with a supplier or via a supplier representative and ABSVD and the ELEXON BMU ID are not fully registered with ELEXON and/or you do not have a NESO BMU ID, go to section [2.6 ABVSD](#), for details on the following required steps:



## 2.2 Single Market Platform

To participate in the DFS, you need to register on the SMP. This is where you will accede to the DFS Procurement Documentation and register DFS Units for participation in the Demand Flexibility Service.

The SMP can be accessed via this link: <https://portal.nationalenergyso.com/smp/s/login/>.

### Participants in DFS

Any Registered Service Provider which was registered as a Registered DFS Participant as of March 2024 does not need to re-register for eligibility to submit DFS Bids, as it has acceded to the DFS Procurement Documents including latest changes on our DFS webpages.

Where any such Registered DFS Participant created DFS Units as of March 2024, those DFS Units will require reviewing and updating to meet the requirements of the latest DFS Procurement Rules and remain valid for submission of DFS Bids.

Please contact [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy) to arrange DFS Unit Validation and an IT Process check with the Contracts team.

For the avoidance of doubt, an IT Process check will need to be carried out, even if you have passed one as of March 2024 and any Unit Meter Points which were validated by NESO for delivery of DFS as of March 2024 will need to be resubmitted to NESO for validation for delivery of DFS during the DFS Procurement Period.

## 2.3 DFS IT process check

Once you have started registration on the SMP, you will be contacted by our DFS team to arrange an IT process check. You will be provided with the relevant information to complete this, and access to the development area of the DFS Assessment Platform.

The purpose of the IT process check will be to ensure you have access to the correct templates and the required data flows are in place for you to be able to take part in the service. During these checks, we will simulate a DFS Service Requirement.



A DFS IT process check will be completed within a single day (typically between 09:00 – 12:00) but will simulate the normal weekly process for all DFS Service Requirements (including Tests). The file submissions will be checked for both routes, i.e. SharePoint and API.

The typical steps involved in the IT process check will be:

- Receive an email from DFS Team to Registered DFS Participant outlining the calendar details of IT Process Check, copy of Participation Guidance document, blank templates of required files to be populated by Participant and a version of each required file populated with sample data for assistance. Please note this email would be received 48 hours prior to the IT Process check.
- Receive an email from DFS Team on the day of IT Process check outlining the timeline for the day and setting the order for file submission.
- Provider to send Weekly Indicative Forecast and Unit Meter Point Schedule files by SharePoint
- Provider to send Weekly Indicative Forecast and Unit Meter Point Schedule using API (if applicable)
- NESO to send the Service Requirement (via email for IT process check only). Please subscribe to the [Demand Flexibility Service dataset](#) for updates about the future requirements.
- Provider to send DFS Bids by SharePoint
- Provider to send DFS Bids using API (if applicable) NESO to notify Provider of DFS Acceptance
- Providers to check bid results via Sharepoint and API (if applicable)
- Provider to send Weekly Settlement Submission via SharePoint
- Provider to send Weekly Settlement Submission via API (if applicable)
- Email to confirm successful completion of IT Process check

NESO will confirm once you have successfully completed an IT process check and you will then be ready to move on to the next step in the onboarding process to participate in the DFS. If you are notified that the IT process check was not completed successfully you will be given the reasons why and an appointment to perform a subsequent IT process check will be scheduled.

**For the purposes of the IT process check, no payment from NESO will take place as no demand reduction from customers is required at this stage. This checkpoint is to support technical/operational readiness only.**

## 2.4 Register as a DFS provider

The next onboarding step is to submit a form to become a DFS registered provider. Once completed and verified, we'll add you to our DFS Registered Provider Page.

To become a Registered DFS Participant, the provider must be registered in SMP, have uploaded the signed DFS Declaration and Adherence Form, and have successfully completed an IT process check to be listed as an approved DFS provider.

If you are a third party participating via an aggregator, you must have a signed contract with the 'Registered DFS Participant'. The 'Registered DFS Participant' must confirm the contracts have been signed and notify us in writing of your participation by emailing [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy).

Once verified, your information will be uploaded to the NESO website in 10 working days.

Please complete this Microsoft form to notify us you have been completed steps above and we will add you as an approved DFS provider (Registered DFS Participant) to our website:

[Request to become a DFS Registered Provider 2024/2025 \(office.com\)](#)

## 2.5 Onboarding – Weekly Submissions

After completing DFS IT process check, you will be provided with access to the production area of the DFS Assessment Platform (further information on the DFS Assessment Platform is contained within Appendix 1).

The penultimate onboarding step is to submit (via API or SharePoint) your onboarding Weekly Indicative Forecast. The data contained within the Weekly Indicative Forecast outlines how much demand flexibility at 4-hours' notice we potentially have access to. Alongside this you will be required to submit (via API or SharePoint) a list of participating Unit Meter Points to the NESO for

## Public

validation, using the Unit Meter Point Schedule file template. NESO will check this for any duplications across Registered DFS Participants. Upon receiving bid acceptance from DFS Team,

you will be asked to submit Weekly Settlement Submission file for accepted bids. More information on these files is contained within the appendices.

Please ensure your Weekly Indicative Forecast is as accurate as possible as any inaccuracies could have adverse effects for operational planning. Please ensure that correct data is submitted in Weekly Settlement Submission file as it would affect payments.

## Unit Meter Point Duplication

Under the Procurement Documentation, it is the responsibility of the Registered DFS Participant to ensure that their customers are only signed up to DFS once, as per clause 4.4 and 13.1.3 (d) of the Procurement Rules. Registered DFS Participants should clearly state this to their customers, and it should form part of the contractual agreement/terms and conditions with the end customer.

If a Unit Meter Point is found to be duplicated as part of the registration or Unit Meter Point submissions, NESO will look for the date and time that this meter was signed up by each participant. The meter will be allocated to the participant that has the latest time stamp.

NESO encourages providers to make it clear to their customers they can only sign up to one provider at a time. Parties should also ensure it is easy and clear for customers to both register and de-register from a Registered DFS Participant as outlined in our [Communication Principles](#).

The Unit Meter Point Schedule file will require you to identify the DFS Consumer Type (Domestic or Industrial & Commercial) of each Unit Meter Point.

There are two types of DFS Initiation Measures (known as Type in Unit Meter Point Data file): Manually Initiated and Directly Instructable.

“Directly Instructable” – the facility made available to a Registered DFS Participant by the owner and/or occupier of a Unit Meter Point during the DFS Procurement Period for the Registered DFS Participant to initiate delivery of DFS from a Unit Meter Point by communicating directly with the Unit Meter Point (which may be by an appropriate signal to the on-site **Metering Equipment**).

“Manually Initiated” – the initiation of delivery of DFS from a Unit Meter Point by an action on the part of the owner and/or occupier of the premises associated with that Unit Meter Point in response to a communication from the Registered DFS Participant.

## Public

For audit purposes, you will be required to keep evidence of instructions sent to Directly Instructable Unit Meter Points, and acceptances from the consumer for Manually Initiated Unit Meter Points, for each relevant Contracted Settlement Period.

### Unit Meter Point Queries

Last winter, we received a small number of requests from consumers asking which registered provider they were signed up with for DFS. These cases typically emerged where a customer had been signed up to one provider, before moving to another.

This winter, we have introduced standard procedures to address these issues. If a consumer (or provider acting on behalf of a consumer) contacts us to ask who their DFS provider, we will acknowledge their request, then will ask their current provider (ie the provider who has the latest MPAN timestamp with respect to that consumer) to get in touch with that provider and inform them that they are currently signed up with them.

We included an alternative proposal in our 2024 consultation, in which we would inform a provider of the new provider with respect to a specific MPAN. Reflecting feedback about how this information can be commercially advantageous, we withdrew it. For avoidance of doubt, in the procedure we are now introducing, we will not share provider details with other providers. We are harnessing our Communication Principles to ask providers to get in touch with their customers.

## 2.6 Settlement and Registration process requirements

### 2.6.1 New provider: bank registration details

The final onboarding step is to register bank details for settlement. If you are a new provider to NESO, we will need to set up your bank details in our settlement systems. Please complete the [“Ancillary Services – New Service Provider Form”](#) or contact [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy) or [settlement.queries@neso.energy](mailto:settlement.queries@neso.energy) to receive more support.

Please send completed and signed form, on company headed paper and PDF copy to [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy) or [settlement.queries@neso.energy](mailto:settlement.queries@neso.energy).

More information about New Provider guidance could be found [here](#). Existing providers do not need to complete this final step, you will already be registered in our settlement systems.

## 2.6.2 Applicable Balancing Services Volume Data (ABSVD)

As part of settlement, Applicable Balancing Services Volume Data (ABSVD) process will apply to Half Hourly (HH) Settled delivered volume (not subject to performance monitoring). This includes Sub-Meters which are not Half-Hourly Settled where the associated Boundary Meter is Half-Hourly Settled, ABSVD procedures and rules will apply to associated Boundary Meters of participating Sub-Meters.

