

# Distribution Flexibility Services Procurement Statement

April 2022

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## Executive Summary

In this, our second Distribution Flexibility Services Procurement Statement, we highlight how we intend to procure Flexibility Services in the coming regulatory year.

Following extensive stakeholder engagement in the last few months, this is a year of transition with a number of new products planned for deployment.

We will build systems and processes that are capable of procuring over a number of timeframes, to help WPD better reflect the value of our services, and FSPs to build different routes to market for different assets.

In the first half of the year, we intend to retain most of the processes from our previous statement. We then intend to submit an updated statement to accommodate the key changes including:

- The addition of new longer term services (Sustain, Secure Long Term & Dynamic Long Term)
- A new more flexible procurement structure focussed on Trades.
- The facilitation of Secondary Trading

We have also increased the focus on the accessibility of our relevant information. We acknowledge there is a lot of data and information detail around how and where we procure services. Through our commitment to a data catalogue and the data and publications section in this document we hope to ease the navigation of this information.

In the final year of ED1, we want to reflect on the significant progress we have made in the procurement of Flexibility Services in this regulatory period. We have built from an innovation idea, to a business as usual, cross industry initiative. Our Flexible Power brand is now in use by five DNOs, and our Future Flex and Intra Flex projects are now highlighting how we move forwards to accommodate domestic assets as well as closer to real time markets. As we prepare for ED2, we acknowledge the significant cost savings we are building into the next regulatory period due to flexibility, and the associated work ahead to further streamline and productionise processes to ensure we gain maximum value from the available flexibility resources.

# 1. Introduction

Western Power Distribution (WPD) is a Distribution Network Operator (DNO) and a Distribution System Operator (DSO), responsible for distributing electricity to 8 million customers. We look after a network of wires, poles, pylons, cables and substations; distributing electricity to homes and businesses across the West Midlands, East Midlands, the South West and South Wales as shown in Figure 1.



Figure 1: WPD licence area

The distribution network sits between the transmission network and our customers. The drive towards a low carbon economy has led to increasing levels of generation directly connected to our distribution network along with new forms of electricity demand such as electric vehicles, heat pumps and battery storage.

Our main responsibilities to our customers are illustrated below:

<b>Keep the lights on</b>	<b>Maintain equipment</b>	<b>Fix the network</b>	<b>Connect customers</b>	<b>Operate a smart system</b>
by operating our network assets effectively	so that the network remains reliable	if equipment gets damaged or is faulty	by upgrading existing networks or building new ones	by managing two-way power flows and flexibility services

The energy system is undergoing a huge transition because of the changes to electricity generation and use, including the growth of distributed generation and the increasing popularity of electric vehicles and heat pumps. These changes and the associated increases in demand have required us to develop new processes and systems, such as adopting flexible solutions to manage different power flows on the network. To continue to operate a smarter, more efficient energy system, we are carrying out the functions of a Distribution System Operator.

As these functions develop, we are committed to providing clear information about what Flexibility Services we need and how we procure them.

This document, our second Distribution Flexibility Services Procurement Statement, is one element of that commitment and draws together information to provide an overview of how we intend to procure services over the next regulatory year (April 22-March 23). It will sit alongside the Distribution Flexibility Services Procurement Report which will detail what services we have procured over the same period, to be published by the end of April. These form part of an annual process with the Procurement Statement submitted to Ofgem by April and the Procurement Report published in the April of the subsequent year (more details are available in section 4). We see these documents, required as part of our Distribution Licence, as base requirements for market information and transparency, which are supported by a host of publically available information and data to provide more details where necessary. These are referenced throughout the document, and are collated in section 7.

All relevant information, including previous documents are available on our Website: [Western Power Distribution - Distribution Flexibility Services Reporting](#)

## 1. Proposed Changes

In the last year we have engaged with stakeholders on a number of changes to our processes which we are looking to be implemented in the coming year.

Many of these are scheduled for our second procurement round of the year. As such we have written the statement to provide clarity on our current processes, with the first procurement round in mind. For transparency we have included the proposed changes in separate call out boxes. We will submit/publish an updated Procurement Statement ahead of their implementation later in the year.

More information on these proposed changes are available in our [Evolution of Distribution Flexibility Services](#) document and our [Distribution Flexibility Services Consultation](#) document.

Within this document we cover a number of key topics such as:

- Why we procure services,
- How we procure these services,
- Indications on where we need the services, with details on the process for identifying and publishing the needs,
- Our tendering processes,
- How we engage with stakeholders,
- The future services we are developing, &
- What data is available and where.

## 2. Flexibility Service Requirements

### 2.1 Why we procure Flexibility Services

Traditional network design was based on passive networks designed to deliver peak demand with minimal intervention with a specified level of redundancy. To enable a greater volume of demand, generation and storage to be connected, our networks are becoming smarter and more active. Creating a more efficient and flexible system will benefit all customers and empower them to be at the centre of the energy revolution. The core driver for our procurement of flexibility is the deferral of network reinforcement. By managing temporal peaks on the network, we can avoid overloading assets and hence push back the need to invest in more assets.

As detailed in section 5.1, we have developed robust processes to help us understand where the deployment of flexibility services is the most cost effective solution

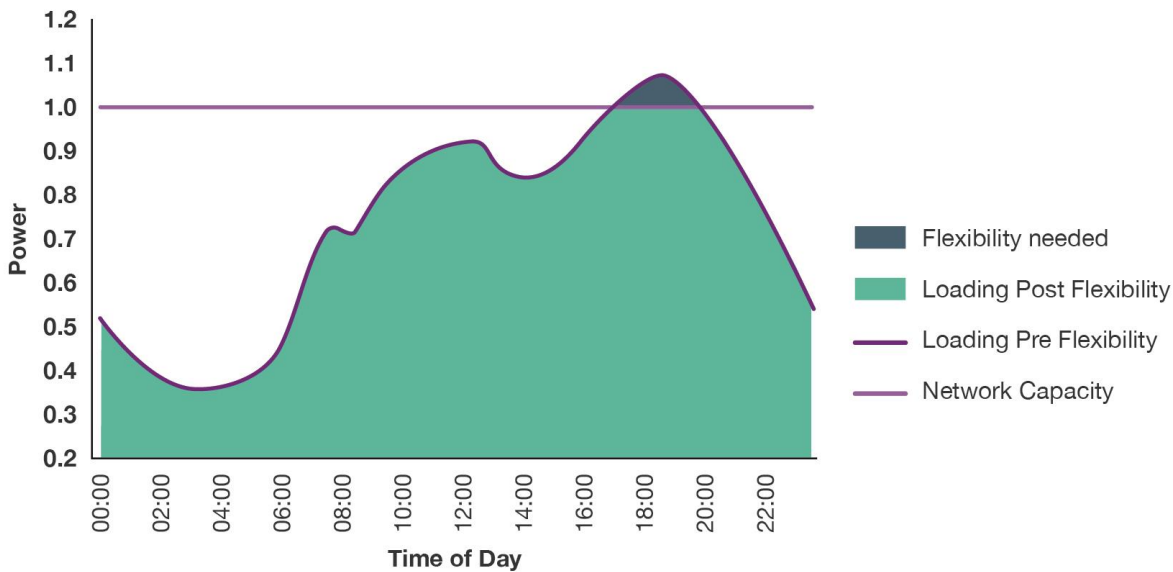


Figure 2: The need for Flexibility

Flexibility can provide more granular increases in network capacity, better reflecting the in-year requirements of network users. Flexibility can also help to manage capacity shortfalls economically and responsively until the need for conventional reinforcement is established. In some circumstances, a longer period of flexibility may allow for more appropriate, long term investment plans to be implemented. Flexibility can also be used to connect new customers to heavily loaded parts of the network without the need for reinforcement. Our ‘Flexibility First’ approach can soften the criticality of timing for the intervention, if sufficient flexibility is available and economic, by managing peak demand leading up to and beyond the capacity limit of the network. The extent to which flexibility is used will be determined by an industry standard cost benefit analysis

While we will be making greater use of flexibility, there will still be situations where it is necessary to carry out conventional network reinforcement, for instance, where there is insufficient flexibility provision to tackle the level of network constraint. The following diagram illustrates the different approaches that may arise.

Network Loading	100%		
<b>Conventional Reinforcement</b>	Accept additional connections until network reaches capacity		Reinforce conventionally
<b>Flexibility First</b>	Accept additional connections until network nearing capacity	Use flexibility to manage network up to capacity and beyond where available	Reinforce conventionally where economic

Figure 3: Options for constraint resolution

Flexibility Services are one of many new active solutions being used DSOs to help manage networks effectively including the use of smart grid technologies such as enhanced voltage optimisation or automated load transfers.

## 2.2 How we procure Flexibility Services

When we created our initial flexibility service offerings, we established the Flexible Power brand. This aimed to create clear distinction between more traditional DNO roles of offering connections, and the new requirements around the procurement of flexibility services.



Figure 4: Flexible Power Logo

The Flexible Power brand remains at the centre of our procurement and operation of services. It has a suite of core processes which can then be linked to wider market platforms. Since its development, Flexible Power has now been adopted by the majority of UK DNOs, bringing a level of standardisation across the industry.

More details can be found on the Flexible Power website: [www.flexiblepower.co.uk](http://www.flexiblepower.co.uk)

### 2.2.1 Services

We currently procure three Active Power services: Secure, Dynamic and Restore. These align with the Open Networks [Common Services definitions](#) which were set out by Product 3 of WS1a in 2020. We do not currently procure Sustain Services (see call-out box 2 for our plans in the coming year), or any Reactive Power services. Each Constraint Management Zone (CMZ), a zone where we procure services, has a requirement for either a Secure or Dynamic services as well as the Restore service.

Secure	Dynamic	Restore
<p>Our <b>Secure</b> service is used to manage peak demand loading on the network and pre-emptively reduce network loading. It offers a higher availability payment and lower utilisation payment.</p>	<p>Our <b>Dynamic</b> service has been developed to support the network in the event of specific fault conditions, such as during maintenance work. It offers a low availability payment and higher utilisation payment.</p>	<p>Our <b>Restore</b> service supports power restoration following rare fault conditions. No availability payment, instead it offers a premium utilisation payment.</p>

Figure 5: Overview of our Flexibility Services

These services are used to manage constraints at the higher voltage levels (EHV and Primary networks), however we look to recruit Flexibility Service Providers (FSPs) at all voltage levels below the constraint being managed. We seek flexibility from a wide range of providers and have not set a contractual minimum capacity limit for participation to make participation possible for a larger range of FSPs, including those connected at lower voltages.

We do not currently procure services to manage LV constraints due to the challenging economics and very small associated geographic locations. As flexibility services mature and volumes grow, this position will be reviewed.

To date most procurements have focussed on demand turn down or generation turn up. However, we ran a demand turn up/generation turn down zone last year. As detailed in section 5, we have a robust process for identifying where we procure services. As the impacts of Ofgem's Access and Forward Looking Charges Significant Code Review are better understood, we anticipate the number of Demand Turn Up zones to increase.

#### Secure

The Secure service is used to manage peak demand loading on the network and pre-emptively reduce network loading. As these requirements are predictable, payments consist of an Arming fee which is credited when the

service is scheduled (irrespective of whether it is used) and a further Utilisation payment awarded on delivery (related to the amount of flexibility provided).

Secure service requirements are declared in advance for the following week. The week-ahead declarations are scheduled to allow FSPs to participate in alternative services when not required for the Secure service.

## Dynamic

The Dynamic service has been developed to support the network in the event of specific fault conditions, often coinciding with other outages for maintenance work.

