

Evolution of Distribution Flexibility Services Procurement

November
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Contents

1. Introduction	3
Why we procure Flexibility Services	3
Purpose of this document	3
2. Evolution of Flexibility Products	4
Product definitions	4
New products and timeframes	7
Our Sustain product	9
Changes to existing products	10
Allocation of services to zones	10
Allocation of Volume to the services	10
Pricing strategy	12
Joint Utilisation Competition	13
Looking to the future	15
3. Evolution of Flexibility Processes	16
Current procurement structure	16
New procurement structure	17
New online procurement hub	18
Interactions with Platforms and Marketplaces	19
Secondary trading	20
4. How we get there	23
Grandfathering rights	23
Addition of non-delivery penalties	23
Timing of changes	23
5. Data Sharing	24
Flexibility requirements	24
Procurement Results	24
Dispatch information	25
6. Feedback	26
Summary of questions:	26
Appendix A: Overview of proposed services for 22/23	28

1. Introduction

Why we procure Flexibility Services

WPD operates a “Flexibility First” approach to all load related reinforcement decisions. This means that where 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.

Purpose of this document

As part of the 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.

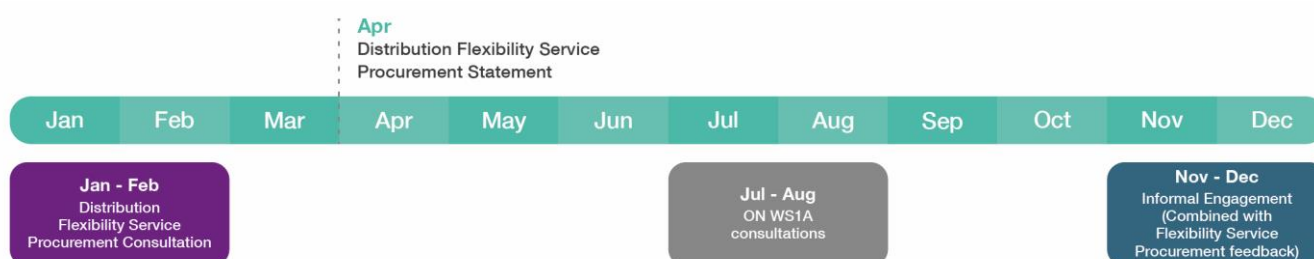


Figure 1: Flexibility Procurement Engagement Timeline

This document supports our informal engagement process and sets out our view of how our services and processes will develop into the future. It will highlight the shorter term changes expected within the next reporting year, as well as pointing to the long term direction of travel. It aims to support our initial engagement, and help refine our views ahead of our formal consultation which will be launched in January.

As per the Procurement Statement the document is split into our view on products, followed by our view on processes. We then follow with a discussion on some of the key decision points along the way as well as the data we intend to share.

The aim of this document is to gather stakeholder views on these proposals so we can understand where the value lies and refine our thinking. Please review and provide feedback where possible. This can be done by emailing us directly at wpdflexiblepower@westernpower.co.uk or attending the online workshop that will accompany the document release.

2. Evolution of Flexibility Products

As our understanding and experience of Flexibility Service procurement grows we expect to evolve our product offering. This should allow us to manage our network needs more effectively, whilst providing appealing revenue opportunities for market participants.

This section aims to give an overview of how we expect our products to evolve over time.

Product definitions

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.</p> <p>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.</p> <p>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

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

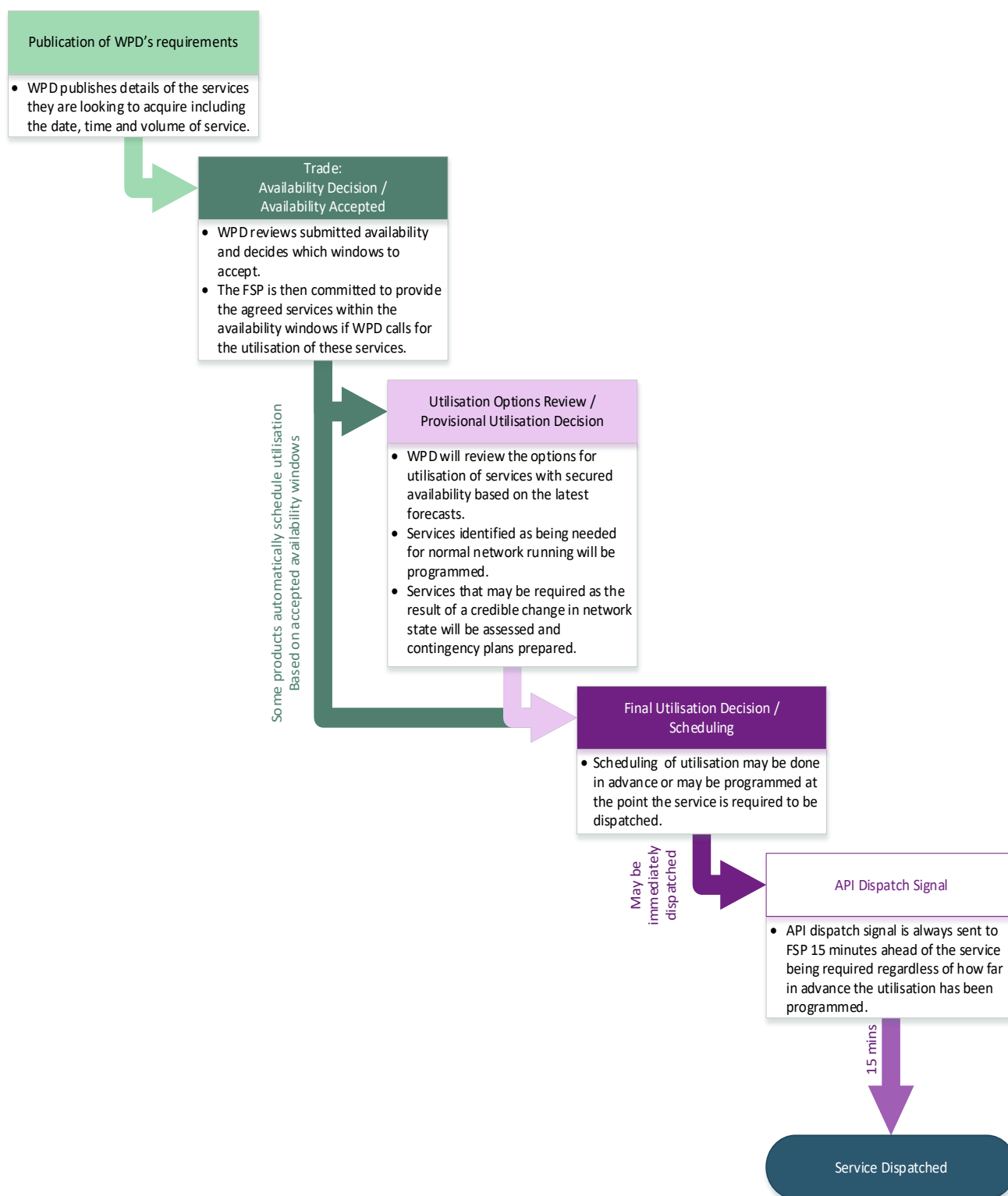


Figure 3: Common Process for Flexibility Services

As an example of this common process, our current products are mapped out in the figure below. These were all built around a weekly operational process. Please note that, as described later in the document, we are proposing that the way in which we procure these services will change in the next reporting year.

