# Webinar – Evolving Flexibility Markets 25th July 2024

## This webinar will start at 10.30am

Please mute your microphones during the presentation.

There is time allocated for Q&A following the presentation.

Questions can be submitted via the Q&A function at any time.

This webinar will be recorded.

The slides from today and the recording will be available on our website
www.flexiblepower.co.uk

# Agenda

**1**

**Open Networks Outputs**

- Flexibility Products
- Standard Agreement
- Settlement
- Pre-qualification

**2**  **API** - Improvements to Flexible Power dispatch API

**3**  **Update from SSEN**

Catherine Winning – Flexibility Markets Manager

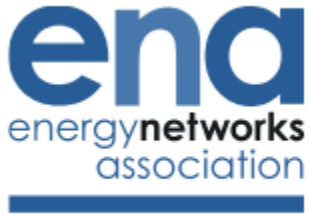**4**  **NGEDs upcoming procurement opportunities**

**5**  **Next steps**

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DSO

1

**Open
Networks
Outputs**

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# Evolving Flex Markets

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energynetworks
association

Distribution flexibility markets have seen growth and maturity over the last 5-6 years. Over this time the ENA has been working with Network Operators to establish best practice and drive standardisation. Stakeholder input and collaboration has been crucial to this process.
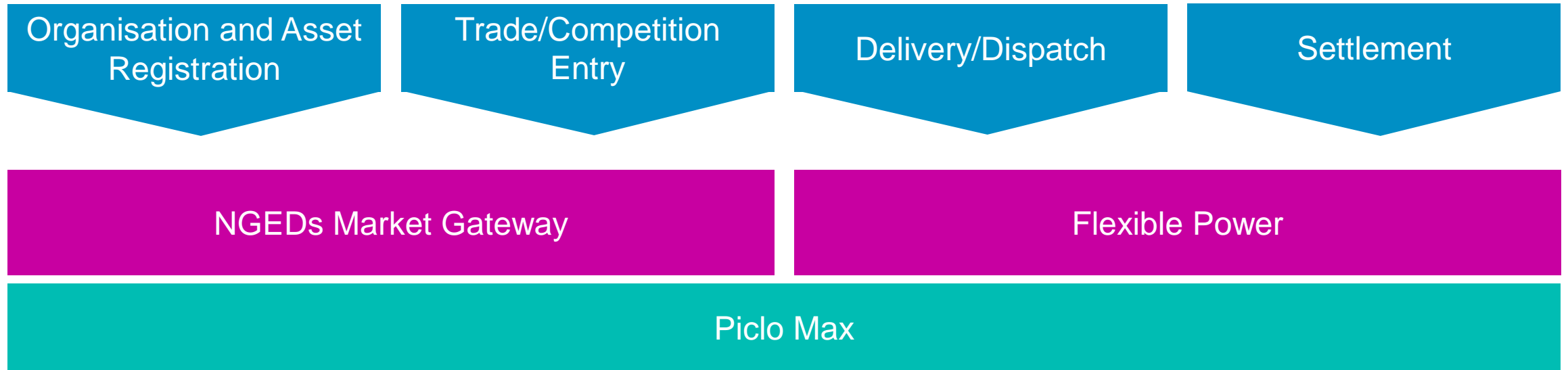
This year has seen some substantial and much welcomed output from the Market Development Workstream which will driven a step change in the standardisation of flexibility markets across UK DNOs.

**Today, NGED would like to share with our flex market stakeholders how and when we will implement these outputs and what you should expect to see as an outcome.**

| ENA Market Development Workstream Focus Areas |
|---|
| Standardisation of Flex Products |
| Standardisation of Pre-qualification |
| Standardisation of Flexibility Contracts |
| Standardisation of Settlement Process |
| Standardisation of Dispatch API |
| Standardisation of Baselining |

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# NGEDs Flex Market tools

| Organisation and Asset Registration | Trade/Competition Entry | Delivery/Dispatch | Settlement |
|:---:|:---:|:---:|:---:|

| NGEDs Market Gateway | Flexible Power |
|:---:|:---:|

| Piclo Max |
|:---:|

Earlier this year we established a partnership with Piclo. We've built Interfaces between Piclo and our Market Gateway and Flexible Power platforms allow Flex Providers to enter NGED competitions via Piclo's Market Platform for full end to end if they so chose.

