Distribution Flexibility Services Procurement Statement

April 2023

Electricity Distribution

nationalgrid

Contents

Executive summary

This is our third year of producing our Distribution Flexibility Services Procurement Statement.

It builds on the update produced in January highlighting the changes we are making to how we procure services. By moving to a **trade structure** with an overarching tender, we have much more flexibility in how and when we procure. This year we will look to procure requirements for whole seasons up to six months ahead of need, in addition to our week ahead timings. Over time we expect those timeframes to shift in both directions with procurement further ahead of need as well as closer to real time. We will also be procuring our **Sustain product**, both at higher and lower voltage zones. This opens up **over 1300 potential LV zones**.

As well as the contractual structure, a key enabler for these changes is our Market Gateway. An online portal that allows us to **digitise our interactions with FSPs** giving us the scalability we need. It is launching in phases, with new functionality to be released as soon as it is available. In the background we are working hard to create the right infrastructure to coordinate the data it collects with internal systems and the Flexible Power Portal, so we have a **seamless customer experience.** As with any new systems, we are keen to understand where we can improve, so do **let us know what does and doesn't work** so we can resolve any issues along the way.

Another change for this year is the consolidation of guidance documentation. Whilst many individual documents were meant to allow us to tailor the documents to potential readers, we realised this meant a lot of cross references between documents and potential for confusion. As such we have consolidated as much as we can into our new **Guidance for Electricity Distribution Service Providers** document. This provides a more robust walkthrough of our requirements and expectations in a single location. It is accompanied by specific separate documentation where we feel this adds value (like the **Standard Flexibility Agreement**). As mentioned above please let us know where it isn't clear, so that we can improve it. We expect a number of versions to be released this year as we bed in our new processes.

Our final change is in **how we engage with you**. Following engagement last year we have dropped the formal consultation, to reduce burden on both sides. Instead we are arranging a number of engagement events to allow for more discussion. We will keep or Evolution of Flexibility Services document as it allows us a framework to discuss new changes and improvements to our procurement.

With the start of ED2 upon us there are a lot of exciting opportunities ahead.

For further information please contact:

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1. Introduction

National Grid Electricity Distribution 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.

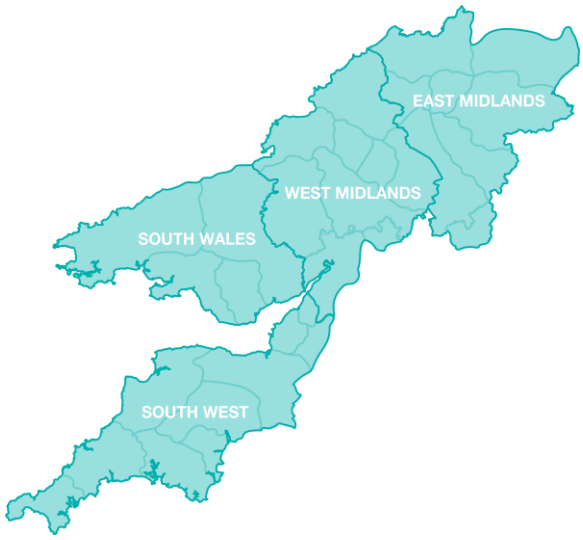
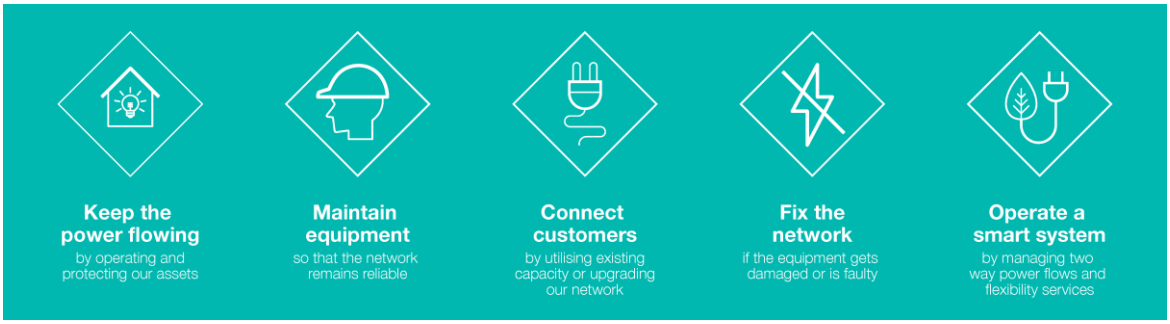


Figure 1: Licence Areas

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.

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, an update to 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 for the remainder of the 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. 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: National Grid - Distribution Flexibility Services Reporting

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

- Why we procure services.
- How we procure these services.
- 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.

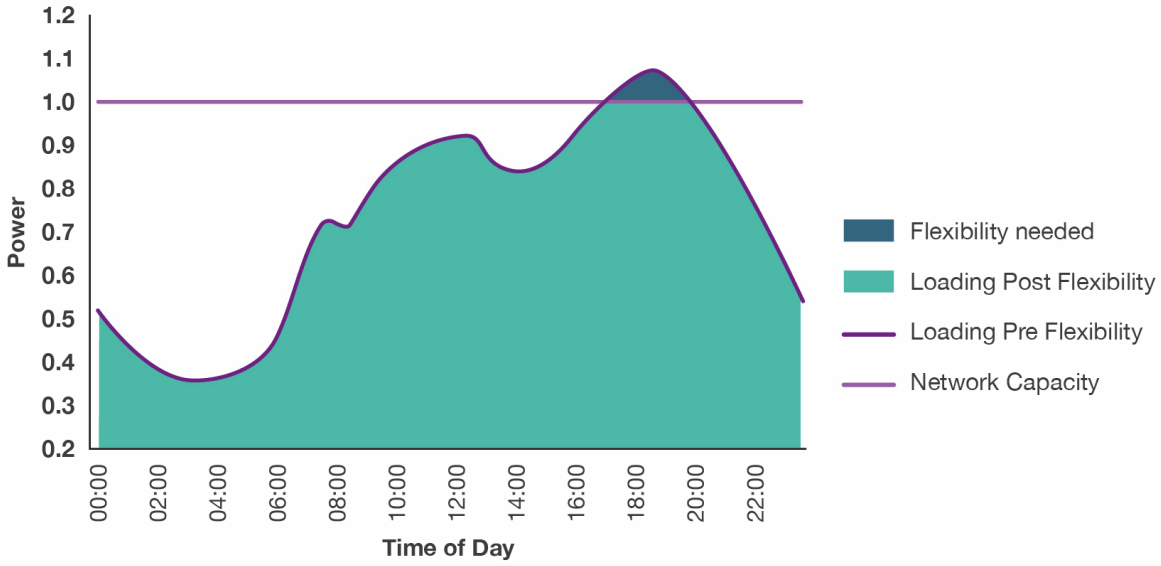


Figure 2: The need for Flexibility

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%		
Conventional Reinforcement	Accept addition connection until network reaches capacity	Reinforce conventionally	
Flexibility First	Accept addition connection until network nearing capacity	Use flexibility to manage network up to the 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 by 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

2.2.1 Services

To date we have procured 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. Going forwards we will be adding the fourth service, Sustain to our suite of services. These services are summarised in the figure below.

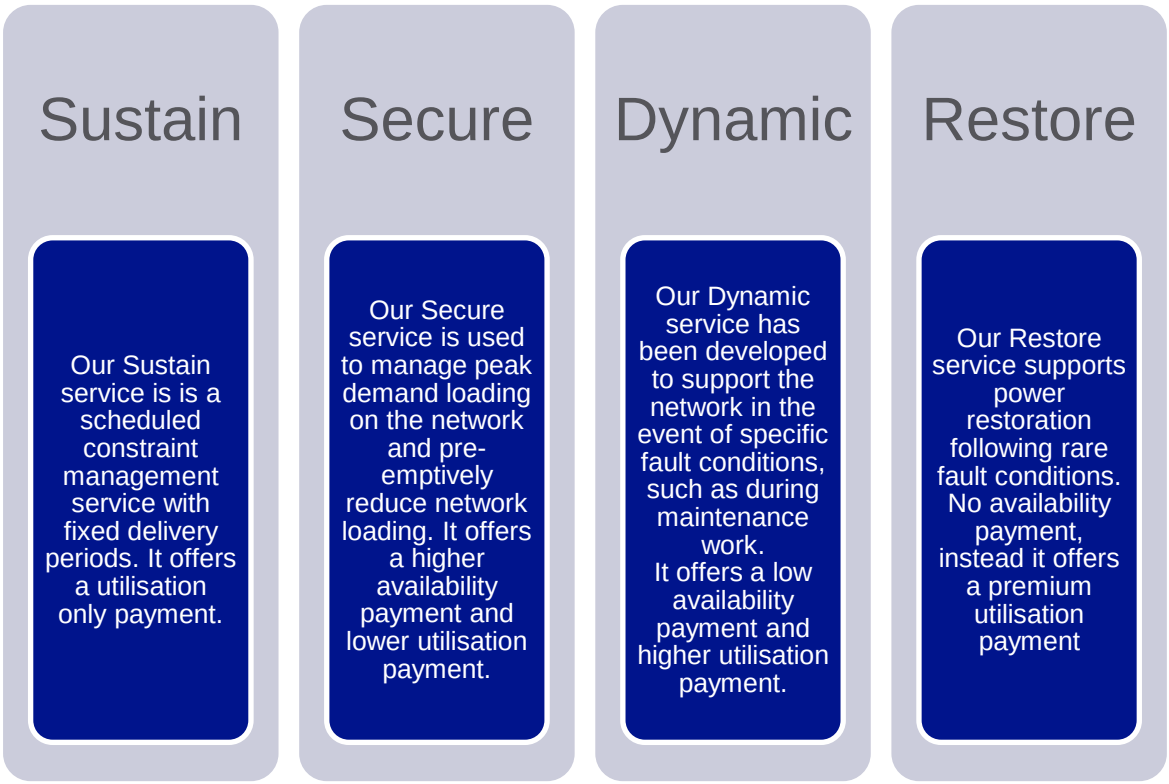


Figure 5: Overview of our Flexibility Services

We do not currently procure any Reactive Power services.