### Industrial and Commercial (I&C)

ABSVD process will apply to HH Settled I&C consumer via P354 'Use of ABSVD for non-BM Balancing Services at the MPAN level'.

More detailed information about P354 process and requirements is explained in P354\_FMR\_D\_Business Requirements\_v3 (1) available in <https://www.elexon.co.uk/mod-proposal/p354/>

For further information regarding profile class classification please refer to BSCP516: Allocation of Profile Classes and SSCs for Non-Half Hourly Metering System Registered in SMRS – Elexon Digital BSC.

For the avoidance of doubt Profile Class 3 &4 will be able to participate in DFS and its volume will not be ABSVD. Profile classes 5-8 are not HHS and therefore any Unit Meter points under these classifications cannot participate in the service.

DFS registered Participants must provide the following for ABSVD purposes:

a. Within Unit Meter Point Schedule:

1. **Import MPAN** (core 13 MPAN digits)
2. Associated **Export MPAN** must be provided if it exists, if not leave blank (core 13 MPAN digits). If you are representing a site with multiple participating meters and there are more export meters than Import please repeat Import meter while declaring all participating MPANs.
3. MPANs Effective From: the date from which the DFS Participant may provide MPAN Pair Delivered Volumes in relation to this MPAN Pair. Therefore, this can be the first Settlement Date from which the MPAN Pair will be utilised or instructed. It's also can be the first day that the MPAN pair can have ABSVD submitted. It should be later than the form submission date and need to be earlier than MPAN Effective To. This is only applicable in relation to ABSVD.
4. MPANs Effective To: the last date which the DFS Participant may provide MPAN Pair Delivered Volumes in relation to this MPANs. Therefore, the last Settlement Date on which the MPAN Pair will be utilised or instructed. It's also the last day that the MPAN pair can have ABSVD submitted. Once this

## Public

date expires, a new registration is required for the MPANs to be utilised/ABSVD'd.

5. MPANs Customer Consent refers to consent to Elexon sharing the MPAN pair ABSVD volumes with the Energy Supplier. If the consent is TRUE, the SVAA must provide the ABSVD and ABSVD (Losses) to the Supplier responsible for the metering system. If the consent is FALSE, the data will NOT be sent to the Supplier.

6. Consent Effective From means the first Settlement Date on which the MPAN pair Customer Consent is valid. It needs to be equal to "MPANs effective from" in the initial registration. Subsequent registrations should start at 1 day after de-registration or previous Customer Consent to (whichever happens first). Different provisions apply when changing Customer consent.

7. Consent Effective To means the last Settlement Date on which the MPAN pairs Customer Consent is valid. It should be equal to "MPANs effective to" for the initial registration. For subsequent registration this can be updated.

Please note requirements a.3-a.7 will not be required for I&C Unit Meter Points that are not HH Settled i.e. Profile Class 3 and 4 exception.

b. Relevant information required within Settlement file used for ABSVD:

1. **Import MPAN** (core 13 MPAN digits)
2. Associated **Export MPAN** must be provided if it is existent, if not leave blank (core 13 MPAN digits)
3. Date of delivery
4. Delivery start time
5. Delivery end time
6. Baseline kWh
7. Metered kWh
8. HH Settled

Please note Settlement files contains more fields, those are detailed in Appendix 1 of this document.

## Domestic

For consumers whose Unit Meter point is signed up to provide DFS with a supplier or via a supplier representative, ABSVD process applies via the BMU ID.

BMU ID registration is relevant and Registered Participant must apply ABSVD via BMU ID if all the below is true:

## Public

1. Consumer is Domestic.
2. DFS Participant is the Supplier of Electricity or representative of the Supplier of Electricity authorised under contractual arrangement by the consumer to participate in DFS.

If the asset is not registered with ELEXON and does not have a NESO BMU ID, providers are required to:

Contact [bmu.registration@neso.energy](mailto:bmu.registration@neso.energy) to request a NESO BMU registration form.

The form returned by the team will include the NESO BMU ID allocated by the registration team.

Providers register these NESO BM Units with ELEXON by completing the BSCPI5/4.1 form or via ELEXON Kinnect Platform, setting the FPN to 'Yes' and associating the NESO BM Unit with the settlement ID.

For the avoidance of doubt, any Domestic Unit Meter Points (Boundary and Sub-meter) that are not signed up to provide DFS with a Supplier or via a Supplier representative, ABSVD process will not apply and in the Settlement file ELEXON BMU ID shall be left blank.

### 2.6.3 Settlement Calendar

The DFS Service Terms outline the provisions and processes required for payment with regards to settlement of the Demand Flexibility Service. The payment calendar that the NESO Settlement team follow can be found [here](#).

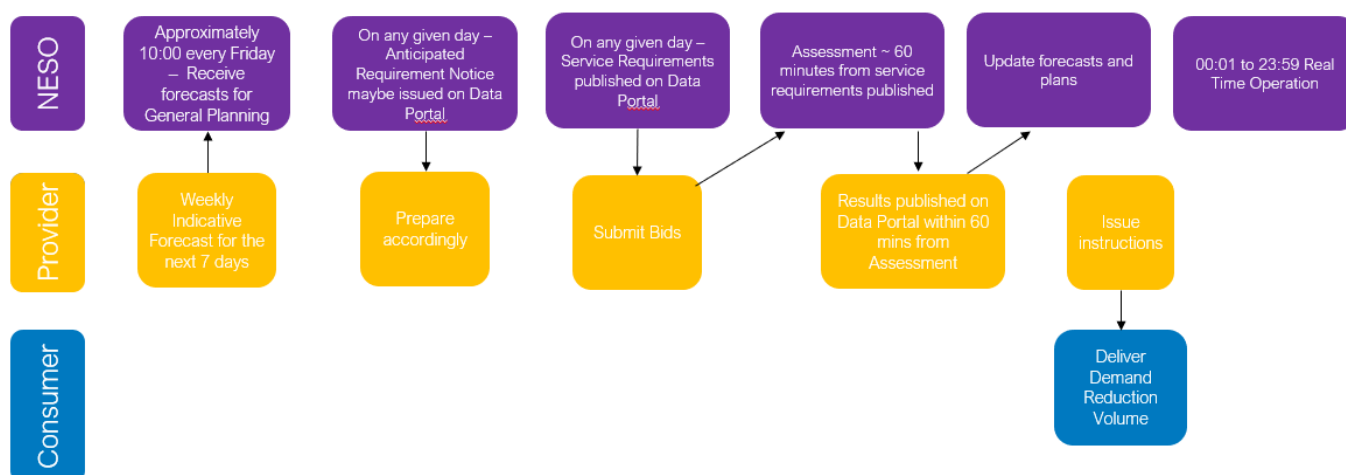
Public

## 3. Participation in DFS

Once you have completed the onboarding process you will be able to participate. This section outlines the processes and requirements involved with participating in the DFS.

### 3.1 DFS high-level weekly process

This is the weekly process for the DFS, section 3.2 explains this in further detail.



1. On a rolling weekly basis Registered DFS Participants will submit a Weekly Indicative Forecast, at or around 10:00 hours each Friday. DFS Participants can submit updates to their Unit Meter Points daily for an ad-hoc check, with a cut off time of 09:00 hours for the daily duplicate check.
2. On any given day, NESO may publish an Anticipated Requirement Notice to notify industry of a potential requirement via the NESO Data Portal. A reminder that whilst NESO have retained the option to publish an ARN, it is not a required part of the service You can subscribe for email updates for NESO Data Portal. The steps to subscribe to receive updates can be found below.
3. On any given day, NESO may publish Service Requirement via the Data Portal. Please subscribe to [Demand Flexibility Service on Data portal](#) to receive email updates.
4. By no later than 60 minutes following issue of Service Requirement Registered DFS Participants may submit DFS Bids.
5. By no later than 60 minutes following the assessment of DFS bids, NESO shall notify all Registered DFS Participants who submitted DFS Bids whether each DFS Bid was accepted or rejected via a publication on the Data Portal. NESO may in addition notify via email.



6. NESO will publish a DFS Utilisation Report to the NESO Data Portal to summarise the accepted and rejected bids.
7. Providers arrange with end consumers to reduce demand (via either a direct instruction to an asset or a communication to the end-consumer with an acceptance received back depending on their opt-in or opt-out status).
8. Demand Reduction Volume is delivered by end-consumers.
9. Registered DFS Participants retain and store the relevant Performance Data set out in the Service Terms.
10. Providers submit Settlement Data for each DFS Acceptance received during any calendar week ending midnight Sunday, no later than 10.00 hours on the second Monday after expiry of that calendar week.

## 3.2 Communications between Registered DFS Participants, industry and the NESO

There are several communications between the Registered DFS Participant, industry and the NESO. This section explains what these are, where they are shared, who sends the information, the frequency of the interactions and also the time frames.