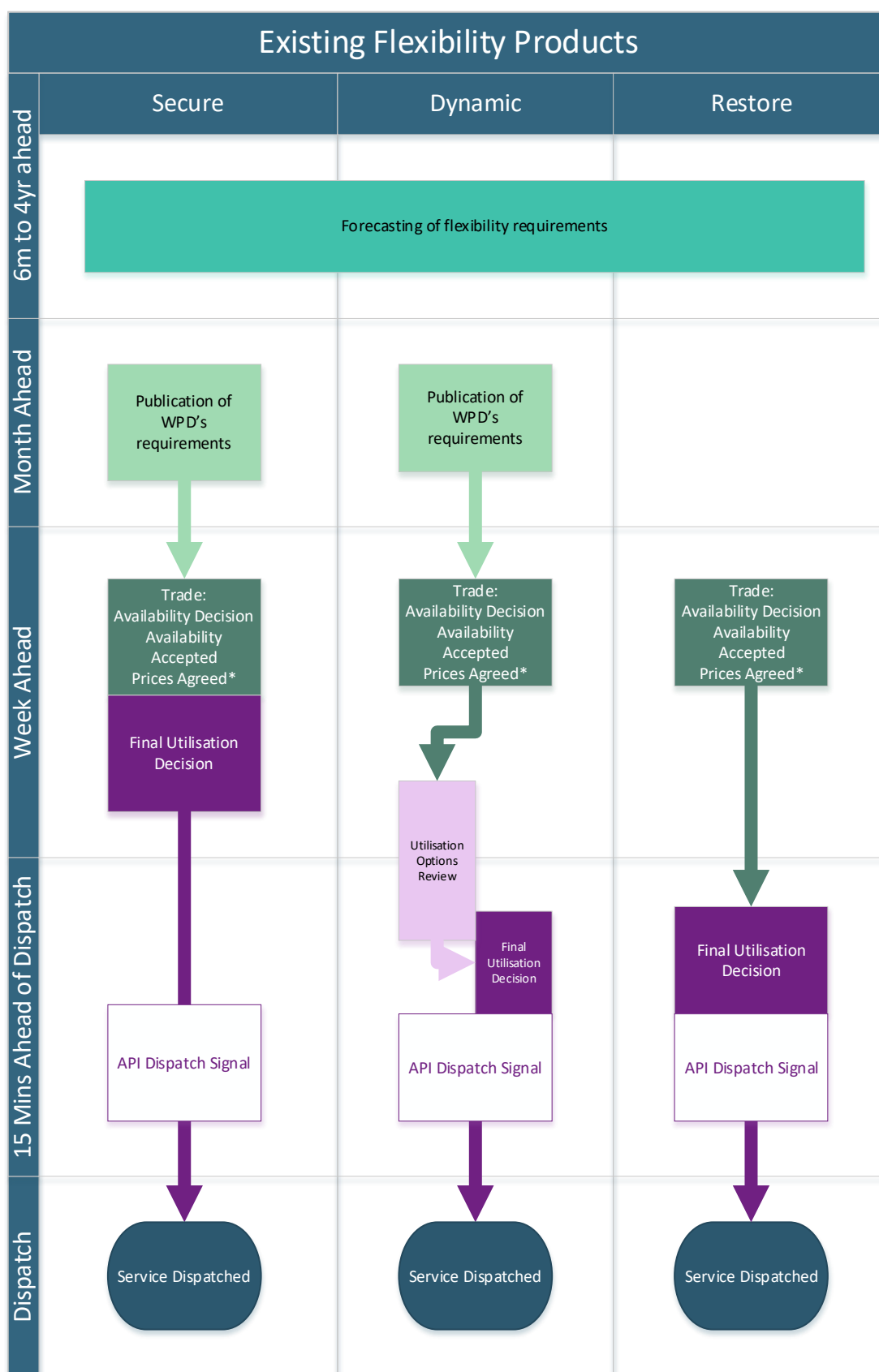


Figure 4: Currently Procured WPD Flexibility Services

* It should be noted that the prices in current services are set at the procurement stage rather than the week ahead stage. In this context Prices Agreed simply takes the pre-agreed pricing from the procurement.

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

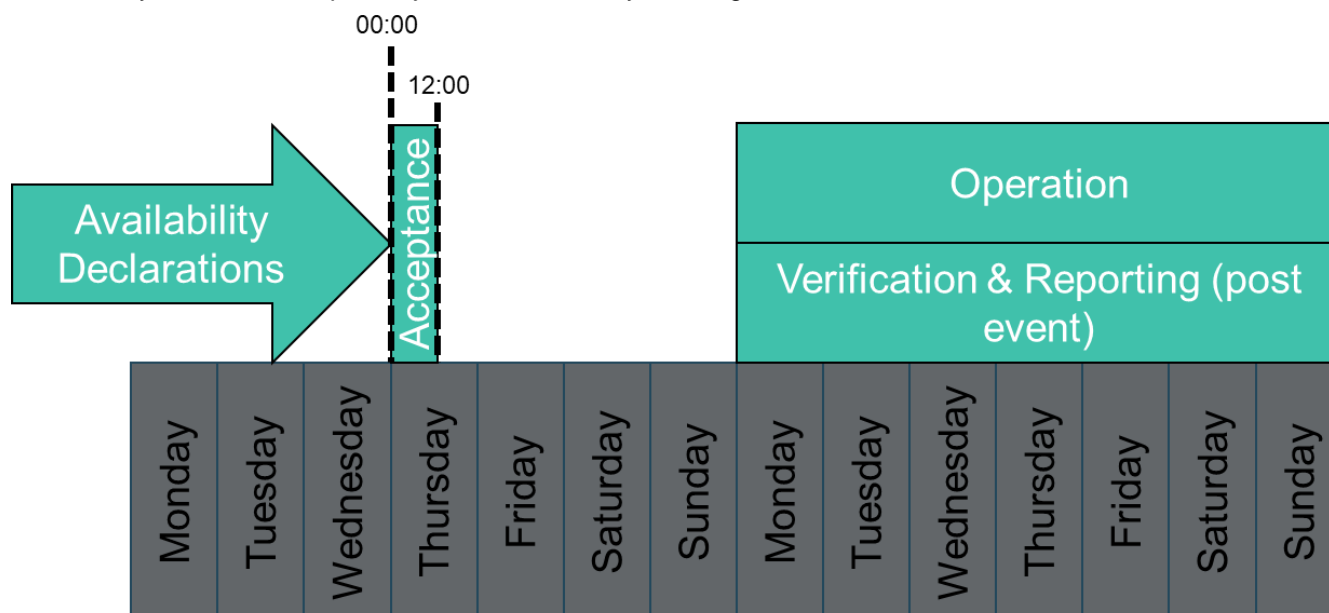


Figure 5: Weekly Operational process

- For Secure, 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 then triggered later. 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 at the week ahead stage and it automatically accepted by WPD. Utilisation is then triggered in response to network conditions.

Question: Does the common process shown in fig.3 adequately define a Flexibility Product? Are there any processes/stages we have missed?

New products and timeframes

As we build out Flexibility Services we see value in widening the timeframes at which we operate. The 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.

For the next procurement year we are proposing the addition of three new longer term products. These are aimed at providing FSPs, and WPD with greater certainty of need and are mapped below. It should be noted that how we procure these services will also change (see section 3).

We aim to add new timeframes to our procurement. This will start with longer term products, whilst building the framework for closer to real time ones.

