

Distribution Flexibility Services Procurement Consultation

January 2022

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1. Introduction

1.1. Why we procure Flexibility Services

WPD operates a “Flexibility First” approach to all load related reinforcement decisions. This means that where/when constraints on our network are identified, we consider whether flexibility services are a credible and economic option to address the network issue and avoid and/or defer reinforcement.

We detail how we make these decisions and how we procure these services in our [Distribution Flexibility Services Procurement Statement](#). This document is updated annually and approved by Ofgem as set out in our Licence condition C31E.

1.2. Stakeholder engagement and purpose of this document

As part of our last [Procurement Statement](#), we set out a process to engage with stakeholders to ensure that we continue to offer products and processes that are fit for purpose and encourage the levels of market liquidity and competition needed to drive efficient outcomes. This engagement process is highlighted in the figure below.



Figure 1: Flexibility Procurement Engagement Timeline

Over November and December we held our informal engagement, built around our [Evolution of Distribution Flexibility Services Procurement Document](#). This detailed a number of changes we are proposing to make in the coming regulatory year.

This consultation follows the engagement, setting out the changes we will be making to the Procurement Statement in the coming regulatory year. We have captured the feedback obtained and reflected the evolution of our thinking. Where changes have been made, these have been incorporated into the narrative, and then also pulled out separately.

This document sits between the wider [Evolution document](#) and the formal documents set out in the C31E licence condition and associated guidance.

The bulk of the document focuses on the Procurement Statement, describing how and when we procure services. We then cover the data we will share, which is covered by the Procurement Report and the ongoing reporting requirements.

The purpose of this document is to get your views on our proposed changes to the way in which we procure and operate flexibility services.

You can provide any feedback to us directly at: wpdflexiblepower@westernpower.co.uk, via the [online form](#) or by arranging follow up bilateral discussions. The consultation period will end on 17/02/2022

2. Flexibility Services requirements

2.1. Current Products

As covered in our previous statement, we currently procure three services: Secure, Dynamic and Restore. These align with the [Open Networks Service definitions](#). We do not currently procure Sustain Services as part of our business-as-usual services. Each Constraint Management Zone (CMZ) has either Secure or Dynamic as a primary product as well as the optional Restore service.

Secure	Dynamic	Restore
<p>Our Secure 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 Dynamic 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 Restore service supports power restoration following rare fault conditions.</p> <p>No availability payment, instead it offers a premium utilisation payment.</p>

Figure 2: Overview of our current Flexibility Services

2.2. New products

As we build out Flexibility Services we see value in widening the timeframes at which we operate. This opens up new opportunities for different assets to participate, and allows us to better manage our risk (both operational and financial). We see this as a key way of building up the volume and liquidity needed for functioning local flexibility markets. As detailed below our initial focus for deployment will be on longer term products. We will then look to incorporate closer to real time products in the medium term.

2.2.1. New long term products

As detailed in our [Evolution of Flexibility Service document](#), we are looking to deploy new, longer term products to our suite of Active Power Flexibility Products. These are aimed at providing Flexibility Service Providers (FSPs), and WPD with greater certainty of need and are mapped in Figure 3. It should be noted that how we procure these services will also change, as detailed in Section 3.

These products bring forward the decision making for service availability (all new products), 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.

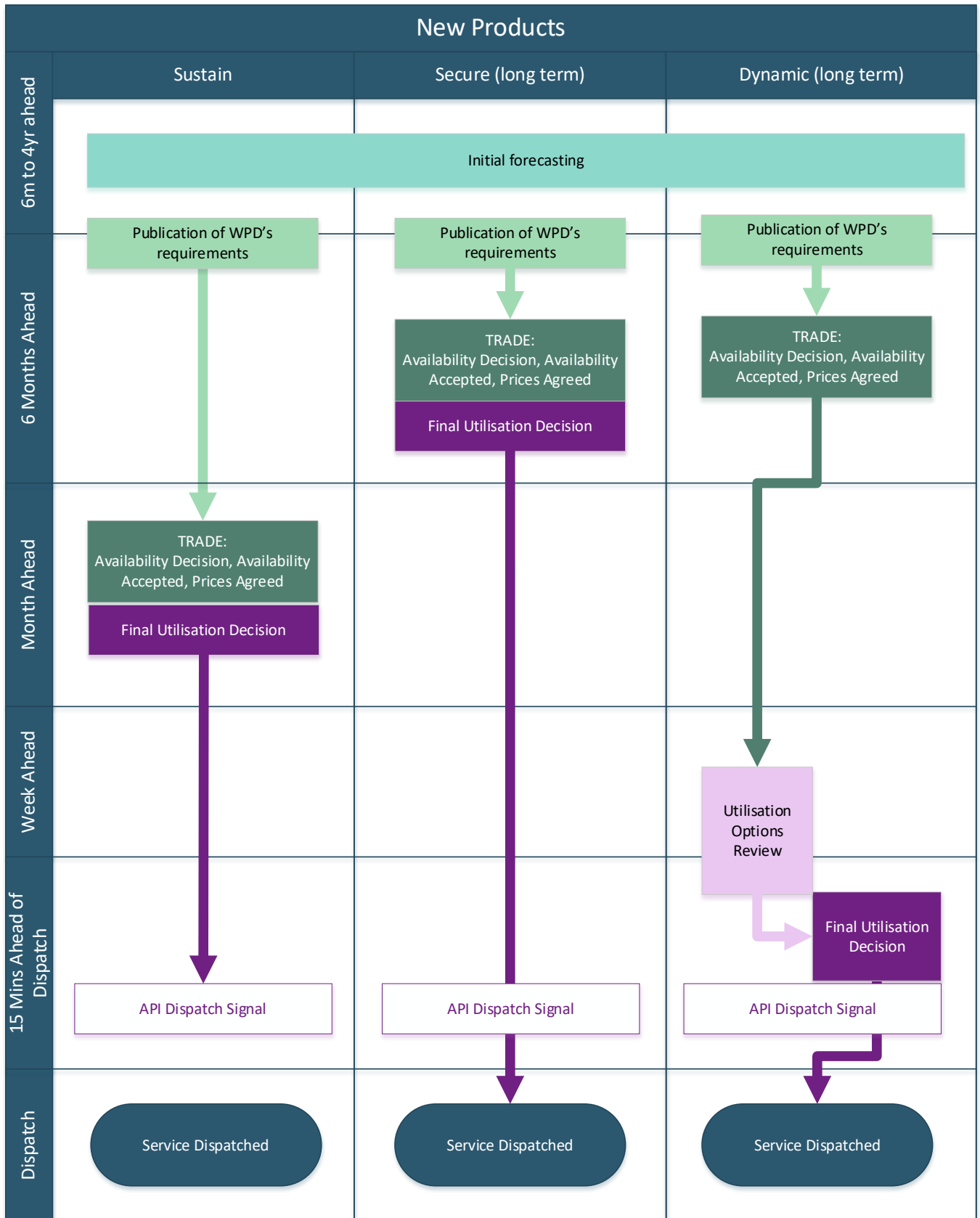


Figure 3 New Long Term Flexibility Products

2.2.2. Our Sustain product

Sustain is the fourth Active Power Product defined under the Open Networks project. Sustain is a scheduled constraint management service. By scheduling the entire behaviour ahead of time Sustain services require less technical integration and can be easier to participate in. However they are also less targeted.

As part of our Future Flex project we investigated options for making flexibility services more accessible for domestic FSPs. One of the strands that emerged was the development of a Sustain service (named Sustain H in the trial).

We have now committed to the commercialisation of the product and have published a [Sustain-H roll out road map](#). This builds on a number of the building blocks used for existing service and process development. Our proposed Sustain product will deliver on this road map.

A few key differences from our current products should be noted:

- Sustain is a “drop to” service. As it is scheduled ahead of time with a fixed baseline, FSPs have clarity well ahead of time on what is expected of them.
- There are two fixed four-hour delivery windows each weekday over targeted summer and winter seasons.
- We accept both half-hourly and minute-by-minute metering at either asset or household level.
- Participants are paid a fixed tariff which grouped across a number of CMZs.
- We will implement trades on a monthly basis to allow FSPs to manage the natural volatility of domestic portfolios.

With all of this, the aim was to develop a simplified product that would be easy, and low cost to roll out across domestic sites.

We will deliver our Sustain product in the next reporting year. This will use the process developments suggested in Section 3 to help digitalise the process to make it manageable for both WPD and the FSPs.

We expect interest in this product to be limited to domestic FSPs, due to the creation of the similar Secure (Long Term) product. We will review the suitability of the Sustain service for other assets should we have any interest in provision of the service. The key difference between the services is the level of targeting seen in the availability/utilisation windows. For Sustain we expect to have simple windows that are common across many 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.

It should also be noted that domestic participants can, and currently do participate in some of our Secure and Dynamic services. We expect this to continue, and encourage FSPs to choose the service that best suits their assets and their commercial strategies. The development of Sustain H is seen as the provision of another route to market, rather than the sole route to market.

2.2.3. Changes to existing products

To align our current product offering to the new procurement process, alongside the new products, we will also make some modifications to our current products.

These will remain focussed on the weekly operational process with key changes including:

- Pushing the price setting of our Secure and Dynamic products to the week ahead stage.
- Offering the option to bring forwards the availability and price setting for our Restore product. This will sit alongside the option to continue to provide weekly availability, but could remove the burden of weekly trading and reduce the cost of participation in the service.