Whilst all distinct and serving different needs, we see all our services as following a common process. This is highlighted in the figure below and starts with publishing our service needs, moving all the way to service delivery. The same steps need to be carried out in each product, with the key differentiator being when they are completed.

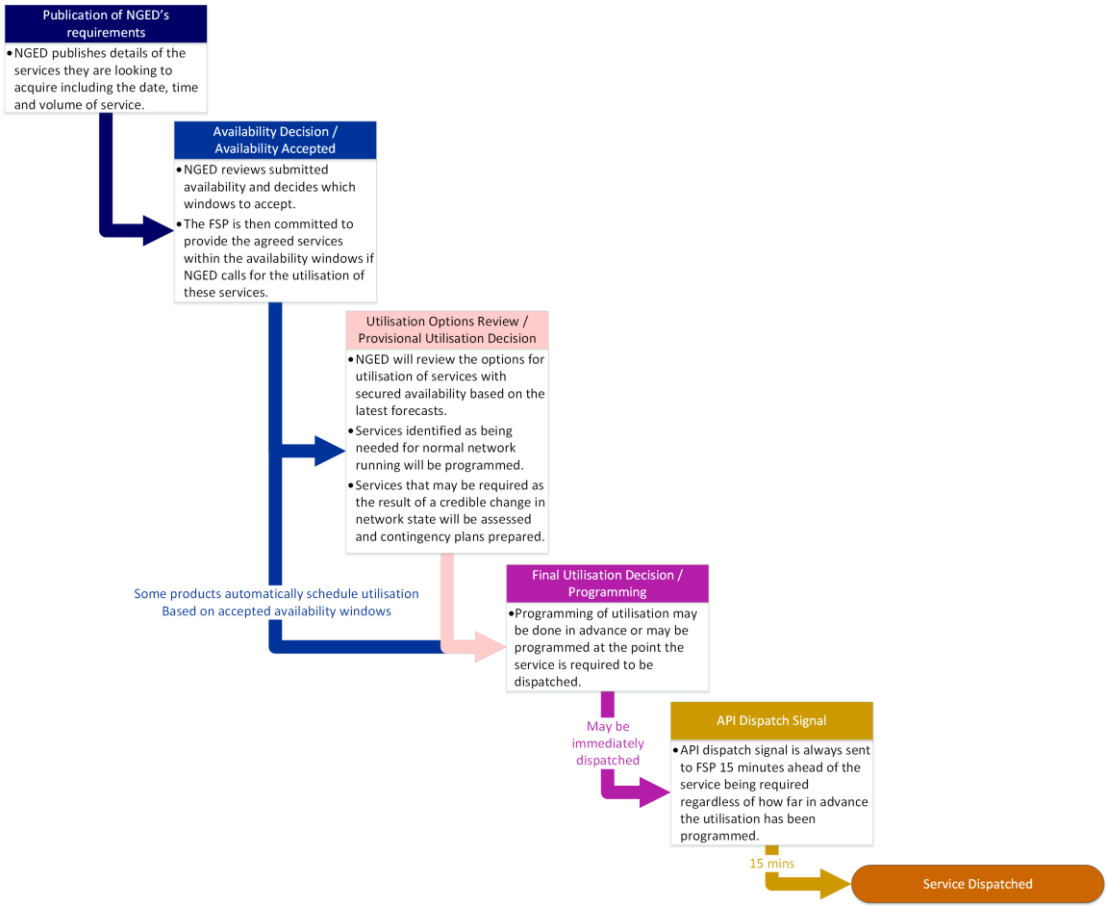


Figure 6: Elements of a Flexibility Product

Our services have previously been focussed at managing constraints on the higher voltage levels (EHV and Primary networks). In addition to using the Sustain product for these voltage levels, we will also be using the Sustain Service to help us manage loadings on distribution transformers (HV/LV transformers).

To accommodate Sustain services, and to help us better manage operational and commercial risk, we are looking to add a new timescale to our service operation. This is detailed in section 2.2.3 and involves the commitment to availability payments six months ahead of need. This adds to the current week ahead process.

These new changes, and the suite of products are summarised in the table below.

Table 1: Product Summary

Products	Voltage of Constraint		Trading Timescale	
	EHV & EHV/HV boundary	HV & HV/LV boundary	6 month ahead	week ahead
Sustain	✔	✔	✔	
Secure	✔		✔	✔
Dynamic	✔		✔	✔
Restore	✔		✔	✔

The way each service aligns to the common process is highlighted in the figure and table below.

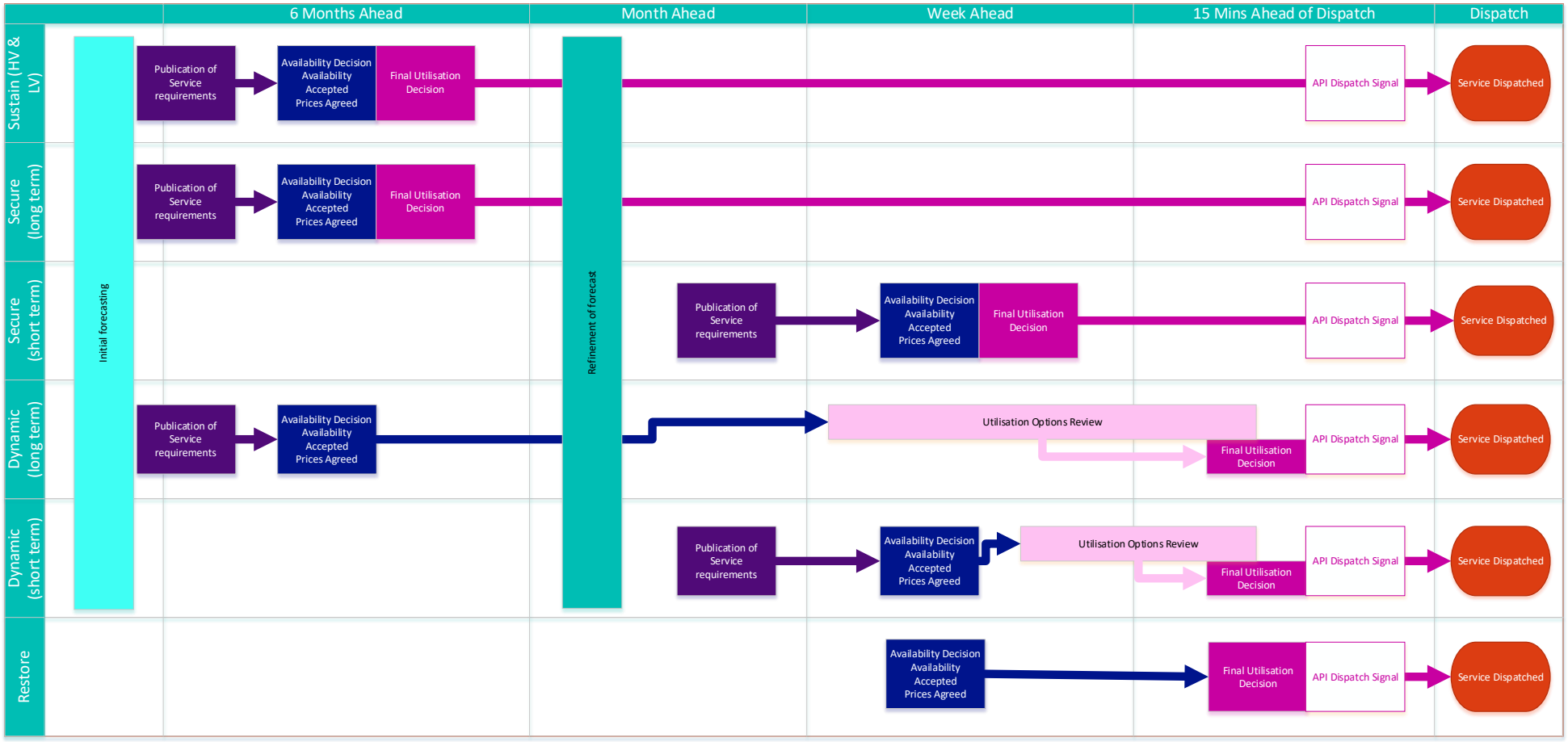


Figure 7: Product Overview

There are many similarities between our Secure (Long Term) and Sustain services. The key difference between the services is the level of targeting seen in the availability/utilisation windows. For Sustain will have common delivery windows that are common across all zones. For Secure (Long Term), these will be zone specific windows. Where assets can be controlled in a more targeted way, we would expect them to opt in to Secure (Long Term) as it would require fewer hours of operation to deliver a similar revenue, however we see the value in simplified control possible through Sustain.