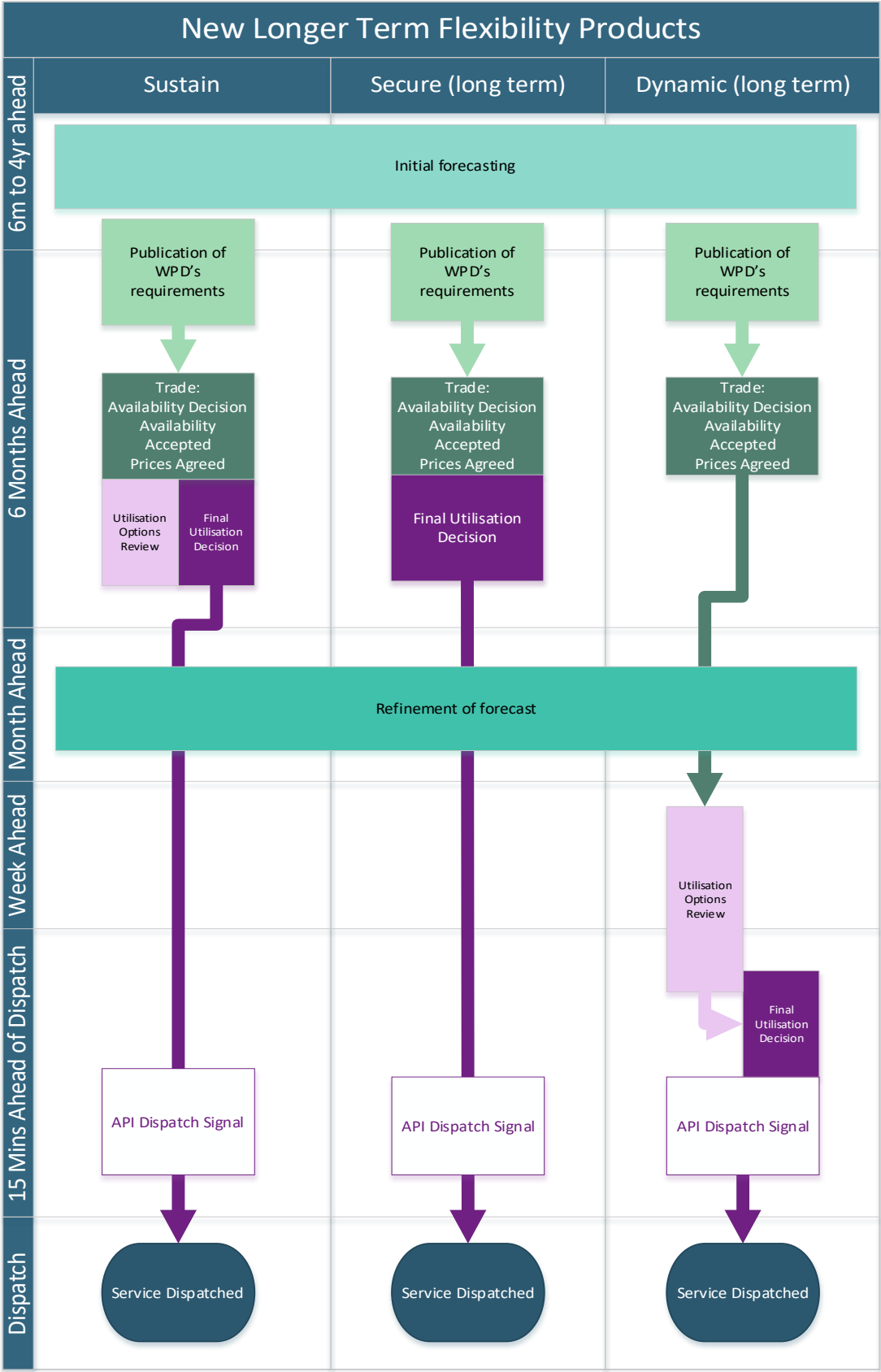


Figure 6: New Long Term Flexibility Products

These products bring forward the decision making for service availability (all new products), and in some cases service utilisation (Sustain & Secure (Long Term)), 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.

Whilst the initial focus is on longer lead time products, the framework provided is flexible on timeframes and allows us to move to closer to real time procurement. Our trials through the IntraFlex project have shown the market interest in such projects, highlighting the ability to bring new assets to market, as well as allowing genuine price competition. However such markets create significant additional complexity to market operations and will require additional resource from FSPs and WPD. In the near term, we will focus on building the relevant WPD processes and tooling to allow flexibility to efficiently operate closer to real time. We will transition to operating in those timescales in line with market participation. The framework also allows us to express the value of secondary trading (see section 3)

We expect to continuously review our spread of products to ensure we provide easy market access to all relevant FSPs. We also acknowledge that each additional product adds complexity and so will need to balance benefits of new products versus their costs to us and to market participants.

Question: Do you see value in the new products proposed for the coming reporting year? Does the additional value of the new products outweigh the additional complexity added?

Question: Are there any other new Products we should be considering?

Our Sustain product

Our new Sustain product will support the development of domestic scale flexibility.

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

We do not currently procure a Sustain product as part of our BaU operations but will roll out a Sustain product in the coming reporting period.

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 will shortly publish 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.

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 existing process developments 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 the value per MW will be same, however fewer MWhs of operation will be required.

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.

Question: Do you see there being additional value in our Sustain Product over our Secure (Long Term) Product? Does that value extend beyond domestic scale assets?

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 (this is detailed in section 3).
- 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.

A full mapping of the new products can be found in **Appendix A**.

Question: Will the changes proposed significantly alter the value of the current products?

Question: Do you see value in the new timeframe offered for Restore?

Allocation of services to zones

With the creation of new products we will have 6 variants of flexibility services, based on the 4 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. We envisage that the zone would feature both the long term and short term versions of these products. Sustain and Restore would be available in all zones. This allocation is shown in the table below.

Table 1: 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

Question: Do you agree with our decision to operate Secure or Dynamic products in a single zone. Would the operation of both services in a single zone add value, or create uncertainty and complexity?

Allocation of Volume to the services

As we move beyond a single primary service per zone, we are conscious that 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 aim to start with simple allocation rules. We can 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 the section below, 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 2: Volume Allocation in a Secure Zone

	Procurement		Week Ahead		Real time
	Availability	Utilisation	Availability	Utilisation	Utilisation
Sustain		Accept All			
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 3: Volume Allocation in a Dynamic zone

	Procurement		Week ahead		Real time
	Availability	Utilisation	Availability	Utilisation	Utilisation
Sustain		Accept All			
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. 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.

Question: Are there any other factors that should be considered as part of our long term investigation into Service Optimisation?

Question: Are there any perceived issues with our short term approach?

Pricing strategy

Our current pricing strategy has 3 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.