As the service is required following a network fault, it consists of an Availability fee and Utilisation fee. By accepting an Availability fee, FSPs are expected to be ready to respond to Utilisation calls within 15 minutes. Availability under the Dynamic service is usually expected to be of a longer duration compared to the pre-emptive Secure service.

Dynamic availability windows are also declared in advance for the following week.

## Restore

The Restore service is intended to help with restoration following rare network fault conditions. Under such circumstances, the Restore service can be used to reduce the stress on the network.

As the requirement is inherently unpredictable, Restore is based on a premium 'Utilisation only' fee. This rewards response that aids network restoration, but pays no Arming or Availability fees. FSPs who are declared available for the Restore service are expected to respond to any Utilisation calls within 15 minutes and receive an associated Utilisation fee.

Each service is subject to the specific payment mechanics. These are designed to encourage full delivery, whilst balancing the level of penalties to ensure the services remain attractive. These are detailed in our Payment Mechanics document (<https://www.flexiblepower.co.uk/downloads/603>) and are based on a clawback of value for under delivery. For Secure and Dynamic, below our 5% grace factor, for every 1% of under delivery, we reduce the payment by 3%. This is measured on a minute by minute basis. There is also a clawback on availability payments. These are designed to encourage accurate declarations of capacity.

The services are also currently subject to our baselining methodology as outlined in our Baselining document (<https://www.flexiblepower.co.uk/downloads/600>), this covers a simple historic baseline (based on the metering from the previous month between 15:00 and 20:00) and a nomination or zero baseline. The default baseline is the historic, with the others available upon agreement with WPD. Following the conclusion of the [Open Networks WS1A P7 Baselining work from 2021](#), we will update our baselining methodologies to align this year. We aim to have the aligned baselines deployed ahead of Procurement Cycle 2 of 2022.

More detail on each service can be found in the overview on the Flexible Power website:

[www.flexiblepower.co.uk/about-flexibility-services](http://www.flexiblepower.co.uk/about-flexibility-services)

## 2. New Services

Over the coming year we plan to introduce a number of new longer term services: Sustain, Secure Long Term and Dynamic Long Term. These products bring forward the decision making for the declaration and acceptance of service availability, and in some cases service utilisation, to the procurement timescale. This will allow larger chunks of availability to be offered, and provide more certainty for FSPs. It will also allow WPD to manage market and operational risk. These new products will sit alongside our existing products and provide multiple opportunities for participation at the different timescales. More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 2.2).

### 2.2.2 Volumes and requirements

We carry out procurement every 6 months (see more details in section 3). Each procurement sets out in detail its specific requirements including the locations and volumes needed.



As highlighted in section 5, we have a robust process for the identification of system needs, and the assessment of flexibility options through our [Distribution Network Options Assessment \(DNOA\)](#) process. The figure below highlights how our key processes interact.

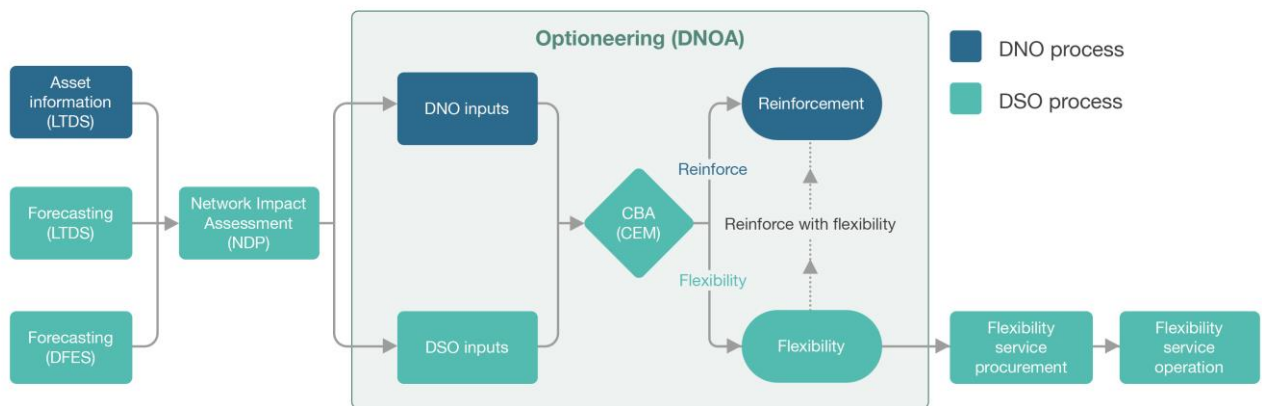


Figure 6: Determining Flexibility Requirements

Our [Long Term Development Statement \(LTDS\)](#) highlights the assets that make up our network. Feeding in the forecasting of Load Growth from our [Distribution Future Energy Scenarios \(DFES\)](#) allow us to understand how the loadings on the network will change. We set this out, including the key areas for future enhancement in our Network Development Plan (our first NDP is due by the end of April). As detailed later in section 5, the DNOA process then compares the options for managing any potential constraint. Built around the ENA’s Common Evaluation Methodology, this assesses the most effective routes forwards. The DNOA then feeds into our Procurement of Flexibility Services.

It should be noted that DNOA process also indicates the optimum duration for the usage of flexibility services. This feeds into our procurement and the length of contract we will award. As detailed in section 3, we offer the FSP the choice of 1 to 4 year contracts.

Due to the timing of these processes, we cannot provide a definitive view of all the services we will be procuring the coming year. The NDP, due in April, may highlight new areas of requirement.

However we acknowledge the value in providing indications of the potential volumes needed, to help build understanding on the order of magnitude of the market.

In total we have contracted with 709MW. 252MW was awarded in our last complete procurement, with a further 324MW out for award across 41 CMZs in our latest procurement round.

At the closure of our last procurement in 2021, there was over 110MW of unfulfilled requirements in our CMZs. A detailed results document is published [here](#).

Figure 6 highlights the volumes we have sought in our flexibility tenders up to the time of publishing.

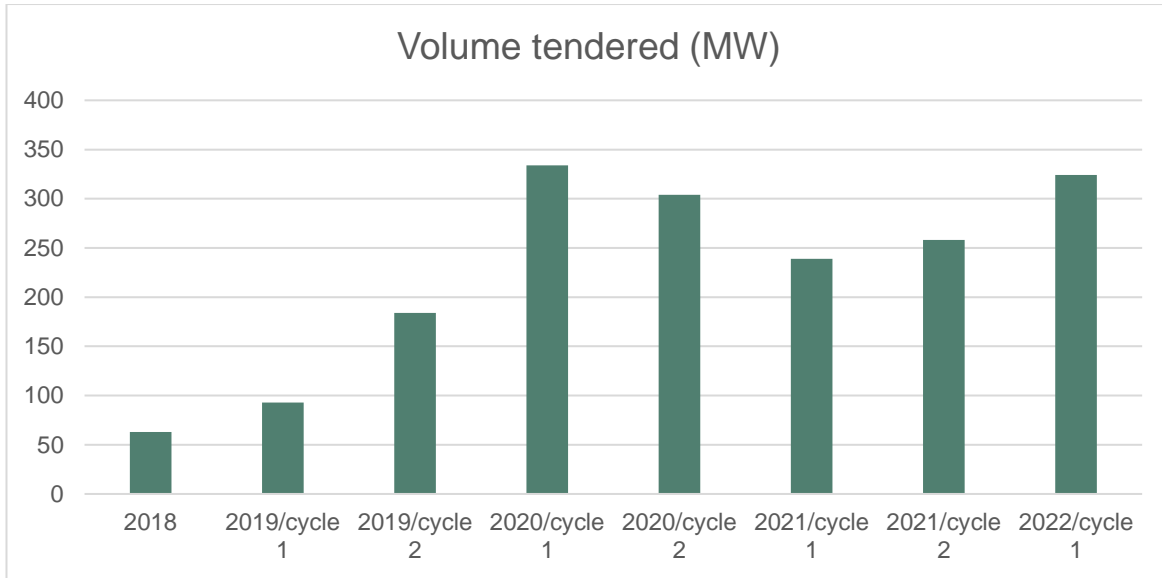


Figure 7: Volume tendered per procurement cycle (in MW)

It should be noted that at the time of publishing, we have a live procurement underway (the second procurement round from our 21/22 statement, as highlighted in section 3). This will impact the volumes under contract, as well as the estimates below on the potential market size which are based on the requirements (but not the outcomes) of the procurement. The zones included in the procurement are shown below.

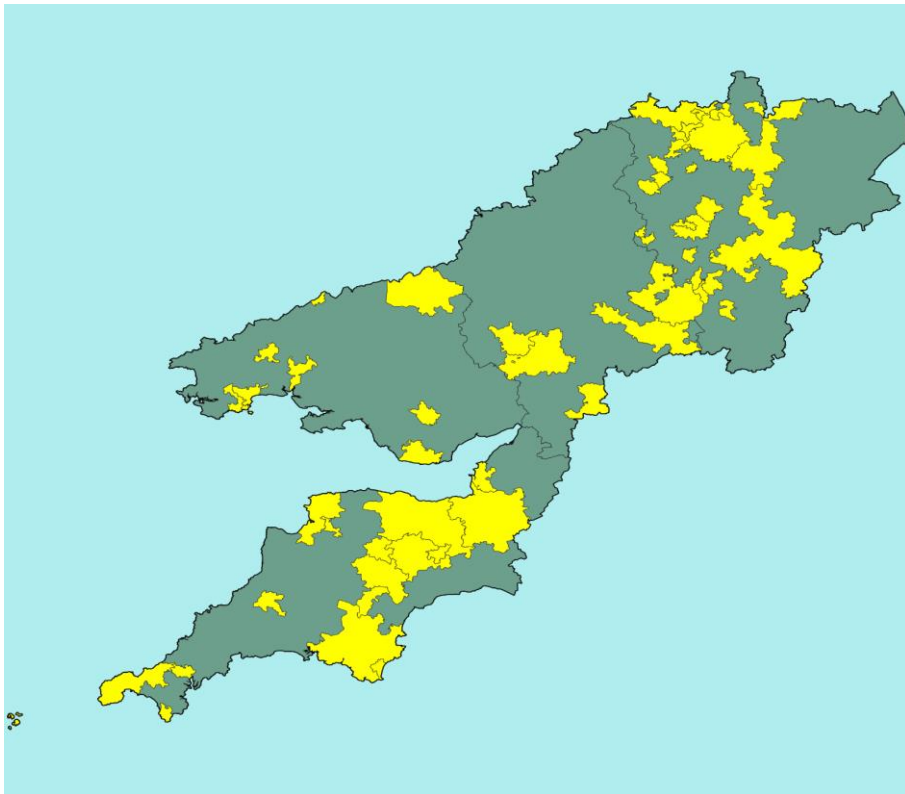


Figure 8: CMZs open for procurement at time of publishing (our T6A procurement round)

The Tables below summarise some of the key characteristics of this procurement. As detailed later, full data behind all of these summaries is available on the [Flexible Power Website](#) and the [Connected Data Portal](#).

Table 1: Summary of Procurement Requirements by Network Need

	Pre Fault		Post Fault	
	Peak Capacity (MW)	Forecast Utilisation (MWh)	Peak Capacity (MW)	Forecast Utilisation (MWh)
<b>Thermal</b>	168.07	11266.96	97.59	6414.11
<b>Voltage</b>	37.72	37.72	0	0
<b>Security Of Supply</b>	21.39	5654.75	0	0
<b>Network Stability</b>	0	0	0	0

Table 2: Summary of Procurement Requirements by Product Type

	Product				
	Sustain	Secure	Dynamic	Restore	Others
<b>Peak Capacity (MW)</b>	0*	54.31	270.46	324.77	0
<b>Forecast Utilisation (MWh)</b>	0*	744.61	49289.17	0	0
<b>Number of Zones</b>	0*	19	22	41	0

\*It should be noted that we will be looking to procure Sustain in the second procurement round of this year. As these figures are based on the current open procurement, they show as 0.