The changes NGED is making in respect of the **ENA outputs** will be replicated on Piclo.

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# Flexibility Products

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# Flexibility Products

Benefits of Aligned Flexibility Products;

- **Consistency Across Networks:** Simplifies participation by providing uniform service definitions and requirements across different Distribution Network Operators (DNOs).

- **Reduced Complexity:** Eases the process of engaging with multiple DNOs, lowering administrative and operational burdens.

- **Increased Market Opportunities**: Opens up access to a broader market by making it easier to offer services across different regions.

- **Enhanced Transparency:** Improves understanding and comparison of service offerings, aiding in better decision-making and strategy development.

- **Streamlined Procurement:** Facilitates a more straightforward and efficient procurement process, enabling quicker and more effective responses to DNO needs.

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# Flexibility Products
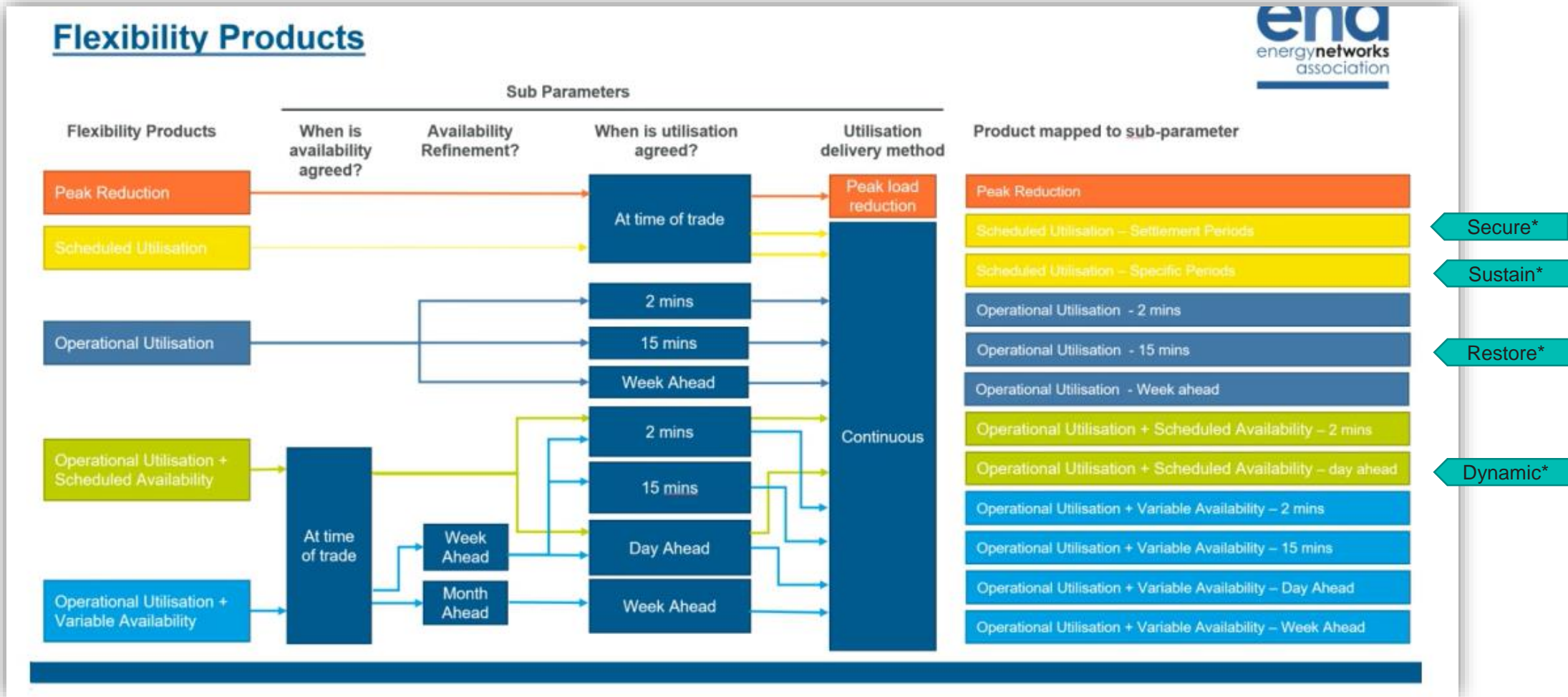
# NGEDs approach to rolling out new products