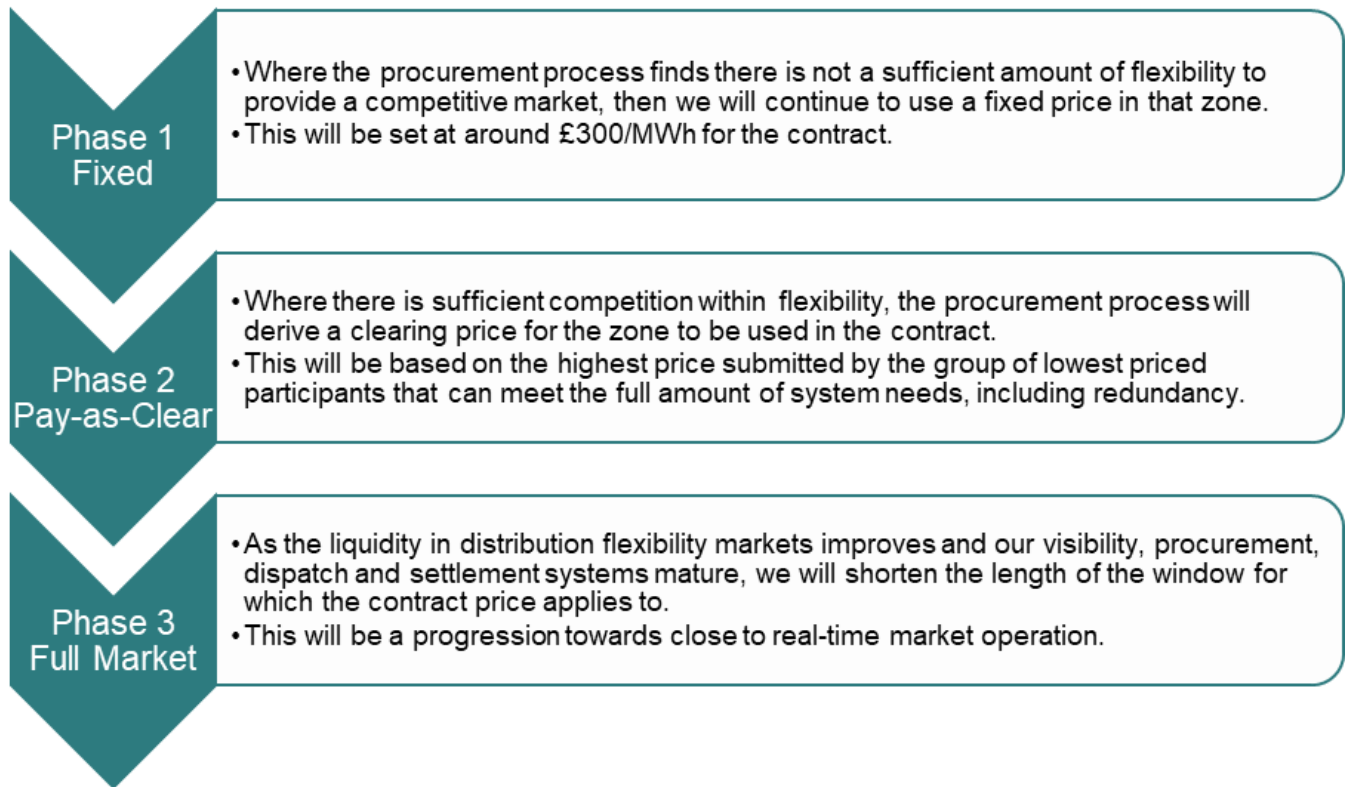


Figure 7: Flexible Power Pricing Strategy

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. Going forwards, we expect this assessment to be conducted on pre-qualified assets, which are ready to provide services (are set up on the Flexible Power Portal). Once sufficient volume is in place, our Trades (see section 3 for more detail) will transition from fixed price to competitive bids. This will be facilitated by our new contractual structures (also see section 3) 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.

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 expected 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 below.

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 4: 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.

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 7 below.

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, and
- 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.

Our Joint Utilisation Competition will allow competition for Utilisation across timescales

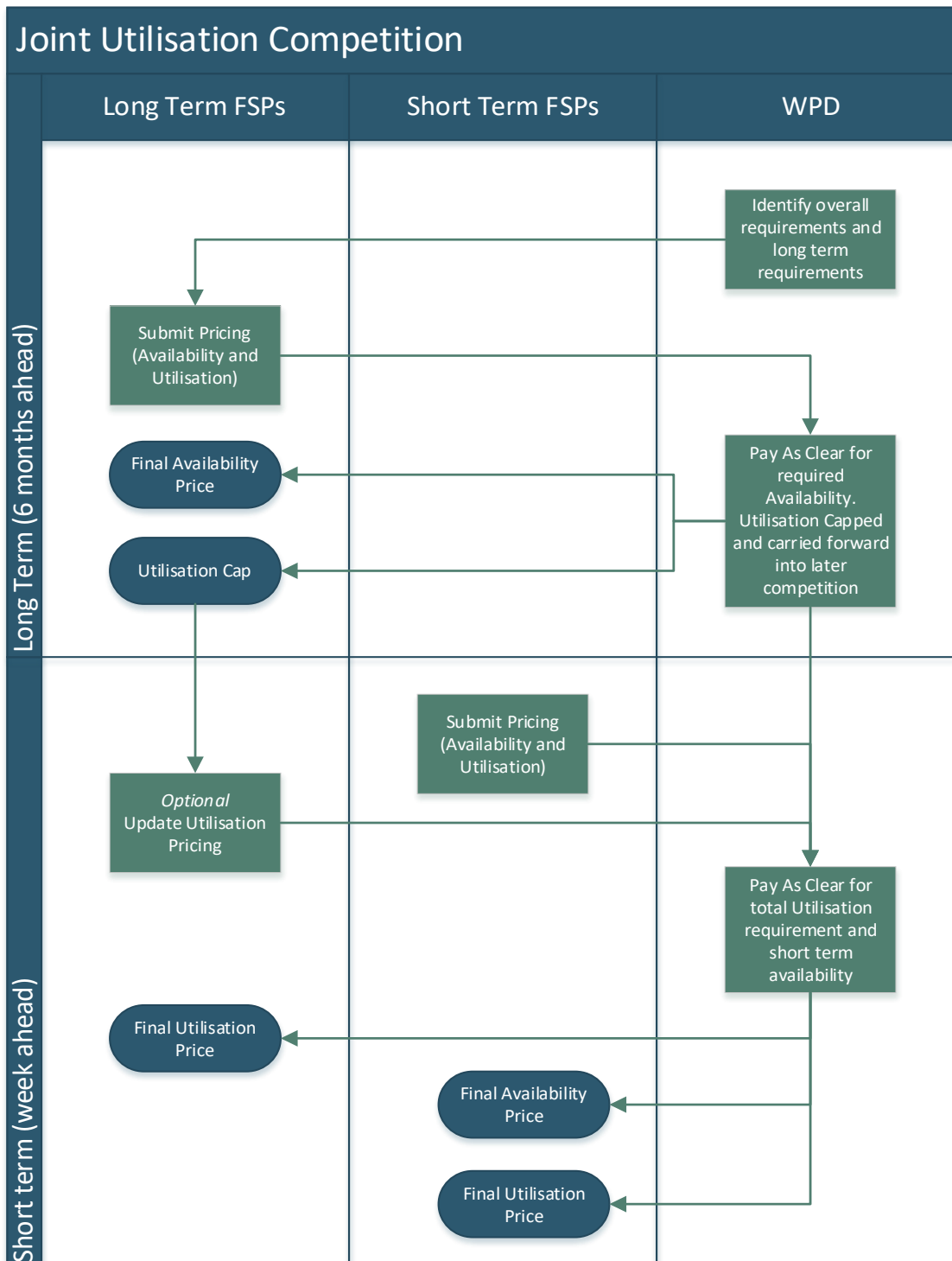


Figure 8: Joint Utilisation Competition

Question: Do you see any limitations with our proposed pricing strategy? Can you see any better ways of determining price within our markets?

