

Learning together

A joint UK Power Networks-NGED consultation on proposals for local flexibility

Insights and next steps







Contents

1.	Executive Summary	3
2.	Introduction	4
3.	Moving to consistent timelines for procurement and dispatch	5
4.	Deployment of 'Demand Turn Up/Generation Turn Down' services	7
5.	The value of fixed baselines	9
6.	Building trust in flexibility delivery	11
7.	Prioritisation of secondary trading	12
8.	Engagement approach	13



1. Executive Summary

As two of the leaders in local flexibility markets, UK Power Networks and National Grid Electricity Distribution (NGED) set out several areas of challenge and their proposed way forward in July 2024, based on their shared experience. Recognising the benefits of developing common approaches to flexibility across Britain, we decided to consult together. We received 34 responses, and widespread support for our joint approach.

Prior to consultation we worked with colleagues at the ENA's Open Networks project to refine the scope and timing of this work, to ensure it would complement wider efforts to standardise approaches to local flexibility. Following the consultation, we shared anonymised feedback from all respondents with colleagues in other Distribution System Operators (DSOs), National Energy System Operator (NESO), Open Networks and the new Market Facilitator, Elexon.

Through the consultation we received insightful feedback which has allowed us to refine our positions and next steps:

NGED will introduce day-ahead procurement in 2025, aligning with UK Power Networks approach and timeline.

Both DSOs will explore potential to communicate dispatch decisions earlier than 1.30pm and more generally will review timelines in light of any changes to the timing of wider market processes, whilst seeking to retain alignment.

While both DSOs envisage the vast majority of dispatch decisions being made at day-ahead, they will explore the necessary commercial framework for closer to real-time dispatch

NGED has recently begun to procure demand turn-up.

In the first instance, they will use the Scheduled Availability and Operational Utilisation product. They intend to complement this with day-ahead procurement in 2025. The latter aligns with UK Power Networks' current approach.

To widen participation in demand turn up, both UK Power Networks and NGED are engaging with Elexon on Issue 114, which is seeking to facilitate a level playing field between suppliers and aggregators.

- 3 UK Power Networks will extend its application of fixed baselines for longterm flexibility procurement, following the approach established by NGED. The consultation highlighted a wide range of views on baselines which will be further examined in late 2024 through Open
- examined in late 2024 through Open
 Networks work to standardise baselines.
 In light of stakeholder views on how to

In light of stakeholder views on how to manage risks of over-optimistic forecasts of future assets, UK Power Networks will introduce limits to participation of planned and speculative assets in its Autumn long-term flexibility tender. NGED will maintain its policy of contracting only with operational assets. Both DSOs commit to publishing more data on operational performance by April 2025.

Both DSOs intend to focus efforts on developing liquid and well-functioning primary markets for flexibility.
Respondents were largely in agreement that secondary markets were not required in the near future. We will keep this position under review.

With the recent appointment of Elexon as the 'Market Facilitator', tasked with developing more consistent and coordinated flexibility markets, this work will not only support progress of NGED and UK Power Networks but of all DSOs. We are very grateful for the significant contribution of stakeholders to this effort.

2. Introduction

Together, UK Power Networks and National Grid Electricity Distribution (NGED) dispatched more than 90% of Distribution System Operator (DSO) flexibility in 2023/24.

In July 2024, after several months of discussions, we published <u>a summary of key challenges for local flexibility and our proposed way forward on each</u>, based on our pooled experience of working with flexibility providers since 2018. In doing so, we were keen to minimise the burden for providers to engage, while promoting greater alignment between our two organisations.

More than 60 people attended a <u>joint webinar</u> and we received 34 consultation responses. This document summarises the considerable insight from that feedback along with our next steps. To support wider industry progress on local flexibility, we have shared the full set of anonymised responses with our colleagues in other DSOs, Open Networks and Elexon. We are publishing this data alongside this report.