| Existing Product | Attributes | New Product | Attributes | Dispatch Instruction |
|---|---|---|---|---|
| DYNAMIC | Scheduled Availability, Utilisation instructed in real-time | **SAOU_DA** Scheduled Availability, Operational Utilisation – Day Ahead | Scheduled Availability, Utilisation instructed day ahead | Day ahead at 13:30, same time every day |
| SECURE | Scheduled Availability, Utilisation instructed in real-time | **SU_SEP** Scheduled Utilisation - Settlement Periods | Utilisation Only, API instruction optional | Every Thurs 17:00 ahead of delivery week |
| SUSTAIN | Scheduled Utilisation Only. API instruction optional | **SU_SPP** Scheduled Utilisation - Specific Periods | Scheduled Utilisation Only, API instruction optional | Every Thurs 17:00 ahead of delivery week |
| RESTORE | Utilisation Only. Utilisation instructed in real-time | **OU_15** Operational Utilisation – 15min | Utilisation Only. Utilisation instructed in real-time | 15mins ahead of delivery start |

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# Implementing the new products

All future **Long Term and LV Winter services** that NGED procures will be under the new Products.

Our next Long Term and LV Winter Procurements open on 23rd September for 6 weeks for delivery requirements from April 2025 onwards.

**Short Term (weekly auction) services** that NGED procures will not be applicable to the new products until April 2025 onwards.

Existing Trades that are already procured on the older products will not be affected and will continue on the basis they were awarded.

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# Standard Agreement

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# Standard Agreement

## Purpose

**The main aim of the Standard Agreement, used by the ESO and the individual DNOs, is to:**

- **Make participation easier by offering standard terms,** especially for those who operate in multiple markets across many locations

- **Reduce resource and cost burden** in assessing contracts for different markets

- **Facilitate shorter term markets** by providing an over-arching agreement, available prior to bidding and which can be used for numerous tender rounds

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# Standard Agreement

Th ENA recently published a new V3 of the Standard Agreement that was developed across the ESO and all UK DNOs and informed through consultation and feedback from stakeholders.

Key developments for V3 include;

| Identified change | Changes |
|---|---|
| **Duplicate registration of assets:** For situations where individual assets are registered and offered by more than one Provider for the same service at the same time. | Providers to use reasonable endeavours to ensure there is no duplication of registered assets, now provides clarity of how these will be dealt with should it occur. |
| **Cyber Security:** Will be signposted within the T&Cs to reflect individual company requirements until standard industry wording has been agreed. | All DNOs and the ESO have company specific Cyber Security requirements and any standardisation would need to be debated and agreed at industry level and not as part of the Standard Agreement work |
| **Voluntary participation:** Current wording is more suited to longer term bilateral contracts. | In light of move to shorter term / closer to real time procurement and using an overarching contractual approach wording on voluntary participation has been removed. |
| **Liabilities:** Providers expressed their concerns that liabilities were uncapped, which could be a barrier to entry for some | A cap has been introduced. NGED had previously introduced a cap, which being lower than the newly agreed standard cap, they will retain. |
| **Site Access:** Concerns were raised with DNOs wanting access to domestic and small non-domestic DER sites. | Recognising that such access may only be required in certain circumstances, any access requirements necessary for specific services will be included within the Service Terms, this is no longer a blanket requirement. |
| **Collaboration with other TWGs:** Incorporate output from: Product / Settlement / Dispatch TWGs | Incorporated standard wording relating to: Definition of services; Metering; Payment Calculations; Performance Monitoring; and System Comms |
| **Re-organisation / Alignment of Schedules:** Move information into contract award notifications, remove sections as required and include further standard wording where possible. | For overarching contracts applying to many tenders, some information will not longer be specific to individual services contracted for (e.g. service windows) and therefore required detail will be included in separate contract award notifications. Removal of variations to services and discretionary services. |
| **Governance** Once issued, v3 will be subject to formal ENA governance | The TWG consider that an annual review is appropriate, at which time should any issues be identified a working group will be convened. |