Question: Do you see any issues with keeping our Restore Product as a fixed price?

Question: How would the Joint Utilisation Competition affect how you set Availability and Utilisation prices at either of the timescales?

Looking to the future

As previously mentioned we will continue to review our portfolio of products. 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 as part of the regional development programme we are developing **coordinated services between ESO and DSO**. 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.

3. Evolution of Flexibility Processes

Alongside the development of new products, we are also looking to evolve a number of our processes. These have two main aims: streamlining of existing FSP interactions and the facilitation of new products. These will have two main outcomes for consumers: standardisation of processes and data exchanges to accelerate market platforms and increase the opportunities for FSPs to provide services.

Current procurement structure

Currently, we contract with FSPs through formal tenders held every six months. FSPs are required to complete both commercial and technical qualification at different stages of the procurement process.

To avoid FSPs having to complete commercial qualification for all tenders, a Dynamic Purchasing System (DPS) has been 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.

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.

In addition, 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.

Each procurement cycle takes approximately 3 months from publication of requirements to contract award as shown below.

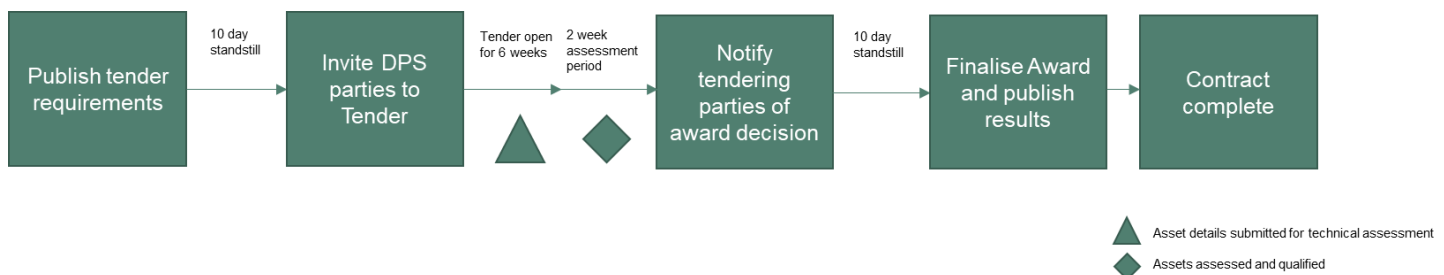


Figure 9: Current Procurement Process

Following a procurement cycle, we then require contracted FSPs to 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.

Trades.

The term Trade is new to Flexible Power, however the concept has been in place through the existing process for the acceptance of availability for services. We define a Trade as; an obligation to provide a service to WPD at a price (or a mutually agreed capped price) with specified assets and within an accepted service window.

Signposting

Signposting of our upcoming requirements currently occurs on a 6 monthly basis, updates are published every January and July. We will continue to publish signposting data at this frequency for both week ahead and long term product requirements.

New procurement structure

Our new procurement structure will help align with the a more framework style approach, giving us more opportunities for competition and paving the way for closer to real time procurement.

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.

To meet these changes, we propose to introduce both a new approach to pre-qualification and the development of an online procurement hub that will digitalise and streamline the end to end procurement process.

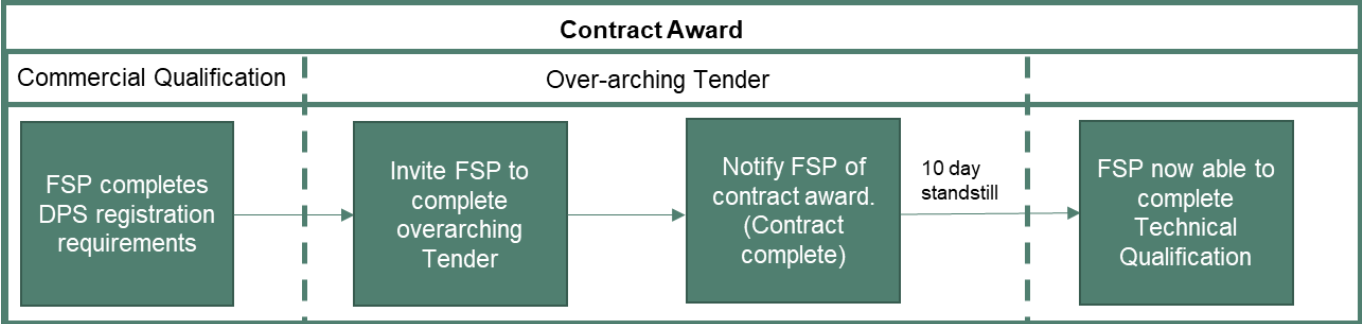
New approach to pre-qualification

Commercial Qualification

We will retain the DPS for commercial qualification, and alongside it introduce an overarching contract will be awarded to FSPs ahead of them being eligible to bid for opportunities. The tender for an over-arching contract only includes the Terms and Conditions and associated schedules. Acceptance of the Terms & Conditions is the only criteria for pass/fail. Pricing, capacity and asset qualification will not be considered at this stage.

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). Another benefit of using an Over-arching Tender for Initial Contract Award is that 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

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 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

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

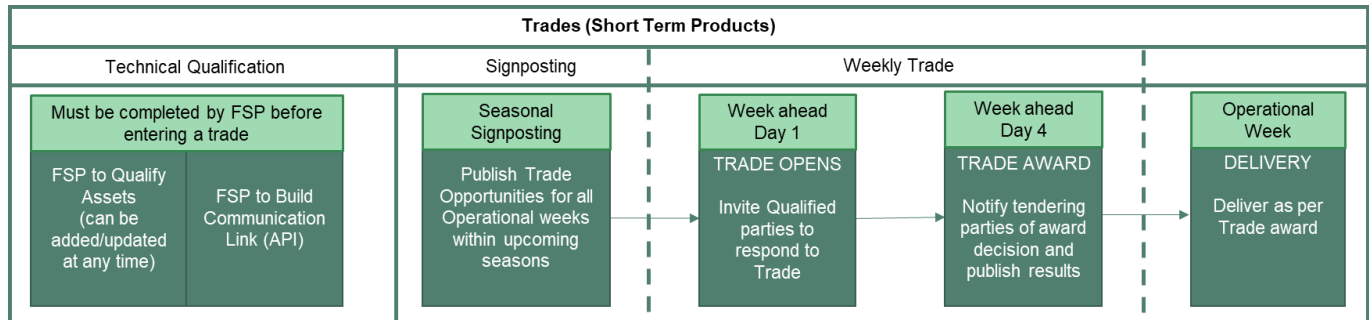


Figure 11: Short Term (Weekly) Trades

Long Term products will Trade in much the same way, these Trades however 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.