With the creation of new services we will have a number of variants of flexibility services, based on the four Open Networks core products. To simplify the number available in each zone we will continue our current approach of using either allocating a higher voltage zone Secure or Dynamic. The zone would feature both the long term and short term versions of these products. Restore will be available in all zones, Sustain will be available where it is efficient to use. This allocation is shown in the table below.

Table 2: Products available in each type of higher voltage zone

Products	Secure Zone	Dynamic Zone
Sustain	Yes	Yes
Secure (long term)	Yes	No
Secure	Yes	No
Dynamic (long term)	No	Yes
Dynamic	No	Yes
Restore	Yes	Yes

All LV zones will only operate the Sustain service.

Each service is subject to 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 Guidance Document and are based on a clawback of value for under delivery. For Secure, Dynamic and Sustain, 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 Guidance Document. These have been updated to reflect a reduced focus on historic baselines and a move toward technology specific baselines. This allows us to be more transparent and allow for more flexibility in managing varying asset portfolios

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.

To date most procurements have focussed on demand turn down or generation turn up. As detailed in section 5, we have a robust process for identifying where we procure services. As the impacts of the Access Significant Code Review are better understood, we anticipate the number of Demand Turn Up zones to increase. We are currently aiming to launch Demand Turn Up/Generation Turn Down services in 24/25

More detail on each service can be found in the overview on the Flexible Power website: www.flexiblepower.co.uk/about-flexibility-services

2.2.2 Volumes and requirements

As highlighted in sections 3 & 5, we have a robust process for the identification of system needs, and the assessment of flexibility options through our 6 monthly Distribution Network Options Assessment (DNOA) process. This sets out in detail its specific requirements including the locations and volumes needed and feeds into the subsequent trading activity. The figure below highlights how our key processes interact.

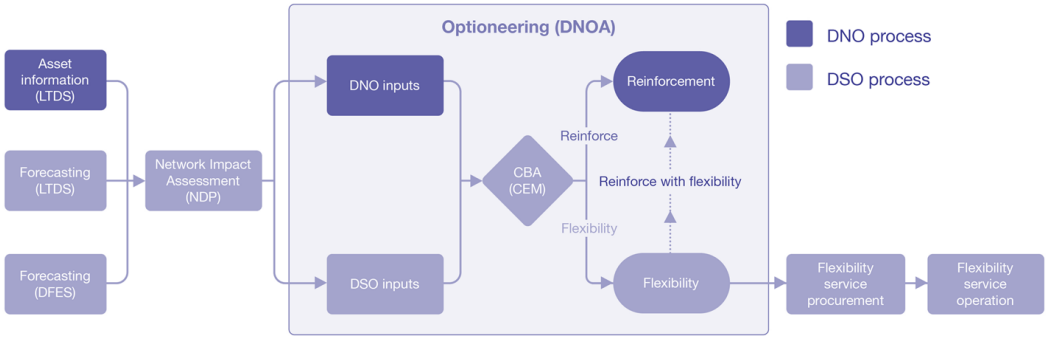


Figure 8: Determining Flexibility Requirements

For our higher voltage zones 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 (NDP). 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.

As we move away from fixed pricing for our services (see section 3), the DNOA will help determine ceiling prices for zones. These indicate the maximum price at which the zones remain viable. These feed into our trading decisions.

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.nationalgrid.co.uk/network-flexibility-map-application): We publish comprehensive data on signposting and forecasting of our Higher Voltage zones through our Network Flexibility Map. This includes the overall 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. We are reviewing the best approach to viewing data for LV zones.

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. Again we are reviewing the best approach to viewing data for LV zones.

Distribution Networks Options Assessment (DNOA) (https://www.nationalgrid.co.uk/network-strategy/distribution-future-energy-scenarios/distribution-network-options-assessment): 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.

The Market Gateway (https://marketgateway.nationalgrid.co.uk): Our Market Gateway will host all our trade opportunities. These are each of the requirements for which we are seeking a response. It is also the platform that hosts all the response from FSPs and our final trade awards. This will be the key point of commercial interaction for FSPs

Raw data on the Connected Data Portal (Flexibility - Groups - National Grid's Connected Data Portal): We host raw data on our 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 also hosts the core data for the LV zones as well as the splits in requirements between the different products available in a single zone (as Trade Opportunities) and the final Trade Awards.

These publications link together as shown in the figure below.

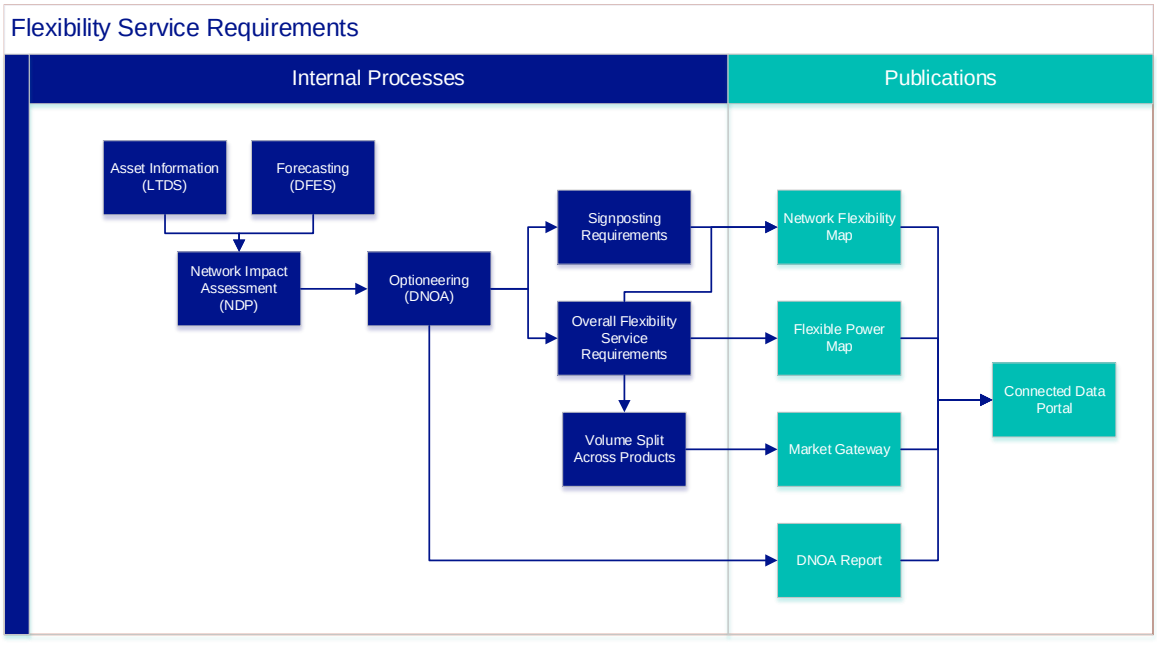


Figure 9: Network Requirement publication and signposting

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. All our documentation is summarised in our Document and Data Catalogue.

Due to the timing of the above processes, we cannot provide a definitive view of all the services we will be procuring the coming year. Our DNOA processes refreshes every six months which may bring in additional zones.

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. As such we have produced the following tables summarising our latest round of needs that will feed into this year's trading cycles.

We have a number of higher voltage zones. These are described in the map and table below.