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# Implementing the Standard Agreement

**NGED will be implementing the V3 Standard Agreement through its Market Gateway Platform in August**

We are awaiting the publication of the Settlement Working Groups final outputs, shortly after we will publish NGEDs version of the V3 Agreement for FSPs to review and we will provide an additional red-line version so that its clear what additions NGED have made compared to the ENA published V3 Template.

**New organisations** registering on MG will only see V3 of the Agreement for acceptance.

**Existing users** will be prompted to re-complete the Qualification Tender, which will display V3 and ask them to accept.

All users wishing to enter Long Term and LV Winter Trades after 23rd September must have accepted the new V3 Standard Agreement in order to be eligible.

We do not plan to publish a red-line version comparing V3 to our older contract as the two are structured quite differently, but if this would help we can consider – please feedback.
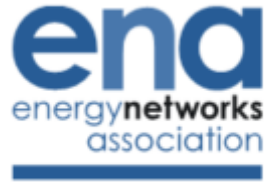
# Settlement

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# Settlement Mechanics

**This ENA initiative has been looking at the standardisation of settlement mechanics across DNOs, aligned to the new products**
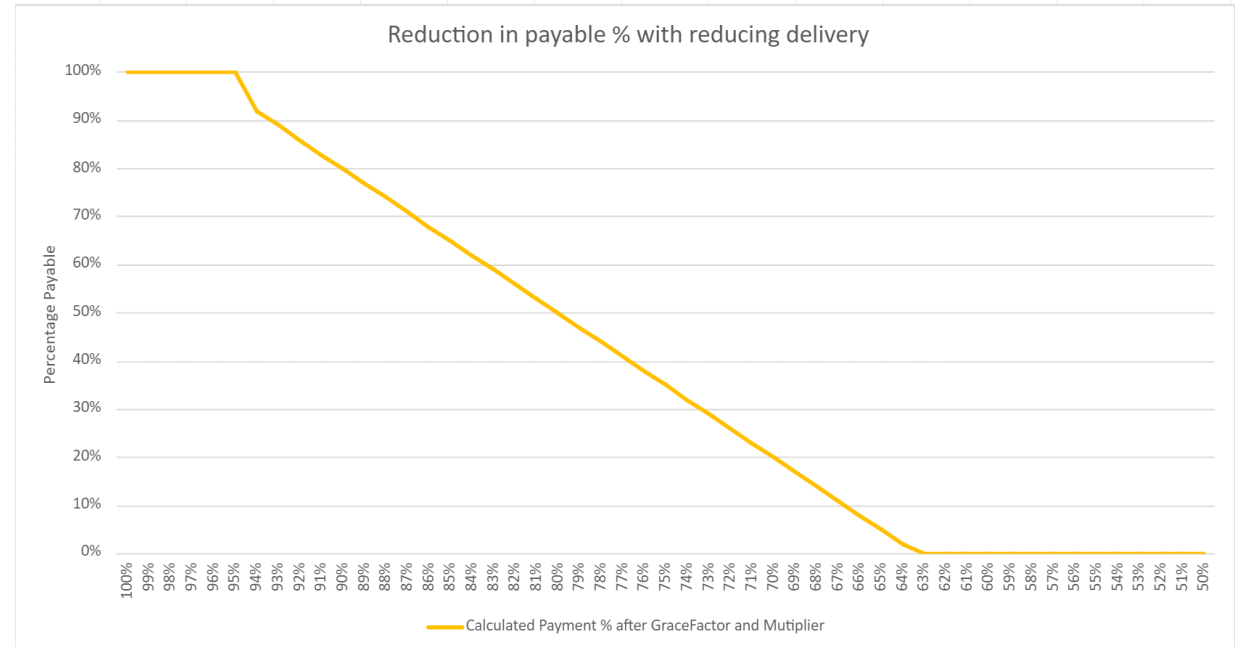
The WG is still finalising the publication of its outputs, but in summary;

- The mechanics are based closely to those already employed by NGED through Flexible Power.