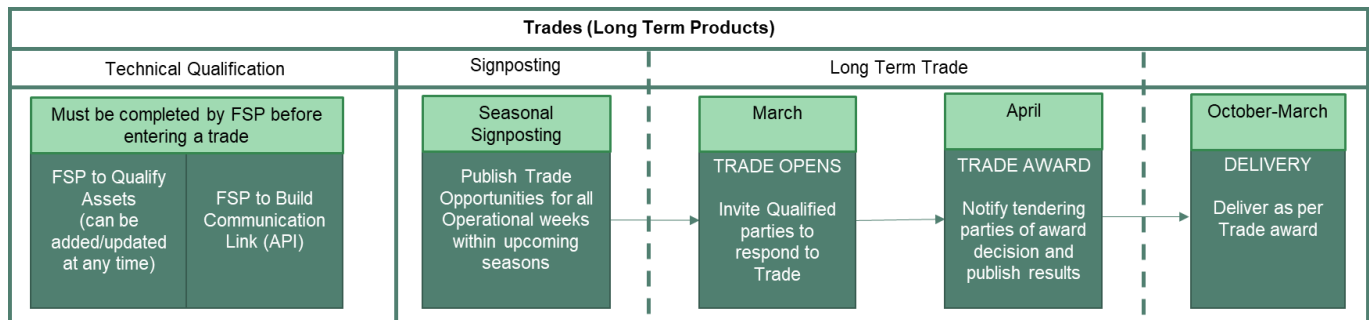


Figure 12: Long Term (Seasonal) Trades

Question: Are there any barriers to completing the qualifications requirements, both Commercial and Technical, ahead of participating in a Trade that we haven't considered?

New online procurement hub

Our procurement hub will streamline the procurement process through digitisation. This will help us scale up our operations and allow for more dynamic competition.

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 is where FSPs will be able 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

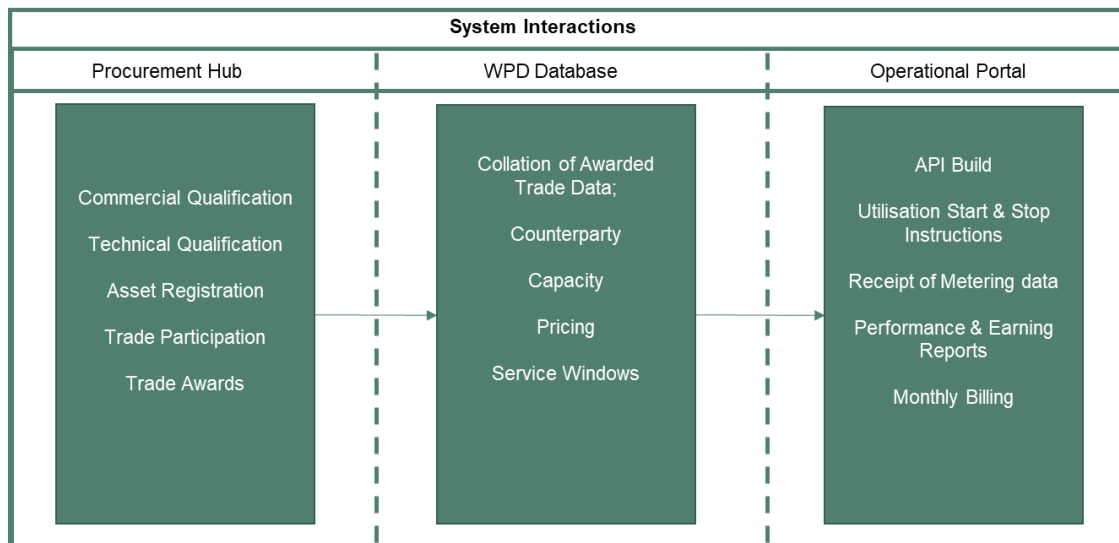


Figure 13: Flexibility System interactions

Question: Does our described digitalisation of procurement activities adequately reduce burden for FSPs looking to participate?

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 then providing pricing information through the procurement hub, and then accepting operational instructions via the portal, Marketplaces can interact like any aggregator.

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

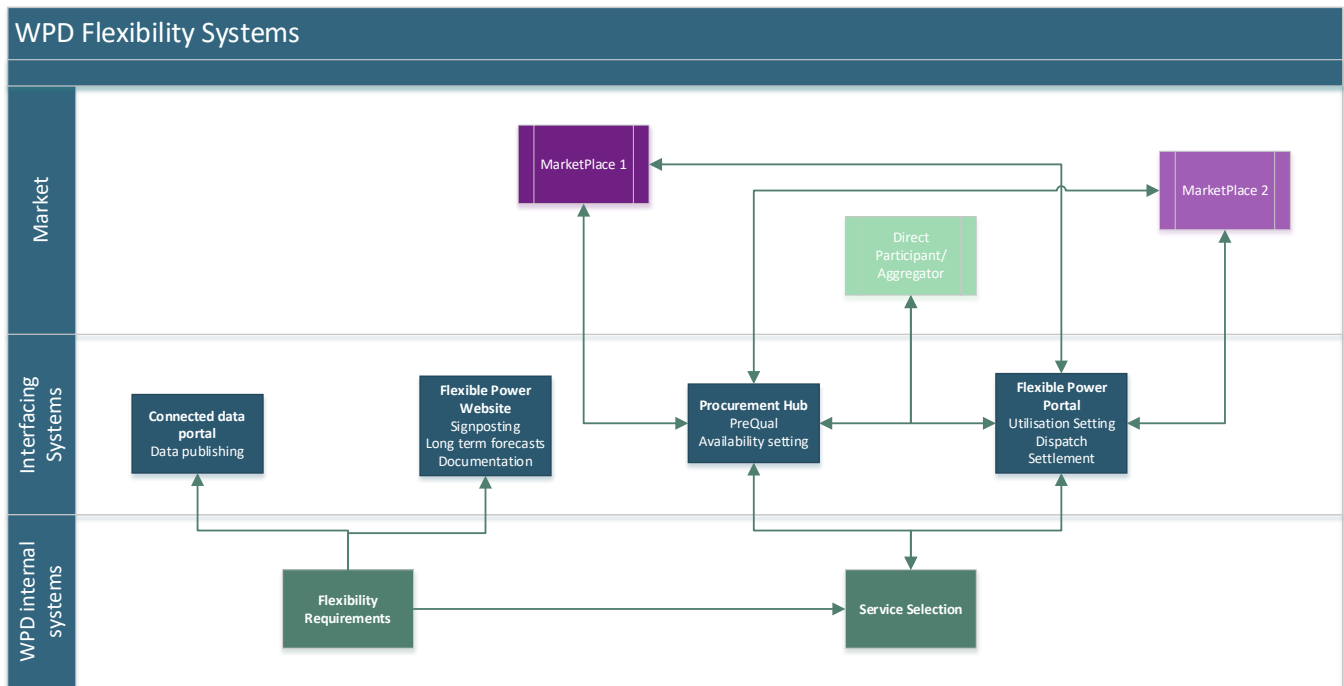


Figure 14: WPD Flexibility System Overview

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 economic coordination with other Services and Products.

Question: Do you agree with the proposed approach to interacting with marketplaces?

Secondary trading

With the addition of our new processes and systems, we are considering how we could facilitate secondary trading between assets. This will enable FSPs to trade away their operational obligation where technically necessary, or economically efficient. We will look to facilitate such trading, but are conscious of the bounds of the DNO role as a neutral market facilitator rather than the operator of the market. Our views on the initial process are laid out below. We expect to add more flexibility to the process, and digitise it in ED2.

Set up:

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.

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.

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.