Table 3: Summary of Procurement Requirements by Location (CMZ)

Zone Name	Primary Product	Maximum Voltage Level and which service will be procured (kV)	Response Type	Peak Capacity (MW)	Forecast utilisation (MWhs)	Seasonal Requirement
<b>Aberaeron</b>	Dynamic	11	DTD/GTU	0.76	197.91	Winter
<b>Alfreton</b>	Secure	11	DTD/GTU	3.1	9.84	Summer
<b>Apollo - Tamworth</b>	Secure	11	DTD/GTU	0.95	1.79	Summer/Winter
<b>Berkswell SGT</b>	Secure	132	DTD/GTU	10.15	142.67	Summer
<b>Bridgwater/Street</b>	Dynamic	33	DTD/GTU	20.94	3621.01	Winter
<b>Chesterfield Main</b>	Secure	33	DTD/GTU	3.88	5.08	Winter
<b>Clowne</b>	Dynamic	11	DTD/GTU	1.56	251.51	Winter
<b>Coalville</b>	Dynamic	33	DTD/GTU	35.4	824.93	Winter
<b>East Aberthaw</b>	Dynamic	33	DTD/GTU	10.89	3163.43	Summer/Winter
<b>East Yelland</b>	Dynamic	33	DTD/GTU	10.64	456.18	Winter
<b>Feckenham South</b>	Dynamic	66	DTD/GTU	19.99	7480.31	Winter
<b>Grassmoor</b>	Secure	11	DTD/GTU	2.73	30.91	Winter
<b>Grendon - Corby 132kV</b>	Dynamic	132	DTD/GTU	42.55	207.05	Summer/Winter
<b>Hayle - Camborne</b>	Dynamic	132	DTD/GTU	52.58	483.05	Winter
<b>Hemyock</b>	Dynamic	11	DTD/GTU	1.43	334.83	Winter
<b>Hereford - Ledbury Ring</b>	Secure	66	DTD/GTU	6.93	21.64	Winter
<b>Hereford BSP</b>	Secure	66	DTD/GTU	5.08	30.63	Winter
<b>Ilkeston</b>	Dynamic	11	DTD/GTU	10.23	4245.42	Summer
<b>Isles of Scilly</b>	Secure	11	DTD/GTU	0.36	7.13	Summer/Winter

Laneast	Secure	11	DTD/GTU	0.36	7.29	Winter
Lincoln-Anderson Lane	Secure	33	DTD/GTU	5.2	26.62	Winter
Llandrindod - Rhayader	Dynamic	66	DTD/GTU	1.17	268.46	Winter
Llanfyrnach	Dynamic	11	DTD/GTU	2.71	1003.6	Winter
Loughborough	Dynamic	33	DTD/GTU	15.83	1135.27	Winter
Mackworth	Secure	33	DTD/GTU	1.38	20.52	Winter
Manton	Secure	11	DTD/GTU	2.18	143.49	Winter
Moretonhampstead	Dynamic	11	DTD/GTU	0.85	94.71	Winter
Mountain Ash	Secure	33	DTD/GTU	2.04	11.76	Winter
Mullion	Secure	11	DTD/GTU	1.22	100.61	Winter
New Dove Valley	Secure	11	DTD/GTU	3.05	84.03	Winter
Pembroke - BroadField	Dynamic	33	DTD/GTU	1.65	141.99	Winter
Pembroke - Tenby	Dynamic	33	DTD/GTU	5.8	18570.53	Summer/Winter
Pembroke – St Florence	Dynamic	33	DTD/GTU	0.8	194.51	Winter
Roundswell	Secure	11	DTD/GTU	1.7	6.73	Winter
Stokenham	Secure	11	DTD/GTU	0.34	9.46	Winter
Tiverton	Dynamic	33	DTD/GTU	14.37	4124.68	Winter
Trevaughan	Secure	33	DTD/GTU	3.02	77.41	Winter
Truro - Truro Treyew	Dynamic	33	DTD/GTU	8.12	1308.11	Winter
Weston Super Mare	Dynamic	33	DTD/GTU	10	445.77	Winter
Witheridge	Secure	11	DTD/GTU	0.64	7	Summer/Winter
Woodbeck	Dynamic	11	DTD/GTU	2.19	735.91	Winter

\*DTD/GTU means Demand Turn Down, Generation Turn Up. DTU/GTD mean Demand Turn Up/Generation Turn Down.

\*\* The seasonal requirements are determined looking at a % allocation of the value. As such Winter zones may have minor requirements in the summer and vice versa. For full details on exact requirements, please look at the detailed information on the requirements (as detailed in the section below).

We continue to review our requirements for Flexibility Services (see section 5) and expect the volume of flexibility services needed will increase over time.

Each Constraint Management Zone is focussed on the mitigation of a specific network constraint. As such the times and volumes needed are highly diverse. Across the portfolio of zones we have requirements in every month in the year, every day of the week and all half hours for some days. We acknowledge the requirement for comprehensive market information on our detailed procurement needs for each zone and therefore have created a suite of information to the market to communicate our latest needs. These include:

**Network Flexibility Map** (<https://www.westernpower.co.uk/network-flexibility-map-application>): We publish comprehensive data on signposting and forecasting through our Network Flexibility Map. This includes the availability windows and expected market volumes required for all our Distribution Future Energy Scenarios (DFES) for a five year period under the Signposting process. Visualisations of the data are available online through the mapping tool and datasets are downloadable without registration. The Network Flexibility Map also presents our firm flexibility requirements which feed into our procurement process. This shorter term view, gives clarity on our needs and is refreshed every six months in line with our procurement timeline.

**Flexible Power Map** (<https://www.flexiblepower.co.uk/map-application>): The Flexible Power Map replicates much of the functionality of the Network Flexibility Map but focusses on the requirements against which we will procure. It highlights the required volumes and forecast availability windows. This map is held on the Flexible Power website and hosts data from the other DNOs who are also involved in the Flexible Power Collaboration.

**Procurement documents** (see latest here: <https://www.flexiblepower.co.uk/downloads/426>): For every six monthly cycle of procurement, we publish market information detailing the requirements for procurement at each of the CMZs. This includes information such as the MW required, expected MWh availability windows and MWh estimated utilisation volumes.

**Distribution Networks Options Assessment (DNOA)** (<https://www.westernpower.co.uk/DNOA>): Our DNOA process provides a systematic methodology to recommend a single investment option for potential constraints. (See section 5.1). As part of the DNOA process we publish the outcomes of our assessment on a six monthly basis. This highlights why we have gone out to procurement for each zone

**Raw data on the Connected Data Portal:** ([Flexibility - Groups - Western Power Distribution's Connected Data Portal](#)). WPD now operates a Connected Data Portal. This is a platform for the hosting of datasets across the business. It allows data to be accessed via API, allowing easy processing at scale. We have committed to publishing the data behind the above publications on the portal. This includes, the detailed requirements in each zone as well as the associated geographic polygons. It allows for the

These publications link together as shown in the figure below.

## Flexibility Service Requirements

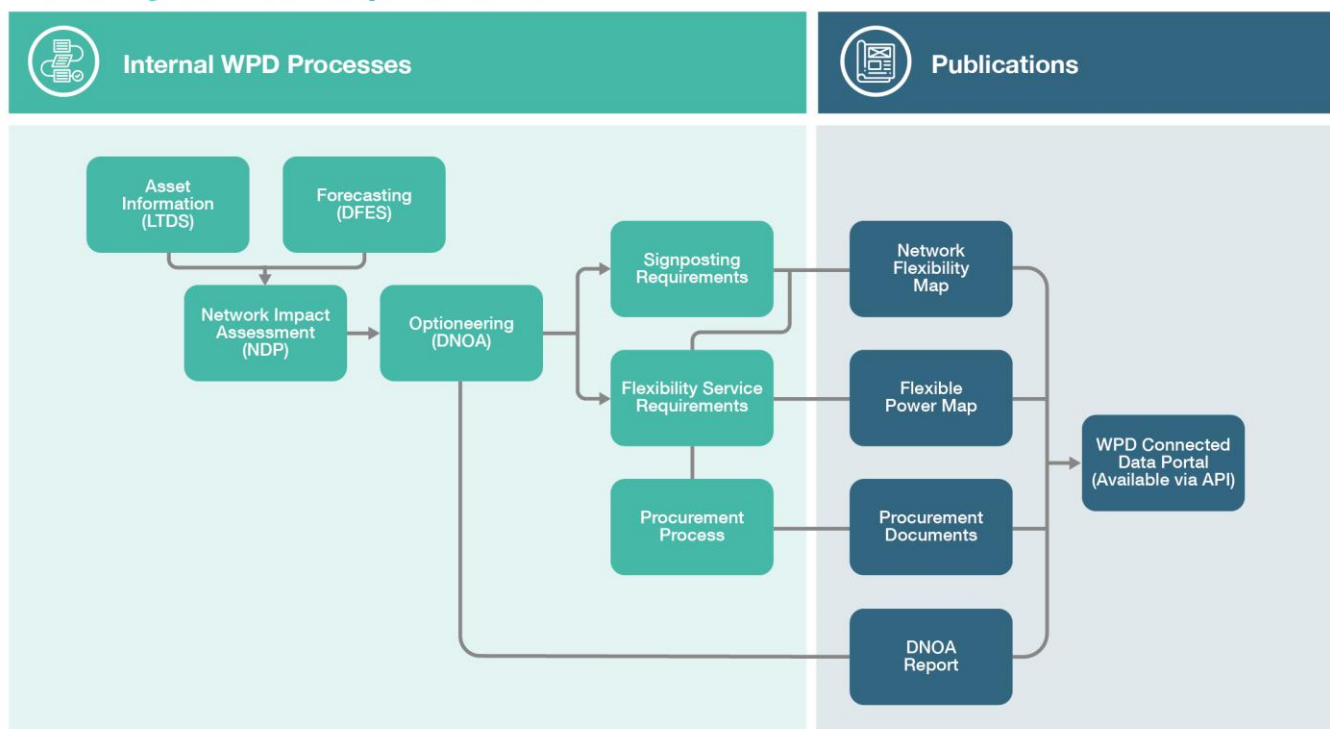


Figure 9: Network Requirement publications

We also provide a number of additional tools to aid FSPs in understanding our requirements such as a [Post Code checker](#) and a [service value calculator](#).

### 2.2.3 Operational Processes and Dispatch Principles

Once services have been procured (as per the process highlighted in section 3), we have clear and transparent processes for operating our services.

#### Monthly Forecasting

On a monthly basis we update the market with the outcomes of the previous month as well as our best forecast of requirements for the coming month. These are published on the Flexible Power website. (<https://www.flexiblepower.co.uk/tools-and-documents>).

## Weekly Operational Process

Our Operational Processes are focussed around the Flexible Power Portal (<https://flexiblepowerportal.co.uk>) and it's associated API. This is a simple API used to send Start/Stop messages and receive metering data (see our [Flexible Power Guide to API Set-up and UAT testing](#)).

The Portal and API are used to facilitate a weekly operational process (as covered in our [Operation Process Overview](#)).