- No new penalties have been included.

- Two changes will **improve earnings potential**;

   ➢ A Grace factor will now be applied to Availability payments as well as Utilisation payments.

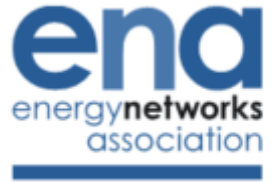   ➢ Utilisation Performance will be calculated linearly, not stepped

# Settlement Mechanics

| Product | Availability Grace Factor | Utilisation Grace Factor | Performance Multiplier |
|---|---|---|---|
| **SAOU_DA** Scheduled Availability, Operational Utilisation – Day Ahead | 5% | 5% | 3 |
| **SU_SEP** Scheduled Utilisation - Settlement Periods | 5% | 5% | 3 |
| **SU_SPP** Scheduled Utilisation - Specific Periods | 5% | 5% | 3 |
| **OU_15** Operational Utilisation – 15min | 5% | 10% | 2 |



Reduction in payable % with reducing delivery

— Calculated Payment % after GraceFactor and Mutiplier

# Implementing the Settlement Mechanics

NGED will apply these **new mechanics** to all service procured under the **new products.**

**No retrospective changes** for Service procured under the old retiring products.

The ENA Working Group expect to publish its outputs in August

Build of the new mechanic in Flexible Power is underway.

We'll update our published documentation around this as soon as possible.

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Pre-qualification

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# Pre-qualification

It was acknowledged that aligned and justified DNO approaches to pre-qualification would greatly benefit market participants and had the potential to reducing the administrative burden through replicability.
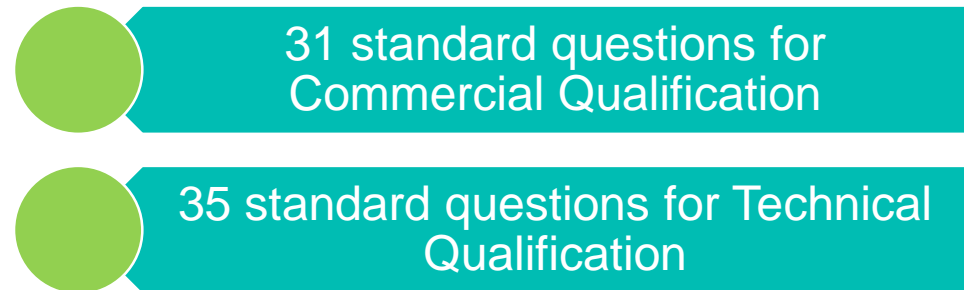
The ENA Open Networks Working Group developed

- A standard data layer for both Commercial and Technical Pre-qualification.

- Agreed via engagement with external and internal stakeholders.
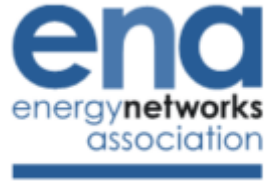
- Implemented all UK DNOs and 3rd Party Platforms

**Then;**

|  | Commercial | Technical | Total |
|---|---|---|---|
| ENWL | 51 | 57 | 108 |
| NIEN | 80 | 22 | 102 |
| NPg | 16 | 47 | 63 |
| SPEN | 25 | 30 | 55 |
| SSEN | 45 | 32 | 77 |
| UKPN | 44 | 80 | 124 |
| NGED | 17 | 16 | 33 |
| **Grand Total** | **278** | **284** | **562** |

**Now;**

31 standard questions for Commercial Qualification

35 standard questions for Technical Qualification

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# Pre-qualification

## Technical – Highlighted Improvements

**Connection Status**

Ability to define – Energised only for NGED

**Technology identity**

As standard set of groupings aligned to reporting needs

**DER Parameters**

Future proof and aligned to other TWG outcomes

## Commercial – Highlighted Improvements

**Contracting Party**

Clear questions, reducing the number of 'in the case of' questions

**Due Diligence**

No. of questions vastly reduced and less onerous to complete

**Insurance**

Reduced to only two requirements and values lowered to minimum statutory limits remain

# Implementing Pre-qualification

NGED implemented the new Pre-qualification criteria in April 2024 within our Market Gateway.