2.2.4. Overview of new suite of products

A full mapping of the new suite of products can be found below

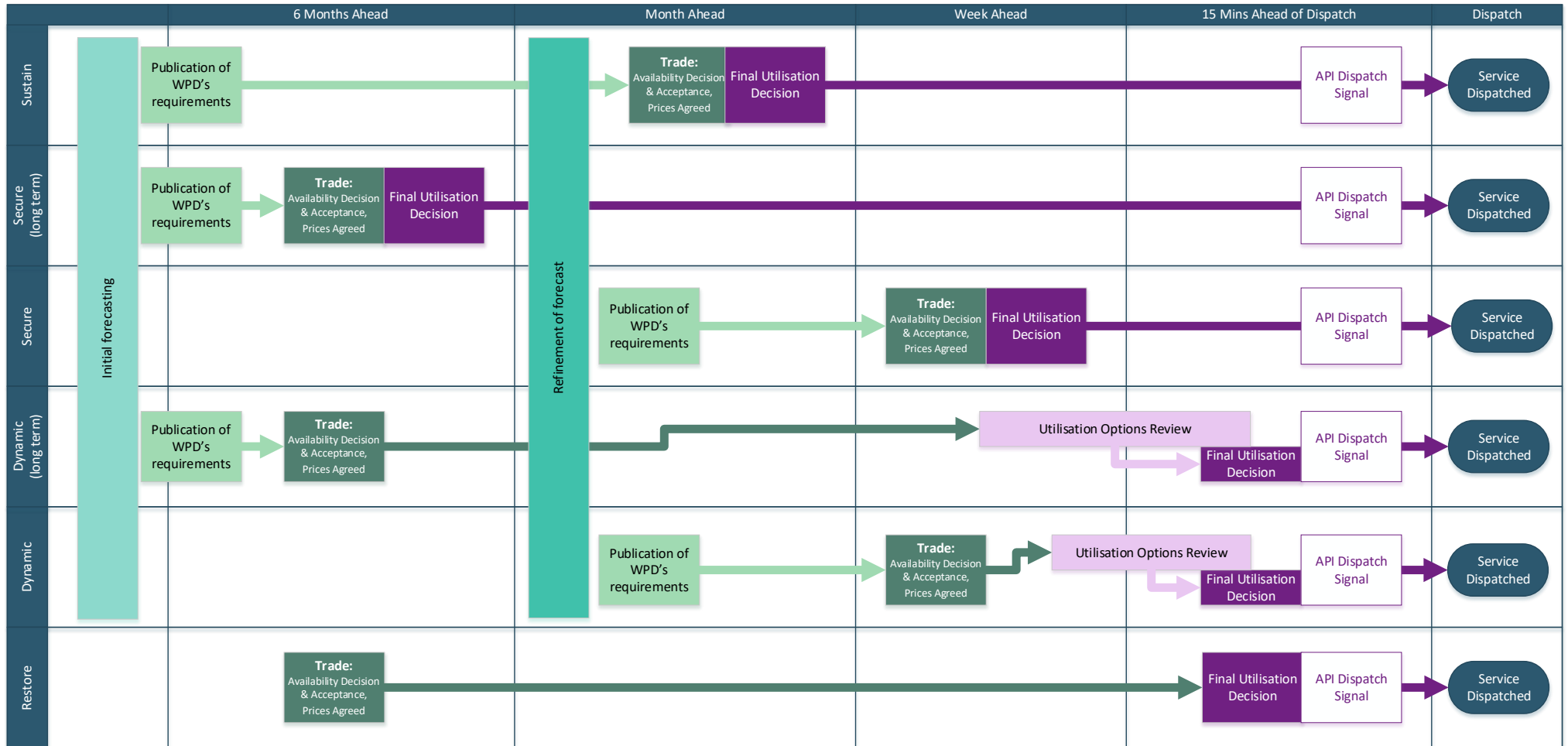


Figure 4: Product Overview

	Sustain	Secure (long term)	Dynamic (long term)	Secure	Dynamic	Restore
Delivery Seasons	Seasonal; Winter (October - March) / Summer (April – September)			Weekly		Seasonal & Weekly
DNO Signpost Requirements	January / June					
Publish Trade Opportunity	Monthly 6 weeks ahead	February / July		Every Monday (am); Week ahead of Operational Week		Seasonal & Weekly
Trade Opportunity Response Window	4 weeks	6 weeks		3 days (23:59 Weds)		Seasonal & Weekly
Capacity Award Decision	2 week ahead	April / September		Every Thursday; Week ahead of Operational Week		Seasonal & Weekly
Availability window (A) Decision	N/A	April / September		Every Thursday; Week ahead of Operational Week		Seasonal & Weekly
Price Award (A)	N/A	April / September		Every Thursday; Week ahead of Operational Week		N/A
Price Capping (U)	N/A	N/A	April / September	N/A		N/A
Utilisation (U) Price Setting	Fixed Price	April / September	Every Thursday; Week ahead of Operational Week via JUC	Every Thursday; Week ahead of Operational Week	Every Thursday; Week ahead of Operational Week via JUC	Fixed Price
Utilisation (U) Decision	2 week ahead	Every Thursday, week ahead of Operational Week	Within Operational Week up to 15mins ahead of delivery requirement	Every Thursday, week ahead of Operational Week	Within Operational Week up to 15mins ahead of delivery requirement	Within Operational Week up to 15mins ahead of delivery requirement
Dispatch Signal	15 minutes ahead of Utilisation					
Verification & Performance reports	Within 15 minutes of Event End					
Invoicing	Monthly					

Table 1: Product Overview

2.2.5. Allocation of services to zones

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

Table 2: Products available in each type of 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

2.2.6. Looking to the future

As previously mentioned we will continue to review our portfolio of products to ensure they remain relevant and drive value for WPD and participants. Our current development pipeline involves the following changes:

- The addition of **closer to real time products**. The IntraFlex project has shown a clear appetite for such markets, and the value of new assets that could be enabled in these shorter time frames. To enable our efficient use of such services, new internal processes and tools are required to allow us to handle the increased volume and frequency of decision making. We have ensured that proposed product framework and procurement processes are flexible enough to accommodate these closer to real time products to facilitate a simple roll out once capability has been built. It should be noted that closer to real time products do introduce new operational and financial risks and so we see these products sitting alongside others, rather than replacing them.
- As part of our work with the ESO in the regional development programmes we are developing **coordinated services between ESO and DNO**. The initial focus has been on the development of the **MW dispatch** product to help the ESO manage Transmission Constraints via the use of DNO existing control systems. As we move beyond the minimum viable product, we will look to investigate the ability for the DNO to gain access to the service for the management of our Network. We will also look to investigate if other routes to market are needed for Distribution connected assets to access Transmission Constraint management services.
- We will closely monitor the Open Networks work on **Reactive Power services**. These services present additional challenges to Real Power Services. As such we will look to build on the learning from innovation projects, and the other DNOs to ensure any implementation follows best practice.

2.2.7. Changes following engagement

Through our engagement we received broadly supportive feedback with explicit feedback to trial the Sustain product alongside the similar Secure (Long Term product).

Further internal developments have identified the following changes to add to the process:

- We have adjusted Sustain to operate monthly. Originally this was set at a seasonal level. However, following feedback through the Sustain-H work, it was identified that providers would like to be able to adjust portfolios monthly, due to the natural variation in domestic portfolios. As such we will facilitate this through a monthly Trade process.

2.3. Volumes and requirements

2.3.1. Flexibility requirements

We have a robust process for determining our Flexibility Requirements. This is focussed on our [DNOA process](#). This is detailed in section 5. We will keep the same process for the coming year.

Each CMZ 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 share this information in the following ways:

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 Documents (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

Monthly Forecasting (<https://www.flexiblepower.co.uk/tools-and-documents>): 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 and a link is emailed to relevant FSPs each month. Going forwards we will split the outcomes and forecasts into separate reports.

Raw data: This year we have added a new source of data, by publishing the raw data that sits behind the flexibility maps and procurement documents on our Connected Data Portal (<https://connecteddata.westernpower.co.uk/group/flexibility>). This gives participants the ability to download the full data in an SQLite database, along with some queries to interrogate the data as well as the geographic polygons that define the CMZs.

We also provide a number of additional tools to aid FSPs in understanding our requirements such as a Post Code checker, a service value calculator and more detailed monthly forecasts highlighting operation needs.

2.3.2. Change following engagement

As part of the engagement we received strong feedback on the need to publish data that is machine readable and accessible via API. The addition of our raw data on the [connected data portal](#), fulfils this brief and is already in place.

We will also develop a comprehensive data catalogue to help better detail what data is available where, to ensure stakeholders can maximise the use of our data. We will also review what other data can be made available on the connected data portal.

2.4. Operational Processes and Dispatch Principles

2.4.1. Allocation of Volume to the services

As we move beyond a single primary service per zone we need clear and transparent ways of allocating volumes to each services we aim to procure. This will aid FSPs in understanding how to maximise the value of their assets.

In the long run we see this as an optimisation problem that would need to consider a range of factors. These could include Network Risk, Procurement Risk, System Risk, Expected Pricing Fluctuations, Changing Forecasting capabilities and others as they become apparent.

However we will start with simple allocation rules. We will then build in more complexity as our understanding of the products and surrounding markets improves. We see this process extending out into future regulatory periods as markets evolve and our capabilities improve.

Our first pass on allocation will focus on sharing the value across products and timelines and manage some procurement risk. It will not focus on pricing data initially, as none will be available, however, as discussed in section 3.3.2, there will be a Joint Utilisation Competition for the Dynamic products. As pricing trends emerge, we will investigate how to incorporate these into our selection process.

Our initial view on how Allocated Volumes will be applied to each service is highlighted in the tables below.

Table 3: Volume Allocation in a Secure Zone

	Procurement		Week Ahead		Real time
	Availability	Utilisation	Availability	Utilisation	Utilisation
Sustain		Accept up to 20% of total requirement			
Secure (Long Term)	Accept to Allocated Volume	Accept to Allocated Volume			
Secure			Accept Remaining Requirement	Accept Remaining Requirement	
Restore	Accept All				Dispatch on need

Table 4: Volume Allocation in a Dynamic zone

	Procurement		Week ahead		Real time
	Availability	Utilisation	Availability	Utilisation	Utilisation
Sustain		Accept up to 20% of total requirement			
Dynamic (Long Term)	Accept to Allocated Volume				Dispatch on need
Dynamic			Accept the most economic option for the total volume		Dispatch on need
Restore	Accept All				Dispatch on need

We aim to accept all Sustain volume in each zone to help build the nascent domestic flexibility market up to a cap of 20% of volume requirement.

We will then look to balance volumes between our existing and long term products based a simplistic split of volume across the timescales. Any unfulfilled volume from the earlier stages, as well as the allocated volume will be covered at the week-ahead stage.