### NESO Data Portal communications

The NESO has created an area on the Data Portal to share updates on the Demand Flexibility Service, this can be accessed via this link: [Demand Flexibility Service | National Energy System Operator \(neso.energy\)](https://www.neso.energy). There will be one dataset for this year to consolidate all DFS data, with information related to DFS service requirement clearly indicated. The [Demand Flexibility Service dataset](#) has various data files which would be updated individually as required.

Industry can subscribe to the dataset to receive updates. Please be mindful that NESO would only be issuing updates/ notifications via the Data Portal, so please subscribe to the link: [Demand Flexibility Service | National Energy System Operator \(neso.energy\)](https://www.neso.energy).

### DFS file transfers

There are several required file transfers and communications between the Registered DFS Participant and the NESO. The NESO has developed the DFS Assessment Platform for these file transfers. Additionally, some files (Unit Meter Point Schedule and DFS Bids) can be submitted to NESO via a special purpose API. Further detail on submitting these files, and the requirements to follow, can be found in the appendices.

This table shows each communication, who it is from and to, when and how the communication will be sent, and its frequency.

File number	File name	From	To	How	Frequency	When	Period
1	Weekly Indicative Forecast	Provider	NESO	DFS Assessment Platform or API	Weekly (also at the onboarding stage)	Friday at or around 10:00  Can be updated daily	7 days (Sat - Fri)
2	Unit Meter Point Schedule	Provider	NESO	DFS Assessment Platform or API	At most daily. Only needed if there are changes to portfolio	Daily, before 9 am	7 days (Sat - Fri)
3	Anticipated DFS Requirement Notice	NESO	Provider	NESO Data Portal	within day	Variable	NA
4	Service Requirement	NESO	Provider	NESO Data Portal	within day	Variable	NA
5	DFS Bids	Provider	NESO	DFS Assessment Platform or API	within-day	Within 60 minutes of a Service Requirement	NA
6	DFS Utilisation Report	NESO	Provider & Industry	DFS Assessment	Post assessment	Within 60 mins of Assessment	NA

Public

File number	File name	From	To	How	Frequency	When	Period
	(DFS Acceptance)			Platform or API  and  NESO Data Portal			
<b>7</b>	DFS Utilisation Report Summary	NESO	Industry	NESO Data Portal	Post assessment	As soon as possible following DFS Acceptances	
<b>8</b>	Weekly Settlement Submission	Provider	NESO	DFS Assessment Platform or API	Weekly	Monday after the end of the DFS service week	7 days (Mon-Sun)
<b>9</b>	Aggregate Incentive Values	Provider	NESO	DFS Assessment Platform	Alongside Weekly Settlement Submission (Optional)		

### 3.3 DFS Tests & Guaranteed Acceptance Price (GAP)

NESO has retained the ability to call test events within the contractual terms however, we do not have any immediate plans to call tests given the move to an in-merit margin tool. Should NESO choose to utilise any tests they may be accompanied by a GAP. In line with previous years, NESO may choose to share insights into this through the publication of a Market information Report. The GAP will be shared as part of any Service Requirement for test events.

For further information on the GAP and tests, please see our DFS webpage where we will publish DFS Market Information Reports and any subsequent updates.

To manage the impact of DFS Tests on efficient system operation, Registered DFS Participants may be assigned to dispatch groups and instructed to deliver their contracted volume in separate or overlapping Settlement Periods. This is so the change in system demand can be shaped to limit the magnitude of frequency fluctuations. The DFS Service Requirement, as specified on the [Data Portal](#), will indicate if “staggered” dispatch is being carried out and which service delivery windows each Registered DFS Participant is eligible to submit DFS bids for.

### 3.4 Submitting DFS Bids

This section covers how you submit your DFS Bids. Note it is the Providers responsibility to identify if a Service Requirement has been published.

#### Key information on submitting DFS Bids:

- Bids can be submitted by SharePoint or API.
- Bids need to be submitted, within one hour of the Service Requirement publication unless otherwise noted in the Service Requirement.
- Each individual bid needs to:
  - Be for a specific DFS Unit.
  - Be for a single Settlement Period.
  - Have only one volume (between 1MW and 100MW) and what is expected to be delivered if accepted.
  - Have only one Utilisation Price (£/MWh).
- Registered DFS Participants **can**:
  - Submit multiple bids for different DFS Units for the same Settlement Period;
  - Submit multiple bids for the same DFS Unit for different Settlement Periods.
- Registered DFS Participants **cannot**:
  - Submit multiple bids for a single DFS Unit for the same Settlement Period;
  - Keep the same MPANs/assets across multiple units.
  - Link bids or have mutually exclusive bids. (The NESO will accept DFS Bids in cost order, if all of your bids are accepted you must be able to deliver all of the Demand Reduction Volume).

### 3.5 Data Portal Dataset & API

The NESO will share all information pertaining to DFS via the [Demand Flexibility Service dataset](#) on the NESO Data Portal. Four data resources will be updated throughout to provide Registered DFS Participants with the following information:

#### DFS Industry Notification

This resource will be updated to indicate that the NESO anticipates issuing a DFS Service Requirement for either a Test or Live Event – updates of this type are referred to as an Anticipated Requirement Notice (ARN). Following an ARN, a subsequent update will be issued to notify Registered DFS Participants that either a DFS Service Requirement has been issued or the service is being stood down and a Service Requirement will not be issued.

#### DFS Service Requirements

This resource will be updated to notify all Registered DFS Providers that a Service Requirement has been issued for either a Test or Live Event. Updates will indicate the settlement periods for which a Service Requirement has been issued and the MW required. Updates to this resource constitute the initiation of a Service Requirement and indicate that the NESO will accept DFS bids for the corresponding Service Requirement for a one-hour period immediately following the update to the resource. In addition to the Service Requirement, updates will also indicate which settlement periods each Registered DFS Participant is eligible to bid for (if applicable).

#### DFS Utilisation Report

This resource will be updated within one-hour of bid submission gate closure and detail the acceptance or rejection of each bid submitted by Registered DFS Participants for a Service Requirement.

#### DFS Utilisation Report Summary

This resource will be updated alongside the DFS Utilisation Report and will detail the total volume of DFS procured and indicative cost of the service for each Service Requirement and settlement period. Once the NESO has processed the relevant settlements data for each Service Requirement, this resource will be updated to indicate the volume and cost of the delivered demand flexibility.

The dataset resources can be viewed and downloaded from the Data Portal in CSV format, but Registered DFS Participants can also utilise the [CKAN Data API](#). Instructions for connecting to the

API are provided on the [NESO Data Portal](#). The *Demand Flexibility Service* Data Portal dataset is found at the following link:

[Demand Flexibility Service | National Energy System Operator \(neso.energy\)](#)

Up to the point of service “go-live”, the dataset resources will be populated with dummy data in the first row to allow Registered DFS Participants to familiarise themselves with the formatting and contents of each resource and test calling the API. Any updates to the resources occurring after go-live of the service should be treated as genuine.

### 3.6 Paying for Delivered Demand Reduction

Registered DFS Participants are required to calculate the operational baseline, using the agreed industry methodology based on P376, for each of their participating Unit Meter Points and then use this to calculate the Delivered Demand Reduction Volume of their DFS Units following a Service Requirement. This is submitted to the NESO via the Weekly Settlement File and details of this file are outlined in the appendices.

For any Unit Meter Points that have confirmed participation via the ‘opt-in’ method, only reductions are considered, and any demand increases will not be settled. However, to gain further information into end-consumer participation, the settlement data needs to include all delivery, regardless of sign. Both reductions and increases are considered for those who instructed participation via the ‘opt-out’ method.

Non-participating meter points should not be included in Weekly Settlement File and providers should keep a record of this “opt-out” confirmation. Further information on the baseline calculation is contained within Appendix 5.

NESO will then calculate the payment due to each of the Accepted DFS Units according to the scales described in the Performance Incentives Section.

For example, a DFS Unit was contracted to deliver 30 MW (15 MWh) in a given settlement period at a price of £300/MWh. Note the delivery numbers are in MWh for this example but in the actual files they will be in kWh. If this DFS Unit delivers 100% of its contracted quantity, it should be paid 15 MWh\*300£/MWh = £4,500. The meters inscribed in this unit are shown in Table 1.

*Table 1 Example of meters inscribed in DFS Unit.*

MPAN	DFS Unit	Type	Delivery MWh	Accepted Utilisation Price (£/MWh)

Public

1234	Un-1	Opt-in	3.5	300
1235	Un-1	Opt-in	-1 (0)	300
1236	Un-1	Opt-in	0	300
1237	Un-1	Opt-out	3	300
1238	Un-1	Opt-out	-1	300

Even though MPAN 1235 increased demand and will not be settled because it is *Opt-In*, the amount delivered still needs to be included in the settlement data for feedback and insights purposes, as well as any potential ABSVD application (see ABSVD section).

The total delivery from DFS Unit Un-1 on that period would be 5.5 MWh. In percentage terms that is 36.7% (5.5/15).