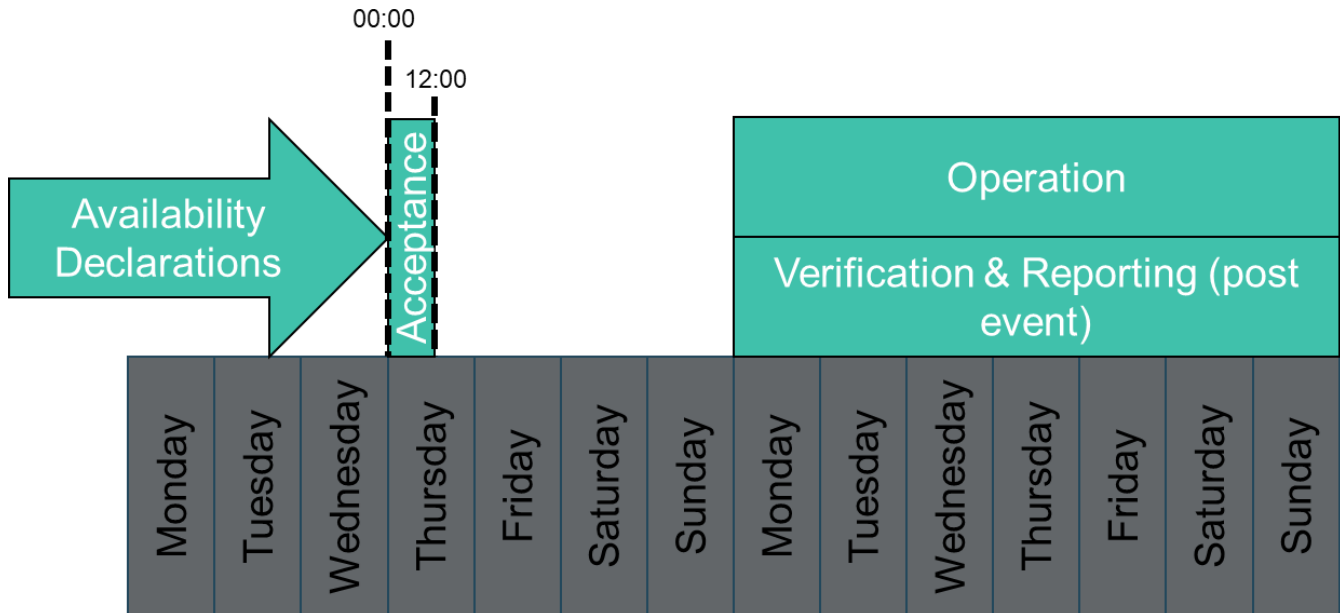


Figure 10: Weekly Operational process

### Availability Declarations

By midnight on Wednesday, FSPs provide us with their asset availability for the following operational week (Monday to Sunday).

This includes providing details such as the available capacity they can provide as well as key operational parameters such as maximum and minimum run times.

### Acceptance

On Thursday morning, before 12:00, we assess the available volume declared and accept availability to meet the volumes required for us to manage the relevant constraint.

As Restore has no availability payment, all availability declarations are accepted automatically.

After 12:00 this is communicated to FSPs via the portal.

### Operation

When we instruct FSPs to deliver flexibility depends on the service being used. These will always be within periods of accepted availability.

- For Secure, the default is that once accepted, the service will be utilised. FSPs can opt to schedule their asset operations and a Utilisation Instruction is sent via the API 15 minutes ahead of the requirement.
- For Dynamic, Utilisation is triggered by network conditions, after the acceptance of availability. A Utilisation instruction is sent via the API 15 minutes ahead of the requirement.
- For Restore, Utilisation is triggered in response to network conditions. FSPs are expected to provide response as soon as possible following receipt of the Utilisation Instruction sent via the API.

### 3. Operational Processes

As we move forwards, we will use a similar operational process for all the products. As detailed in section 3, procurement will happen on an ongoing basis. However we will continue to provide a view of long term requirements and further details at the month ahead stage.

For the short term product we will then open up a trade window at the week ahead stage, as detailed below. The Acceptance phase will incorporate the Joint Utilisation Competition for the Dynamic Product

For our long term products we will replace the two 6 monthly procurement windows with long term trade windows. These will be used to secure volume much further ahead of real time. Each trade window will be focussed on an operational period 6 months into the future. We will endeavour to release the complete annual requirement for any single zone within one of the trade windows, to ensure that providers are bidding for the maximum value. Where requirements span multiple operational windows we will endeavour to allocate it to the one with the best fit.

Our Sustain product will have a similar process on a monthly timescale.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 2.4).

As we currently operate a fixed price or pay-as-clear pricing structure (see section 3.3), there is no differentiation in price between FSPs. However we do optimise our instructions, instructing in an order which most closely aligns to the required flexibility. We will consider the following factors to optimise our decisions.

Table 4: Dispatch Principles

Principle	Description	In Practice
<b>Security</b>	The needs of the system will be met using flexibility in such a way that security of supply is maintained.	DSO/DNO requirements: Conform with applicable standards with an appropriate management of risk.
<b>Cost</b>	Flexibility will be operated to meet system need at the minimum level of cost.	Lowest prices per MWh and minimum levels of over procurement. Flexibility will be procured in cost order and will not unduly discriminate against any provider.
<b>Operability</b>	DSOs will seek to instruct services that offer compatible levels of operability.	Provider characteristics: availability, reliability, run times, response times etc... Accepted offers need to match/partially match requirements.

As our operational experience increases, we will use this information to provide feedback to FSPs in areas and support them to maximise their value to the system.

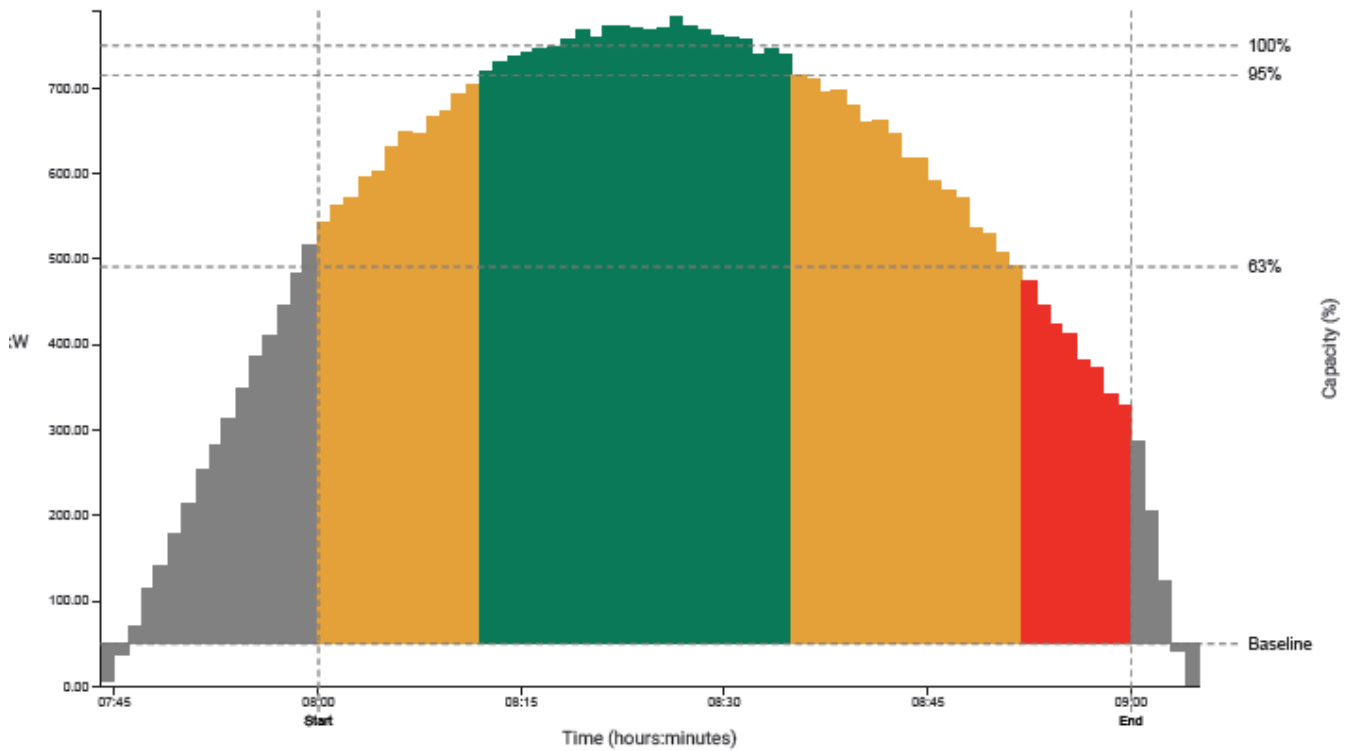
In the future, as our procurement strategy matures towards full market-led pricing, then pricing submitted for each flexibility asset will be the dominant factor for consideration.

More details about this process can be found in our Acceptance and Dispatch Document: <https://www.flexiblepower.co.uk/downloads/681>.

### Reporting & Settlement

Event [performance](#) and [earnings reports](#) are automatically generated shortly after the close of each instruction. These allow FSPs to easily assess their performance. Examples are available on the [Flexible Power Website](#). A sample Performance Report is shown below.

## Event Overview

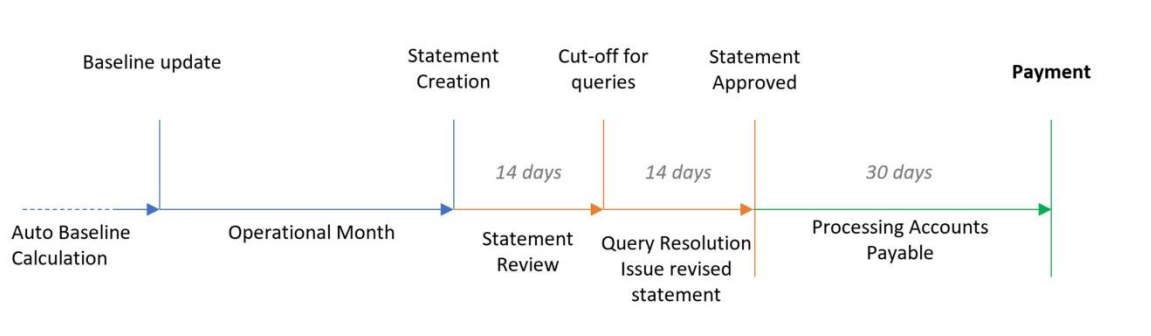


## Performance Highlights

Expected Total Volume	700.00 kWh
Actual Total Volume	592.92 kWh
Baseline	50.00 kW

Figure 11: Example Performance Report

Self-Billing invoices are then created on a monthly basis aggregating all the monthly events and follow the process highlighted below. This gives time for the review of the invoice, as well as any follow up queries ahead of payment.



More details about our settlement process can be found in our Billing Guide (<https://www.flexiblepower.co.uk/downloads/594>).



## 3. Tendering Process

### 3.1 Process

We have developed our tendering process to be objective, transparent and market based. They are designed to be as simple as possible whilst maintaining compliance with the Utilities Contract Regulations. These regulations impose strict requirements on how utilities procure services. Since 2019 we have used a Dynamic Purchasing System (DPS) to manage pre-qualified parties enabling their eligibility to tender into all our published procurement cycles. Our experience of using the DPS has fed into the procurement processes developed within the Open Networks project (WS1A P2).

The DPS splits the procurement activities into two key stages.

- Initially FSPs pre-qualify, joining the DPS. The DPS holds a record of all parties who have completed a pre-qualification process to be eligible to tender for demand response services in any of our current or future zones. Eligibility to join the DPS is not assessed on technical ability or on geographical location of assets, only company/individual address and contact details must be provided. To join the DPS, FSPs respond to our annual PIN. They are then sent our simple Pre-Qualification Questionnaire, which once completed and assessed completes their registration to the DPS.
- Once parties have successfully been added to the DPS will be invited to all future tenders. In line with our Procurement Timeline (see section 3.2) we launch two Invitation to Tenders (ITTs) a year. These focus on the geographic locations of assets, as well as the technical ability of the participant. They also invite FSPs to enter a best and final price that will be used should stage 2 pricing be achieved (see section 3.3).