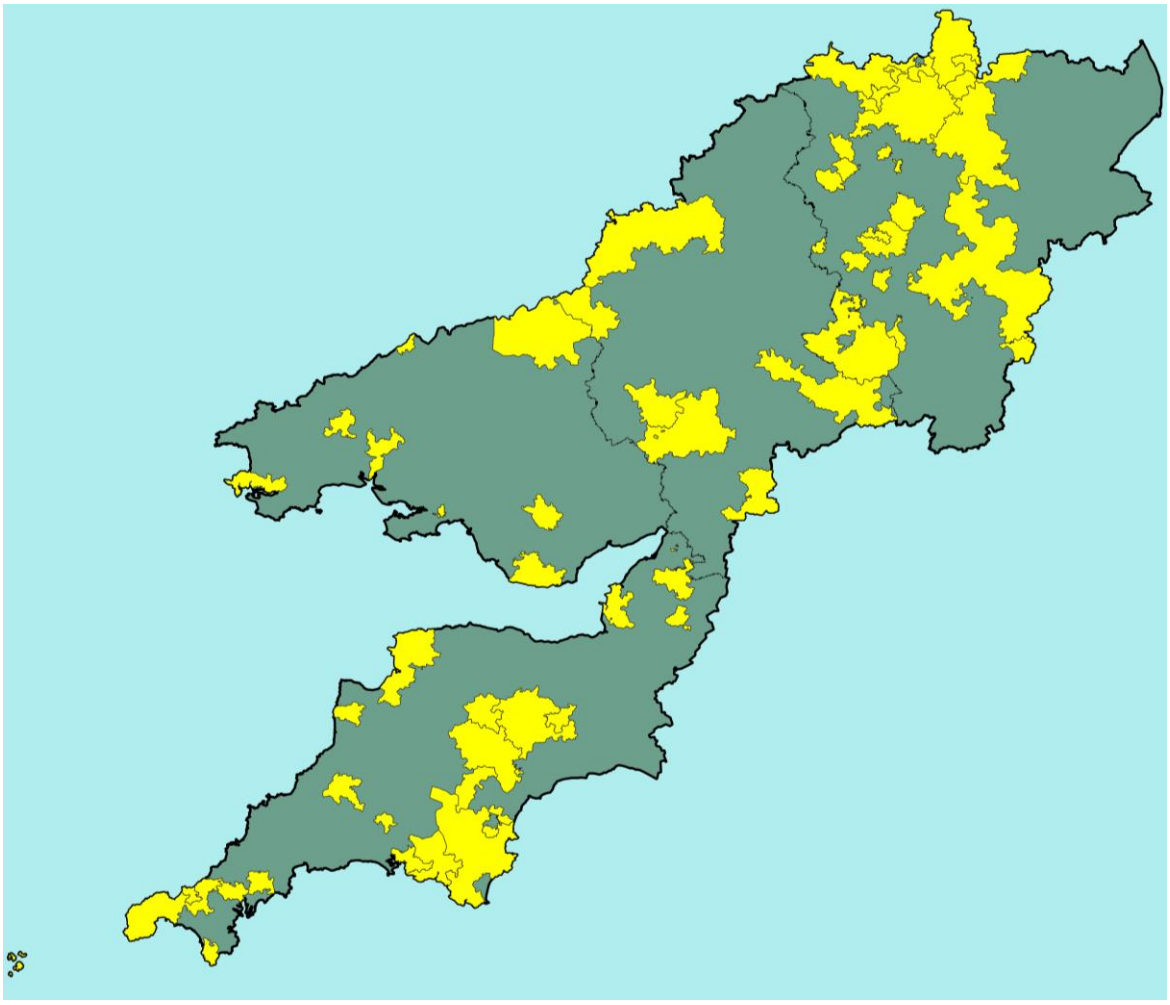


Figure 10: Map of Higher Voltage Flexibility Requirements

Table 3: Overall Higher Voltage zonal requirements

ZONE NAME	MAXIMUM VOLTAGE LEVEL AT WHICH SERVICE WILL BE PROCURED (kV)	PRIMARY PRODUCT	RESPONSE TYPE	SEASONAL REQUIREMENT	PEAK CAPACITY (MW)	FORECAST UTILISATION (MWHS)
Exeter City	33	Secure	DTD/GTU	Winter	6.61	50.10
Hayle - Camborne	132	Dynamic	DTD/GTU	Winter / Summer	15.75	117.03

Coalville	33	Dynamic	DTD/GTU	Winter / Summer	6.53	21.65
Grassmoor	11	Secure	DTD/GTU	Winter / Summer	1.90	5.57
Woodbeck	11	Dynamic	DTD/GTU	Winter / Summer	1.96	6.02
Llandrindod - Rhayader	11	Dynamic	DTD/GTU	Winter / Summer	1.19	16.62
Tiverton	33	Dynamic	DTD/GTU	Winter	10.36	126.87
Weston Super Mare	33	Dynamic	DTD/GTU	Winter	3.40	25.66
Witheridge	11	Secure	DTD/GTU	Winter	0.56	0.94
Lincoln-Anderson Lane	33	Secure	DTD/GTU	Winter	4.51	32.90
Hereford - Ledbury Ring	66	Secure	DTD/GTU	Winter	3.76	86.03
Loughborough	132	Dynamic	DTD/GTU	Summer	4.80	1.05
Manton	11	Secure	DTD/GTU	Winter / Summer	1.62	31.32
Truro - Truro Treyew	33	Dynamic	DTD/GTU	Summer	5.10	45.97
Ilkeston	11	Dynamic	DTD/GTU	Winter / Summer	11.37	51.00
Aberaeron	11	Dynamic	DTD/GTU	Winter / Summer	1.21	31.36
East Yelland	33	Dynamic	DTD/GTU	Winter	4.73	44.17
Hemyock	11	Dynamic	DTD/GTU	Winter / Summer	0.89	3.27
Mullion	11	Secure	DTD/GTU	Winter	0.53	31.48

Laneast	11	Secure	DTD/GTU	Winter	1.24	0.42
Plympton BSP	33	Secure	DTD/GTU	Winter	0.61	10.43
Sharnbrook	11	Dynamic	DTD/GTU	Winter	0.91	3.32
Gunnislake	11	Secure	DTD/GTU	Winter	1.32	51.89
Probus	11	Secure	DTD/GTU	Winter	1.37	584.06
Morwenstow	11	Dynamic	DTD/GTU	Winter	1.60	7.87
Toton	11	Secure	DTD/GTU	Winter	3.95	2.85
Filton Airport and Cribbs Causeway Ring	33	Secure	DTD/GTU	Summer	5.45	55.98
Tuxford	11	Secure	DTD/GTU	Winter	0.66	0.41
Staythorpe GSP	132	Secure	DTD/GTU	Winter	23.04	375.16
Atherstone	11	Secure	DTD/GTU	Winter	1.68	29.28
Ravenhill	11	Secure	DTD/GTU	Winter	0.72	3.46
Milford Haven BSP	33	Dynamic	DTD/GTU	Summer	14.54	894.64
Newton Abbot to Newton Abbot Main Circuits	33	Secure	DTD/GTU	Winter	1.99	2.14
Camborne Treswithian	11	Secure	DTD/GTU	Winter	1.08	3.84
Knighton	11	Secure	DTD/GTU	Winter	0.33	2.30

Feeder Road BSP	11	Dynamic	DTD/GTU	Summer	11.84	117.22
Shrewsbury GSP	132	Dynamic	DTD/GTU	Summer	17.66	348.38

Our lower voltage zones are summarised below.

Table 4: Lower voltage zone summary

LICENCE AREA	MAXIMUM VOLTAGE LEVEL AT WHICH SERVICE WILL BE PROCURED (kV)	PRIMARY PRODUCT	RESPONSE TYPE	PEAK CAPACITY (MW)	FULL DELIVERY WINDOW UTILISATION (MWh)	SEASONAL REQUIREMENT	NUMBER OF CMZs
East Midlands	0.4	Sustain	DTD	52.12	54,205.84	Winter	583
South Wales	0.4	Sustain	DTD	8.59	8,928.40	Winter	116
South West	0.4	Sustain	DTD	10.96	11,395.28	Winter	285
West Midlands	0.4	Sustain	DTD	21.18	22,025.12	Winter	375

The following table summarises the network needs these services are being used to procure.

Table 5: Summary of volumes by network requirement type

CONSTRAINT	PRE FAULT		POST FAULT		PRE FAULT LOW VOLTAGE SUSTAIN*	
	Peak Capacity (MW)	Forecast Utilisation (MWh)	Peak Capacity (MW)	Forecast Utilisation (MWh)	Peak Capacity (MW)	Full Delivery Window Utilisation (MWh)
Thermal	105.53	1,037.46	53.94	1,407.25	92.84	96,554.64
Voltage	4.95	102.65	0	0	0	0
Security Of Supply	12.34	675.28	0	0	0	0
Network Stability	0	0	0	0	0	0
Other	0	0	0	0	0	0

*we have split out the Low Voltage Sustain volumes as, due to the nature of our Sustain product the Utilisation volumes would mask the volume for the higher voltage zones. It should also be noted that the higher voltage zones describe the forecast utilisation of the core need, rather than any volume associated with the Sustain product.

The final table summarises the volume splits by product type. This highlights the total volume of the requirement in the zone, and the expected split across products and timeframes.

Table 6: Summary of the volumes per product

PRIMARY PRODUCT		PEAK CAPACITY (MW)	FORECAST UTILISATION (MWH)	NUMBER OF ZONES*
LV Sustain		92.84	96,554.64	1,359
Secure	Sustain - full delivery window**	0.245	254.8	5
	Sustain - network need window***		up to 272.11	
	Long Term****	3.2	up to 680.28	10
	Total	**62.92**	**1,360.56**	**20**
Dynamic	Sustain - full delivery window**	1.48	1,539.20	8
	Sustain - network need window***		up to 372.42	
	Long Term****	36.8	up to 931.04	16
	Total	**113.84**	**1,862.08**	**17**
Restore		176.76	N/A	37
Others		0	0	0

*It should be noted that the numbers of zones in the sub products will not sum to the totals. This is due to limitations on where we use some of the products. For example we do not procure our long term or sustain products for zones with N-2 requirements and no outage yet planned. We also do not procure Sustain where the efficiency or effectiveness of the services are too low.
**Full delivery window highlights the utilisation across the full Sustain delivery periods
***Network need window, highlights the equivalent utilisation needed of the core product
****Long Term highlights the volumes we will be taking forwards into the longer term markets. We have not explicitly included the volumes in the shorter term markets as it will procure the volume

required to cover the total requirement minus what is successfully procured in the Sustain and long Term markets (yet to conclude).