Since April, new and existing Market Gateway Users have been able to complete Commercial and Technical Qualification aligned with the ENA outputs.

Users that have not accessed their Market Gateway accounts since April may need to log in and complete any outstanding new Commercial Pre-qualification questions, these will be flagged on login.

Asset Registration is unaffected – NGED already compliant

Overall, **users should not be impacted by this change**

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**Flexible Power Dispatch API**

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# Alignment with ENA dispatch Working Group

The ENAs Open Networks Project has been looking at best practice and options for standardising the dispatch API used by market platforms to instruct flexibility.

It was agreed earlier this year that such standardisation is complex and that the working group should seek a good and practical solution for alignment that can endure, acknowledging that this would take additional time.

Its now expected that the working group will complete its assessment and make recommendations for dispatch API alignment post Q4 of 2024.

Ahead of that, and with the adoption of the new flexibility products, **DNOs that use Flexible Power for dispatch will deploy an interim V2 API** that will allow us to rollout some improvements sooner, which align with best practice identified by the ENA, while also maintaining the existing V1 API for providers that do not wish to change.  We'll launch a V3 in the future to meet the ENA recommendations once they are completed.

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# The need for changes to the Dispatch API

- **DNO flexibility markets are growing;** these changes will help facilitate scale and increase efficiency

- **DNO standardisation driven by Open Networks;** more effective implementation of the new standardised flexibility products

- **Changes include;**
  - Enabling simultaneous dispatches
  - Inclusion of a Start & Stop time
  - Inclusion of required Power Change
  - Additional Notice instruction
  - Single URL for all instructions
  - Inclusion of a Dispatch ID

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| | | | | Scheduled Availability, Operational Utilisation – Day Ahead | Scheduled Utilisation, Utilisation Only - Settlement Periods | Scheduled Utilisation, Utilisation Only - Specific Periods | Operational Utilisation, Utilisation Only - 15min Response |
|---|---|---|---|---|---|---|---|
| | | | Programme | "SAOU_DA" | "SU_SEP" | "SU_SPP" | "OU_15" |
| | | | API Signal Optional? | No | Yes | Yes | No |
| V2 API | Notice Instruction | Timing | Instruction issued | day ahead at 13:30 | Every thurs 17:00 ahead of delivery week | Every thurs 17:00 ahead of delivery week | n/a |
| | | Payload | Dispatch ID | "dispatchid" | "dispatchid" | "dispatchid" | n/a |
| | | | Dispatch Instruction | "Notice" | "Notice" | "Notice" | n/a |
| | | | Dispatch Start_UTC | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | n/a |
| | | | Dispatch Stop_UTC | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | n/a |
| | | | Power change kw | 1000.00 | 1000.00 | 1000.00 | n/a |
| | | | Meterable unit IDs | "muid" | "muid" | "muid" | n/a |
| | Realtime Instruction | Timing | Instruction issued | 15mins ahead of start | 15mins ahead of start | 15mins ahead of start | 15mins ahead of start |
| | | Payload | Dispatch ID | "dispatchid" | "dispatchid" | "dispatchid" | "dispatchid" |
| | | | Dispatch Instruction | "start" | "start" | "start" | "start" |
| | | | Dispatch Start_UTC | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" |
| | | | Dispatch Stop_UTC | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | "maxruntime" |
| | | | Power change kw | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
| | | | Meterable unit IDs | "muid" | "muid" | "muid" | "muid" |
| | | Timing | Instruction issued | On minute of stop | On minute of stop | On minute of stop | On minute of stop |
| | | Payload | Dispatch ID | "dispatchid" | "dispatchid" | "dispatchid" | "dispatchid" |
| | | | Dispatch Instruction | "stop" | "stop" | "stop" | "stop" |
| | | | Dispatch Start_UTC | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" | "2023-01-08T14:00:00Z" |
| | | | Dispatch Stop_UTC | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" | "2023-01-08T15:00:00Z" |
| | | | Power change kw | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
| | | | Meterable unit IDs | "muid" | "muid" | "muid" | "muid" |

# Implementing V2 Dispatch API

Available in Flexible Power for FSP integration from August.