This is highlighted in the figure below. More details can be found in our procurement process document (<https://www.flexiblepower.co.uk/downloads/136>).

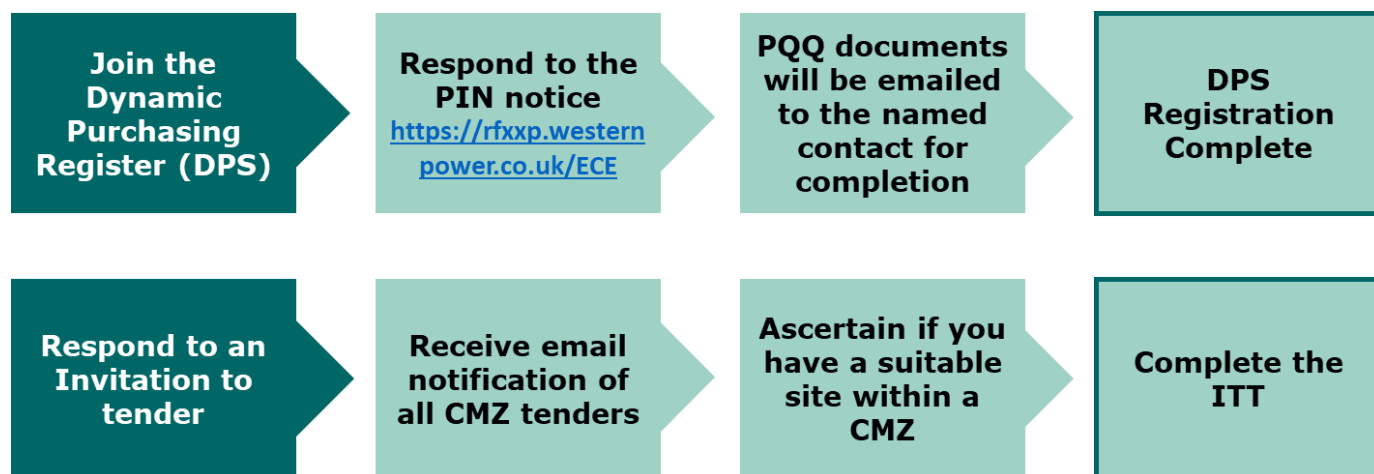


Figure 12: Procurement Process overview

Once procured, FSPs must integrate with the Flexible Power Portal and can then enter the weekly operational process (see section 2.2.3).

We understand the need to further improve the standardisation of processes across the industry. In the last year we have:

- Adopted the latest ENA Standard Flexibility Services Agreement (version 1.2) developed as part of WS1A P4. This has been in use since our 2<sup>nd</sup> procurement of 2021.
- In line with the work from WS1A P2, we have adopted the common DNO procurement timelines. This ensures that we adhere to a common view of minimum time periods for signposting, and responses to ITTs

We will continue to align with the outcomes of the Open Networks project.

#### 4. New Tendering Process

As we look to accommodate the introduction of new products, it's clear that our current procurement processes need to evolve to meet the different timeframes through which we will be securing flexibility and, to meet the anticipated increase in volumes entering into the market.

In addition, there is industry consensus that DNOs should be looking to evolve their procurement processes to align with the current approach taken by the ESO where market participants are pre-qualified and awarded a framework contract ahead of being able to bid for ESO Market opportunities.

We will retain the DPS for commercial qualification, with admission following completion of the PQQ. We will then introduce an overarching contract to be awarded to FSPs ahead of them being eligible to bid for opportunities/trades. The tender for an over-arching contract is available immediately after commercial qualification and only includes the Terms and Conditions and associated schedules. Acceptance of the Terms & Conditions are the only criteria for pass/fail. Pricing, capacity and asset qualification will not be considered at this stage. Once accepted this will be enduring with re-acceptance only needed for significant updates to the terms and conditions.

Once an over-arching tender is awarded an FSP is commercially eligible to participate in Trades, however in order to be fully eligible to enter into Trades the Technical Qualification requirements must then be completed.

Technical qualification includes the registration and validation of assets and the requirement on FSPs to link with our operational Portal over API so that start stop signal can be received and metering data can be shared for verification and settlement purposes.

Assets can be added, updated and deleted at any time by the Contracted FSP. Only assets that are registered and have been verified by WPD can be selected for participation in a Trade. Assets committed within a Trade cannot be changed after a Trade has completed.

Trades are then the vehicle for the regular allocation of service windows. These happen at different timescales for the different processes.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 3.1).

#### 5. Digitising Procurement

In order to better manage the frequency of Trades and the anticipated growth in market participation, we plan to develop an online procurement hub that will digitalise the end to end procurement process and accelerate platform and marketplace interactions. The hub will be supported by a number of APIs ease the scaling up of interactions.

FSPs will be able to create an account through which they will complete all the Commercial and Technical Qualification Requirements, including the overarching tender.

Upon completion of the qualification requirements, the account will then allow FSPs with access to participate in Trades. The Trade area will allow FSPs to view Trade Opportunities, enter bids for Trades within which they have qualified assets and receive their Trade Award Notices.

Trade data that is produced within the online procurement hub will be collated within a WPD Database. This database will have the ability to pass relevant Trade data to existing operational Flexible Power Portal and populate it with the awarded service windows, capacity and pricing. The existing Flexible Power Portal is then responsible for instructing utilisation events and gathering metering data for settlement. Performance reporting and Monthly settlement will continue to be carried out by the Portal.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 3.1).

## 3.2 Pricing Strategy

Since 2019, we have been operating a pricing structure that is dependent on the level of competition revealed through the procurement process. Each CMZ is assessed independently because of variations in the number of FSPs and scale of flexibility provision. We have established a multi layered strategy, with each phase reflecting the maturity of the market. The prices paid are based on the availability of flexibility in each CMZ. This starts with fixed pricing for non-competitive markets and builds towards more market base mechanisms with maturity and liquidity.

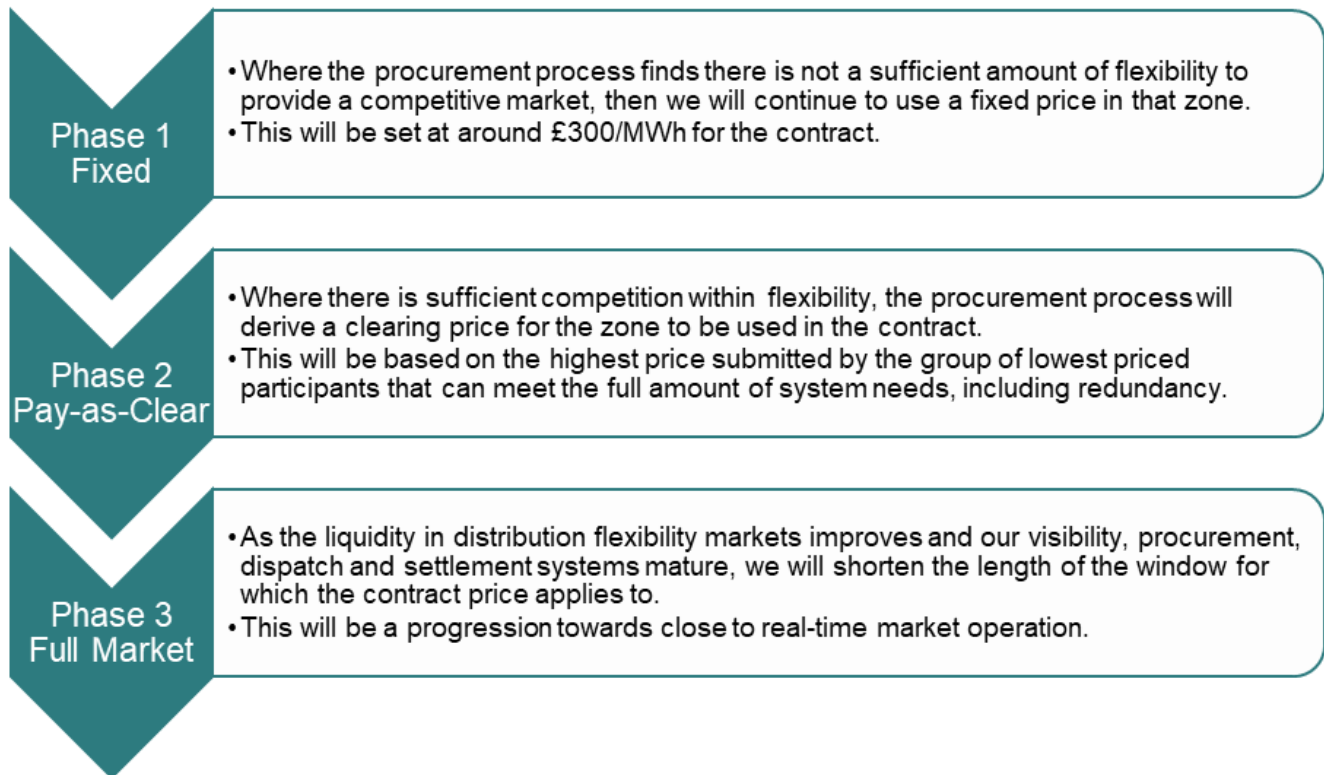


Figure 13: Pricing Strategy

Given the early stages of the market development, most zones are currently in Phase 1. However as volumes and competition grow we expect more zones to move into the phase 2 and 3 stages. To facilitate this, since 2020 we have been carrying out competition test to see if market pricing can be established through the pay as clear process.

The fixed pricing utilised in our services in Phase 1 is highlighted below. These feed into the performance related payment mechanics. More details can be found in our Payment Mechanics document (<https://www.flexiblepower.co.uk/downloads/603> )

Table 5: Fixed Prices

	<b>Arming</b>	<b>Availability</b>	<b>Utilisation</b>
<b>Secure</b>	£125/MWh	N/A	£175/MWh
<b>Dynamic</b>	N/A	£5/MWh	£300/MWh
<b>Restore</b>	N/A	N/A	£600/MWh

In Phase 2:

- Tenderers will also be asked to provide their 'best and final offer' per MWh of combined availability/arming & utilisation.
- The combined price is split as per the fixed price product ratios;

- We will carry out an N-2 test to determine which zones have enough participation to be applicable for clearing.
- Where we have CMZs with multiple FSPs with a total capacity that exceeds the CMZs needs the 'best and final offer' price will be used to determine a zonal clearing price.
- The zonal clearing price will be deemed to be the CMZs best market price, and this price will then be offered to all tenderers.
- Tenderers whose best and final offer is above the clearing price will be awarded a contract at the zonal clearing price. Tenderers are under no obligation to provide services under the contract.

More details can be found in our competition testing and pay-as-clear process in our Clearing Process document (<https://www.flexiblepower.co.uk/downloads/178>).

## 6. Fixed Pricing Review

Ahead of the roll out of the new products later in the year we will conduct a review on our fixed pricing to ensure it remains attractive and competitive.

## 7. Joint Utilisation Competition

To encourage competition between the different timescales, we will look to operate a Joint Utilisation Competition (JUC) for our Dynamic Products. We see this as a key element to our Phase 3 Pricing Strategy.

Where Long terms products are trading months ahead, we will look to acquire the Allocated Volume. Within this process Availability prices will be set for the Dynamic (Long Term) product and Utilisation pricing will be capped.