For each issue, we present:

- 1. What we heard
- 2. A summary of insight we drew
- 3. What we're doing next

We would like to thank everyone who responded to our consultation and welcome further engagement on these, and related, issues. We continue to see huge opportunity for more participation in, and benefits from, local flexibility as Britain progresses towards its decarbonisation targets over the years and decades ahead.



3. Moving to consistent timelines for procurement and dispatch

We proposed to align NGED and UK Power Networks processes and timelines for day-ahead flexibility procurement, to minimise operational complexity for Flexibility Service Providers and support optimisation with wider market opportunities.

What we heard

Almost all respondents agreed that we should align our day-ahead procurement and dispatch processes and timings, with many agreeing strongly. 76% of respondents agreed the specific timings (dispatch decision by 13:30) – with a variety of alternative proposals including:

"A decision/indication of prices /demand ahead of day ahead wholesale auction ahead of EAC would be very helpful"

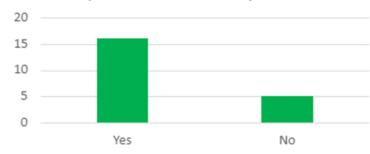
"Getting a despatch decision at 13.30 for DA is too early...would prefer it to be after the FR auction results are out"

"Ideally it should be 1pm to give time ahead of the ESO response and reserve auctions as operators with large portfolios will need to adjust"

"We would push for 1pm"

"The 13:30 publication of results is too close to the c14:00 submission time for battery ancillary service auctions (D*). I suspect a lot of industry participants would prefer [results by 11:30]"

If so - would a decision by 1:30pm support your operational and commercial processes?



Do you agree with the approach of aligning on short-term awards/trades and dispatch at day ahead?

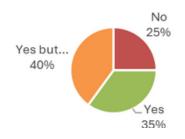


Respondents highlighted important enablers for day-ahead markets including: alignment with other markets, accurate forecasting, reliable timings and availability of appropriate APIs. We also asked about the ability of providers to deliver flexibility within two minutes.

Eight respondents said "yes, but...":

- "Expect higher rewards" (x2)
- · "Requires tight availability window" (x2)
- · "Must work alongside Balancing Mechanism" (x2)
- · "Depends on contract length"
- · "Requires more automation"

Would your assets be able to respond within 2 minutes?



3. Moving to consistent timelines for procurement and dispatch

Summary of insight

Aligning DSO approaches and timescales for day-ahead procurement and dispatch is important for flexibility providers. There are different views on the specific timings, which may reflect different commercial strategies. Providing results in the early afternoon would seem to meet current requirements for most providers.

Most respondents are technically able to deliver flexibility within two minutes, but there are several commercial considerations which need to be resolved to maximise participation.

What we're doing next

NGED plans to move from week-ahead to day-ahead auctions in 2025, aligning their approach and timescales for day-ahead procurement and dispatch with UK Power Networks.

NGED's day ahead dispatches already align with the timings. In the short term, both DSOs will maintain the 1.30pm timing for utilisation decisions, but we will explore whether we could bring this forward to 12.30 or 1.00pm to allow more time before the 2pm submission deadline for Frequency Response auctions. We will keep track of changes in wider market timings.

With regards closer to real-time dispatch, taking into account the "yes, but..." responses, both NGED and UK Power Networks will continue to explore the best means of contracting for two-minute flexibility in those exceptional instances where this is technically necessary, e.g., when using flexibility to respond to a network fault. We will share what we learn with one another and other DSOs.

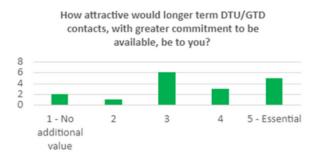


4. Deployment of 'Demand Turn Up/Generation Turn Down' services

UK Power Networks has been procuring Demand Turn Up and Generation Turn Down since late 2022. NGED has started procuring similar services in Autumn 2024. We highlighted several areas where the current design of services might need to evolve to maximise their effectiveness.