This timing is highlighted below;

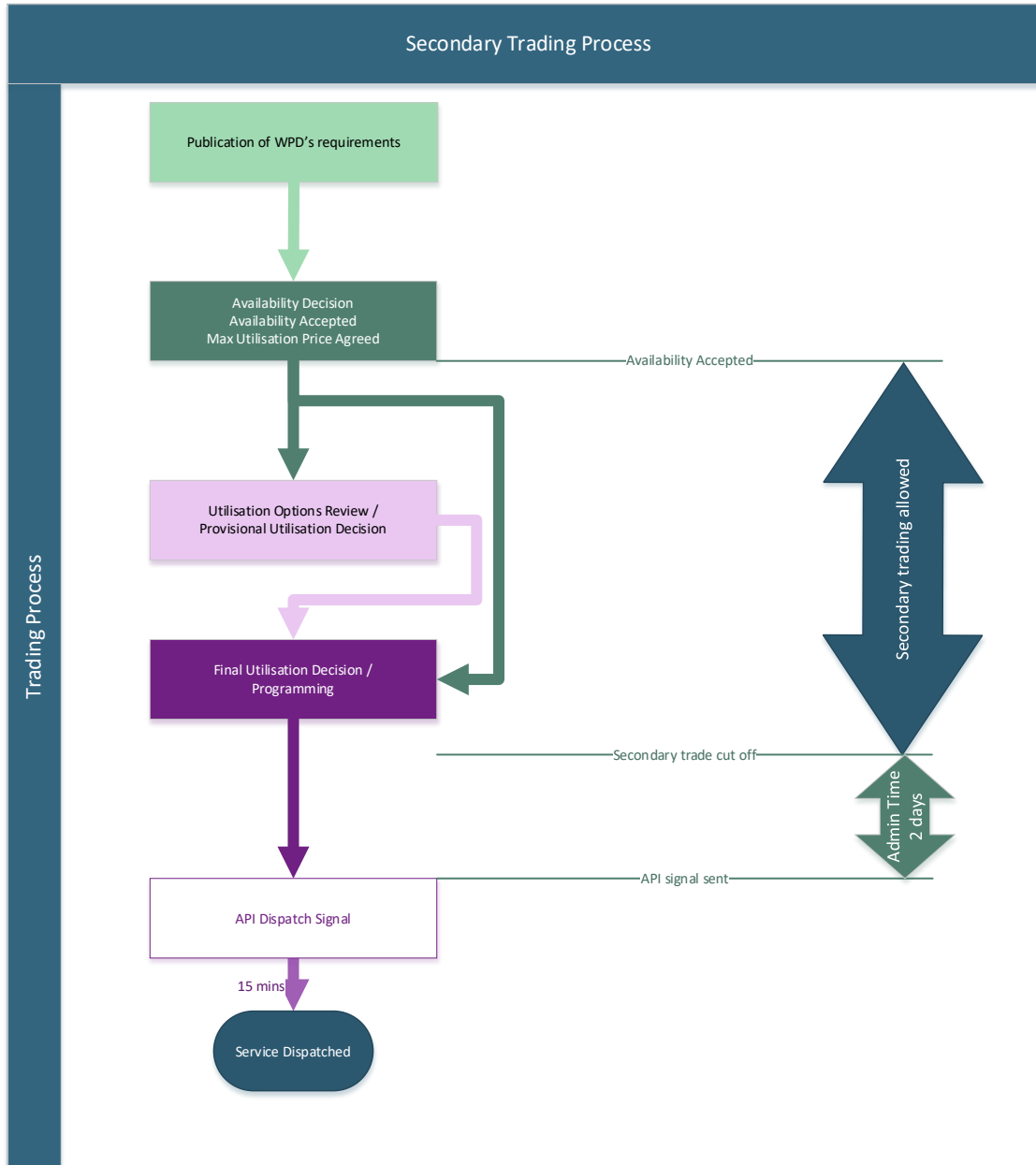


Figure 15: Proposed Secondary Trading Process

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.

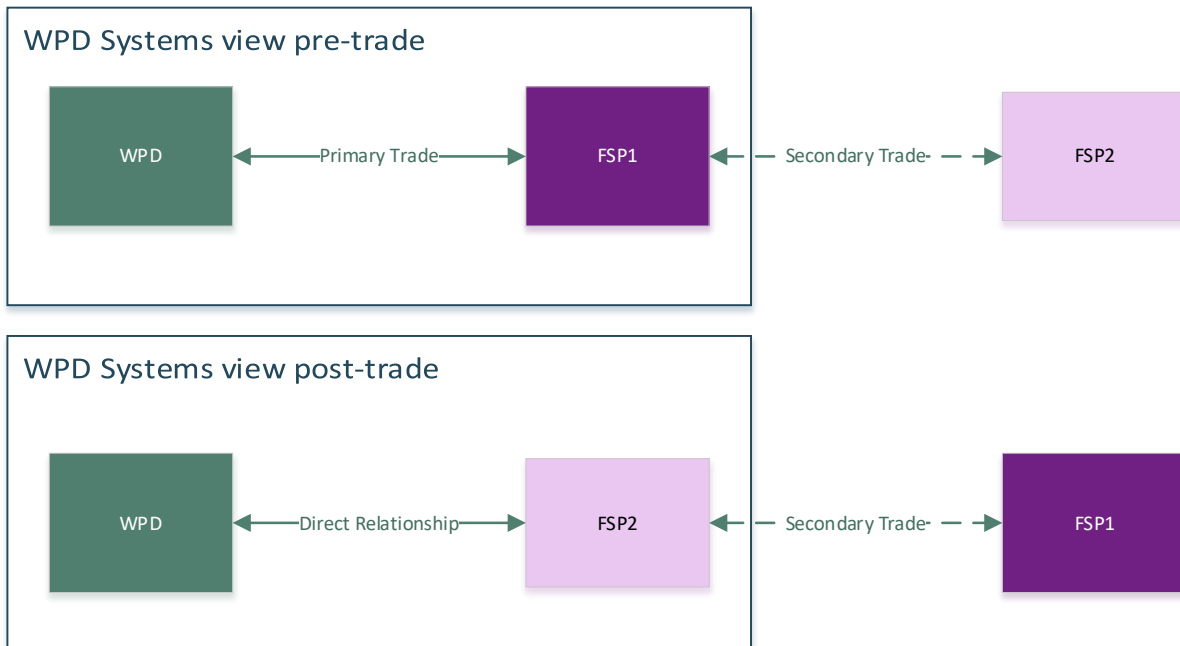


Figure 16: WPD System view of FSPs pre and post-secondary trade

We will look to transfer full obligations (all the MWs), with equivalence needed (at least the same operation parameter) 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.

Question: Do you see value in facilitating secondary trading? Will our proposed implementation help unlock that value?

4. How we get there

The proposed changes are significant, and as such there are a number of further considerations needed.

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 be encouraging 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.

Question: Do you see any issues with our plan on Grandfathering?

Question: If you are an existing FSP would you transition to the new services?

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.

Question: Do you support the addition of penalties for non-delivery?

Question: Do you have any proposed structures to help introduce penalties in a proportionate manner?

Timing of changes

The changes proposed are significant and will have impacts on FSPs and WPD.

Following this round of engagement we will review our plans and firm up timescales. The changes will not be implemented for the first procurement round of the year. Due to the scale of the internal work needed to facilitate them, and the fact that it cuts across two annual Procurement Statements.

Our aim is to get the basic infrastructure in place for the changes by our August 2022 Procurements, with some further functionality delivered by the end of the 22/23 regulatory reporting year.

Question: Which elements of change should be prioritised from a delivery perspective?

5. Data Sharing

To support our procurement of Flexibility Services, we have built a comprehensive process for sharing data on our needs, requirements and operations.

We see three broad categories of data: Flexibility Requirements, Procurement Results & Dispatch information.

We aim to deliver industry leading market data, to help FSPs understand the opportunity available to them, and how to maximise the value they provide.

