# Challenge Group

## ENA Open Networks

27th July 2023

# Agenda

| Item | Start | Finish | Time | Item | Presenter |
|---|---|---|---|---|---|
| 1 | 14:00 | 14:05 | 5 | **Welcome and apologies** | Maxine Frerk (Challenge Group Chair) |
| 2 | 14:05 | 14:20 | 15 | **Recent industry developments and ON impact**<br>Ofgem's letter to Open Networks | Maxine Frerk (Challenge Group Chair)/ Jospeh Cosier & Fiona Campbell (Ofgem) |
| 4 | 14:20 | 14:30 | 10 | **Focus Group Engagement**<br>Overview of feedback received in technical focus groups | Reece Breen Begadon (ON Technical Advisor, ENA) |
| 5 | 14:30 | 14:50 | 20 | **ON Success Framework and Flex Figures**<br>Final view of the framework and 2022/2023 flex figures | Avi Aithal (Head of ON, ENA) |
| 6 | 14:50 | 14:55 | 5 | **Break** | |
| 7 | 14:55 | 15:15 | 20 | **Primacy Rules**<br>Iteration 2 supporting analysis | Luke Harker (NG ED) &<br>Stuart Fowler (NG ESO) (Technical working group co-Leads) |
| 8 | 15:15 | 15:35 | 20 | **Flexibility Products**<br>Updated technical specs for active power product | Guy Shapland (SPEN-D) (Technical working group co-lead) |
| 9 | 15:35 | 15:55 | 20 | **Settlement Processes**<br>Alignment proposal and gap analysis | Gavin Stewart (SSEN-D) and Tariq Hakeem (NG ESO) (Technical working group co-leads) |
| 10 | 15:55 | 16:05 | 10 | **Agreeing Next Challenge Group Agenda** | Avi Aithal (Head of ON, ENA) & All |
| 11 | 16:05 | 16:10 | 5 | **Recent and Upcoming ENA Events** | Helen Jarva (ON Project Manager, ENA) |
| 12 | 16:10 | 16:15 | 5 | **AOB** | Maxine Frerk (Challenge Group Chair) |

# Recent industry developments and ON impact

## Ofgem's letter to Open Networks

Maxine Frerk (Challenge Group Chair)/ Joseph Cosier & Fiona Campbell (Ofgem)

# ENA Open Networks 4th and 5th July Focus Groups

Reece Breen Begadon (ON Technical Advisor, ENA)

# Focus group sessions

**Topics on Tuesday 4 July:**

- Implementation of DER visibility
- Carbon reporting
- Settlement process

**Topics on Wednesday 5 July:**

- Flexibility products
- Procurement process
- Primacy rules

**Overview**

- Good turnout and retention and quality of discussion
- Most workings groups have direct support and/or actionable feedback
- All  working groups in the process of incorporating the feedback ahead of approval next month(s)

ena energynetworks association

## Do you want to help shape the future of local flexibility markets?

ENA's Open Networks programme is working with all the UK network companies to make it easier for flexibility providers to engage with the market, whilst improving transparency of network planning and decision-making, and making energy networks more coordinated and aligned.

Open Networks is inviting subject matter experts and relevant stakeholder to participate in a series of focus group sessions to help shape the developments within the local flexibility markets.

Split into multiple technical discussions across two days, these focus group sessions will be a great opportunity to raise series of queries for open discussion on key areas in the programme.

**Topics on Tuesday 4 July:**

- Implementation of DER visibility
- Carbon reporting in flexibility
- Settlement process for local flexibility services

**Topics on Wednesday 5 July:**

- Standardisation of flexibility products
- Standardisation of flexibility services procurement process
- Primacy rules to manage service conflict

To find more details on the logistics, purpose of the session and key the discussion points, please click on the links below:

- Tuesday 4 July focus groups
- Wednesday 5 July focus groups

To express your interest in attending one or any number of the sessions listed above, please complete this sign up form.

If you have any queries, please contact: opennetworks@energynetworks.org

# Overall attendance and demographic

- **71 People** registered to attend the focus group sessions


# Carbon reporting for flexibility services

## Summary

- Stakeholders agreed with the proposed approach to incorporating asset specific information.
- Two alternative sources of data for time series marginal grid intensity factors were identified.
- Some push back from stakeholders on the use of timeseries grid intensity factors.
- Some attendees offered data to help understand these variances better.