Because delivery is less than 50% but more than 25%, we can calculate that Settled proportion is 23.3%. So, the equivalent Settled MWh in that period and from that unit would be  $0.233 * 15 \text{ MWh} = 3.495 \text{ MWh}$  which means the participant should be paid  $3.495 \text{ MWh} * £300/\text{MWh} = £1,048.5$ .

## Unit Meter Points – further information

- Registered DFS Participants must calculate the Operational Baseline for all Unit Meter Points and keep a record of this for each Unit Meter Point that was submitted as delivering Demand Reduction in the Weekly Settlement Submission for audit purposes.
- DFS Initiation Measures evidence must be captured, as described in section 2.3.
  - Registered DFS Participants must get an acceptance/confirmation from each Unit Meter Point to say that that Unit Meter Point will participate in the specific Contracted Settlement Periods the Registered DFS Participant had accepted from their DFS Bids.
  - Example: if Registered DFS Participant submits a bid for today at 16:00 to 16:30, and the bid is accepted within-day at 16:30, the Registered DFS Participant MUST get confirmation between when the bid was made and the delivery time 16:00 to say that that Unit Meter Point will participate in that Contracted Settlement Period if they were selected as *Opt In*. This MUST be kept as a record for auditing. If the Manually Initiated Unit Meter Point does not confirm during this time, this Unit Meter Point CANNOT be included within the Weekly Settlement calculation. For Unit Meter Points where the reduction is Directly Instructable, the instruction sent to the Unit Meter Point is considered the confirmation. Again, this instruction must be kept as a record and the Unit Meter Point can be used for the Weekly Settlement calculation.

- If the NESO identifies the Unit Meter Point as a duplicate with another Registered DFS Participant, the duplicate Unit Meter Point may not be entered for any volume for settlement of DFS until it is accepted as part of a Registered DFS Participant's portfolio via the Unit Meter Point Schedule. Please see section 2.5: Unit Meter Point duplication for further information on how Unit Meter Point duplications can be resolved.
- The following assumptions are taken regarding Import and Export MPAN sign conventions:
  - Export MPAN: Metered > 0 when exporting to the grid. Baseline > 0 when exporting to the grid.
  - Import MPAN: Metered > 0 when importing from the grid. Baseline > 0 when importing from the grid.
  - The table below outlines how you can submit data from multiple associated meter points in your settlement file:

- Only an import MPAN				
Import MPAN	Export MPAN	Baseline	Metered	Delivered
123		Baseline <sub>123</sub>	Metered <sub>123</sub>	Baseline <sub>123</sub> - Metered <sub>123</sub>
- An import and export MPANs, both participating.				
Import MPAN	Export MPAN	Baseline	Metered	Delivered
123	456	Baseline <sub>123</sub> Baseline <sub>456</sub>	Metered <sub>123</sub> Metered <sub>456</sub>	(Baseline <sub>123</sub> - Baseline <sub>456</sub> ) - (Metered <sub>123</sub> - Metered <sub>456</sub> )
- Another way the participant can submit the same data could be in separate rows. One for the import MPAN data and others for any other associated export MPAN. This is because we don't allow an Import MPAN to be empty in the settlements file.				
Import MPAN	Export MPAN	Baseline	Metered	Delivered
123		Baseline <sub>123</sub>	Metered <sub>123</sub>	(Baseline <sub>123</sub> - Metered <sub>123</sub> )
123	456	-Baseline <sub>456</sub>	-Metered <sub>456</sub>	-Baseline <sub>456</sub> - (-Metered <sub>456</sub> )



Public

				= Metered <sub>456</sub> – Baseline <sub>456</sub>
--	--	--	--	--

### 3.7 Contact details

If you need to contact the Demand Flexibility Team with any queries regarding onboarding, service design or other general queries, please email [demandflexibility@neso.energy](mailto:demandflexibility@neso.energy)

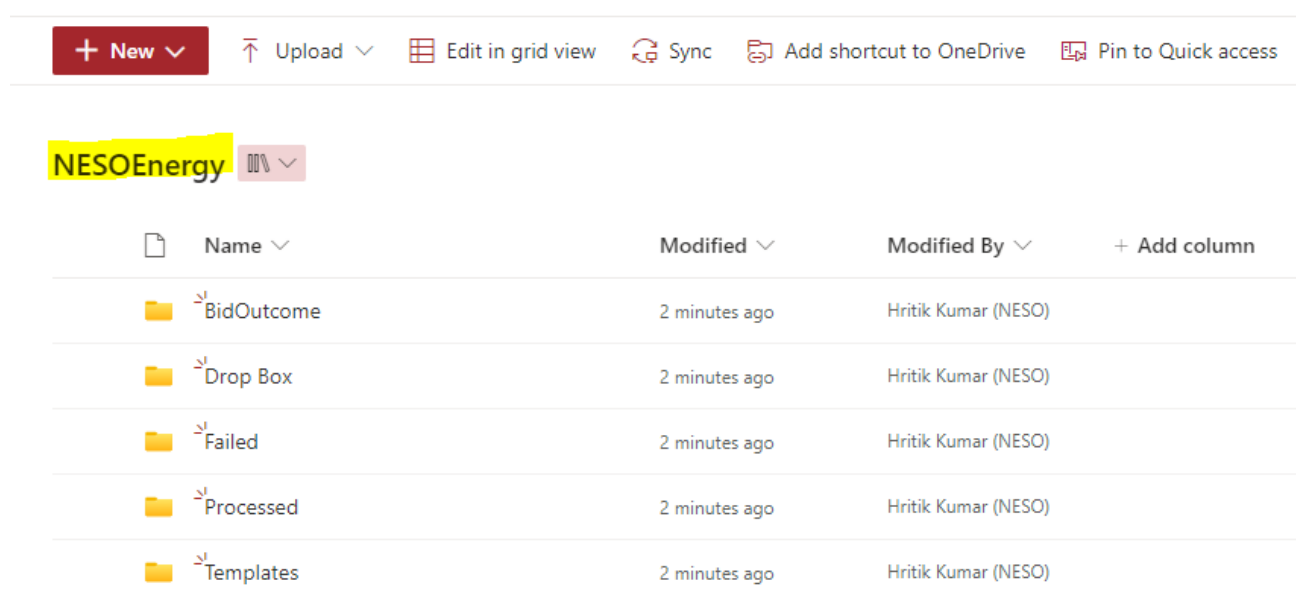
# Appendices

## Appendix 1 – General information on file submissions

This appendix contains general information for submitting the required files via the DFS Assessment Platform.

### DFS Assessment Platform (NESO DFS SharePoint Site)

- Each Provider will have their respective SharePoint Area allocated where they can see the following folders as shown in the figure (using “NESOEnergy” as an example provider).



<div> <div>+ New</div> <div> <div>Upload</div> <div>Edit in grid view</div> <div>Sync</div> <div>Add shortcut to OneDrive</div> <div>Pin to Quick access</div> </div> </div>				
<div> <div>NESOEnergy</div> <div></div> </div>				
	Name	Modified	Modified By	+ Add column
	BidOutcome	2 minutes ago	Hritik Kumar (NESO)	
	Drop Box	2 minutes ago	Hritik Kumar (NESO)	
	Failed	2 minutes ago	Hritik Kumar (NESO)	
	Processed	2 minutes ago	Hritik Kumar (NESO)	
	Templates	2 minutes ago	Hritik Kumar (NESO)	

- All files are uploaded to the “Drop Box” folder and then validation checks take place. Further information on the validation checks undertaken can be found in Appendix 2.
- The “Templates” folder contains templates of the required files (explained further in Appendix 2) and Sample Example files as a reference.
- The “Bid Outcome” folder will be loaded with your DFS Utilisation Report (DFS Acceptances) containing information on your accepted and rejected bids as soon as the assessment is complete for a Service Requirement, around 60 minutes after the Bid Submission Time. You will be notified via email when this happens. Please note it is the Data Portal publications that are legally binding and form any DFS acceptance.

5. NOTE: If your submitted file moves from the “Drop Box” folder to the “Failed” folder you will receive an email detailing the reason for the failure, an example of this is shared in Appendix
6. Only files that move from the Drop Box folder to the Processed folder have been successfully submitted.

## Using and understanding the templates

### Accepted files and naming conventions

**PLEASE NOTE** NESO will only accept files where:

- a. the correct file naming convention is used, and
- b. the file must be sent with .CSV extension.

Please do not add in additional columns or information to the templates or they will not upload correctly to the DFS Assessment Platform (NESO DFS SharePoint area).

File names follow this convention: “Provider\_ProviderName\_FileName\_ddmmyyyy.csv”

- **Provider** – Don’t change this
- **ProviderName** – Change this to the name of the Registered DFS Participant (E.g., NESOEnergy)
- **File name** – E.g., WeeklyIndicativeForecast, don’t change this
- **ddmmyyyy** – Change this to either the first date of the file (e.g., Saturday, if for the Weekly Indicative Forecast) or delivery date (e.g., today’s date for within-day event, if for DFS Bids)

Further information on the different data validation checks that will be completed can be found in Appendix 2, below examples the file validations that will be completed.