2.4.2. Operational Timeline

Currently, we publish our long term requirements for our two existing primary products (Secure and Dynamic) ahead of procurement to help us secure the relevant volume of contracts. On a monthly basis we then publish our best forecast of requirements for the coming month on the Flexible Power website. We then operate a weekly operational process where FSPs declare availability on the Flexible Power portal by midnight on Wednesday. We then accept or reject in on Thursday morning.

As we move forwards, a similar process will be implemented. As detailed in section 3, procurement will happen on an ongoing basis. However we will continue to provide 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 (see section 3.3.2.)

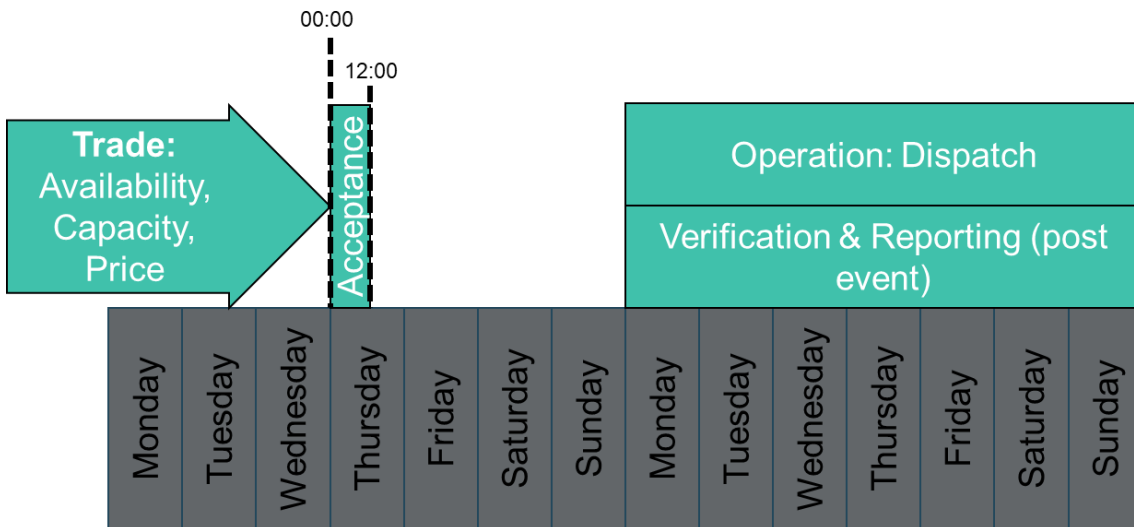


Figure 5: Weekly Operational process

For our long term products we will replace the two 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.

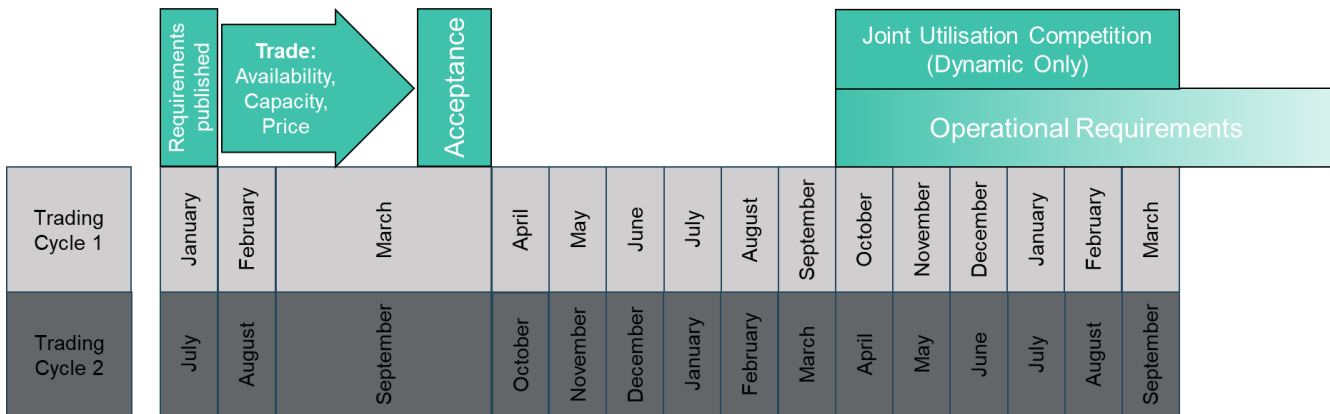


Figure 6: Long term Operational Process

We have considered whether we move the long terms trades to a monthly process rather than the current biannual process. This would look to allocate the complete annual requirement of a zone, in a clearing process that happens 6 months ahead of the first requirement. This would provide a more staggered approach to procurement as zonal requirements are spread. This is not being progressed at this stage due to the potential additional workload for both the DNO and FSP, however we are keen to get your views on this.

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

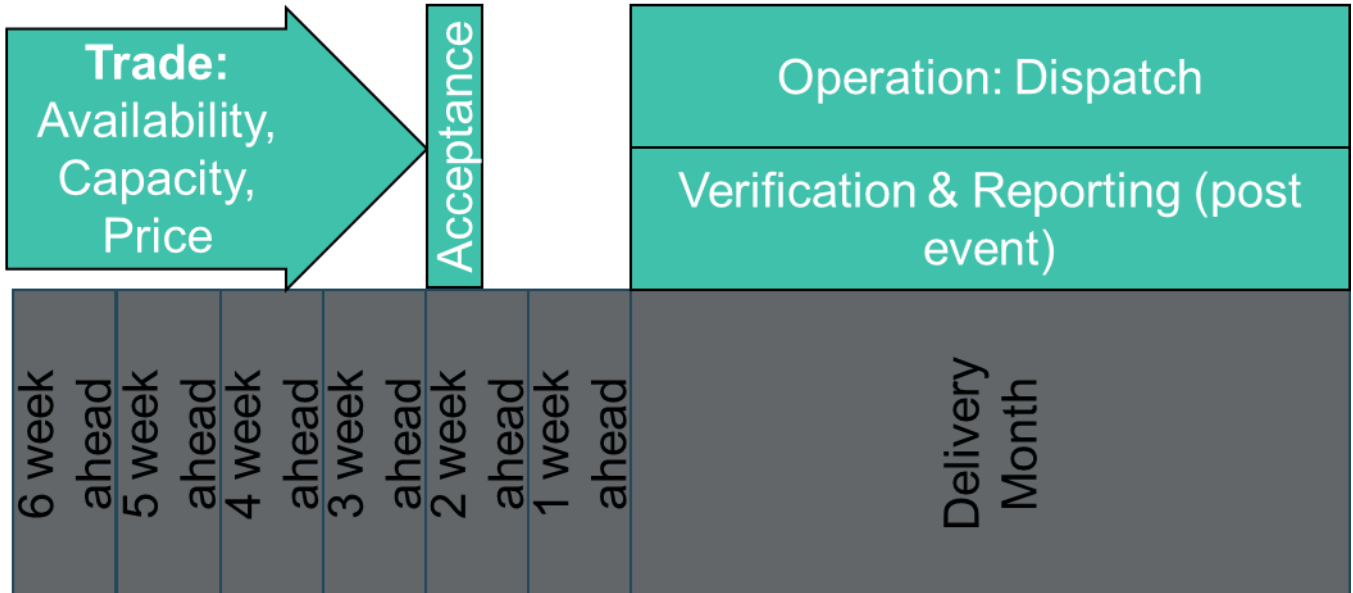


Figure 7: Sustain Operational Process

2.4.3. Dispatch principles

We have not proposed any changes to our dispatch principles.

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

- For Secure & Sustain, 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, acceptance ensures the FSP will be available .Utilisation is triggered by network conditions. A Utilisation instruction is sent via the API 15 minutes ahead of the requirement.
- Due to the low expected need for our Restore service, we do not provide forecasts of need. Availability is still provided and is automatically accepted by WPD. Utilisation is then 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.

As we currently operate a fixed price or pay-as-clear pricing structure, once the trade has cleared, 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.

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.

Table 5: Dispatch Principles

Principle	Description	In Practice
Security	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.
Cost	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.
Operability	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.

2.4.4. Changes following engagement

As part of our engagement to date we have received no negative feedback on the proposed changes. Following internal review we have decided to cap the volume available to our Sustain Providers to 20% of the total zonal requirement. This will retain value for the emerging market, whilst protecting wider providers from the simplistic service selection rules proposed.

2.5. Questions

- **Do our new products add value to the market? If not please detail why.**
- **Is our process for assessing and communicating our flexibility requirements clear? If not please detail why.**
- **Is our Operational Processes clear and effective? If not please detail why.**
- **Would you see value in moving our long term trades to a monthly, rather than biannual window?**
- **Do you have any further comments on this section?**

3. Tendering Processes

Over the next regulatory year we are also looking to evolve a number of our procurement processes. These have two main aims: the streamlining of existing FSP interactions and the facilitation of new products.

3.1. Tendering Process

3.1.1. Current procurement structure

To date we have contracted with FSPs through formal tenders held every six months. To avoid FSPs having to complete commercial qualification for all tenders, a Dynamic Purchasing System (DPS) was established to hold records of all commercially qualified parties. This can be completed at any time and is an initial one-off process which provides eligibility to enter into all future tenders. Technical qualification of a party's assets forms part of the tender process itself, allowing easier participation from parties who have non-static asset portfolios.

FSPs are required to request a contract length within their submission, they can request any length between 1-4 years. Both the capacity a provider can participate with and the price we will pay for availability and utilisation is fixed at the point of contract award for the duration of the contractual period.

The current process aligns to Utility Contract Regulations (UCR), most notably the mandated standstill periods, which can be easily accommodated due to the 6 monthly tender cycles. Each procurement cycle takes approximately 3 months from publication of requirements to contract award as shown below.