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).

2.2.3 Operational Processes and Dispatch Principles

The services we procure are detailed in section 2.2.1. Once services have been procured (see section 3) we have clear and transparent processes for operating our services.

Our Shorter Term products will continue to operate within the current week-ahead timescales. In addition to offering availability windows, as they currently do, FSPs will also offer capacity and availability/utilisation prices. These will be matched against requirements and clear according to our pricing strategy. The timings are highlighted in the figures below. We will formally move across to using trades for these products is Autumn/Winter this year.

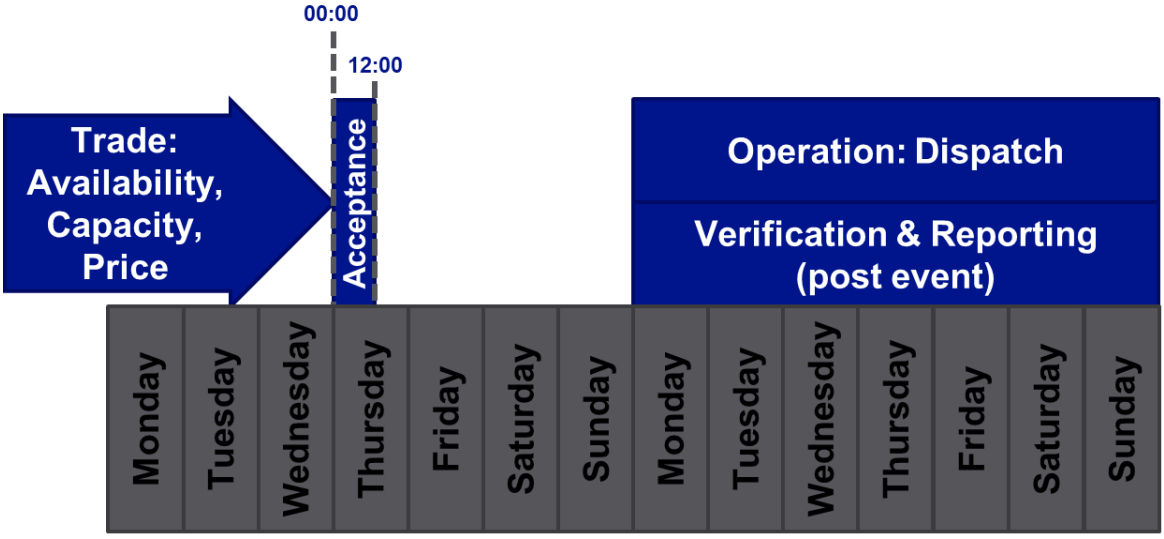


Figure 11: Weekly Operational process

Availability Declarations: By midnight on Wednesday, FSPs provide us with their trade responses for the following operational week (Monday to Sunday). This includes providing details such as the available capacity they can provide, the price and 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. In the future, we will introduce a joint utilisation competition for the Dynamic product

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

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

Long Term products will trade in much the same way, however they will happen over a longer timeframe. We currently plan to operate a number of months ahead, but expect this may change and extend out over time. The timings are highlighted in the figure below. Please note that due to

limitations in system development, our first run of the long term trades will start later (as highlighted in section 3.3). The operational requirement will remain in the same period, however the gap between trade and operation will be shortened to facilitate system development.

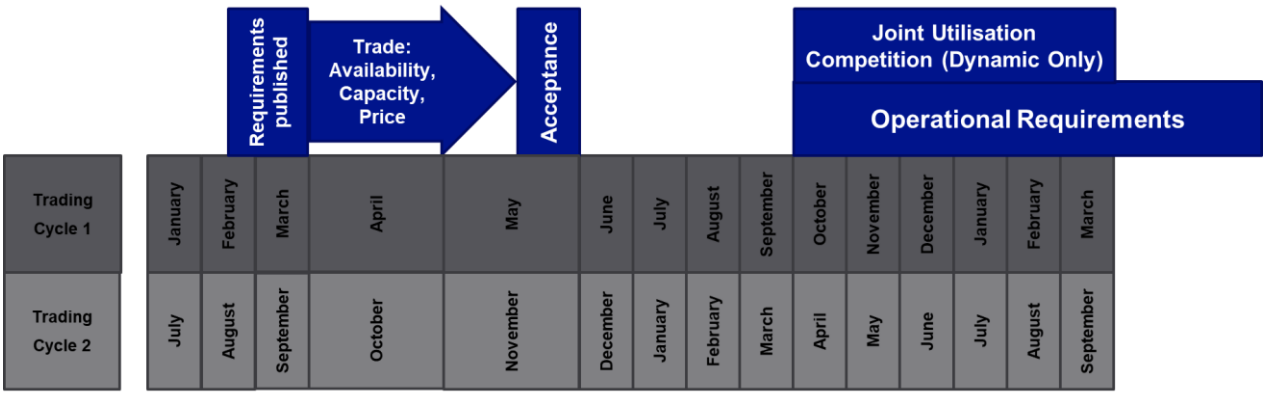


Figure 12: Long Term Operational process

Availability Declarations: Following publishing results in February and August, FSPs will be able to submit their availability declarations in from April/May (May/July for cycle 1 of 23/24) or October/November in their trade response. This includes providing details such as the available capacity they can provide, the price and key operational parameters such as maximum and minimum run times.

Acceptance: We will accept or reject trades by the end of May (July/August for cycle 1 if 23/24)/November.

Once trades have been cleared, our dispatch processes then focusses 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 Guidance document for more details).

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.

Our dispatch principles align with our wider service selection principles laid out in section 5.2.

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.

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.

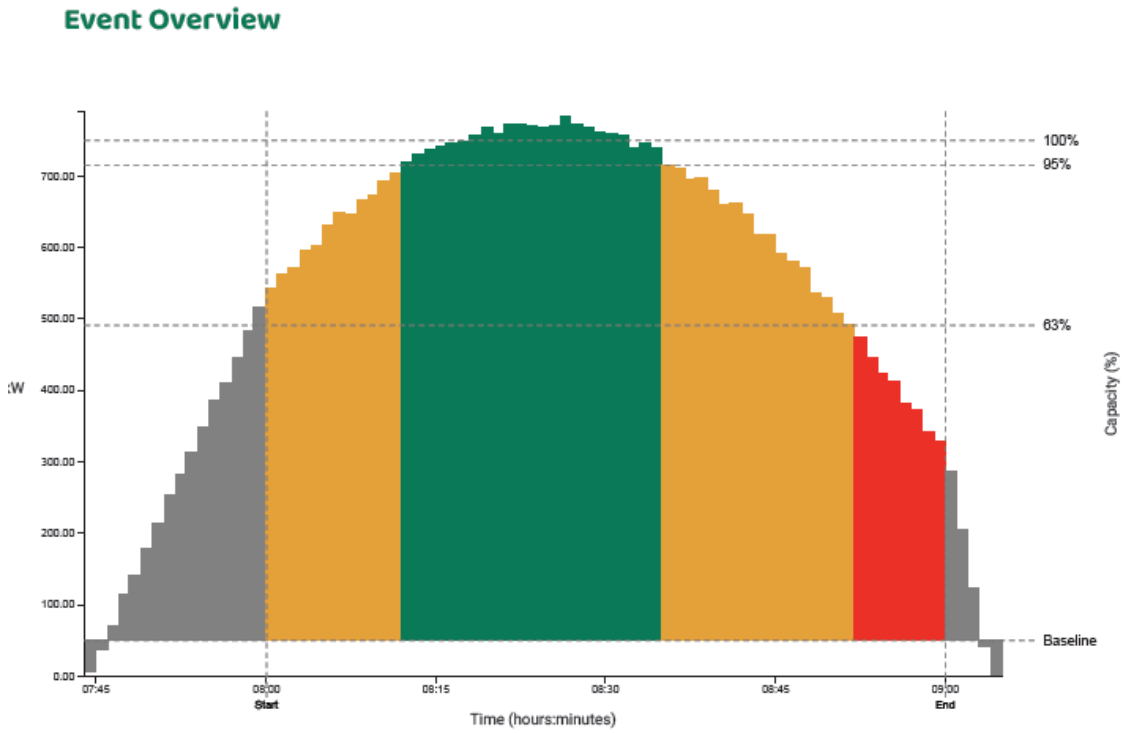
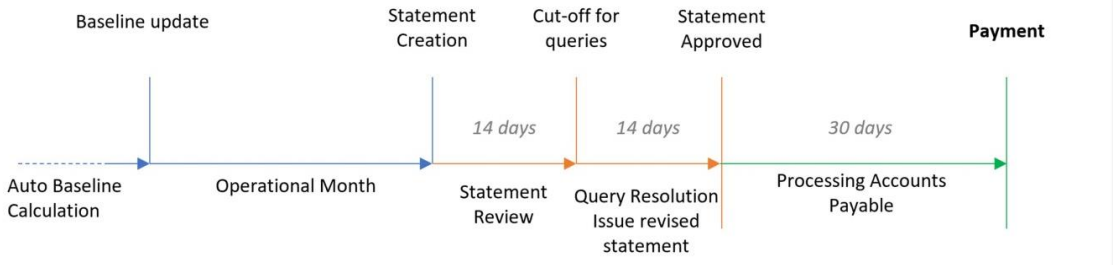


Figure 13: Example Performance Report

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 Guidance Document.