Can be used for both old and new products, however old products will not receive notice instructions.

If established providers do not wish to change to V2, the V1 API will be maintained and is compatible with the new products – but note the additional fields and notice instructions wont be possible under V1.

We'll notify Flexible Power Users once the V2 API is available

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**Update from
SSEN**

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# SSEN – SYSTEMS FOR FLEXIBILITY

Update to Stakeholders (NGED hosted Webinar)
Catherine Winning – Flexibility Markets Manager

Scottish & Southern
Electricity Networks

# FLEXIBLE POWER

## V2 Dispatch API

To support dispatch of standardised VAOU-WA and SAOU-DA products, V2 of the Flexible Power dispatch API is planned for release in August.

```
PUT   {participant_base_url}/v2/dispatch
```

V2 introduces an additional instruction type called "notice", which conveys a set of instructions for the week or day ahead, and enhances the existing start/stop instruction types with the agreed power change.

- Week ahead notices will be sent on prior Thursdays at 5pm.
- Day Ahead notices will be sent on prior days at 1:30pm.

FSPs who have V1 integration will need to update their endpoints to support the new products.

A V2 API testing page will be provided in the portal to self-test the integration.

## V2 Payment Mechanics

To support Open Networks standardised payment terms, a V2 of the Flexible Power paymech is planned.

The calculation changes involved are minor and benefit FSPs. Nonetheless, they constitute a change to contractual terms, therefore SSEN will be requesting amendments to existing VAOU/SAOU Overarching Agreements.

The V2 Paymech will be introduced per FSP, as and when contracts are amended.

Scottish & Southern
Electricity Networks

# FLEXIBILITY MARKET PLATFORM

SSEN have partnered with Electron to launch a Flexibility Market Platform (FMP).

The initial release provides call-off auction capability.

- Due for launch on 29th July.
- Access is by invitation, for FSPs with VAOU/SAOU Agreements who can participate in the new markets.
- Eligible FSPs have been contacted directly to confirm migration data.

The existing DPS (Delta) is expected to be used for the final time in the October procurement round (PQQ and Mini-Competition for new Overarching Agreements).

If good progress is made with FMP delivery, the October procurement round may be transferred to FMP.



- **First long-term (Years-ahead) VAOU market opens in August**
- **First mid-term (Month ahead) SAOU market opens in September**