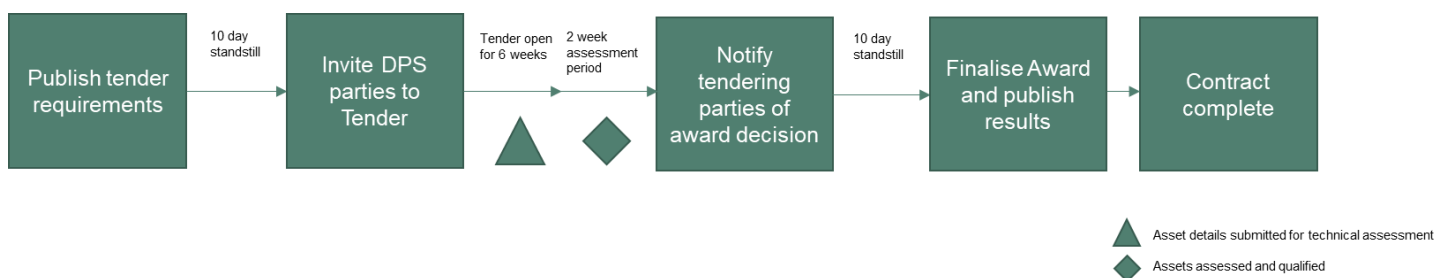


Figure 9: Current Procurement Process

Following a procurement cycle FSPs participate in week-ahead Trades to secure their availability and utilisation commitments. As price and capacity are already agreed within the contract award, these week-ahead Trades serve only to award the service windows.

It should also be noted that we currently procure a season ahead of any delivery requirements, therefore allowing FSPs the period between contract award and the expected delivery season (usually 3-4 months) to build the communications link, which uses an Application Programming Interface (API), that's required to receive dispatch signals and submit metering data for baseline calculation, delivery verification and settlement.

3.1.2. New procurement structure

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 be looking to roll out such an approach in the next year. An overview of the new process is presented below. It is split into an initial qualification, and then a repeating trading phase.

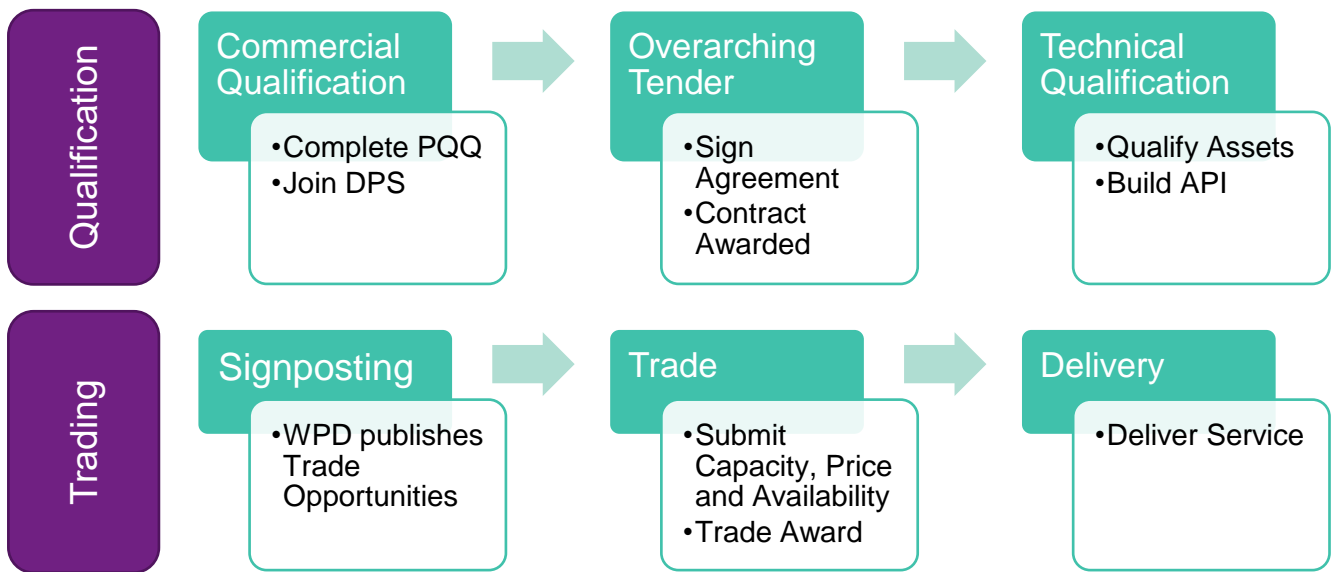


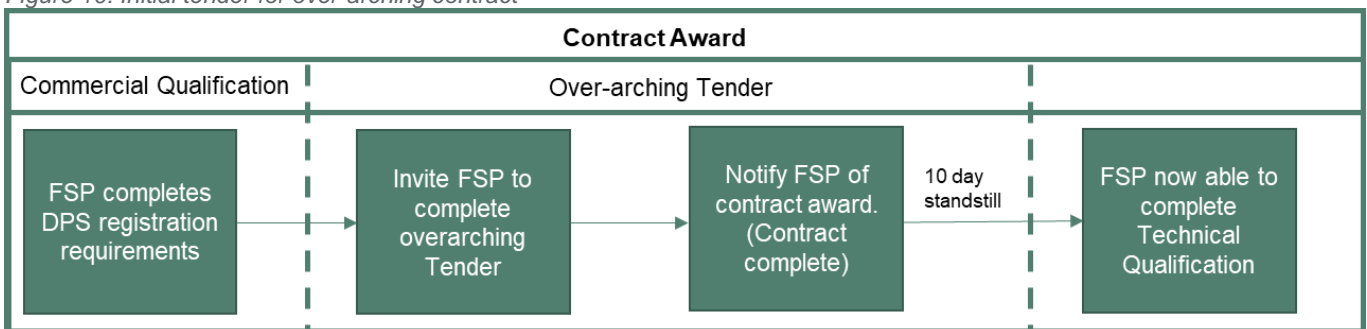
Figure 8: New Procurement Structure

Qualification

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.

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.

Figure 10: Initial tender for over-arching contract



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

Trades are the vehicle for the regular allocation of service windows.

Our Short Term products will continue to see the Trades occur within a week-ahead timescales. In addition to offering availability windows, as they currently do, FSPs will also offer capacity and Availability/Utilisation prices.

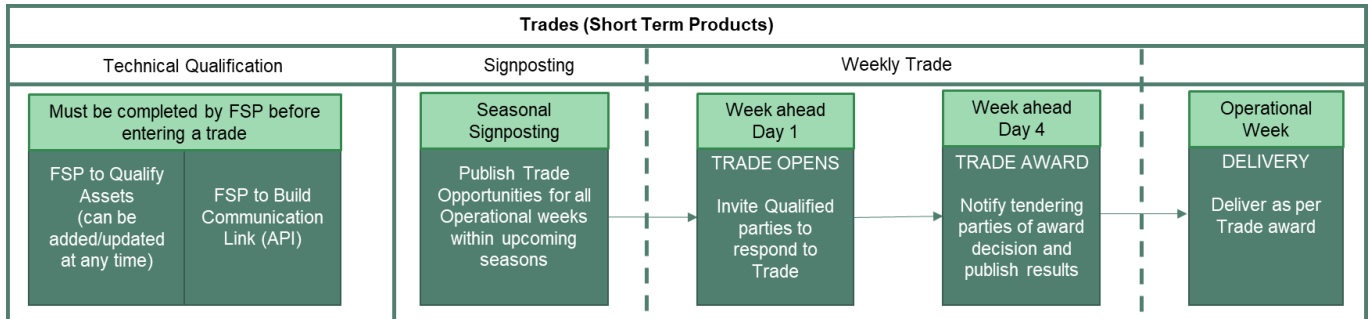


Figure 11: Short Term (Weekly) Trades

Long Term products will Trade in much the same way, however they will happen over a longer timeframe, most likely season ahead. [Table 5](#) provides a view of when we anticipate Seasonal procurement will occur for Long Term Products in comparison to Short Term products.

The example below gives dates relevant to a Long Term Winter Season Trade.

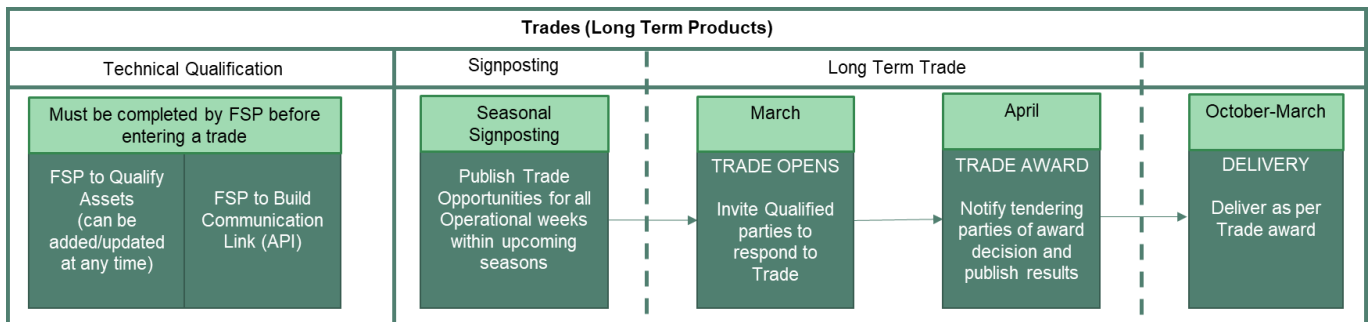


Figure 12: Long Term (Seasonal) Trades: Winter Example

3.1.3. New online procurement hub

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.

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 Portal and populate it with the awarded service windows, capacity and pricing.