Flexibility requirements

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 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 (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

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.

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.

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.

Question: Which data sources do you currently use?

Question: What are the most valuable data formats (maps, CSVs, databases...)?

Question: Is there any further data that you would like to see published?

6. Feedback

The purpose of this document is to present our initial views on how services and processes could develop to help frame engagement with stakeholders.

As such this document will be supplemented with a webinar to explain our proposal and follow on workshops. If you want to access these please register your interest at:

- For the Webinar: https://zoom.us/webinar/register/WN_3vL9w_YMR0i3_Ov7v2xI9Q
- For the Online Workshop: <https://zoom.us/meeting/register/tJMvdO6vrj0tHtWrsBum2gPWSw9j9FzEP3FZ>

You can also provide any feedback to us directly at: wpdflexiblepower@westernpower.co.uk or via the [online form](#).

This input will help us refine our thinking ahead of our formal C31E consultation in January.

Summary of questions:

Question: Does the common process shown in fig.3 adequately define a Flexibility Product? Are there any processes/stages we have missed?

Question: Do you see value in the new products proposed for the coming reporting year? Does the additional value of the new products outweigh the additional complexity added?

Question: Are there any other new Products we should be considering?

Question: Do you see there being additional value in our Sustain Product over our Secure (Long Term) Product? Does that value extend beyond domestic scale assets?

Question: Will the changes proposed significantly alter the value of the current products?

Question: Do you see value in the new timeframe offered for Restore?

Question: Do you agree with our decision to operate Secure or Dynamic products in a single zone. Would the operation of both services in a single zone add value, or create uncertainty and complexity?

Question: Are there any other factors that should be considered as part of our long term investigation into Service Optimisation?

Question: Are there any perceived issues with our short term approach?

Question: Do you see any limitations with our proposed pricing strategy? Can you see any better ways of determining price within our markets?

Question: Do you see any issues with keeping our Restore Product as a fixed price?

Question: How would the Joint Utilisation Competition affect how you set Availability and Utilisation prices at either of the timescales?

Question: Are there any barriers to completing the qualifications requirements, both Commercial and Technical, ahead of participating in a Trade that we haven't considered?

Question: Does our described digitalising of procurement activities adequately reduce burden for FSPs looking to participate?

Question: Do you agree with the proposed approach to interacting with marketplaces?

Question: Do you see value in facilitating secondary trading? Will our proposed implementation help unlock that value?

Question: Do you see any issues with our plan on Grandfathering?

Question: If you are an existing FSP would you transition to the new services?

Question: Do you support the addition of penalties for non-delivery?

Question: Do you have any proposed structures to help introduce penalties in a proportionate manner?

Question: Which elements of change should be prioritised from a delivery perspective?

Question: Which data sources do you currently use?

Question: What are the most valuable data formats (maps, CSVs, databases...)?

Question: Is there any further data that you would like to see published?

Appendix A: Overview of proposed services for 22/23

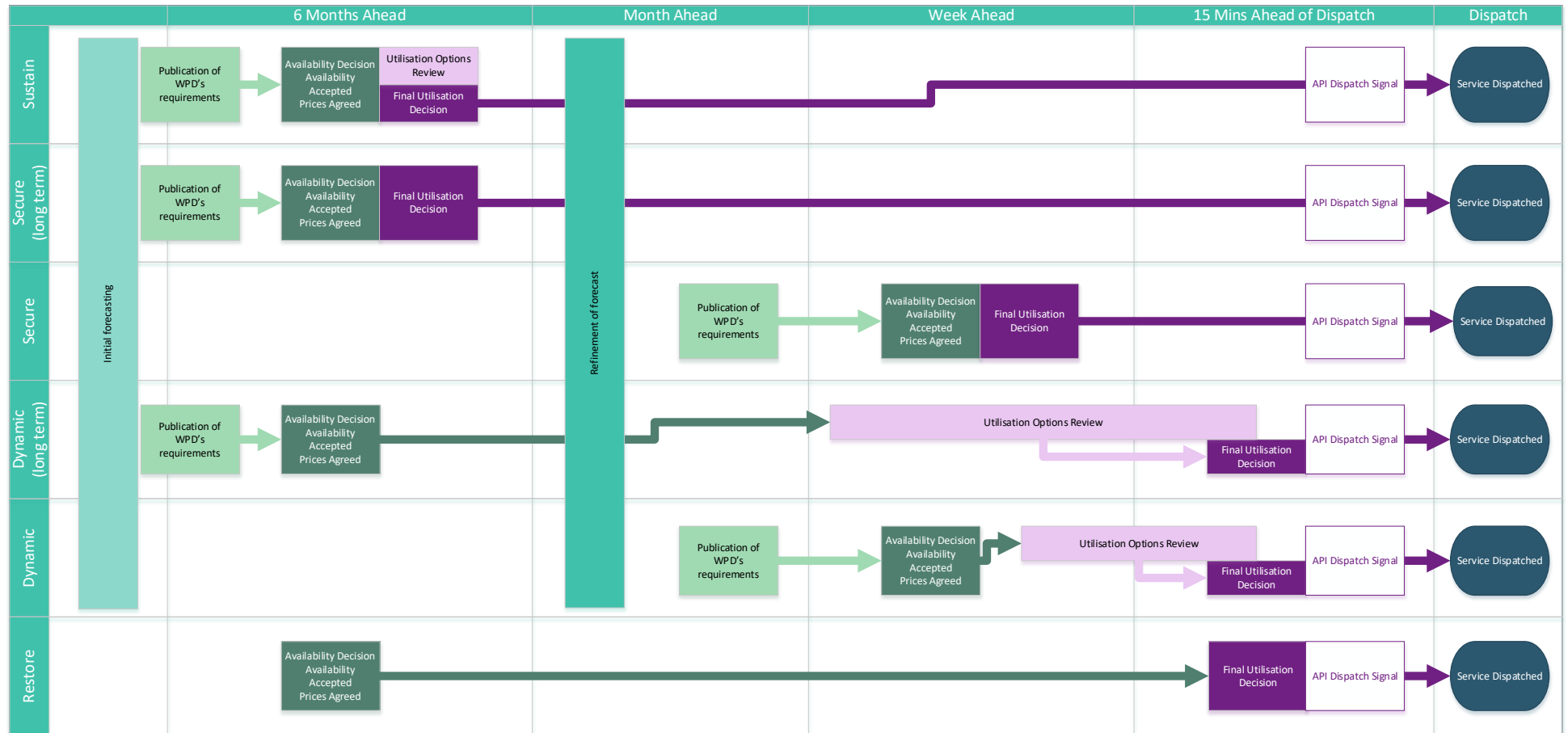


Figure 17: Overview of proposed services for 22/23

	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	February / July			Every Monday (am); Week ahead of Operational Week		Seasonal & Weekly
Trade Opportunity Response Window	6 weeks			3 days (midnight Weds)		Seasonal & Weekly
Capacity Award Decision	April / September			Every Thursday; Week ahead of Operational Week		Seasonal & Weekly
Availability window (A) Decision	April / September			Every Thursday; Week ahead of Operational Week		Seasonal & Weekly
Price Award (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	April / September	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	April / September	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 5: Overview of proposed services for 22/23

Western Power Distribution (East Midlands) plc, No2366923
Western Power Distribution (West Midlands) plc, No3600574
Western Power Distribution (South West) plc, No2366894

Western Power Distribution (South Wales) plc, No2366985
Registered in England and Wales
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