This Utilisation will then be entered into a competition with the existing Dynamic product at the week-ahead stage. This competition will be for the total required volume. As such the shorter term Dynamic participants will be competing for:

- the combination of the allocation for the short term market,
- any unfulfilled volume in the long term allocation, &
- any instances where their combined availability and utilisation is more economically effective that the utilisation of longer term participants.

Long term participants will automatically be entered into the competition at their capped rate, but will be encouraged to update their pricing to reflect any efficiencies that can be made closer to real time.

We will not be operating this Joint Utilisation Competition for our Secure Zones due to the structure of the Secure Product.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 3.3.2).

## 3.3 Timelines

We operate two procurement cycles every year. These are spaced roughly every 6 month and are detailed in our Procurement Timetable document (<https://www.flexiblepower.co.uk/downloads/585>). This is updated yearly and covers the dates for the next 2 years. For information the dates relevant to the next reporting year are shown below.

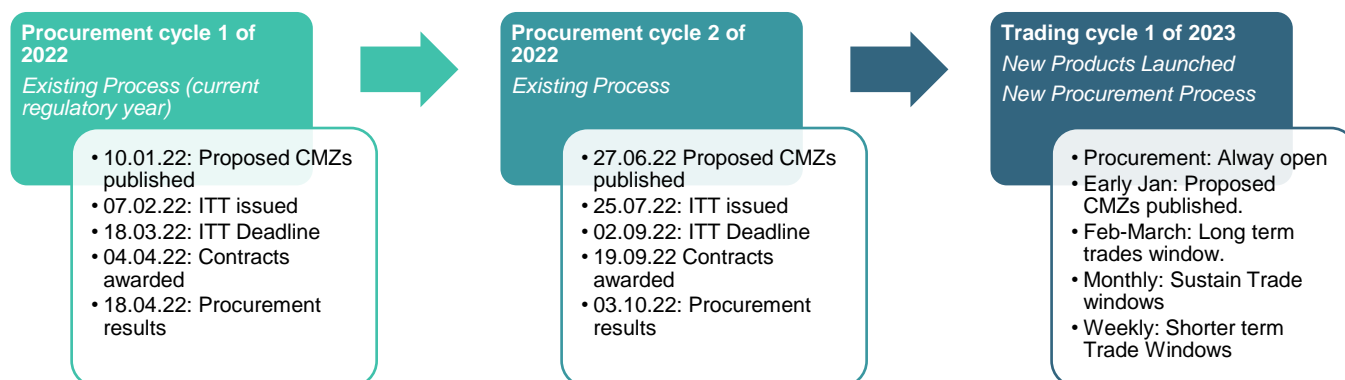


Figure 14: Procurement Timeline

## 8. New Timelines

The move to the new procurement structure will take time and require the build out of new systems. At this stage we expect the first procurement cycle of the regulatory year (cycle 2 of 2022) to use the existing products and processes. We will then look to implement the new products and processes for the second cycle.

At that point the concept of a “procurement cycle” will cease to exist with formal procurement, via the ITT happening on a regular basis as part of the qualification ahead of any Trade. Instead we will focus on the different trading cycles. These will vary depending on the products considered.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 3.2).

As highlighted in section 2.2. The requirements are published across a number of publications. On publication of needs we also remind our Update Service, with the links required to the requirements, links to DPS registration and any further information (such as webinars). Registration to the Update list is available here:

<https://www.flexiblepower.co.uk/locations/western-power-distribution/contact-us>

All ITTs are then issued to all members of the DPS.

Procurement Results are then published on the [Flexible Power Website](#).

A summary of all relevant documents is provided in Section 7.

## 3.4 Contract Award Process

FSPs respond to the ITT with a number of key asset parameters. These include:

- The location of the asset
- The energisation status of the asset
- The technology type
- The tendered peak capacity (in MW)
- The Minimum and Maximum Operating Duration
- Known limitations to the asset availability

FSPs may provide multiple assets and portfolios per zone, with different best and final prices. These can be contracted directly or via a supplier or aggregator. We also allow contracts to be awarded ahead of asset build and have no minimum volume threshold. However we need FSP to be able to adequately fill in the above parameters to allow for consistent treatment of assets in the procurement.

It should also be noted that the following requirements in the ITT are assessed on a simple Pass/Fail basis;

- Site/asset location within CMZ boundary.
- Commitment to build/integrate with the Application Programme Interface (API).
- Ability to provide minute by minute metering data over API.
- Asset ability to respond within 15mins and hold response for minimum of 30mins.
- Acceptance of CMZ Terms & Conditions.
- Each asset must be built and energised or have a connection agreement with the final milestone before the CMZs operating window.

- Provision of the service must not put the participant in breach of other agreements (e.g. connection agreement).
- Acceptance of potential fixed price award.
- Provision of a Market Price must be declared.
- Acceptance of potential Market Price award.

As highlighted in section 3.2 the level of volume provided will impact the pricing strategy used within the zone.

Contracts are then awarded following the conclusion of the ITT.

We have worked collaboratively with industry through the ENA's Open Networks project WS1A Product 4 to develop a common set of terms and conditions and were the first DNO to adopt these. We will continue to use the latest version of the common terms as they get updated. Informed by stakeholder feedback, the terms and conditions provide low barriers of entry, maximise participation and reduce complexity. They include:

- Mutual and capped liabilities
- Performance based payment mechanisms to incentivise participation
- No penalties for non-delivery, only loss of potential revenue
- No exclusivity clauses
- No obligation to provide availability

Our contracts do not have any exclusivity, maximising the ability for a flexibility provider to increase revenue opportunities by providing services to other parties. Following feedback from FSPs, we have altered our contractual length to give better certainty for market FSPs. Since 2019, we have been allowing FSPs to choose their optimum contract length, from between one and four years

The Contract is available on the website (<https://www.flexiblepower.co.uk/tools-and-documents>). The terms must be accepted as part of the response to the ITT. As it is a standard, cross party contract, it is non-negotiable, however feedback will be collated and fed back into future reviews, both within WPD and with the wider ENA standard terms.

Since 2018, we have published a procurement cycle results document within one month of contract award (see example here: <https://www.flexiblepower.co.uk/tools-and-documents>, summarising the various stages and results of the tendering process. As the tendering process has developed, more information has been published. We now publish:

- Volumes of flexibility coming through all stages of the procurement process
- The counterparty, technology type, MW capacity, length of contract, payment structure and price agreed for each contracted party
- A summary of the outcomes per CMZ. This includes, the volumes required, the number of bid received, the MW awarded and the zone price.

## 9. Secondary Trading

With the addition of our new processes and systems, we are looking to facilitate secondary trading between assets. This will enable FSPs to trade away their operational obligation where technically necessary, or economically efficient. We are conscious of the bounds of the DNO role as a neutral market facilitator rather than the operator of the market. As such we will focus on the enablers of the trade (who can trade, when they can trade, how obligations are transferred) rather than the actual formation of the trade. We expect to add more flexibility to the process, and digitise it in ED2.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 3.5).

## 4. Stakeholder Engagement

We have a wide range of options for engaging with stakeholders as highlighted below.

To join our Update Service please use our contact form: <https://www.flexiblepower.co.uk/locations/western-power-distribution/contact-us> .

You can also contact us directly at [WPDFlexiblePower@westernpower.co.uk](mailto:WPDFlexiblePower@westernpower.co.uk).

### 4.1 Engagement around Flexibility requirements

As detailed in Section 3.2 we operate two procurement cycles a year. The timings are set years ahead to provide certainty for FSPs. These are surrounded by a mix of promotional activities to maximise participation, as well as feedback processes to allow us to continually improve our processes. Information on our pre-qualification requirements as well as all other relevant information are available on the [Flexible Power Website](#). We have summarised the full list of relevant documents in section 7.

The publication of our requirements, are accompanied by promotion to increase market awareness and drive participation. This includes promotion to our [update service](#), social media posts, [webinars](#), surgeries, one to one engagement and the attendance of relevant events. This targets a wide range of stakeholders to ensure all relevant parties are aware of the opportunity and the response required.

Once each procurement round has been completed, we then focus on collecting feedback on how we could improve how we publish requirements and the DNOA process. The associated timings are covered below.

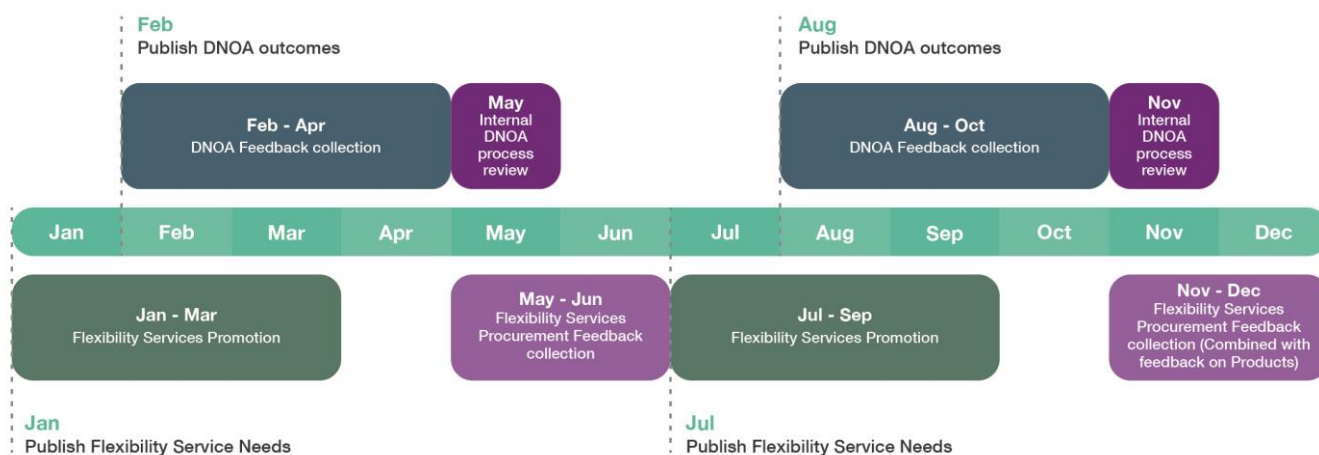


Figure 15: Timeline for our engagement around flexibility requirements

We are always looking at how to improve this process and ensure we are engaging in accessible and meaningful ways. If there are any options we should be considering, do let us know.

### 4.2 Engagement about products and process

In addition to what we procure, we also seek stakeholder feedback on how we procure services. We aim to target key stakeholders including those who have been involved in various elements of the process as well as wider industry stakeholders, including the ESO and other DNOs. As well as ad hoc feedback we see two key processes;

- We have established an annual process for reviewing and improving our services. This has stakeholder engagement built into the process. In September and October we have the opportunity to develop any proposed changes for our services. This will incorporate any feedback collected in the year. We then engage in informal engagement with stakeholders over November and December. This year this revolved around our [Evolution of Flexibility Services document](#), with it's accompanying [webinar](#) and workshops. This then fed into a [formal consultation](#) process. The feedback from this was [collated](#), and has fed into many of the changes proposed in this procurement statement. All this information is available on the [WPD website](#). We also feed the findings into the Open Networks Project.

- As part of our work in the Open Networks project (see section 4.3) we collaborate with the other DNOs to deliver more standardised processes for procurement and operation of Flexibility Service. As part of the WS1A process, a formal consultation is conducted in July. We used this feedback to inform ON work as well as WPD internal process.



Figure 16: Timeline for engagement around products and processes

In addition to these two formal routes. We collect ad-hoc feedback which is fed into the relevant processes. Stakeholder engagement is also a key part of any new service development work (see section 6).