The 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

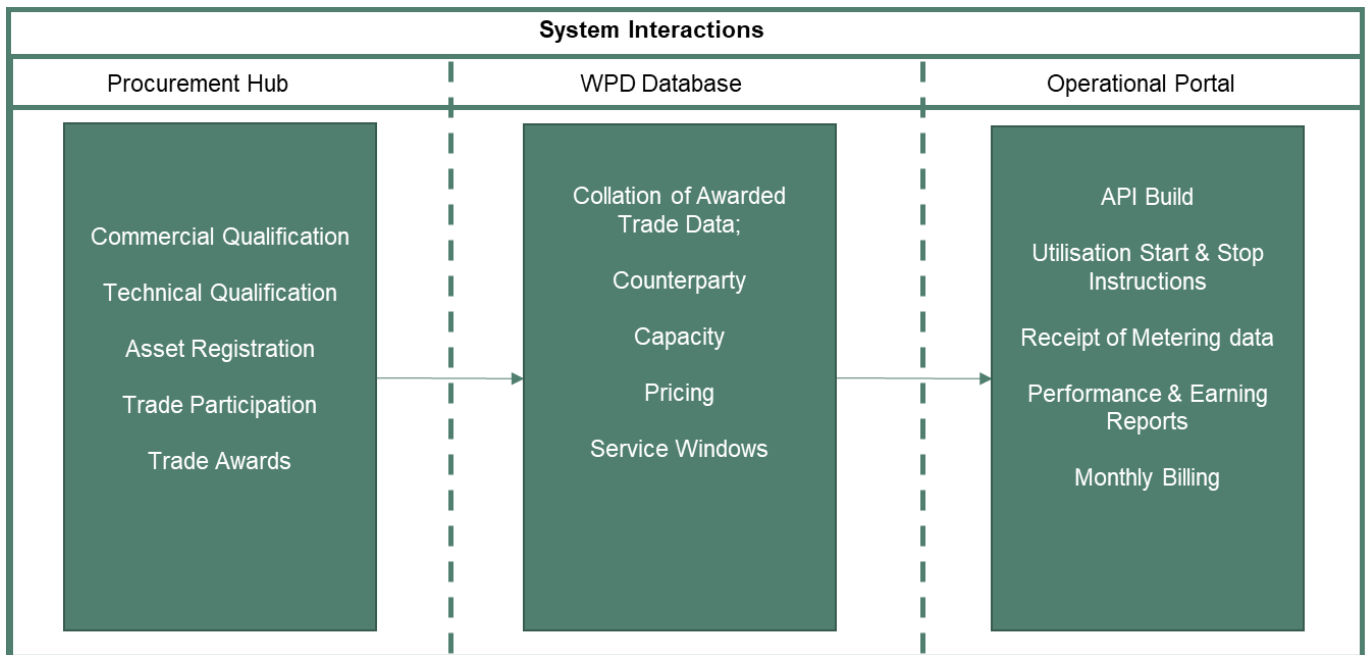


Figure 13: Flexibility System interactions

3.1.4. Grandfathering rights

We already have a number of contracts with FSPs, some of them up to four years long. These were put in place to help provide revenue certainty and are based on our current shorter term products.

We see the addition on new long term products as adding valuable new revenue options, with the option of gaining more certainty in terms of Utilisation expectations. As such we will encourage existing FSPs to opt into the new contracts. However if they chose not to change their existing contracts will be honoured, with the FSPs maintaining their Price, and their Dispatch Expectations.

As legacy contracts come to an end, any renewals will be made on the new contract structure.

3.1.5. Addition of non-delivery penalties

Our existing contracts have limited non-delivery penalties. These are limited to loss of current and future revenue and are determined by our payment mechanic. These are complemented by limited liabilities for direct losses associated with non-delivery and the contractual right to intervene in the case of Service Failure (seen as the repeated under delivery). This approach was used to reduce barriers to entry and help build out a new market. As we move forwards we will be looking to add stronger non-delivery penalties. The reasons behind this are multiple:

- These highlight the need for highly reliable services for the management of the network. This helps better reflect the value to the DNO and will help focus our value for consistent FSPs.
- Adding robust penalties will reduce speculative and risky behaviour, which as we move to more competitive structures may depress value for genuine FSPs.
- The addition of secondary trading will provide additional ways for FSPs to limit their liabilities.
- As we add longer term trades, we will be providing larger chunks of value to the market, making it easier to absorb the penalties.

We are yet to finalise how and when penalties will apply, and will look to wider industry experience to help inform our position. We see this as an important measure to be implemented as the market matures and will help the flexibility services we procure to better reflect our network needs.

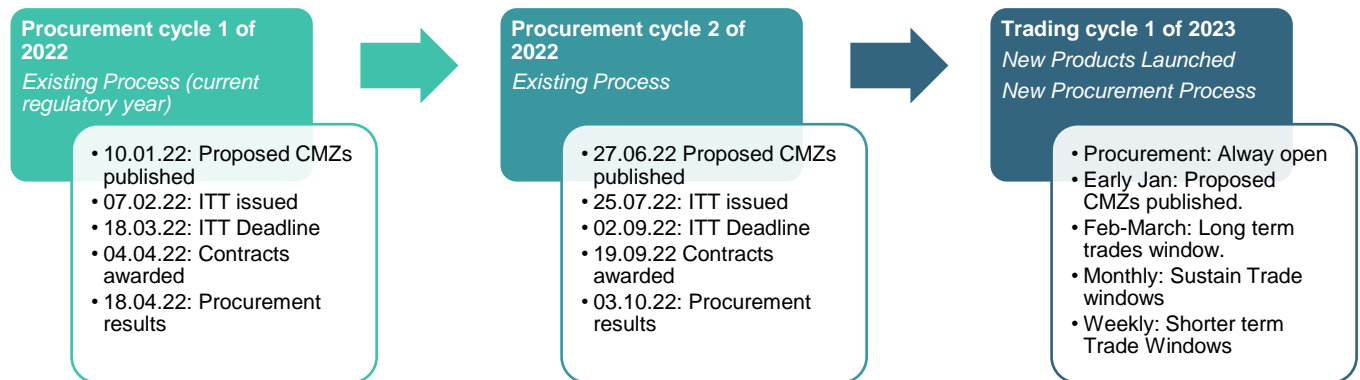
3.1.6. Changes following engagement

We received no negative feedback about the above proposals.

One key theme that arose was the need to push the digitisation of the online procurement hub to facilitate full API interactions. This was already part of the specification and has been highlighted as a key value driver.

3.2. Procurement 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 the 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.



3.3. Pricing Strategy

3.3.1. Overall Strategy

Our current pricing strategy has three distinct phases shown in the figure below. Within it there is a clearing process used to determine if there is sufficient volume in the local market to provide competition. This is based on an N-2 principle (there must be sufficient volume to manage the network following the loss of the two largest providers), and is used to determine whether competitive pricing should be used.

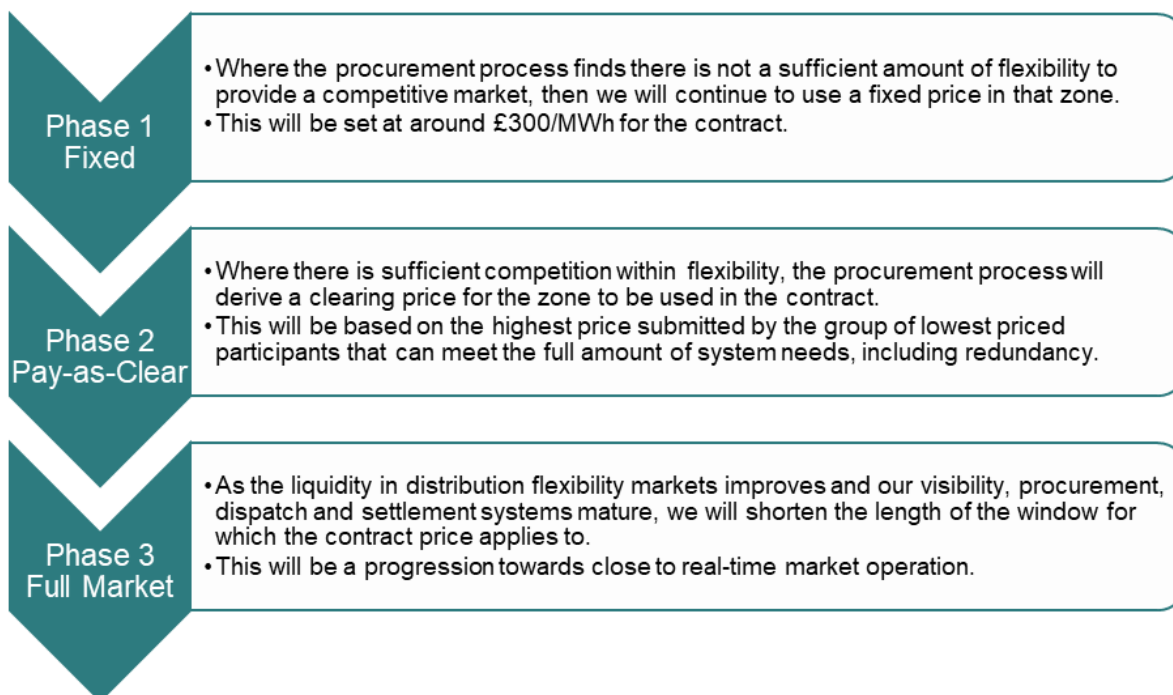


Figure 7: Current WPD Pricing Strategy

In the next year we will keep our current rules on clearing and liquidity. These are used to determine the readiness of the market for true competition. We expect this assessment to be conducted qualified assets, which are ready to provide services. Once sufficient volume is in place, our Trades will transition from fixed price to competitive bids. This will be facilitated by our new contractual structures and will provide a cleaner transition than is currently possible.

With the new product structure, we expect our transition to merge aspects of phase 2 & 3 mentioned in the previous strategy. We will look to use Pay-As-Clear mechanics where possible due to their economic efficiency and their push towards more accurate bidding. However we will also be shortening the length of the window for which the contract price applies. For the avoidance of doubt, this will only be used where the market clearing test has been passed in each local market. Until such a point, Fixed Pricing will be retained.