### File validations:

These are validations that will be completed on each file uploaded to the “Drop Box” folder. If files fail these validations they will be moved to the “Failed” folder and if they pass, they will be moved to the “Processed” folder. Note that similar validations will be performed to files submitted via the API.

File Name	<p>Each part split by ( _ ) underscore (Example:  Provider_NESOEnergy_WeeklyIndicativeForecast_15102024.csv)  Should be 4 parts after split  3rd Part should be WeeklyIndicativeForecast (or relevant file name)  4th Part should be the relevant date depending on the file</p>
-----------	--

## Public

File Headers	<ul style="list-style-type: none"> <li>Trim spaces from File Headers and it should <b>exactly match</b> the predefined headers – as shown in the File Template</li> <li>No special characters allowed in File Headers</li> <li>Order of Headers should also be same.</li> </ul>
--------------	---

## File column headings and their descriptions

Table 2 File Headers and Descriptions

Header	Description
Delivery Date	Date of Delivery – e.g., for the Weekly Indicative Forecast dates of all the 7 days in dd/mm/yyyy format.
Registered DFS Participant	Company name of the Registered DFS Participant i.e., the supplier or aggregator. This needs to be the same name across all the files explained in Appendix 2. As per your SMP registration
DFS Unit ID	The ID given by NESO for the DFS Unit that is allocated to offer delivery of the Demand Reduction Volume. Please be aware this may change from the unit ID parties populate initially. This ID will be provided within the SMP and will follow this structure XXXXXX## (3 – 6 characters relating to the Registered DFS Participant's company name and two digits numbering the DFS Unit registered under this Registered DFS Participant for the DFS.
DFS Volume MW	The Demand Reduction Volume in MW that is offered to be reduced by that DFS Unit in the relevant Settlement Period for the relevant DFS Bid. This must be a number between 1MW and 100MW.
From	Time on the Delivery Date, at which the Demand Reduction Volume starts – this is in Local Time (GMT or BST) format and given as HH:MM
To	Time on the Delivery Date, at which the Demand Reduction Volume ends – this is in Local Time (GMT or BST) format and given as HH:MM
Utilisation Price GBP per MWh	The Utilisation Price (£/MWh) that is offered to provide the Demand Reduction Volume on that DFS Unit in the relevant Settlement Period.
Guaranteed Acceptance Price GBP per MWh	The price (£/MWh) published by NESO from time to time with respect to Service Requirement; If participants bid at or below this price for a specific period, then they will be accepted for that period.
GSP Group 14 Zones + Other + Total	Breakdown of the Demand Reduction Volume in MW of each DFS Unit per GSP Zone and Other column include any Demand Reduction Volume not in any of the GSP Zones. The Total column is the maximum aggregate Demand Reduction Volume (in MW) of each DFS Unit across the GSP Zones, should be equal to DFS Volume (in MW) that is offered.

## Public

Status	This is the status for the DFS Bids submitted by the Registered DFS Participant and outlines whether they were Accepted or Rejected as shown in the DFS Utilisation Report (DFS Acceptances).
Baseline kWh	This is the DFS Operational Baseline for each Unit Meter Point and for each Contracted Settlement Period, in kWh. <sup>1</sup>
Metered kWh	This is the aggregate Half-Hourly Metered Data for each Unit Meter Point for each Contracted Settlement Period, in kWh. <sup>1</sup>
Delivered kWh	This is the Delivered Demand Reduction Volume, the difference between the metered data and the baseline data, in kWh. <sup>1</sup>
Accepted Utilisation Price GBP per MWh	Utilisation Price that NESO accepted and will pay for the delivered Demand Reduction Volume allocated to each Unit Meter Point and for the relevant period, in £/MWh.
Elexon BMU ID	This is the Supplier's Elexon Base BMU ID for settlement purposes. Elexon BMU ID is the settlement ID allocated to the market participants who are registered as suppliers with Elexon. This is a unique ID provided by Elexon to the Base Supplier, this normally starts with "2_". More detail available in the ABSVD section of this document.
Import MPAN	<p>The unique reference number allocated to the Registered DFS Participant for the relevant period to identify an import Boundary Meter. The MPAN has to be the core 13 digits without spaces.</p> <p>This is described further on the Elexon website:  <a href="https://bscdocs.elexon.co.uk/guidance-notes/msid-mpan-guidance">https://bscdocs.elexon.co.uk/guidance-notes/msid-mpan-guidance</a>. The 13-digit number is made up of the combination of items 4, 5 and 6 (Distribution Identifier, Unique Reference Number, Check Digit), described on the Elexon link. This MPAN number is used throughout systems and processes as the reference or key to a particular Metering Point.</p>
Export MPAN	The unique reference number allocated to the Registered DFS Participant for the relevant period to identify an export Boundary Meter. The MPAN must be the core 13 digits without spaces. More detail available in the ABSVD section of this document.
MPANs Effective From	The date from which the DFS Participant may provide MPAN Pair Delivered Volumes in relation to this MPAN Pair. Therefore, this can be the first Settlement Date from which the MPAN Pair will be utilised or instructed. It's also can be the first day that the MPAN pair can have ABSVD submitted. It should be later than the form submission date and need to be earlier than MPAN Effective To. This is only

<sup>1</sup> Refer to Section **3.6 Paying for Delivered Demand Reduction**, in the case the same Unit Meter Point is included in multiple DFS Units.

## Public

	applicable in relation to ABSVD. The format is dd/mm/yyyy. More detail available in the ABSVD section.
MPANs Effective To	The last date which the DFS Participant may provide MPAN Pair Delivered Volumes in relation to this MPANs. Therefore, the last Settlement Date on which the MPAN Pair will be utilised or instructed. It's also the last day that the MPAN pair can have ABSVD submitted. Once this date expires, a new registration is required for the MPANs to be utilised/ABSVD'd. The format is dd/mm/yyyy. More detail available in the ABSVD section.
MPANs Customer Consent Flag	Refers to consent to Elexon sharing the MPAN pair ABSVD volumes with the Energy Supplier. If the consent is TRUE, the SVAA must provide the ABSVD and ABSVD (Losses) to the Supplier responsible for the metering system. If the consent is FALSE, the data will NOT be sent to the Supplier. Whether the Customer has consented to the Supplier receiving MPANs (Import/Export) ABSVD. More detail available in the ABSVD section.
Consent Effective From	Customer consent starting date. Also means the first Settlement Date on which the MPAN pair Customer Consent is valid. It needs to be equal to "MPANs effective from" in the initial registration. Subsequent registrations should start at 1 day after de-registration or previous Customer Consent to (whichever happens first). Different provisions apply when changing Customer consent. More detail available in the ABSVD section.
Consent Effective To	Customer consent end date. Also means the last Settlement Date on which the MPAN pairs Customer Consent is valid. It should be equal to "MPANs effective to" for the initial registration. For subsequent registration this can be updated. More detail available in the ABSVD section.
Timestamp Subscribed	This field indicates the date and time when the end consumer subscribed to the Demand Flexibility Service with your company as Registered Service Provider. The format is dd/mm/yyyy hh:mm
DFS Initiation Measure	This is the type of DFS Initiation Measure of each Unit Meter Point submitted within your Unit Meter Point Schedule. The type can be either Directly Instructable or Manually Initiated. If a Unit Meter Point has any part considered Manually Initiated, the Unit Meter Point needs to be identified as Manually Initiated.
Participating	Whether the associated Unit Meter Point was participating or not in the relevant service period.
Sub-Meter Serial Number	Unique identifier of the sub-meter.
HH Settled	Whether the related boundary meter (MPAN) is half-hourly settled or not.

## Public

	As defined in the Procurement Rules – a Meter whose Half-Hourly Metering is used directly to calculate the half-hourly imbalance position attributable to a Responsible Party under and for the purposes of the BSC;
Consumer Type	Whether the Unit Meter Point represents a Domestic or Industrial & Commercial consumer.
Opt In	This is a True / False field in the Unit Meter Point Schedule. It should be set to True where the associated Unit Meter Point is Opt-in, and it should be set to False where the associated Unit Meter Point is Opt-out.
Action	This field pertains to the Unit Meter Point Schedule. It can be <i>Add</i> or <i>Remove</i> , and it is used to indicate to NESO if you want to add or remove the relevant Unit Meter Point. It can also be used for amending any errors with previous submissions. In that case, please change the Action field on the row with errors to <i>Remove</i> and add a new row with the correct data and with <i>Add</i> in the action field.
Dispatch Type	This field in the Service Requirements File indicates whether the dispatch is staggered and only a subset of participants can take part, (to manage ramp of demand reduction and maintain system stability) or if all participants can take part
Participant Bids Eligible	List of providers eligible to submit bids for the relevant service window. Only applicable if Dispatch Type is <i>Staggered</i>
Service Requirement MW	DFS Service Requirement will contain details of service requirements for an event and details of Registered DFS participant bid eligibility.
Service Requirement Type	This field in the Service Requirements File indicates whether the requirement for each service window corresponds to a Live or Test event.
Participating Meter Electricity Supplier	This field should be True if the Registered DFS Participant is also the electricity supplier of the related boundary meter. It should be False otherwise.