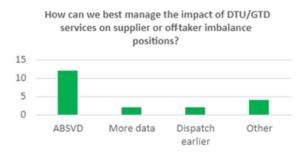
What we heard

To build confidence in the value and reliability of these services, we asked about the attractiveness of longer-term contracts with greater commitment. While many respondents were undecided (a third rated the proposal as 3/5), a significant minority felt that such contracts would be attractive. or even essential.



To address the access of aggregators (and other non-suppliers) to demand turn up products, the most popular option was to apply adjustments to imbalance positions via the Applicable Balancing Services Volume Data (ABSVD). Some respondents clarified that ABSVD in its current form would not be fully appropriate and that UK Power Networks and NGED should engage with Elexon on Issue 114 to ensure that a holistic approach could be developed to meet DSO and ESO requirements.

While an ABSVD-like adjustment could be part of the solution, it would not in itself address the cost borne by the consumer which may inhibit the competitiveness of aggregators. One aggregator respondent commented that "The predominance of off-peak [supplier] tariffs for EV charging makes turn up very hard".



Summary of insight

While UK Power Networks has seen positive take up of demand turn up services since 2023, there is interest in evolving these services to enable wider participation. There is potential value in introducing availability payments, though many market participants appear undecided. Participants generally believe that an ABSVD-like solution would enable greater participation from nonsuppliers, but that this should be considered as part of the wider changes already being scoped.

4. Deployment of 'Demand Turn Up/Generation Turn Down' services

What we're doing next

UK Power Networks will continue to expand the use of Demand Turn Up in line with increased requirements to connect distributed generation.

NGED has included Demand Turn Up procurement in its Autumn tender 2024. These use longer term contracts with the Scheduled Availability and Operational Utilisation product. This will include an availability payment, giving providers the confidence of returns to sign up for and enable the new service. NGED will look to supplement these procurements with shorter term products in 2025.

UK Power Networks and NGED are engaging with Elexon through <u>Issue 114</u>. This working group is open to interested industry stakeholders and is exploring potential noregret and holistic changes to ABSVD to establish a level playing field for suppliers and aggregators and support ESO and DSO needs for flexibility.



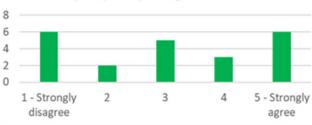
5. The value of fixed baselines

We consulted on options for aligning baselines going forwards, specifically around adoption of 'fixed' baselines (i.e., baselines that are not influenced by recent behaviour of the asset). We presented the case to adopt such baselines for longer term procurement, where they align well across all baselining principles, as well as in shorter term markets where they provide greater simplicity at the possible expense of accuracy. Fixed baselines could also support improved revenue stacking.

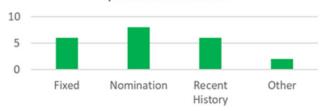
What we heard

Responses to the questions were mixed.

Do you agree that fixed baselines align well to the principles in planning timescales?



Would you prefer to see the used of fixed, nomination or recent history baselines in operational time frames?



Whilst we saw reasonable support for fixed baselines, we also saw a number of suggestions for nomination baselines, or allowing both.

"Yes - we agree that fixed baselines are appropriate for low carbon technologies such as Electric Vehicles (EVs), and for availability services that are procured over the longer term in particular"

Attitudes towards recent history baselines were very mixed, with some highlighting their effective use in the BM/ESO markets, and others seeing their limitations for service stacking.

Recent history is a non-starter for batteries, we do things very differently daily or seasonally depending where the price is and what our starting SoE [State of Energy] is etc."

"We have a track record of CM and P376/DFS baselines which can be used to gauge performance"

While we were considering a 'zero baseline' to be a specific example of a fixed baseline, this was not clear to all respondents and did impact the scores above.

A desire to see the number of baselines rationalised appeared amongst many responses, whether that be supporting approaches such as P376/DFS, or the use of fixed baselines.