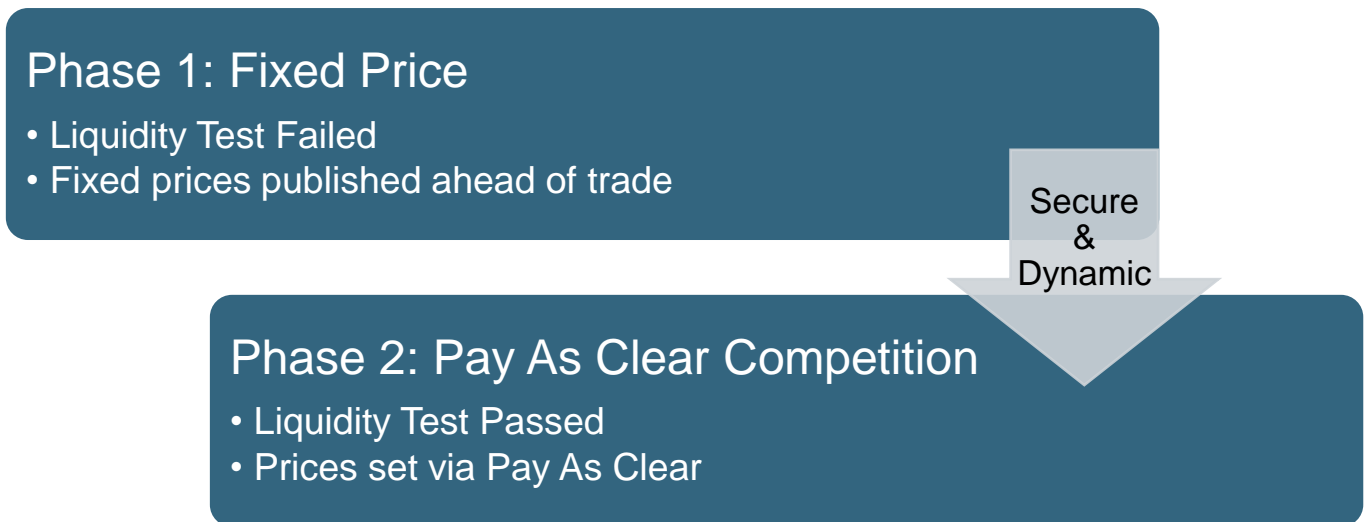


Figure 9: Updated Pricing Strategy

For Sustain and Restore, we will maintain our Fixed Pricing strategy for the next reporting year. For Sustain this is in place to help build out the domestic market. We expect to transition to a competitive, Pay-As-Clear mechanism once it has reached maturity. For Restore, as we expect Utilisation to be very rare, we feel the costs of implementing competition outweigh the benefits. FSPs would have to actively monitor and adjust pricing on a regular basis with limited expect return on the additional work. We will continue to review the Restore price so that it remains a premium utilisation product and remains well differentiated from the other products. Our Pricing Strategy, for competitive markets is summarised in the table 6.

We have considered if Secure should transition to a Utilisation only service. As the Utilisation is decided at the same time as the Arming, splitting the value now has limited benefit. We see this as the long term direction, however due to the changes that would be required to the payment mechanics (as the monthly performance adjustments are claimed against arming payments) and internal processes, the change has not been prioritised for the next reporting year.

Table 6: Product pricing (once liquidity threshold has been cleared)

Service	Pricing (once market is liquid)			
	Secure Zone		Dynamic Zone	
	Arming	Utilisation	Availability	Utilisation
Sustain		Fixed Price		Fixed Price
Secure (long term)	Pay As Clear. Cleared at the Trade months ahead	Pay As Clear. Cleared at the Trade months ahead		
Dynamic (long term)			Pay As Clear. Cleared at the Trade months ahead	Prices Capped months ahead. Final Price set through the Joint Utilisation Competition at week ahead stage which is Pay As Clear
Secure	Pay As Clear. Cleared at the Trade at the week ahead	Pay As Clear. Cleared at the Trade at the week ahead		
Dynamic			Pay As Clear. Cleared at the Trade at the week ahead	Final Price set through the Joint Utilisation Competition at week ahead stage which is Pay As Clear
Restore		Fixed Price		Fixed Price

In terms of how prices are submitted, for Secure we will continue to accept a single value to which we will apply a standard split between availability and utilisation fees. This reflects the product being akin to a Utilisation only service. For our Dynamic services, we will drop the WPD mandated split and allow free bids for both Availability and Utilisation. This will give FSPs the ability to better align with their true costs of operation. We will however provide sufficient information to the market so that FSPs understand the relative value we will be using when assessing the bids.

3.3.2. Joint Utilisation Competition

To encourage competition between the different timescales, we will look to operate a Joint Utilisation Competition (JUC) for our Dynamic Products. This is detailed in Figure 8.

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 than 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.

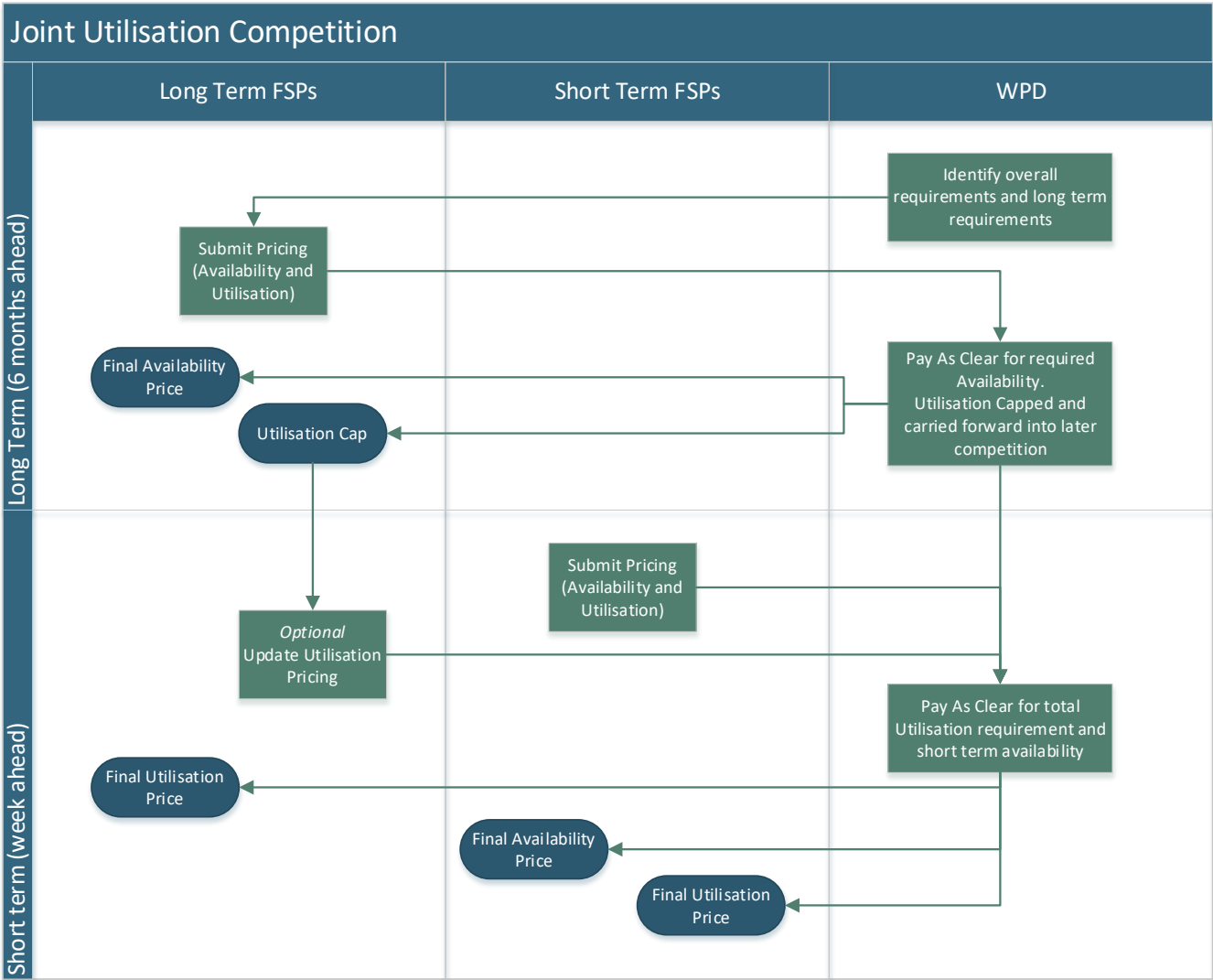


Figure 8: Joint Utilisation Competition

3.3.3. Change since engagement

Our new strategy for pricing received broadly positive feedback. As such no changes have been made to it.

3.4. Interactions with Platforms and Marketplaces

With the development of the procurement hub and the existing Flexible Power Portal we will have simple and scalable method for interaction with FSPs based on a specific number of key products.

We believe this structure should scale well with the interactions with Flexibility Marketplaces. By pre-qualifying relevant assets and providing pricing information through the procurement hub, and then accepting operational instructions via the portal, Marketplaces can interact like any other FSP.

We will continue to investigate whether any changes to the interfaces are needed to accommodate the specific requirements of marketplaces. This is expected to focus on the digitalisation of all interactions as well as any potential adjustments to responsibilities.

It should be noted that certain key activities such as service selection will remain with WPD. Within a product, we need the ability to accept bids from all parties (FSPs, Aggregators, and Marketplaces) and then optimise our selection across them. This is summarised in the figure below