## GSP Zones for reference

These are the 14 GSP Zones:

- North Scotland
- South and Central Scotland
- North East England
- North West England
- Yorkshire
- East Midlands
- West Midlands
- London
- East England
- South East England
- South West England
- Southern England
- North Wales Merseyside and Cheshire
- South Wales

## Common issues when saving Unit Meter Point Schedule file

When saving the Unit Meter Point Schedule file, you can accidentally save the file in an UTF-BOM format. BOM characters are not visible and uploading files to the SharePoint with this format can result in processing errors. Below we explain how to remove BOM from any text/XML file:

1. Download Notepad++
2. To check if BOM character exists, open the file in Notepad++ and look at the bottom right corner. If it says UTF-8-BOM then the file contains BOM character (see image below).
3. To remove BOM character, go to Encoding and select Encode in UTF-8
4. Save the file and retry uploading this in the SharePoint.





## Appendix 2 – Detailed information on file submissions

### 1. Weekly Indicative Forecast

Weekly Indicative Forecast gives a best estimate of the volume that each provider can deliver from each DFS Unit for 30-minute intervals starting from the following day (Saturday) first interval 00:00 – 00:30 to the next Friday 23:30 – 00:00 i.e., D+7. This file should include an estimate of delivery if NESO were to call the service at 4-hours lead time.

1. Each provider will receive an email reminder usually on every Thursday afternoon informing them to submit the Weekly Indicative Forecast by 10:00 hours on the Friday. Providers can upload the file in the DROP BOX folder of the SharePoint link attached in the email.
2. Providers need to plan their forecast submission using the following template file "Provider\_ProviderName\_WeeklyIndicativeForecast\_ddmmyyyy.csv"  
Where for ddmmyyyy – enter the FIRST date of the Forecast week in the filename for which you are submitting the data which will always be upcoming Saturday.
3. NESO will accept the Weekly Indicative Forecast file only if providers follow the file template standards. The file headers are shown below, and each header is described in Table 2:

Delivery Date
Registered DFS Participant
DFS Unit ID
DFS Volume MW
From
To
Utilisation Price GBP per MWh

Note: This file can be updated at any point during the week with more accurate estimates. Simply, reupload the new file in the SharePoint folder or via API.

## Data Validations:

1. Submit Data for all the 7 days of the week – starting from Saturday to next Friday.
2. No Data Row should contain the same DFS Unit and the same Settlement Period for the same date.
3. Time difference between FROM and TO, should always be 30 minutes.
4. No blank lines from starting, between and end in the file are allowed.
5. Each DFS Volume MW (Demand Reduction Volume) must be between 0MW and 100MW and can contain decimal points.
6. DFS Volume and Price cannot be negative.

## 2. DFS Bids

DFS Bids submitted by the Registered DFS Participants. This includes quantity and price that the provider can offer for each Service Window. It also shows the quantity in MW of each DFS Unit in each GSP Zone. For the GSP Zones, it is not a contractual requirement to enter quantities within the GSP Zone, but the NESO would value this data, if you do not have this information, you can input 0 within the GSP Zones). Providers need to submit their Bids in line with the deadline published in the DFS Service Requirement.

Note: All volumes offered must be deliverable if your bids have been accepted. There are no mutually exclusive bids.

1. Providers need to submit their DFS Bids following the Service Requirement sent by the NESO using the following template file “Provider\_ProviderName\_DFSBids\_ddmmyyyy.csv” Where ddmmyyyy – enter Date of Actual Delivery which is TODAY.
2. Alternatively, the provider can submit the DFS Bids via the API. Appendix 4 shows the details on how to submit the DFS Bids via API.
3. NESO will accept the DFS Bids file only if providers follow the file template standards. The file headers are shown below and are described in Table 2:

---

Delivery Date

Registered DFS Participant

DFS Unit ID

---

Public

DFS Volume MW

From

To

Utilisation Price GBP per MWh

GSP 14 Zones+Other+Total

## Data Validations:

1. No Data Row should contain the same DFS Unit and the same Settlement Period for the same date.
2. Time difference between FROM and TO, should always be 30 minutes.
3. Sum of all the GSP column+ Other should match the Total column and DFS Volume MW (Demand Reduction Volume).
4. No blank lines from starting, between and end in the file are allowed.
5. Each DFS Volume MW (Demand Reduction Volume) must be between 1MW and 100MW
6. DFS Volume and Price cannot be negative.
7. If DFS Service Requirement is staggered (see DFS Service Requirement), the Delivery Date and From – To columns, will be checked against your assigned dispatch group.

## 3. Weekly Settlement Submission

Registered DFS Participants need to submit their Settlement Data (Weekly Settlement Submission) **only for Accepted Bids** for the entire service week. The service week will be considered as Monday to Sunday. The Registered DFS Participants need to submit their Weekly Settlement file to get paid accordingly. The data for the Weekly Settlement file for a service week should be sent by the second Monday following the end of the service week (i.e., 8 calendar days after the Sunday), or earlier. This file needs to show the actual delivery from each Unit Meter Point. NESO will pay for actual delivery, including where Registered DFS Participants have under or over delivered against their bid volume, in accordance with the Performance Monitoring guidelines.

The following points are required in relation to submission of the Weekly Settlements File.

1. Providers need to submit their Weekly Settlement file on Monday using the following template file "Provider\_ProviderName\_WeeklySettlementSubmission\_ddmmyyyy\_NN.csv". Where ddmmyyyy – enter the FIRST date of the Weekly Settlement Submission service week in the file name for which you are submitting the data, which will always be service week starting MONDAY.

## Public

For example, if you want to report settlement data for an event that took place on Thursday 26<sup>th</sup> of September 2024, then “ddmmyyyy” will take the value “23092024”, as the Monday of the week of delivery was 23<sup>rd</sup> September 2024.

Consider an example for a week with more than one event. If there were events on the 16<sup>th</sup> and 17<sup>th</sup> of September 2024, then “ddmmyyyy” should be “16092024” and in this file you should include data for the two events. See next point regarding number of records per file.

2. To ensure we can process the data successfully, the upper limit of records on each Settlements File is 100,000 rows. If you have more records than the upper limit, then you may split them into multiple files. For your first file, NN would be 01, for the second file, it would be 02, and so on for each subsequent file.
3. Providers need to Submit their Weekly Settlements data for the previous service week (Monday to Sunday) on the coming MONDAY to get paid accordingly.
4. NESO will accept the Weekly Settlement Submission file only if providers follow the file template standards, shown below and described in Table 2.
5. Please refer to Section **3.6 Paying for Delivered Demand Reduction** for further information on how to report delivery data in the Weekly Settlements Submission in case the same Unit Meter Point is included in multiple DFS Units. Also, you are referred to Appendix 5 for an example of calculating the operational baseline.

Delivery Date

From

To

Registered DFS  
Participant

DFS Unit ID

Import MPAN

Export MPAN

Sub Meter  
Serial Number

Participating

Baseline kWh

Metered kWh

Delivered kWh

Public

Accepted  
Utilisation Price  
GBP per MWh

HH Settled

Participating  
Meter Electricity  
Supplier

Consumer Type

Elexon BMU ID

Please note that given the order of magnitude of the Unit Meter Points consumption (in the kWh range), we request data from Unit Meter Points in kWh. However, the Accepted Utilisation Price is in units of £/MWh because the DFS requirement is in the MWh range.

## Data Validations:

1. Submit data only for Accepted Bids clearly entering the relevant settlement period in the From and To columns on days where there was a Service Requirement. Also, only submit data for meters that Opted in (or that didn't opt out) for each particular period.
2. You may include data for multiple days in the same file.
3. No Data Row should contain Same DFS Unit ID and Same Settlement period for same date.
4. Registered DFS Participant column should have the same name as that on SMP.
5. DFS Unit column should be populated with the same data as that on SMP and on your Unit Meter Point Schedule.
6. Time difference between From and To, should always be 30 minutes.
7. Delivered kWh should always be the difference between Baseline kWh and Metered kWh. Even when Delivered kWh is less than zero.
8. No blank lines from starting, between and end in the file are allowed.
9. Please restrict to 3 decimal places for kWh data.
10. If Domestic Unit Meter Points that are not signed up to provide DFS with a supplier or via a supplier representative, ABSVD process will not apply and must complete in the Unit Meter Point Schedule and Settlement file HH Settled field as "False" and leave ELEXON BMU ID blank in the Settlements file.

## 4. Unit Meter Point Schedule Submissions

The rationale for this submission is so NESO can validate that Unit Meter Points are not duplicated between participants. Please note that Unit Meter Point data is never released by the NESO and

will only be used for the purpose of auditing and duplication checking. You should also use this file to allocate the Unit Meter Points to your registered DFS Units.