Summary of insight

The response on baselining was mixed, with no single clear view on a way forwards. There are strong views held by different parties on various approaches. Since many of the consultation responses were anonymous, we were not able to ascertain whether technology-specific baselines could bring greater consensus.

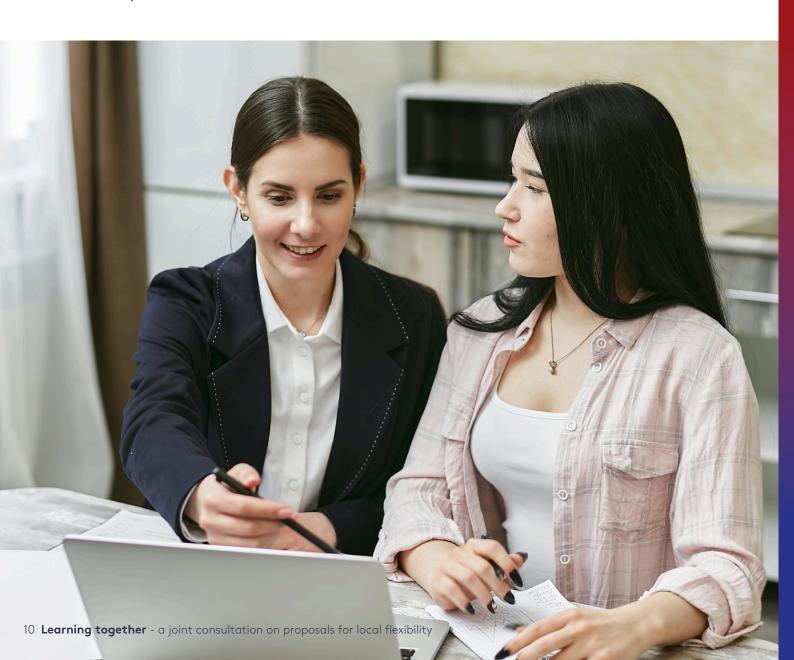
We understand that a combination of nomination and recent history baselines have been used effectively in services that are operated closer to real time such as the BM and DFS. Fixed baselines have been used effectively by NGED.

5. The value of fixed baselines

What we're doing next

The spread of views highlights the need for further engagement and work on baselining. All feedback has been provided to the Open Networks Baselines Technical Working Group, who are bringing forward stakeholder engagement to enable deeper understanding of industry views and whether there is any technology-specific consensus on baselines.

In the meantime, NGED will continue to use fixed baselines and UK Power Networks is extending its use of fixed baselines to cover thermal generators, batteries and domestic heat pumps within its Autumn 2024 long-term flexibility tender.



6. Building trust in flexibility delivery

We set out the need to enhance the trust in flexibility services, outlining the different ways in which we look to manage the risks. We wanted to start a conversation on how to better manage both development and operational performance.

What we heard

Given the early stage of the discussion we were unsurprised to see a spread of responses.

On the best way to manage development risk, only contracting with operational assets seemed to be the slight preference. Both others had support, but also had comments highlighting their challenges for certain provider types.

To better manage operational risk, we saw a similar spread of responses. Participating closer to real time came out as the largest factor, whilst other options also received support. We also saw a range of perceptions of the risks.





"I don't perceive much risk"

"Penalties for non-delivery would be a total blocker - we could not participate"

Finally, respondents highlighted the need to monitor, and publish, data on performance.

"We think reputational risk should be an aspect of optimiser performance. All service terms should require providers to consent to SOs publishing operational data in a non-confidential format. SOs should feel empowered to enable an industry culture of self-policing from this data"

Summary of insight

Providers recognise the need to build confidence in the reliability of flexibility. While there were different opinions on how to achieve this, there was greatest support for prioritising operational assets and introducing closer to real-time procurement (eg at dayahead).