### 4.3 Engagement with ESO and DNOs

We recognise that WPD is one actor amongst many in an ever more complex energy market place. As such, in addition to our wider engagement, we endeavour to engage heavily with the other network licensees.

A key part of this is through our active involvement at the Energy Network Association, especially the Open Networks project, where we work with the other licensees to develop and adopt common approaches across a range of DSO related activities. Workstream 1A is focussed on the development of Flexibility Services. Its key objectives include:

- Bringing more transparency in how DNOs facilitate local markets for flexibility and make decisions to provide more confidence in independent decision making.
- Simplifying participation in local flexibility markets through standardisation of approaches across DNOs and between DNOs and the ESO.  
Addressing barriers to participation in flexibility markets and facilitate stacking of revenues across multiple markets.

As highlighted in section 4.2, the Open Networks project build stakeholder engagement into processes. This covers regular engagement via the Challenge and Dissemination Groups as well as consultations on the Program of Works as well as the content of the work-streams.

In addition we engage actively with other licensees directly when needed. Examples of this include:

- Our collaboration with the ESO and other relevant DNOs on the Regional Development Programmes (RDPs). The RDPs look across the whole-system landscape to identify key areas of development to unlock additional network capacity, reduce constraints and open up new revenue streams for market FSPs. Building on the work of Open Networks we are developing flexibility markets to manage distribution and transmission system needs.
- Tied to the above, we engage in the monthly Whole Electricity Join Forum with the ESO, DNOs and TOs.
- By opening up our Flexible Power brand and processes to other DNOs we have looked to increase alignment and collaboration within the industry. The collaboration will help streamline the process for flexibility providers and make interfacing with DNOs simpler and easier by avoiding the complexities and resource intensity associated with liaising with numerous network operators. We intend to work in partnership to further develop the Flexible Power brand and develop the portal functionality to enable interface capability with other flexibility platforms so wider market participation options can increasingly be made available to providers.



## 5. Detailed Quantitative Assessment

### 5.1 Flexibility Service Requirements

Our [Long Term Development Statement \(LTDS\)](#) highlights the assets that make up our network. As highlighted in section 2.2.2, our [Distribution Future Energy Scenarios \(DFES\)](#) provides data on the predicted growth in generation and demand across the 4 licence areas on a yearly basis. This scenario growth data allows areas on the network expected to be constrained to be identified. Forecasts carried out using this data feed into the upcoming Network Development Plans (NDP) and are used to plan conventional network build solutions and/or flexibility procurement based on system needs. The decision making process for determining the optimal solution for each constraint is called the [Distribution Network Options Assessment \(DNOA\)](#). This is carried out on a biannual process, leading to two rounds of Flexibility Service Procurement each year. The DNOA process is used to both look forward and identify which services should have services procured to help mitigate them, as well as looking backwards to ensure they continue to provide value.

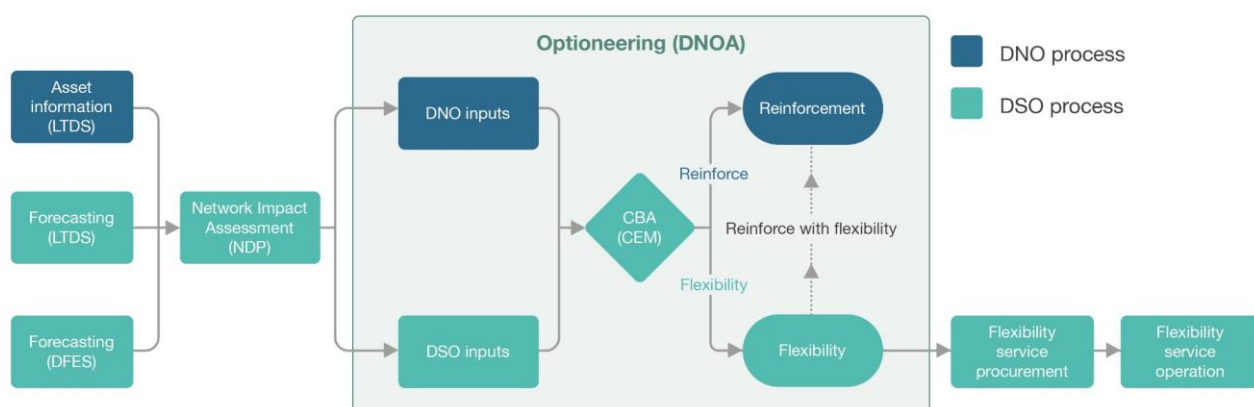


Figure 17: Determining Flexibility Requirements

The DNOA outlines the decisions made to meet the future needs of the distribution network. A smarter network needs smarter decisions: the DNOA outlines the options considered to provide the best consumer value in investments made on the distribution network and how cost-benefit analysis is employed to determine the optimal investment path. The decisions show in a transparent manner how we are optimising our investment to deliver secure, sustainable and affordable electricity to meet the changing needs of the areas we serve.

To improve transparency in how DNOs reach decisions for the flexibility procurement and the potential to delay conventional reinforcement, a Common Evaluation Methodology (CEM) Cost-Benefit Analysis (CBA) tool has been created by Baringa Partners as part of the Open Networks project. This tool is used in the DNOA process to assess the net benefit of flexibility against a baseline of conventional reinforcement for scenarios over a number of years. The economic analysis is based on the Time Value of Money wherein delaying reinforcement costs creates a significant economic benefit. If this benefit is greater than the cost of flexibility required during the deferral period, then flexibility procurement is deemed the optimal solution and could create savings that can be passed on to customers and stakeholders.

The decision tree below demonstrates the different choices our analysis can lead to. Firstly, the schemes that do not require any intervention are removed from future DNOAs. Among the schemes which do require intervention, if the constraint cannot be managed using flexibility then reinforcement is pursued. If the constraint can be managed using flexibility but no intervention is required within the next year signposting is published. The schemes which require flexibility services within the next year are put through cost-benefit analysis to determine if flexibility can be used to defer reinforcement. This is further detailed in the latest DNOA document (<https://www.westernpower.co.uk/DNOA>)

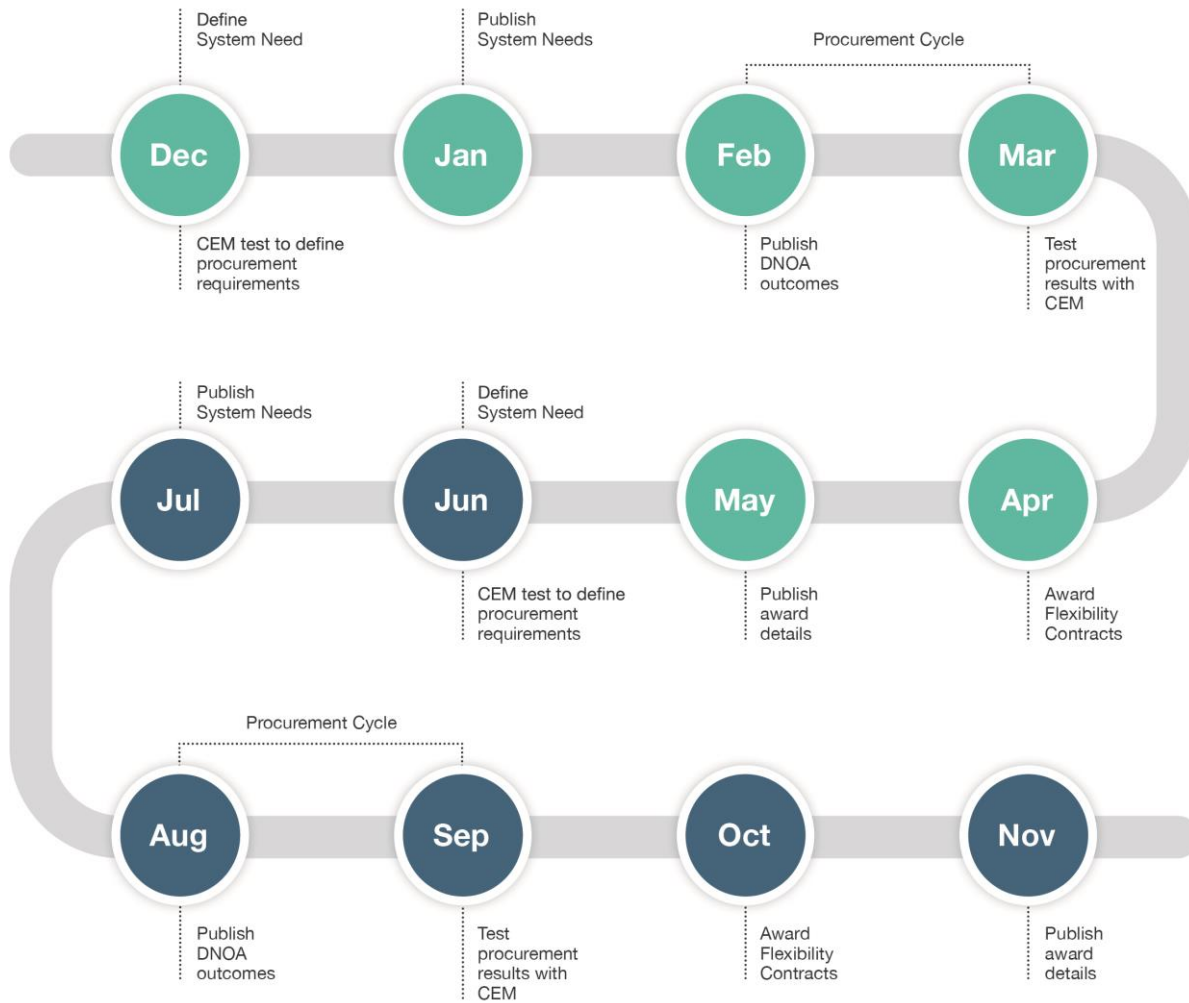


Figure 18: DNOA process

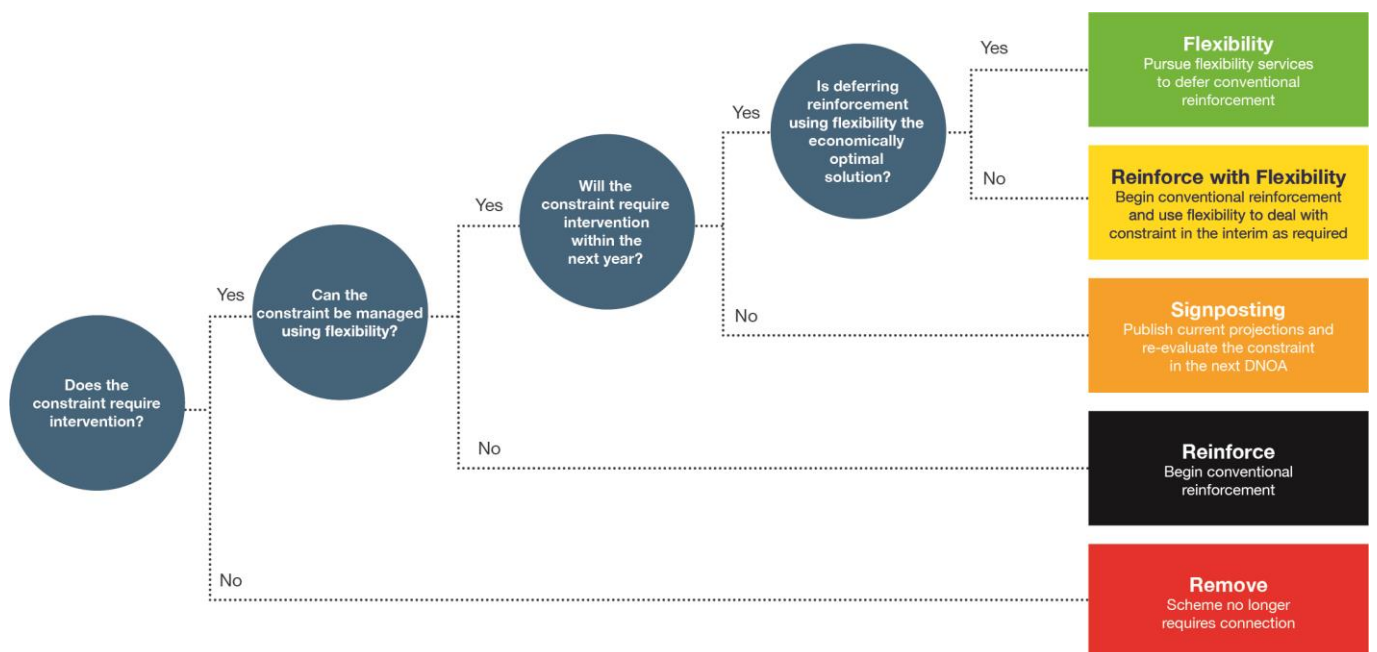


Figure 19: DNOA decision tree

## 5.2 Flexibility Service Selection

As detailed in section 3, we have a detailed process for procurement of Flexibility Services, including a clear methodology for how we select which services to procure and then instruct services.