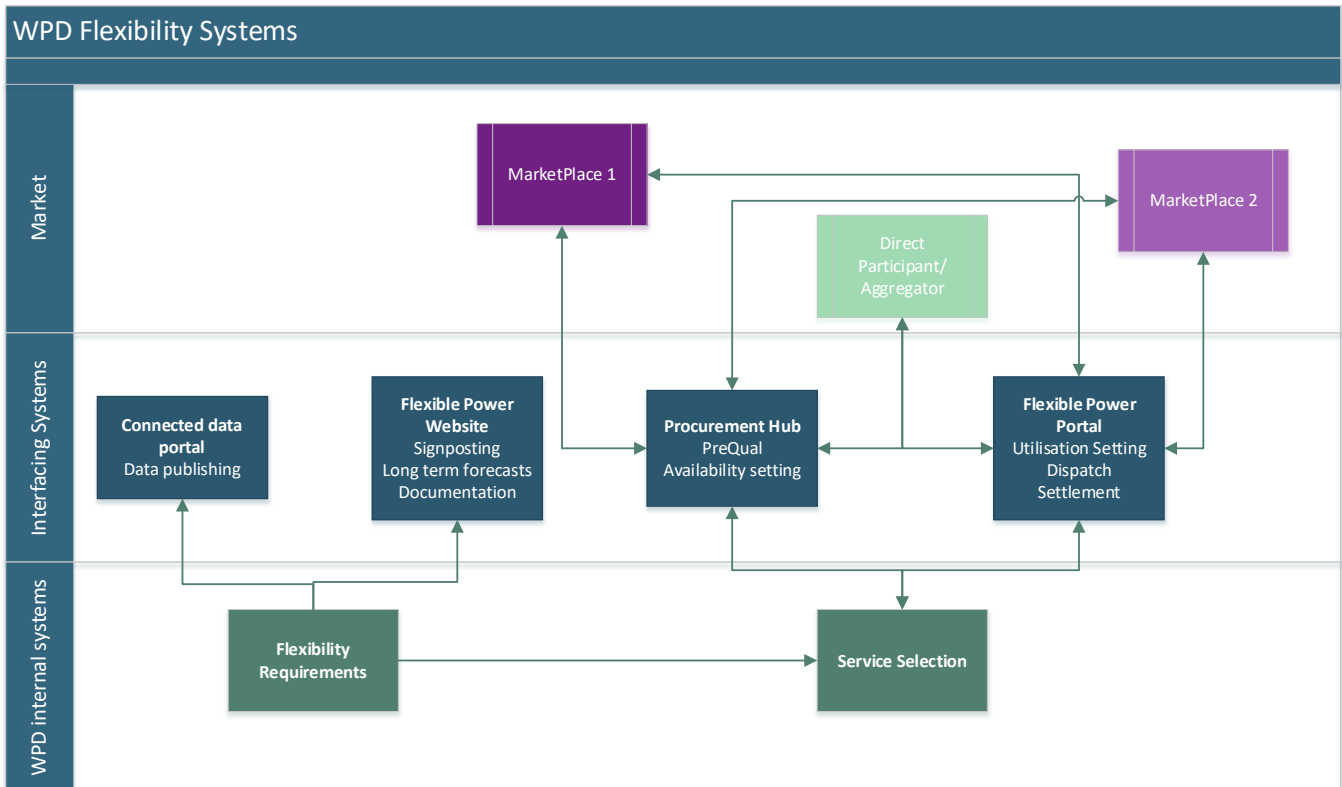


Figure 14: WPD Flexibility System Overview

To assess value in a fair way, we need pricing in a common format, at common times, all tied to the product. To ensure a level playing field between marketplaces and aggregators, we will avoid any separate fees for access to market places, instead we would be expected to be presented with a single price per unit (inclusive of the asset cost and the marketplace fee).

We are keen to facilitate competition between providers of marketplaces, to drive the best customer value and continued innovation. We expect to see further added value to emerge from these marketplaces such as economic coordination with other Services and Products.

3.5. 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. Our views on the initial process are laid out below. We expect to add more flexibility to the process, and digitise it in ED2.

Who Can Trade?

For assets to be eligible to secondary trade they must be:

- Pre-qualified in the same CMZ. This prequalification must include technical set up with all Flexible Power systems
- Opted-in to secondary trading via the procurement hub. FSPs opted-in within a zone will be able to see other opt-in assets to facilitate trading.

When a trade can be made?

Conceptually a secondary trade can be conducted between the availability acceptance and the dispatch signal being sent (subject to an admin time).

Ahead of the acceptance there is no obligation on either party and so there is nothing to trade. Once the dispatch signal has been sent then it is too late.

Initially we will set the Admin time at **2 working days** to allow WPD to process the trade and update any relevant systems. We expect this to shorten as we enhance and digitise our systems and processes.

Transfer of obligations and relationships.

When a trade is made the entire obligation and relationship will transfer to the new party. They will receive the dispatch signal, be subject to settlement and receive the full payment.

We will not specify or facilitate the contractual relationship between the secondary trading parties. This will give them flexibility on the commercial relationship.

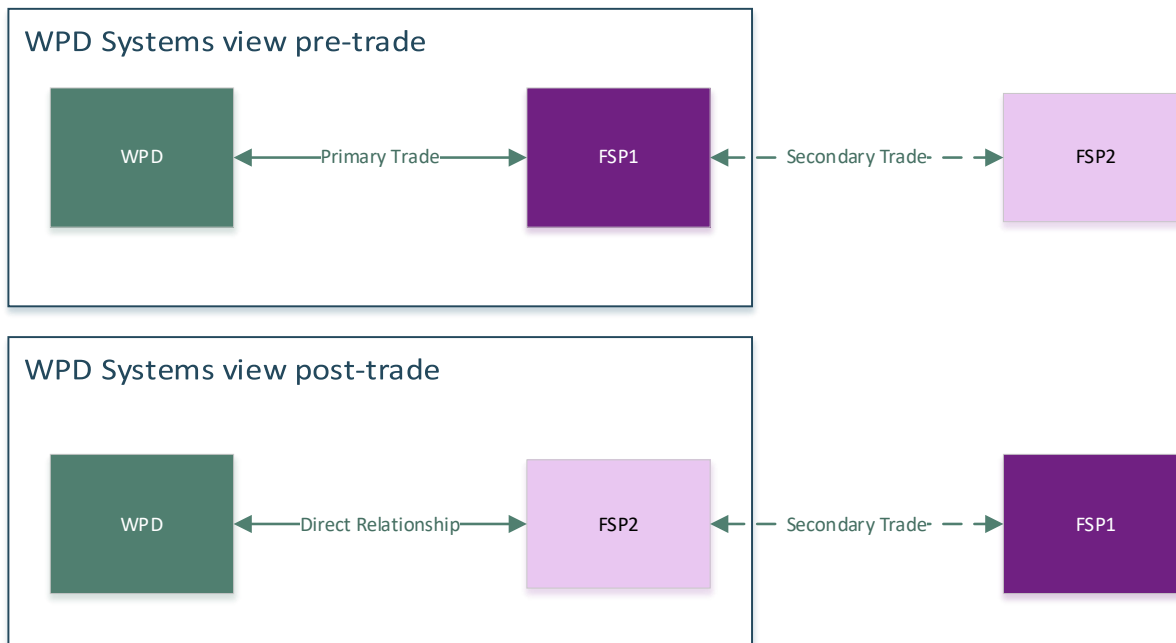


Figure 16: WPD System view of FSPs pre and post-secondary trade

We will look to transfer full obligations (all the MWs), with equivalence needed (at least the same operation parameters) but over time, as we improve systems, will look to facilitate partial obligation sharing.

Secondary Trading will have an impact on settlement due to the design of our payment mechanics. Splitting events between parties will impact the total value provided if there is over/under performance. However these impacts are expected to be low for most assets and as such will be accepted. We will review this position as we gain market experience.

Forming the trade:

WPD will take a hands off approach to forming the trade as we see this being a role for third party marketplaces and platforms to facilitate. Our role will be to highlight the pre-qualified assets that have opted into trading, and then allow third parties to make the trade.

Once a trade has been made, we will need to receive confirmation of the trade from both parties involved.

3.6. Questions

- Does our new tendering process create an enduring framework for procurement across different timescales? If not please detail why.
- Does the new procurement timeline give clarity on the actions required of you to participate? If not please detail why.
- Do you have any views on how we should treat grandfathering and non-delivery penalties?
- Does our Pricing Strategy promote competition and efficient service delivery? If not please detail why.

Do you have any further comments on this section?

4. Stakeholder Engagement

In the last year we have developed a robust timetable for stakeholder engagement, covering our requirements, the products/processes and engagement with the wider industry.

This consultation forms a part of that engagement process, ensuring that our products and processes remain relevant and valuable.

Whilst the timelines are robust, we have had limited response to the engagement. As such we are keen to understand why, and how we can facilitate broader engagement.

As a reminder we split our engagement into 3 general areas detailed below.

4.1. Engagement around Flexibility requirements

As detailed in Section 3 we operate two procurement cycles a year. These will transition to a variety of trading cycles going forward. The current cycles are surrounded by a mix of promotional activities to maximise participation, as well as feedback processes to allow us to continually improve our processes.

The publication of our requirements are accompanied by promotion to increase market awareness and drive participation. This includes webinars and 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.

Once procurement 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.

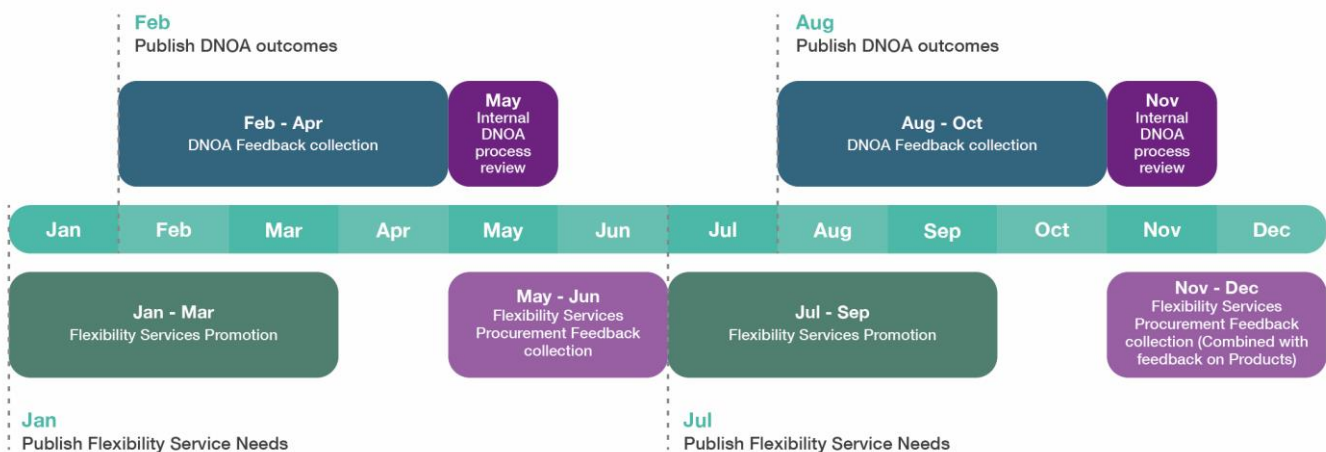


Figure 10: Timeline for our engagement around flexibility requirements

4.2. Engagement about products and process

In addition to what we procure, we also seek stakeholder feedback on how we procure services. This consultation is part of that process. 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;

- Our work as part of the Open Networks project (see section 4.3) we collaborate with the other DNOs to deliver more standardised processes for procurement. As part of the WS1A process, a formal consultation is conducted in July. We use this feedback to inform Open Networks work as well as WPD internal processes.
- As part of the development of future Distribution Flexibility Statements, we have created a formal process for feedback. Informal discussions were carried via our [Evolution of Distribution Flexibility Services](#)

Procurement document issued in November. This was used to help us assess changes needed to the statement and fed into this consultation.