3. Tendering Process

3.1 Process

We have developed our tendering processes 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.

We are now evolving to align with the framework contract approach taken by the ESO, and as such have implemented a process where market participants are pre-qualified and awarded an overarching contract ahead of being able to bid for trade opportunities. This allows us to accommodate new products at different timescales and builds a process that can be translated to closer to real time procurement. It also allows us to operate zones for new requirements such as our Lower Voltage zones.

This process, still uses a DPS, and is split into an initial qualification, where the formal procurement is carried out, and then a repeating operational trading phase. It will be administered on our online Market Gateway. This aims to digitalise the end to end procurement process and accelerate platform and marketplace interactions

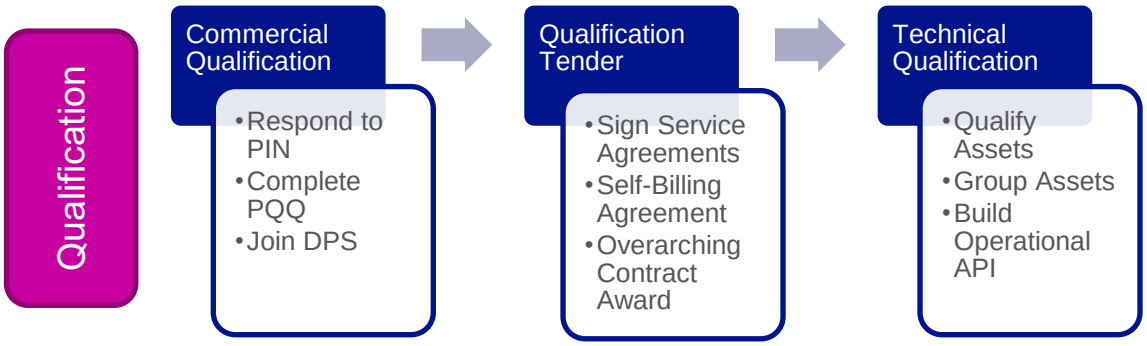


Figure 14: Overview of our qualification processes

Qualification enables the eligibility of FSPs and their assets ready to trade. This involves the commercial aspects; agreeing to the Standard Flexibility Agreement and receiving an overarching contract, following which they are enable with access to the technical aspects; building logical asset groupings, and the required API links to the operational portal (the Flexible Power Operational Portal).

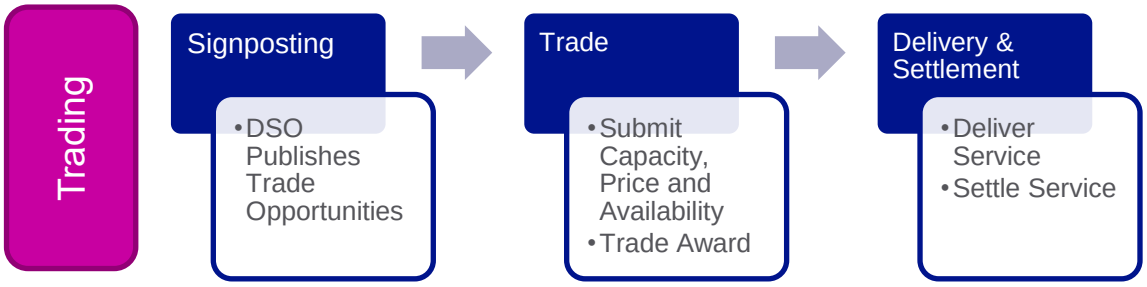


Figure 15: Overview of our trading processes

Trading is how we show our needs for products and how FSPs respond to those needs. We accept or reject those responses, utilise the service and then settle any payments.

We understand the need to further improve the standardisation of processes across the industry and have:

- Aligned with the ESO's method of procurement through the early adoption of the Service Terms structure for the Standard Flexibility Agreement. This allows the implementation of trades. This will align with the other DNOs when version 2 of the Standard Flexibility Agreement is finalised and implemented later this year.
- Aligned with the standardised procurement timelines for our long term products.

We will continue to align with the outcomes of the Open Networks project as they are completed.

3.1.1 Qualification

The qualification process is designed to prepare the FSP and assets for participation in a trade and service delivery. It has 3 distinct phases.

Commercial Qualification

Commercial qualification involves the submission of some basic information to gain access to the DPS. The PIN response is effectively an expression of interest to join, based on basic company information (Name, address, company type and number….).

This is followed by the PQQ, this requires confirmation that the FSP meets the minimum requirements for participation in flexibility services. These are:

1. Commitment to build the Flexible Power API.
2. Ability to provide relevant metering data over the API.
3. Asset ability to respond to a dispatch signal within 15mins and hold a response for minimum of 30mins.

There are also a number of mandatory questions specified in the Utilities Contract Regulations that cover mandatory ineligibility, discretionary grounds for rejection, and confidentiality requirements. The FSP must confirm their acceptance and adherence to these.

Once complete, the FSP is added to the DPS and invited to the overarching tender. Commercial qualification is always open.

Overarching Tender

The tender for an overarching contract is then available immediately after commercial qualification and only includes the Terms and Conditions and associated schedules of the Standard Flexibility Agreement. Acceptance of the Standard Flexibility Agreement is the only criteria for pass/fail. Pricing, capacity and asset qualification will not be considered at this stage. Once accepted, an overarching contract is awarded. This will be enduring with re-acceptance only needed for significant updates to the terms and conditions.

This approach replicates that seen in the ESO framework approach and also retains the requirement for UK DNOs to comply with the Utility Contract Regulations (UCR), however, unlike a framework, it doesn't have a time limit on when parties can join.

Once an overarching 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

Technical qualification focusses on ensuring FSPs are ready to conduct trades.

It includes the registration and validation of assets, the creation of logical grouping of these assets, and building out the API to our operational portal so that start stop signal can received and metering data can be shared for verification and settlement purposes.

Typical details 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.

Assets can be added, updated and deleted at any time by the contracted FSP, as can the logical grouping. Only assets that are registered and have been verified by National Grid can be selected for participation in a trade.

3.1.2 Trading

Trades are the vehicle for the award of service windows. They form the detailed requirements for availability (and for some products utilisation). Once awarded, as well as service windows, a trade will specify the parameters for delivery; the expected volume of response, the assets being utilised and the associated price.

Details of the data covered in a trade can be found in our Guidance Document. Trades do not form part of the formal overarching tender process and will only be awarded through a subsequent trade award following a successful trade response.

Trades are administered through the Market Gateway. Our trades currently operate across two timeframes, short term (weekly) and long term (bi-annually).

A trade is used to lock in key requirements from FSPs and the DSO and clearly set out delivery expectations.

As such once a trade opportunity closes, the trade responses are locked and assessed. The trade award is used to confirm the availability acceptance windows, the meterable units (the asset or asset group) covered and the technical parameters (as specified in the trade response).

These cannot be edited post trade. In due course we will develop processes to facilitate secondary trading.

It should however be noted that whilst the meterable units tied to a trade are fixed, it is still possible to edit the assets linked to the meterable unit can be changed subject to the operational period.

This will allow FSPs to manage which assets are being used. The same response, with the same availability window is expected, but the baseline values will alter to align with the latest assets.

For example an energy retailer may want to remove assets that are no longer their customers, and add others in their place.

3.2 Pricing Strategy

A ceiling price for each zone is calculated as part of our DNOA process using the CEM tool. All ceiling prices will be communicated in the trade opportunity. We are currently fixing the ratio between availability and utilisation prices, but will be looking to remove this restriction in due course.

We then use a Pay as Clear (PaC) mechanic where we are using competitive pricing. This means that all providers are paid at the rate of the marginal Asset, rather than the price they bid. This is designed to encourage bids at the marginal cost of the Asset, rather than the clearing price of the Zone. This mechanic is being used in most new Flexibility Services across Europe.

The decision between PaC and fixed pricing will be determined in the trade. Our default parameters are:

PRODUCT	PRICING MECHANIC
Sustain	Pay As Clear
Secure	Pay As Clear
Dynamic	Pay As Clear
Restore	Fixed Price

Our initial implementation of PaC will build on manual processes looking to best align with the service principles. The clearing price will be set by the most expensive provider selected.