The file should only contain customer's Unit Meter Points that have explicitly signed up to the DFS service through the relevant Registered DFS Participant. If successful in the daily checks (Unit Meter Point not flagged as duplicate and removed), the Unit Meter Point can feature in DFS bids the next day.

Although the primary purpose of the checks is to find duplicates between providers, we have built validations to ensure each participant only sends each Unit Meter Point once.

The Unit Meter Point submission passes through an initial validation stage to ensure consistency of the data (e.g., number of digits on the Import MPAN is 13, timestamp subscribed is not blank, etc.). The output of these validation checks will be saved to your SharePoint and you will be notified by email. Any meters that failed the validations will be rejected and the rest will pass through to the next phase. This early notification allows you to correct any errors and resubmit.

The second stage comprises checks for duplicates between the Unit Meter Point Schedules of all registered participants. The output of these checks will indicate, for each meter, if it was accepted or rejected and will be saved to your SharePoint. At present, the checks in this stage are executed at 11 am. You will receive an email notification following completion of these checks.

Following daily checks, we will also send you a link to your up-to-date Unit Meter Point Schedule portfolio via email. Depending on the size of your portfolio, it may be grouped into multiple files (up to 100k rows per file). If you want to opt-out from receiving these regular Unit Meter Point Schedule portfolio files, please do so by sending an email to the Demand Flexibility Service list.

Additionally, at any point you can query the API to get your up to date portfolio.

Note: The daily Unit Meter Point submissions are incremental, i.e., the participant does not need to submit all its portfolio every day; only those meter points that they wish to add or remove. For example, if on Day 1 you submit your initial portfolio comprising 100k meter points, and on Day 2 you want to add a further 10k meters, the submission of Day 2 would consist only of those additional 10k meters. NESO builds and maintains a database of your portfolio up to date based on your daily submissions. Note it is essential to update the Unit Meter Point Schedule to remove meters no longer present in your portfolio. NESO have outlined the importance of ensuring customers can clearly register and de-register with providers.

The following points are required in relation to submission of the Unit Meter Point Schedule.

1. Unit Meter Points will need to be submitted to the NESO, to check for duplications against other Registered DFS Participants using the template provided.
2. Unit Meter Points should only be submitted for customers who have agreed to participate in the Demand Flexibility Service ensuring timestamp information is available.

3. A check of the portfolios of each Registered DFS Participant will be carried out daily.
4. Providers may submit their Unit Meter Point Data file on a daily basis using the following template file. This only needs to be submitted if there is a change. This includes both adding and removing Unit Meter Points.  
 "Provider\_ProviderName\_UnitMeterPointSchedule\_DATA\_ddmmyyyy.csv"  
 Where "ddmmyyyy" enter the file submission date.
5. Alternatively, providers can submit Unit Meter Point Data via the DFS API. More details on how to submit meter points using the API are given in Appendix 4.
6. NESO will accept the Unit Meter Point Schedule only if providers follow the file template standards. The file headers are shown below and are described in Table 2.

Submission Date
Registered DFS Participant
Import MPAN
Export MPAN
MPANs Effective From
MPANs Effective To
MPANs Customer Consent Flag
Consent Effective From
Consent Effective To
Sub Meter Serial Number
Timestamp Subscribed
DFS Unit ID
Opt In
HH Settled
Consumer Type
DFS Initiation Measure
Action



Public

## Data Validations:

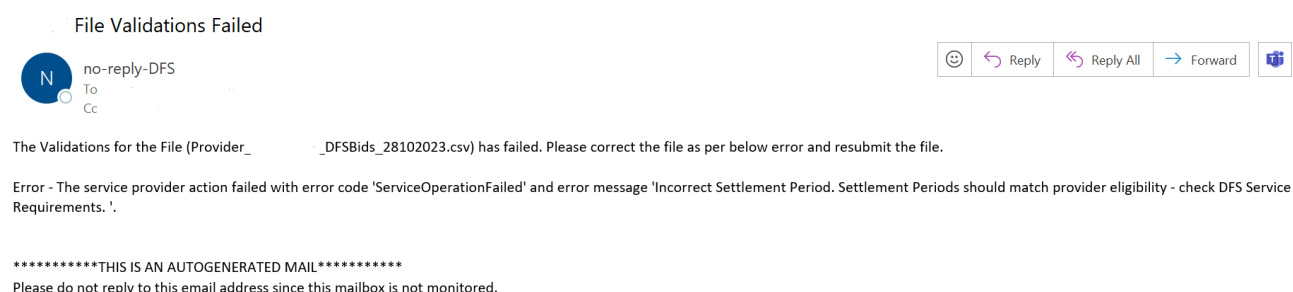
- DFS Initiation Measure needs to be completed with either “Manually Initiated” or “Directly Instructable”.
- Please ensure the Unit Meter Point data (import and export) is stored as a number, with zero decimal places and do not use scientific notation.
- Please ensure your Unit Meter Point numbers are shown in full detail once entered into the template, ahead of being submitted, as explained in Section 2.6 **Common issues when saving Unit Meter Point Schedule file**. Otherwise, your file will not be accepted.
- The Import and Export Unit Meter Point fields should be exactly 13 digits long.
- All sub meters associated to the same boundary meter must be either *Opt-in* or *Opt-out* but not both.
- If participating with a Sub-meter,
  - Include the associated Boundary meter in your submission. Otherwise, it will be picked up in validations and rejected.
- Consent Effective From: This is only needed if the boundary meter (MPAN) is Half-hourly settled, the consumer type is *Industrial & Commercial* or *I&C* and Customer Consent True. The format must be dd/mm/yyyy.
- Consent Effective To: This is only needed if the boundary meter (MPAN) is Half-hourly settled, the consumer type is *Industrial & Commercial* or *I&C* and Customer Consent True. The format must be dd/mm/yyyy.
- MPANs Customer Consent Flag:
  - If the boundary meter (MPAN) is Half-hourly settled and the consumer type is *Industrial & Commercial* or *I&C*, then this can be True or False (not blank).
  - If the boundary meter (MPAN) is **not** Half-hourly settled and if the consumer type is *Industrial & Commercial* or *I&C*, then it needs to be blank.
  - If the consumer type is *Domestic*, then it needs to be blank.
- DFS Unit ID: This will be used to validate your Bid submission. A meter point can only be in one DFS Unit.

Public

## 5. File Validation Failure – communications from NESO

Registered DFS Participants will receive an email notification if they fail to meet the file validations and data validations, when uploading files to the “Drop Box” folder in the DFS Assessment Platform or when submitting the data using the API.

1. Providers are strictly instructed to follow the file and data validations to process their respective files.
2. An email notification will be sent to their registered email address if the Registered DFS Participant has submitted a file which failed to meet the file and data validations from [no-reply-DFS@uk.nationalenergyso.com](mailto:no-reply-DFS@uk.nationalenergyso.com) Registered DFS Participants can see the Error message in the email notification describing why they have failed to meet the file and data validations for each respective file.
3. Example “failed validation” email notification:



## Appendix 3 – NESO communications to Registered DFS Participants and Industry

### 1. Anticipated DFS Requirement Notice (ARN)

This year, as set out in our consultation and [submission document](#), we are not committing to publishing Anticipated Requirement Notices (ARN). Should we do so, we will publish these on the [NESO Data Portal](#). They shall not commit us to issue a Service Requirement and similarly we may publish a Service Requirement without an ARN. We encourage all participants to use the data portal for ARN notifications.

### 2. DFS Service Requirement

The NESO may publish a Service Requirement for the current day via the Data Portal. Note that the start and end times for the event are given in Local Time (GMT or BST). This will set out the DFS Service Windows and total required volume of Demand Flexibility (in MW), in addition to which Service Windows each registered DFS Participants are eligible to submit DFS Bids for.

1. NESO will send the Service Requirement to all Registered DFS Participants through data portal on the following link – [DFS Service Requirement | National Energy System Operator \(neso.energy\)](#) The DFS Service Requirements file contains the following headers, which are explained in Table 2.

Delivery Date
From
To
Service Requirement MW
Service Requirement Type
Guaranteed Acceptance Price GBP per MWh
Dispatch Type
Participant Bids Eligible

Whilst this year we have not committed to test events, we have retained the capability in our service terms. Should we issue a test event requirement notice, we may indicate the period that providers have to bid in for the test, as in previous years. This is to manage operational requirements. The *Dispatch Type* column will clearly indicate if the relevant service period is open for all participants to submit bids or if it is a *Staggered Dispatch*. Furthermore, the *Participant Bids Eligible* column in the DFS Service Requirement file will clearly indicate if you are eligible or not to submit bids for each service window.

For example, let's assume that in the period between 17:00h and 19:00h there is a Service Requirement for a DFS Test. Furthermore, let's assume that the registered capacity across one or more participants is over the critical threshold that would necessitate a Staggered Dispatch (See Table 3).