At a procurement level, section 3.3 details the various phases we have established which set how the markets operated.

In Phase 1, as the volume offered is less than our requirements, we accept all bids at the fixed price.

In Phase 2:

- Tenderers will also be asked to provide their 'best and final offer' per MWh of combined availability/arming & utilisation.
- The combined price is split as per the fixed price product ratios;
- We will carry out an N-2 test to determine which zones have enough participation to be applicable for clearing.
- Where we have CMZs with multiple FSPs with a total capacity that exceeds the CMZs needs the 'best and final offer' price will be used to determine a zonal clearing price.
- The zonal clearing price will be deemed to be the CMZs best market price, and this price will then be offered to all tenderers.
- Tenderers whose best and final offer is above the clearing price will be awarded a contract at the zonal clearing price. Tenderers are under no obligation to provide services under the contract.

More details can be found in our Clearing Process document (<https://www.flexiblepower.co.uk/downloads/178>).

Our Dispatch principles, which determine the selection criteria in operational timeframes have been set out in section 2.2.3.

### 10. Service Volume Allocation

As we add the new products, we will need to establish process for the allocation of volumes across timeframes. Our first pass on allocation will focus on sharing the value across products and timelines and manage some procurement risk. As we gain operational experience we will review this, and feed in learning from providers to ensure the process is clear and efficient.

More details on our proposed changes can be found in our [Distribution Flexibility Services Consultation](#) document (section 2.4).

## 6. Services in Development

Since developing our initial processes and procedures through innovation trials, our processes for procuring Flexibility have been evolving and maturing. As we build learning and scale, we expect to continue developing and improving our processes. Alongside the existing products mentioned in the sections above, we have a number of other services in development. These range from innovation trials to BaU development work.

Depending on the learning generated as part of their development they may, or may not be implemented in the next reporting year.

### *Flexibility from low carbon heating*

Our [Equinox project](#) will be developing three novel commercial methods that are designed to maximise participation in domestic DNO flexibility services. The range of methods will demonstrate how varying risk/reward frameworks between DNOs, suppliers and customers can influence the amount, cost, & reliability of flexibility from portfolios for varying customer segments incl. fuel poor and vulnerable.

### *Coordinated Constraint Management services with the ESO*

As mentioned in section 4.3, as part of our RDPs, we are working with the ESO to develop services to help with the coordinated management of Transmission and Distribution constraints. The latest information is available here: [Regional Development Programmes \(RDPs\) | National Grid ESO](#).

### *Closer to real time Procurement*

As part of our IntraFlex NIA project we trialled the use of the NODES market platform to procure services closer to real time via a continuously clearing market. Following the positive learning from the trial, we are now looking to deploy closer to real time markets. However given the complexity of these services, we are targeting deployment in 2023/24.

### *Energy Efficiency*

Our work on the Sustain Product has delivered learning on the structuring of a Drop-To services. The wider Future Flex project also highlighted further challenges associated with such products. We remain committed to the development of an offering for Energy Efficiency in ED2.

## 7. Data and Publications

We acknowledge there is a significant amount of data and information involved in the procurement of our services, as well as wider DSO processes.

As such we have summarised the key references in this section.

To provide a live view of this we will shortly publish a Flexibility document and data catalogue.

### 7.1 Distribution Flexibility Services Regulatory Reporting

Publication	Description	Location
Distribution Flexibility Services Procurement Statement	A forward looking report on how we will procure services in the coming regulatory year.	<a href="#">WPD Website</a> & <a href="#">Flexible Power Website</a>
Distribution Flexibility Services Procurement Report	A report, and supporting data table, detailing how and where we have procured flexibility services in the past regulatory year.	<a href="#">WPD Website</a>
Ongoing Reporting	We publish the outcomes of our Flexibility Service procurement. This is covered by our Procurement Results document.	<a href="#">Flexible Power Website</a>
Evolution of Distribution Flexibility Service Procurement Document and Webinar	Our initial, informal engagement on the changes we would like to make to how we procure flexibility services.	<a href="#">WPD Website</a>
Distribution Flexibility Services Procurement Consultation Document, Webinar and Outcomes	Our formal consultation on changes we have proposed on how we procure flexibility services.	<a href="#">WPD Website</a>
Ofgem Guidance	The Ofgem guidance determining what should be covered in the regulatory reporting.	<a href="#">Ofgem Website</a>

### 7.2 DSO process

Publication	Description	Location
Long Term Development Statement (LTDS)	The Long Term Development Statement provides an overview of the design and operation of the distribution network, together with data on the 132kV, 66kV and 33kV systems and the transformation levels down to 11kV.	<a href="#">WPD Website</a> (registration needed)
Distribution Future Energy Scenarios (DFES)	The Distribution Future Energy Scenarios outline the range of credible futures for the growth of the distribution network out to 2050.	<a href="#">WPD Website</a> & <a href="#">Connected Data Portal</a>
Network Development Plan (NDP)	The Network Development Plan provide stakeholders with transparency on network constraints and needs for flexibility. The NDP has been created to present the 'best view' of planned asset based and flexible network developments over the five to ten-year period	Not Yet Published
Distribution Network Options Assessment (DNOA)	The Distribution Network Options Assessment (DNOA) is a publication which outlines reasons behind investment decisions made by WPD in order to deal with constraints on our network.	<a href="#">WPD Website</a> & <a href="#">Connected Data Portal</a>

### 7.3 Flexibility Requirements

Publication	Description	Location
Network Flexibility Map	The Network Flexibility Map includes the availability windows and expected market volumes required for all our DFES scenarios for a five year period under the	<a href="#">WPD Website</a> & <a href="#">Connected Data Portal</a>

	Signposting process. Visualisations of the data are available online through the mapping tool and datasets are downloadable. The Network Flexibility Map also presents our firm flexibility requirements which feed into our procurement process. This shorter term view, gives clarity on our needs and is refreshed every six months in line with our procurement timeline.	
Flexible Power Map	The Flexible Power Map replicates much of the functionality of the Network Flexibility Map but focusses on the requirements against which we will procure. It highlights the required volumes and forecast availability windows. This map is held on the Flexible Power website and hosts data from the other DNOs who are also involved in the Flexible Power Collaboration.	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>
Procurement documents	For every six monthly cycle of procurement, we publish market information detailing the requirements for procurement at each of the CMZs. This includes information such as the MW required, expected MWh availability windows and MWh estimated utilisation volumes.	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>
Procurement results	The results documents provides detailed information on the volumes procured through each cycle.	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>
Post Code Checker	A simple look up tool to assess the allocation of postcodes to CMZs. The background data is available as an excel sheet and on the connected data portal.	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>
Service Value Calculator	A tool to provide a view on the maximum potential revenue available to a provider.	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>
WPD Month Ahead Availability Forecasts	Updated ahead of each new month with a forecast of WPDs availability requirements for each operational zone. Active participants can use this to inform their week ahead declarations.	<a href="#">Flexible Power Website</a>
WPD Flexibility Zone Activity Timetable	A spreadsheet detailing which months of the year each zone has a requirement for provider availability	<a href="#">Flexible Power Website</a> & <a href="#">Connected Data Portal</a>

## 7.4 Flexibility Process

Publication	Description	Location
WPD Procurement Timetable	WPD conducts 2 procurement cycles per year. This document provides the proposed procurement window dates for the next 2 years.	<a href="#">Flexible Power Website</a>
WPD_ENA Standard Flexibility Services Agreement	The latest version of the T&Cs applicable to WPDs Procurement of Flexibility Services	<a href="#">Flexible Power Website</a>
Flexible Power Billing Guide	An overview of the monthly billing cycle and the form to send us your payment details.	<a href="#">Flexible Power Website</a>
WPD Operational Process Guide	A guide to the weekly process applicable to WPDs operation of flexibility through Flexible Power.	<a href="#">Flexible Power Website</a>
WPD Procurement Process Guide	Details of the full process all interested parties are required to follow in order to be eligible to tender for participation in Flexible Power.	<a href="#">Flexible Power Website</a>
WPD Clearing Process Guide	Details of the process we will apply when assessing zonal pricing during the procurement stage.	<a href="#">Flexible Power Website</a>
WPD Pricing Strategy	Details of both our fixed price and 'best offer' pricing.	<a href="#">Flexible Power Website</a>
WPD Acceptance and Dispatch Principles	An explanation of how we select services to accept for availability and utilisation.	<a href="#">Flexible Power Website</a>
Flexible Power API Set-up and User Guide	A guide on how to build and test the Application Programme Interface (API) and how to carry out necessary testing within the User Acceptance Testing (UAT) environment.	<a href="#">Flexible Power Website</a>

WPD Routes To Participation - Webinar	Slides and Recording on our Webinars on how to participate in our services.	<a href="#">Flexible Power Website</a>
Flexible Power Payment Mechanics	An overview of the Flexible Power Payment Mechanics	<a href="#">Flexible Power Website</a>
Flexible Power Example Event Performance Report	An example of the performance report created post a response event.	<a href="#">Flexible Power Website</a>
Flexible Power Example Monthly Invoice	An example of the monthly invoice created at the end of each month.	<a href="#">Flexible Power Website</a>
Flexible Power Example Event Earnings Report	An example of the payment breakdown of utilisation earnings created post a response event.	<a href="#">Flexible Power Website</a>
Flexible Power Historic Baseline Methodology	An overview of the Flexible Power Baseline Methodology	<a href="#">Flexible Power Website</a>

## 7.5 Flexibility Updates

Publication	Description	Location
WPD Flexibility Update Service	A mailing list to receive Updates from WPD on our Flexibility Services	Email. Sign up at: <a href="https://www.flexiblepower.co.uk/locations/western-power-distribution/contact-us">https://www.flexiblepower.co.uk/locations/western-power-distribution/contact-us</a>
WPD Flexibility Year in Numbers	An infographic summary of how WPD has been actively using Flexible Power across its network.	<a href="#">Flexible Power Website</a>

## 7.6 Other relevant information

Topic	Description	Location
Open Networks	An overview of the Open Networks Project and all the relevant documentation.	<a href="#">ENA Website</a>
RDPs	Overviews of the Regional Development Programmes	<a href="#">National Grid ESO website &amp; WPD website</a>
WPD Innovation	An overview of the WPD innovation portfolio	<a href="#">WPD Website</a>

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