Restore services are used in response to rare, high impact, network events. The nature of these events often restricts the Flexibility Services that could be use due to locational requirements. In order to ensure timely usage of these services they will remain fixed price.

These prices feed into the performance related payment mechanics. More details can be found in our Guidance Document.

3.2.1 Joint Utilisation Competition

We aim to operate a Joint Utilisation Competition this regulatory year. However we are yet to finalise the timings of release due to uncertainties in system development time scales. When implemented, it will only operate for our Dynamic Products as the structure of the product requires us to make utilisation decisions nearer to real-time.

When utilisation decisions are made for our Dynamic products, all availability of flexibility services will be considered consistently based on our Service Selection Principles as detailed in our Guidance, regardless of the timeframe the offer of availability was made in.

Where longer terms products are trading months ahead, we will look to acquire a specified volume (potential defined as a range) as defined in the trade. As per our clearing process, availability prices will be set and utilisation pricing will be capped. At this stage the availability payments are committed.

This utilisation, associated with this availability will then be entered into a competition with the shorter term 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 short term market requirements,
- any unfulfilled volume in the long term allocation, and
- 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 have the option to update their pricing.

Market conditions may have changed since the point that an FSP has made a declaration of availability for a long term service such that the originally bid utilisation price is no longer competitive. This JUC allows the FSP to submit a reduced utilisation price such that utilisation of their assets can remain competitive.

The decision to resubmit a reduced utilisation price is at the discretion of the FSP and there is no obligation to submit an updated price. Where an FSP chooses to submit a reduced utilisation price for an already accepted availability period, the availability price will not be amended and will remain at the originally cleared price.

3.3 Timelines

As detailed in section 3.1, our new commercial and technical qualification processes are now open all year round.

The equivalent of our two procurement cycles will be retained, as we will update our flexibility requirements every six months and open associated windows for longer term trades. The windows for shorter term trades will then be opened weekly. Please note that some dates may be subject to change depending on the development timeline of the Market Gateway. The timetable provided below shows our best view at this stage.

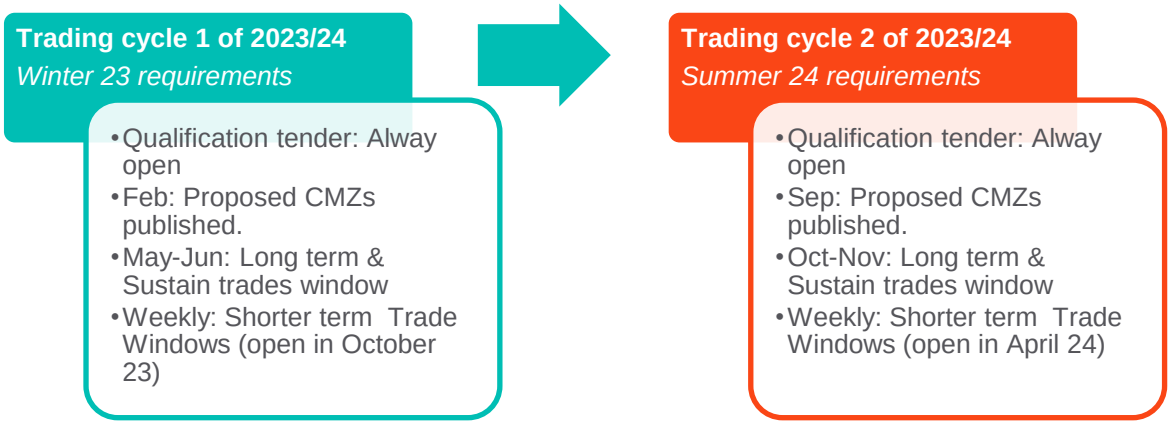


Figure 16: Procurement Timeline

As highlighted in section 2.2. The requirements are published across a number or publications. On publication of needs we also remind our registered stakeholders through an update service, with the links required to the requirements, links to DPS registration and any further information (such as webinars). Registration to the update service is available here: https://www.flexiblepower.co.uk/contact

All trade opportunities will be issued to all relevant members of the DPS on the Market Gateway .

Procurement results are then published on the Flexible Power Website.

A summary of all relevant documents is provided in our Document and Data Catalogue.

3.4 Contract Award Process

FSPs respond to the qualification tender by accepting the latest Flexibility Service Agreement, a self-billing agreement and providing billing details. No asset details are collected at this stage. These are collected later at the technical qualification stage.

Following the qualification tender, a contract is awarded to the FSP.

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.

Our implementation of the Flexibility Service Agreement is available on the flexible power website (https://www.flexiblepower.co.uk/tools-and-documents). The terms must be accepted as part of the qualification tender. 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 National Grid and with the wider ENA standard terms.

As detailed in Section 3.1, there are a number of further steps before any availability is committed to, and to which pricing is agreed.

First we have the technical qualification in which we collect data such as:

- 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.

FSPs may provide multiple assets and portfolios per zone. These can be contracted directly or via a supplier or aggregator. We 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.

Following technical qualification, the capacity, availability requirements and price are determined within the trade process.

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

Since 2018, we have published data to communicate the procurement cycle results 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 procurement process moves forward, award data will fall across two categories:

Contract award data:

- The counterparty to the contract.

Trade award data:

- The counterparty, technology type, capacity, length of trade, and price awarded to each contracted party.
- A summary of the outcomes per CMZ. This includes, the volumes required, the number of bids received, the volumes awarded and the zone price.

We are committed to publishing data associated with both within a month of the award. Where possible we will accelerate this timeframe.

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/contact. You can also contact us directly at NGED.FlexiblePower@nationalgrid.co.uk.

We also publish a Procurement and Engagement Timetable here: https://www.flexiblepower.co.uk/downloads/1123

4.1 Engagement around Flexibility requirements

As detailed in Section 3.3 we operate two trading cycles a year, focussed on our summer and winter requirements. The timings are set in our Procurement and Engagement Timetable. 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 our Document and Data Catalogue.

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.

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 a number of key processes;

- To support our new processes we have arranged a series of webinars to support the new processes.
- We will be hosting a DSO and Flexibility Showcase in Q2 of 2023.
- 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 revolves around our Evolution of Flexibility Services document, with its accompanying webinar and workshops. Last year this fed into a formal consultation. Following feedback from providers we have dropped our formal consultation that followed this work. All this information is available on the 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 Services. As part of this a formal consultation is conducted in July. We used this feedback to inform ON work as well as our internal process.

We also 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 National Grid 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. The Market Development and Network Operations work streams are focussed on the development of Flexibility Services. The 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 Network Development Plan (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.

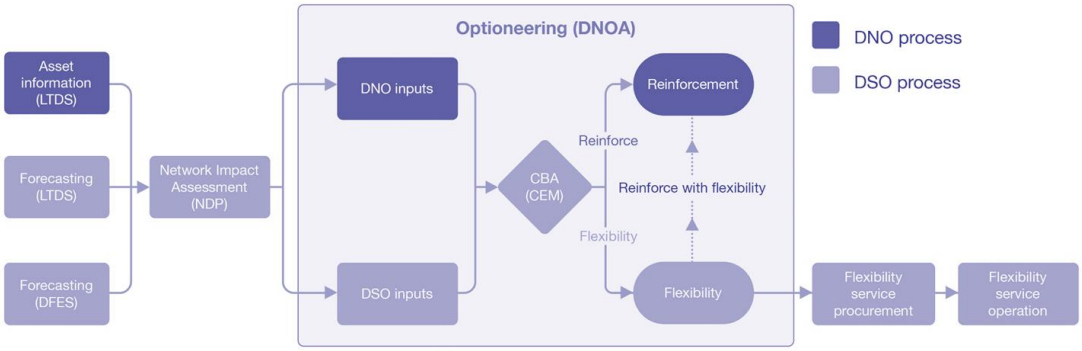


Figure 17: Determining Flexibility Requirements

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. A good practice guide for it's use can be found here.