Table 3 Registered Capacity per Participant

Registered DFS Participant	Registered Capacity MW
<b>A</b>	500
<b>B</b>	100
<b>C</b>	50
<b>D</b>	50
<b>E</b>	100

This requirement could take the form shown below:

From	To	Service Requirement MW	Service Requirement Type	Guaranteed Acceptance Price GBP per MWh	Dispatch Type	Participant Bids Eligible
17:00	17:30	500	Test	200	<b>Staggered</b>	<b>A</b>
17:30	18:00	500	Test	200	<b>Staggered</b>	<b>A</b>
18:00	18:30	500	Test	200	<b>Staggered</b>	<b>B, C, D, E</b>
18:30	19:00	500	Test	200	<b>Staggered</b>	<b>B, C, D, E</b>

In this example, all Registered Participants {A, B, C, D, E} would be eligible for a one-hour test but distributed over a two-hour period to manage from an operational perspective. Participant A can only submit bids for the period between 17:00 to 18:00, whereas the rest of participants are only eligible to submit bids for the period between 18:00 to 19:00.

Public

### 3. DFS Utilisation Report (DFS Acceptances)

DFS Acceptances will be sent approximately one hour after the DFS Bid Submission Time. The DFS Utilisation file contains the DFS Acceptances (list of the Registered DFS Participant's DFS Bids with Accepted/Rejected status). A single file will be sent to each Registered DFS Participant.

1. NESO will send the DFS Utilisation Report post assessment to all Registered DFS Participants using the following template  
"NESO\_ProviderName\_DFSUtilisationReport\_ddmmyyyy.csv" where "ddmmyyyy" is aligned to the delivery date.
2. Providers can see and download the DFS Utilisation Report in the Bid Outcome folder of their respective SharePoint location.
3. DFS Utilisation Report contains the following headers, which are explained in detail in Table 2.

Delivery Date
Registered DFS Participant
DFS Unit ID
DFS Volume MW
From
To
Service Requirement Type
Utilisation Price GBP per MWh
Status
GSP 14 Zones+Other+Total

A combination of the DFS Acceptances from all Registered Participants will be published to the Data Portal, in the form of the DFS Utilisation Report, and will be available for download shortly after all participants receive their individual acceptances.

## Appendix 4 – API Submission

As mentioned in Section 2, NESO has developed an API so participants can submit both their Unit Meter Point Schedule and DFS Bids files. It is the aim of NESO that by offering an option to submit and receive information via the API, alongside the SharePoint option, providers will have more flexibility in how they participate in the service.

The same validations that are built in the SharePoint part of the DFS Assessment Platform, will apply to all submissions via API.

Once you have started the registration process and indicate that you want to use the API, an authorisation process will commence in which users need to get the authorisation token from Microsoft and use that token to get authorised by the DFS Assessment Platform to use the API.

For additional information in how to participate using the API, please refer to our **API Schema for Unit Meter Point Schedule and Bid Submissions** file, which can be found on our DFS webpage.

Please note that the document may be updated from time to time. NESO recommend signing up to the DFS Newsletter to help avoid missing updates.

[https://www.neso.energy/industry-information/balancing-services/demand-flexibility-service-dfs#Contractual-and-guidance-documents-\(2023/24\)](https://www.neso.energy/industry-information/balancing-services/demand-flexibility-service-dfs#Contractual-and-guidance-documents-(2023/24))

## Appendix 5 – Example Operational Baseline calculation

### 1. Find Eligible Days (For both I&C and domestic consumers)

- For Working days (Monday – Friday) The unadjusted baseline is calculated using data from the **10** most recent eligible days.
- For Non-working days (Saturday, Sunday and bank holidays) the unadjusted baseline is calculated using **4** most recent eligible days.
  - From the **4** most recent days the mean average of the 2 median days will be taken
- The selection of eligible days is taken from the time **D-60** to **D-1**

Selection of Eligible Days for use in calculating the baseline		
Day Type	No. of Eligible Days identified in the 60-day window	Historical Settlement Days used to calculate the baseline
Working Day	Ten or more Eligible Days	Ten most recent Eligible Days

## Public

Working Day	5 to 9 Eligible Days	All Eligible Days
Working Day	Less than five Eligible Days <u>The Unit Meter Point cannot be used</u>	Baseline Values default to out-turn metered data for the Metering System(s) in the Baselined Entity, and they will be reported to the Lead Party as having insufficient data.
Non-Working Day	Four or more Eligible Days	Four most recent Eligible Days
Non-Working Day	Less than four Eligible Days	Baseline Values will default to out-turn metered data for the Metering System(s) in the Baselined Entity, and they will be reported to the Lead Party as having insufficient data.

Days will **not** be eligible if they have been classed as **Event Days**.

**Event Days** include days where

- DFS was called, or
- A DNO instructed the meter for delivery of a flexibility service with 48 hours' notice or less.
- The meter point was part of a CM Unit that delivered as a response to a CM event.
- The meter point was part of another service or trial (see Stacking list) and delivered with 48 hours' notice or less.

## 2. Unadjusted baseline (For both I&C and domestic consumers)

- Based on historical actual metered data, calculating each eligible day's **Actual Usage** (kwh) using (MPAN +) – (MPAN –) to give you the MPAN Total.

Day type	From	To	Day 1 Import MPAN	Day 1 Export MPAN	Day 1 MPAN Total
Working Day	00:00	00:30			= Day 1 Import MPAN – Day 1 Export MPAN
Working Day	00:30	01:00			

## Public

### Working Day

- o You should never have figures in both “Export MPAN and “Import MPAN” fields in the same settlement period. One should always be 0.
- The unadjusted baseline is calculated by taking the average of all Eligible Days’ Actual Usage (kWh), the steps are listed as follows:
  - o Determine Time period (e.g., if it is for working day, you will need 10 most recent eligible days: days 1–10)
  - o Add together all the days Actual Usage in each Settlement Period then divide by total number of days.
  - o  $\text{Unadjusted Baseline } j = \sum n \text{ Actual Usage} / n$
  - o where  $j$  is the  $j$ th Settlement Period and  $n$  is number of Eligible Days
  - o Repeat this for each Settlement Period to give your 24-hour unadjusted baseline.

Day type	From	To	Day 1 MPAN Total	Day 2 MPAN Total	...	Day 10 MPAN Total	Unadjusted Baseline (kWh)
Working Day	00:00	00:30					= Average (Day 1 MPAN Total : Day 10 MPAN Total)
Working Day	00:30	01:00					...
Working Day	...	...					...

## Appendix 6 – Local Time Submissions

The DFS is now an all-year-round service and we will call events in local time. Greenwich Mean Time (GMT) and British Summer Time (BST). All files should be submitted in local time, GMT or BST, depending on the time of year. Data portal files will be issued in local time (BST or GMT).

### Example

The following example outlines how to correctly submit data for a hypothetical event running on 30<sup>th</sup> May 2025 from 18:30–20:00 in local time (BST).



## Public

### Data Portal DFS Requirements

The *From* and *To* columns in the requirements file would have the time in BST, as seen below:

Delivery Date	From	To	Service Requirement MW	Service Requirement Type	Guaranteed Acceptance Price per MWh	Dispatch Type
30/05/2025	18:30	19:00	500	Live	0	All Providers
30/05/2025	19:00	19:30	500	Live	0	All Providers
30/05/2025	19:30	20:00	500	Live	0	All Providers

## Bid Submission

Similarly, for an event running on 30<sup>th</sup> May 2025 from 18:30-20:00 in local time (BST) all submissions must be made in BST as below:

Delivery Date	Registered DFS Participant	DFS Unit ID	DFS Volume MW	From	To	Utilisation Price Per MWh	Total
30/05/2025	Provider	UNIT-02	4	18:30	19:00	200	4
30/05/2025	Provider	UNIT-02	4	19:30	20:00	200	4
30/05/2025	Provider	UNIT-03	3	18:30	19:00	200	3
30/05/2025	Provider	UNIT-03	3	19:30	20:00	200	3
30/05/2025	Provider	UNIT-04	1	18:30	19:00	200	1

## Settlement Data Submission

The settlement data must be in line with the event period and in local time, as shown below:

Delivery Date	From	To	Registered DFS Participant	DFS Unit ID	Import MPAN	Export MPAN	Sub Meter Serial Number	Participating	Baseline kWh
30/05/2025	18:30	19:00	Provider	UNIT-02	1234567890	1234567890		TRUE	5500
30/05/2025	19:30	20:00	Provider	UNIT-02	1134567880			TRUE	5500
30/05/2025	18:30	19:00	Provider	UNIT-03	1134567880			TRUE	1000
30/05/2025	19:30	20:00	Provider	UNIT-03	1134567880			TRUE	1000
30/05/2025	18:30	19:00	Provider	UNIT-04	333456770			TRUE	500

## Weekly Indicative Forecast

Also to be submitted in Local Time

## Public

Delivery Date	...	DFS Volume MW	From	To	Utilisation Price GBP per MWh
31/05/2025	..	10	0:00	0:30	400
31/05/2025	...	10	0:30	1:00	400
...	...	...	...	..	..
06/06/2025	...	10	23:00	23:30	400
06/06/2025	...	10	23:30	0:00	400