What we are doing next

To manage development performance, UK Power Networks is introducing volume limits on assets without either a meter number (MPAN) or connection offer. This will enable planned assets (with connection offers) to secure contracts ahead of energisation and aggregators to secure limited contracts for future customers. NGED will maintain its policy of working with operational assets only.

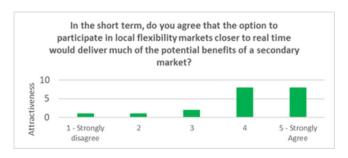
For operational performance, as well as ramping up options to participate at dayahead, both DSOs will include delivery data alongside their dispatch data by April 2025. This will provide stakeholders with a better understanding of current performance levels and support any work the Market Facilitator may consider.

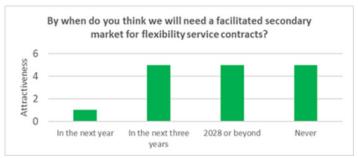
7. Prioritisation of secondary trading

Our questions on secondary trading focused on the relative value of the work. Our 'minded to' position was to de-prioritise work on secondary trading and instead focus on making primary markets as effective as possible.

What we heard

In general responses aligned with our positions, affirming that much of the value would be delivered through more active, closer to real time markets.





A number of respondents suggested that deploying secondary trading would be a distraction until market maturity was realised. "Secondary markets are a distraction. The focus should be the delivery of liquid, well-functioning primary markets". Only one respondent suggested that secondary trading was needed in the next year, with a large number suggesting it was needed beyond 2028, or even never.

There was also a link drawn between secondary trading and the methodology used for performance management detailed in the section above.

Summary of insight

Stakeholders currently see limited value from secondary trading, with a consistent preference for delivering benefit through wellfunctioning primary markets.

What we are doing next

We will both de-prioritise developments in this space, allowing us to focus on core areas of market development. We will keep a watching brief on relevant innovation projects and periodically review our position with FSPs to understand if and when we need to accelerate this work.

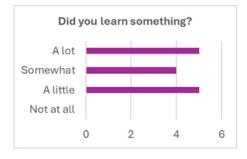
8. Engagement approach

In July we published a 20-page report setting out our questions and positions. We subsequently ran a webinar with interested parties to gather immediate feedback. More than 60 people attended the webinar, with 15 providing feedback on our engagement approach. We kept the consultation open for four weeks after the webinar.

What we heard

On average, stakeholders rated the webinar at 8.2/10. Those who learnt a lot rated the webinar at 8.8/10, while those who learnt a little rated at 7.8/10. 100% of respondents said they would participate in a similar event in the future.





While some highlighted particular content as the most useful, many stakeholders said that it was more generally useful to understand DSO plans and help shape them. For example:

"Opportunity to understand DSO feelings/opinions. And help shape them."

"Feeding back priorities"

"Helpful to clearly see where the current similarities and differences are between UK Power Networks/NGED, and great to see simple/clear proposals for both DSOs"

All participants said they would attend a similar session in the future and many offered helpful feedback on how to make it more effective:

"More explanation of terms"

"Some reading material ahead of the event and questions in advance"

"Spend more time looking at people's answers"

"Would have been nice to see other peoples' responses to the questions. Would also be nice to have it in person!"

"Try in person - we'd get better discussions"

"Make it easier to find the Zoom link!"

Summary of insight

Flexibility providers were positive about the webinar and showed appetite to continue discussions, possibly through in-person workshops.

Both UK Power Networks and NGED were very pleased with the level and quality of engagement from flexibility providers, during and after the webinar.

What we are doing next

With the recent appointment of Elexon to the role of Market Facilitator, both UK Power Networks and NGED are focused on supporting its success in driving forward more consistent DSO flexibility markets and greater coordination between DSOs and NESO. We believe that this report has surfaced important insight and have fed the data and conclusions into Open Networks, Elexon, other DSOs and NESO.

NGED and UK Power Networks will continue to exchange experiences bilaterally and would consider a similar collaboration in future, in cases where we have overlapping needs for input from stakeholders.





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