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.nationalgrid.co.uk/DNOA)

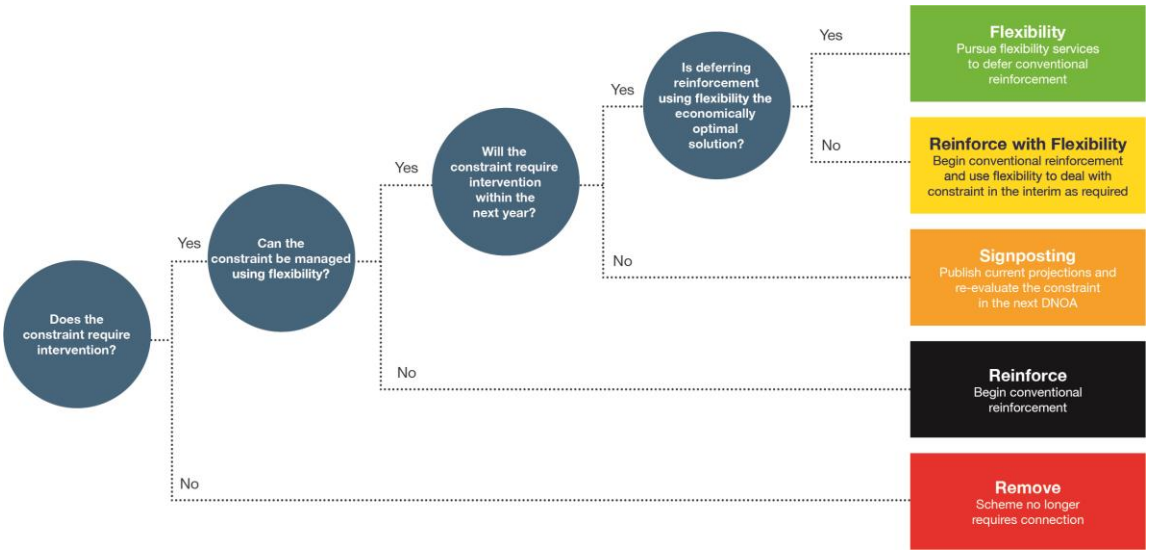


Figure 18: DNOA decision tree

For the next run of the DNOA we are adjusting our process to deliver ceiling prices for each zone. These will feed into our pricing strategy.

To support this we are developing the concept of a minimum value threshold for going out to market. This is intended to focus our procurements on zones where there is genuinely the potential for market viability. We are currently engaging with stakeholders to set this value.

5.2 Flexibility Service Selection

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

As we implement the new structure of trades, we are reviewing how we select services. We need to balance the needs for transparency, efficiency and deliverability. These are interlinked with our dispatch principles, set out in section 2.2.3

We are currently engaging with stakeholders on the approach to be taken going forwards. This can range from adjusting our requirements to simplify the trading mechanics, to looking to better match our requirements with more complex selection decisions.

The outcome of this engagement will impact the processes and systems needed.

Initially our selection will be built on manual processes, aiming to provide the lowest total cost to the DNO and function on a Pay as Clear basis. As we progress we will look to develop robust service selection systems.

5.2.1 Service Selection Principles

In March 2020 the ENA Open Networks Project published a set of dispatch decision criteria guiding principles [1], which guide how DSOs decide which services to dispatch.

PRINCIPLE	DESCRIPTION	NATIONAL GRID ELECTRICITY DISTRIBUTION IMPLEMENTATION
Security	The needs of the system will be met using flexibility in such a way that security of supply is maintained.	This principle can be subdivided into two key criteria that need to be met, Technical Integrity and Customer Security. • Technical Integrity considers Network Integrity, the ability of a network to operate within technical limits and System Frequency Integrity, the ability of the System to operate within acceptable frequency limits[1]. • Customer Security is the ability of a network to meet customer demand and generation. There are minimum standards for these National Grid Electricity Distribution must meet but opportunities to go beyond these standards are also considered where these are economic.
Cost	Flexibility will be operated to meet system need at the minimum level of cost.	The use of Flexibility Services should be cost effective and expenditure proportional to the benefits it brings to the network.
Operability	DSOs will seek to dispatch services that offer compatible levels of operability.	Operability is a measure of how well an offer of a Flexibility Service meets actual or potential System needs. National Grid Electricity Distribution will seek to develop an objective and transparent method for assessing the operability of offers of Flexibility Services.
Competition	DSOs will provide transparency of their dispatch decisions and activities.	Flexibility should be procured using simple, fair and transparent rules and processes. Services should be developed such that service providers can participate easily in different markets.
Fairness	DSOs will operate a fair dispatch methodology and provide equal opportunities to participate.	Flexibility Services shall be assessed and selected impartially purely on their technical and commercial merits. Where multiple technically sufficient Flexibility Services are available at a comparable cost, we will share the dispatch of services across these providers.

We are working to develop standard rules and procedures to assess the operability of offered Flexibility and match this against our system requirements. The first stage of this process is to set out our underlying service selection principles, these will guide both our current service selection process and the more detailed service selection rules we will develop. These principles incorporate the Open Networks principles and provide further information about how these are implemented in practice. These are common across our selection of services to make available, as well as utilise.

To ensure security of supply is delivered for the most cost effective outcome, we will consider these items in the following order:

[1] Although System Frequency is not managed by National Grid Electricity Distribution, it can be affected by the operation of National Grid Electricity Distribution's network and customers.

PRIORITY	NAME	MEANING	IMPLEMENTED OPEN NETWORKS PRINCIPLE
1	Technical Integrity	The National Grid Electricity Distribution requirements of Network Integrity, System Frequency Integrity (SD2 [2]/ TP1B [3]) shall be met. Where these are dependent on Flexibly Services, these services must meet these requirements.	Security
2	Customer Security	National Grid Electricity Distribution requirements for demand and generator security (SD2 [2]) shall be met. Where these are dependent on Flexibility Services, these services must meet these requirements. Opportunities for enhancements to demand and generator security may be used where economic.	Security
3	Value	Flexibility should be procured and operated to carry out the roles of a DSO, in a cost effective manner.	Operability & Cost
4	Market Resilience	Where multiple technically sufficient Flexibility Services are available at a comparable cost, we will share the dispatch of services across these providers.	Competition & Fairness

As our operational experience in dispatching flexibility increases, we will use this information to further develop our systems and processes used to implement these principles. These will be regularly communicated with FSPs to ensure they can maximise their value to the system.

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.

Demand Turn Up Services

To help manage the new access rights of customers after the Access SCR we will be looking to develop Demand Turn Up/Generation Turn Down service for delivery in Summer 24.

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 2024.

Energy Efficiency

Our work on the Sustain product has delivered learning on the structuring of 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 please refer to our 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.	National Grid Website & Flexible Power Website
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.	National Grid Website
Ongoing Reporting	We publish the outcomes of our Flexibility Service procurement. This is covered by our Procurement Results document.	Flexible Power Website
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.	National Grid Website
Distribution Flexibility Services Procurement Consultation Document, Webinar and Outcomes	Our formal consultation on changes we have proposed on how we procure flexibility services.	National Grid Website
Ofgem Guidance	The Ofgem guidance determining what should be covered in the regulatory reporting.	Ofgem Website

7.2 DSO process (and inputs)

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. This is produced by DNO rather than DSO functions.	National Grid Website (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.	National Grid Website & Connected Data Portal

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	National Grid Website
Distribution Network Options Assessment (DNOA)	The Distribution Network Options Assessment (DNOA) is a publication which outlines reasons behind investment decisions made in order to deal with constraints on our network.	National Grid Website & Connected Data Portal

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 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.	National Grid Website & Connected Data Portal
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.	Flexible Power Website & Connected Data Portal
Market Gateway	Our portal for all commercial interactions.	Market Gateway
Procurement results	The results documents provides detailed information on the volumes procured through each cycle.	Flexible Power Website
Post Code Checker	A simple look up tool to assess the allocation of postcodes to CMZs. The background data is available as and excel sheet and on the connected data portal.	Flexible Power Website & Connected Data Portal
Service Value Calculator	A tool to provide a view on the maximum potential revenue available to a provider.	Flexible Power Website
Month Ahead Availability Forecasts	Updated ahead of each new month with a forecast of our availability requirements for each operational zone. Active participants can use this to inform their week ahead declarations.	Flexible Power Website
Flexibility Zone Activity Timetable	A spreadsheet detailing which months of the year each zone has a requirement for provider availability	Flexible Power Website

7.4 Flexibility Process

Publication	Description	Location
Procurement & Engagement Timetable	We conducts 2 procurement cycles per year. This document provides the proposed procurement window dates and the surrounding market engagement	Flexible Power Website
National Grid Guidance For Electricity Distribution Service Providers	Our Consolidated guidance on how we procure flexibility services	Flexible Power Website
NGED_ENA Standard Flexibility Services Agreement	The latest version of the T&Cs applicable to our Procurement of Flexibility Services	Flexible Power Website
Routes To Participation - Webinar	Slides and Recording on our Webinars on how to participate in our services.	Flexible Power Website
Flexible Power Payment Mechanics	An overview of the Flexible Power Payment Mechanics	Flexible Power Website
Flexible Power Example Event Performance Report	An example of the performance report created post a response event.	Flexible Power Website
Flexible Power Example Monthly Invoice	An example of the monthly invoice created at the end of each month.	Flexible Power Website
Flexible Power Example Event Earnings Report	An example of the payment breakdown of utilisation earnings created post a response event.	Flexible Power Website
Flexible Power Nominated Baseline values	The values used for our nominated baselines	Flexible Power Website

7.5 Flexibility Updates

Publication	Description	Location
Flexibility Update Service	A mailing list to receive Updates on our Flexibility Services	Email. Sign up at: https://www.flexiblepower.co.uk/contact

7.6 Other relevant information

Topic	Description	Location
Open Networks	An overview of the Open Networks Project and all the relevant documentation.	ENA Website
RDPs	Overviews of the Regional Development Programmes	National Grid ESO website & National Grid website
Innovation	An overview of the National Grid Electricity Distribution innovation portfolio	National Grid Website