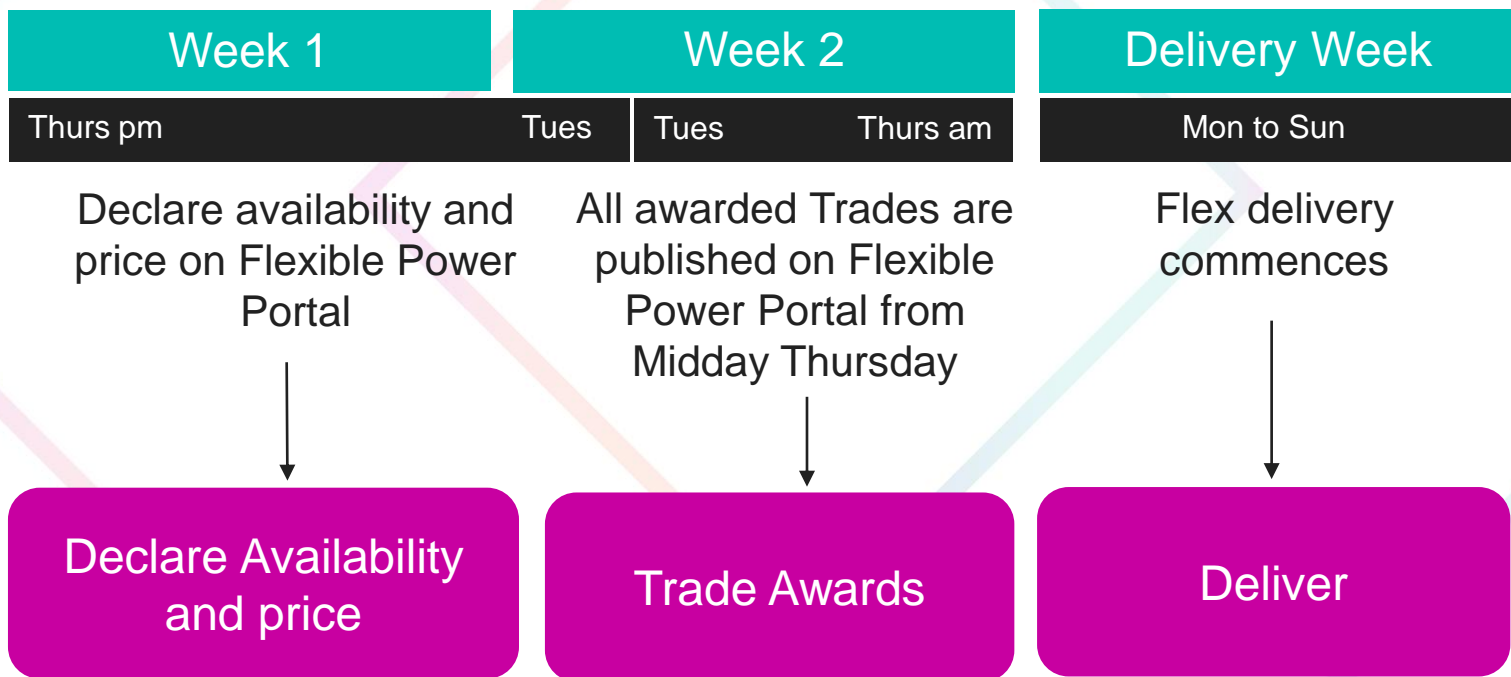Scottish & Southern Electricity Networks

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4

**Upcoming Procurement Opportunities**

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# Key Dates

## Low Voltage Sustain and High Voltage Long Term Trades Procurement Timeline

| Trade Window | | | | |
|---|---|---|---|---|
| **19th Aug**<br>Procurement Opportunities available on Connected Data Portal | **23rd Sep**<br>Trade Opportunities Open | **4th Nov**<br>Return completed Trade Response Spreadsheets | **16th Dec**<br>Award letters issued and all awarded Trades are visible on Flexible Power Portal | **HV Long Term – April '25 Onwards**<br>**LV Sustain – Winter 2025** |
| ↓ | ↓ | ↓ | ↓ | ↓ |
| Publish Opportunity | Enter Trades | Deadline for Trade Responses | Trade Awards | Delivery Window |

**Webinars Scheduled for 25th Sept and Oct.**

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# Requirement Data

We publish all our requirement data on National Grid's Connected Data Portal

Our latest set of data will be publish 19th August

| Dataset | LV Zones | HV Zones |
|---|---|---|
| Postcode Data; to match your assets to our Zones | Click here | Click here |
| Ceiling prices; maximum price you can bid to | Click here | Click here |
| Requirement Volumes; how much we need | | Click here |
| Requirement profiles; when we need it | | Click here |

Please be aware that matching assets to CMZ's with **Postcode Data** may not always be the most accurate method, this is due to the physical configuration of the electricity network, therefore it is advised that the **Polygons Dataset** is more accurate, and can be found HERE

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Next Steps

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# Further help & guidance is available

| nationalgrid **Market Gateway** | **Flexible Power** Portal | Connected Data Portal | **Flexible Power** Website |
|---|---|---|---|
| • Market Gateway<br><br>• User Guide<br><br>• FAQ's | • Flexible Power Portal<br><br>• Flexible Power Portal API documentation<br><br>• FAQ's | • Flexibility – Requirements<br><br>• Trades Data and Results | • Guidance document<br><br>• Flex procurement End to End Process Map<br><br>• Procurement and Engagement timetable<br><br>• Tools and Documents |

# Continued Engagement

**Keeping you up to date and informed on developments and opportunities**

UKPN/NGED Joint Consultation

On Track to Trade 25th September

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# Thank You

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