Figure 11: 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.

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.

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.
- 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.

4.4. Questions

- **How can we better engage with stakeholders? Are there any preferred means, processes or times?**

5. Detailed quantitative assessments

As detailed in our previous statement, we have robust processes for determining our Flexibility Requirements, selecting services and dispatching them. The key focus for the coming year is the accommodation of the new product proposed earlier in this document.

5.1. Flexibility service requirements

The development of our Flexibility Requirements is focussed on our Distribution Network Options Assessment (DNOA) process. We propose no change to this process. As a reminder, it is summarised below.

Our Distribution Future Energy Scenarios (DFES) provides data on the predicted growth in generation and demand across our four 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 a number of other processes (such as the Long Term Development Statement (LTDS), and 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 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.

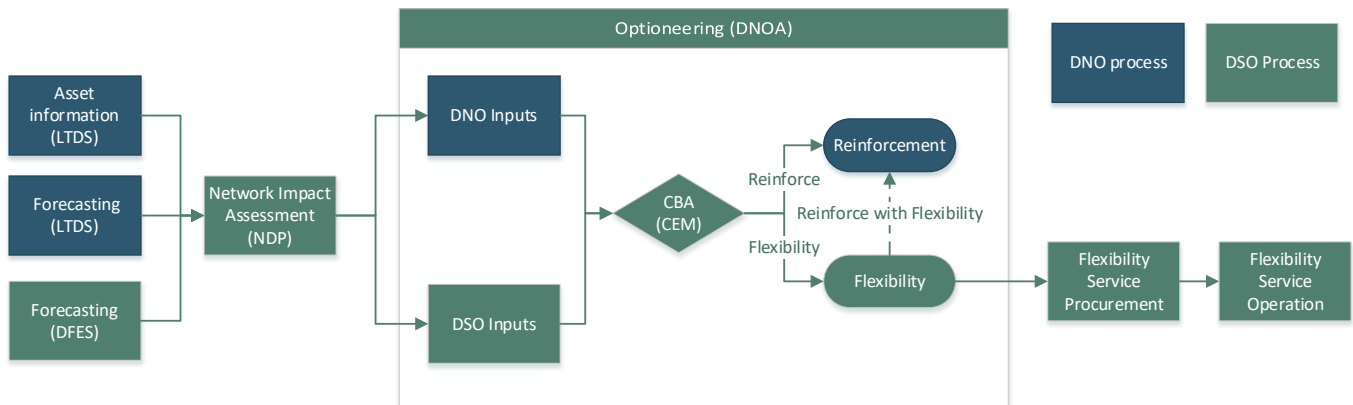


Figure 12: DSO processes

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>).

Going forward we will publish the DNOA data on our connected data portal.

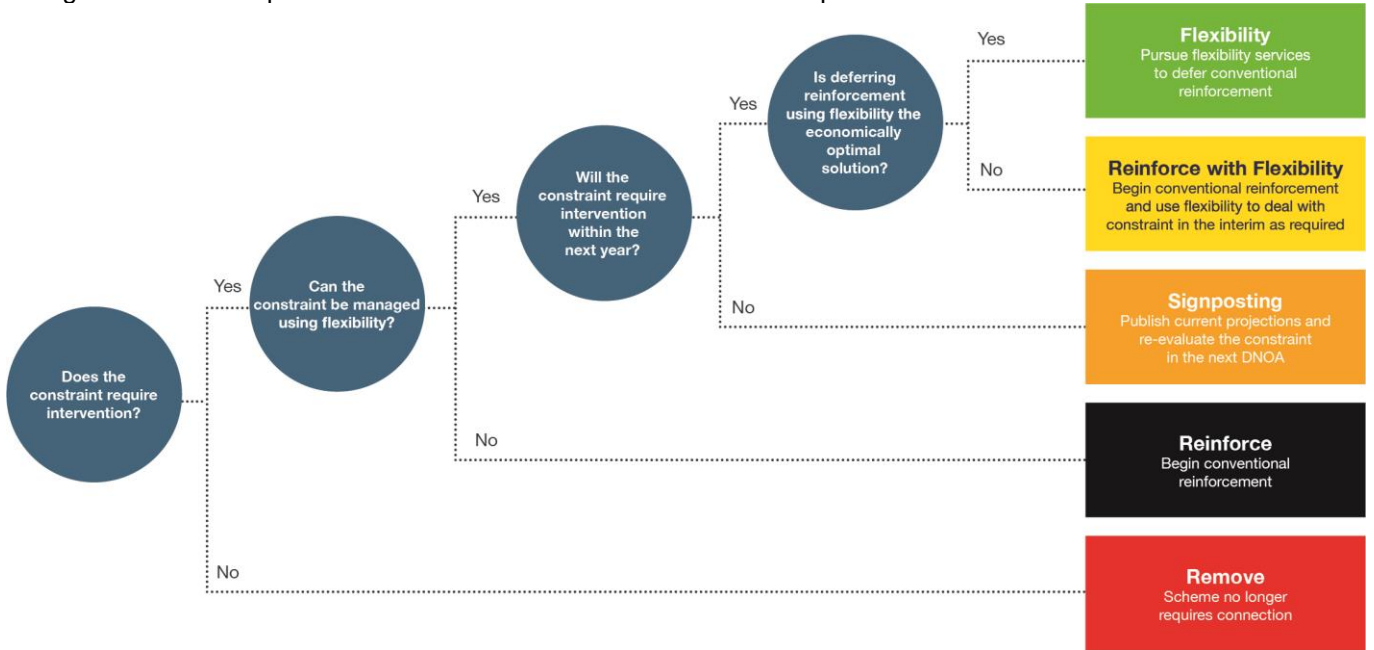


Figure 13: DNOA decision tree

5.2. Flexibility service selection

Details on how we will select and dispatch our services are covered in sections 3.3 & 2.4. These present adjustments to previous processes as we accommodate the new products.



6. Procurement Report & Data Sharing

6.1. Data Sharing

In April we will publish our first Procurement Report. This will look back and reflect on the services we have procured and dispatched over the last reporting year. The final contents will be subject to the final Ofgem guidance. At a minimum it will include the details of the procurement carried out in year, the dispatches, as well as summaries of the carbon impact of our services and all stakeholder engagement carried out in the year.

The Procurement Report is very much a minimum requirement. We see it sitting within a suite of datasets and documentation that should give rich market information available in a number of manners.

To collate these different data sets we will be publishing a comprehensive Flexibility Data Catalogue alongside our procurement statement. Utilising the latest standard in meta-data, we will highlight the various data streams and how they tie together. Initially this excel based, but we aim to transition this to a more robust tool in the next regulatory year. We also aim to extend the catalogue beyond just Flexibility and cover all DSO publications so that it is in place by the end of ED1.

We will also aim to publish all data in machine readable formats on our [Connected Data Portal](#), to maximise the value generated from it. This will include the contents of the procurement report, as well as all data on requirements, forecasting, and results.

Finally we aim to increase the frequency at which we can publish information aiming to get as close to when the data is generated as possible.

In terms of specific content, we see three broad categories of data: Flexibility Requirements, Procurement Results & Dispatch information. These are detailed below.

6.1.1. Procurement Results

Since 2018, we have published a procurement cycle results document within one month of contract award (see example here: <https://www.flexiblepower.co.uk/downloads/582>), 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.

We also publish a yearly infographic summary on WPD has be using Flexible Power in our WPD Flexible Power – Annual year in numbers report (<https://www.flexiblepower.co.uk/downloads/930>).

As mentioned in the section above we will also publish an annual Distribution Flexibility Services Procurement Report this year. This will look back over the year and provide a summary of what was procured. The final content and format of this report are still being discussed with Ofgem.

6.1.2. Dispatch information

We have traditionally published limited information on the dispatches we have made for our services. This has been limited to presenting the unfulfilled volume for the previous month in our Monthly Forecasts. We will include more robust data on our dispatches as part of our Distribution Flexibility Services Procurement Report. We will also investigate what data can be made available on a more regular basis.

6.2. Changes following Stakeholder Engagement

Following Stakeholder engagement two consistent themes arose. The first was the desire to see more data, generally data that was already published but not known about. The second was a clear message for machine readable data that could be pulled by API.

We are already providing the above, generally through our [Connected Data Portal](#).

However it is clear that more can be done to highlight the data and make stakeholders aware of what data is available, where it is, and how they can access it.

As such we have committed to the development of a comprehensive data catalogue to clearly state what data is held where. This will us better utilise the data that is already there, and better identify any gaps.

Off the back of the stakeholder engagement we have also committed to publish all relevant flexibility data on the [Connected Data Portal](#).

6.3. Questions

- **Does our proposal for a data catalogue help provide clarity on the data available?**
- **What data is the most valuable for you? Are there any specific formats preferred (maps, CSVs, databases...)?**

7. Response to the Consultation

The purpose of this document is to get your views on our proposed changes to the way in which we procure and operate flexibility services.

You can provide any feedback to us directly at: wpdflexiblepower@westernpower.co.uk, via the [online form](#) or by arrange a bilateral discussion. The consultation period will end on **17/02/2022**

This responses to this consultation with feed into our final submissions in March and April of this year.

Summary of questions:

- Do our new products add value to the market? If not please detail why.
- Is our process for assessing and communicating our flexibility requirements clear? If not please detail why.
- Are our Operational Processes clear and effective? If not please detail why.
- Would you see value in moving our long term trades to a monthly, rather than biannual window?
- Do you have any further comments on Section 2?
- Does our new tendering process create an enduring framework for procurement across different timescales? If not please detail why.
- Do the new procurement timeline give clarity on the actions required of you to participate? If not please detail why.
- Do you have any views on how we should treat grandfathering and non-delivery penalties?
- Does our Pricing Strategy promote competition and efficient service delivery? If not please detail why.
- Do you have any further comments on Section 3?
- How can we better engage with stakeholders? Are there any preferred means, processes or times?
- Does our proposal for a data catalogue help provide clarity on the data available?
- What data is the most valuable for you? Are there any specific formats preferred (maps, CSVs, databases...)?

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