## Organisations

- Pod point;
- Strath ;
- CUB UK;
- Consumer Scotland;
- Smarter grid solutions;
- Drax Group;
- Energy UK;
- Futurofirma
- Sustainability Consulting Ltd;
- EV Energy;
- Piclo energy

## Attendance

- Attendance: 28 registered and 15 attended.
- Retention: 87%

# Settlement process

## Summary

- The TWG have all the feedback they need to prioritise alignment of the key settlement parameters
- Strong support for the "minded to positions" of each of the parameters presented to the attendees.
- Recommendation to align towards the COP 11 metering standards as part of the settlement process standardisation.

## Organisations

- CUB UK;
- Consumer Scotland;
- EV energy;
- Low carbon;
- Piclo energy;
- Nodes market;
- Flexitricity;
- Axle Energy;
- Electralink;
- British gas;
- Energy UK;
- Oaktree power;
- EV energy

## Attendance

- Attendance: 35 registered and 16 attended.
- Retention : 100%

# Standardisation of flexibility products

## Summary

- Positive Feedback received in support of the groups alignment strategy and appreciated the efforts made to break everything down in a clear manner. The diagram outlining their proposal was received well.
- The attendees were keen for the proposed online market decision tool where providers can input the answers to some questions about their flexibility assets (such as speed of response) and the tool indicates which flexibility products they can provide

## Organisations

- Consumer Scotland;
- Oak tree power;
- CUB UK;
- British gas;
- Energy UK;
- Axle energy;
- Octopus;
- Centrica;
- Piclo;
- Electralink;
- EV energy ;
- AMP Energy;
- Smartest energy;

## Attendance

- Attendance: 35 registered and 22 attended.
- Retention : 100%

# Standardisation of procurement process

## Summary

- There were recommendations to expand the demand type list drop-down and suggestions to provide guidance on how to answer the questions.
- Overall, in support of the proposed templates for commercial and technical criteria and technical working group have all the feedback they need to finalise the technical criteria template.

## Organisations

- CUB UK;
- Consumer Scotland;
- EV energy;
- Low carbon;
- Piclo energy;
- Nodes market;
- Flexitricity;
- Axle Energy;
- Electralink;
- British gas;
- Energy UK;
- Oaktree power;
- EV energy;

## Attendance

- Attendance: 31 registered and 20 attended.
- Retention : 85%

# Primacy rules

## Summary

- Support for the proposed approach to developing primacy rules. - a more data-driven approach, rather than focusing on the development of specific use cases.
- Not much more feedback was given at the session in relation to the content presented.
- Attendees were pleased to see that a comms strategy was being developed to ensure that stakeholders are kept aware of developments in this space.

## Organisations

- Sygensys;
- Consumer Scotland;
- Energy UK;
- Nodes market;
- Smarter grid solutions;
- Piclo;
- Flexitricity;
- Centrica;
- British gas;

## Attendance

- Attendance: 28 registered and 14 attended.
- Retention : 93%

# Implementation of DER visibility

## Summary

- The findings from previous stakeholder engagements were presented to the group, these previous engagements identified the range of steps asset developers would have to take to harmonise the DNO-DER data exchange.
- Not much feedback was given in response to the presentation.
- However, no one expressed any concerns or disagreement with the findings from the previous stakeholder sessions.

## Organisations

- Consumer Scotland;
- Energy UK;
- AMP X;
- CUB UK;
- New Flexibility technologies;
- British Gas;
- Strath;
- Sygensys;
- University of Edinburgh;
- Pod Point;
- VTS Energy;
- Smarter grid solutions;
- Flexitricity;
- Piclo energy;
- Low carbon;
- Smartest energy UK;
- GTC UK;
- Electralink;
- EV Energy

## Attendance

- Attendance: 42 registered and 24 attended.
- Retention : 79%

# ON Success Framework and Flex Figures

Final view of ON success criteria and implementation tracking framework and 2022/2023 Flex Figures

Avi Aithal (Head of Open Networks, ENA)

# Break

# Primacy Rules

Stuart Fowler (NG ESO) and Luke Harker (NG ED)

(Technical working group co-leads)

# Agenda

- Comms Plan
- DNV Report
- Recap on plan
- Data Mapping Progress
- Next Steps

# Comms Plan and DNV Report

## Comms Plan

- Living document that will be maintained detailing approach to stakeholders and when we will communicate with them
- Approved  by Technical Working Group
- To be signed off by Steering Committee today

## DNV Report

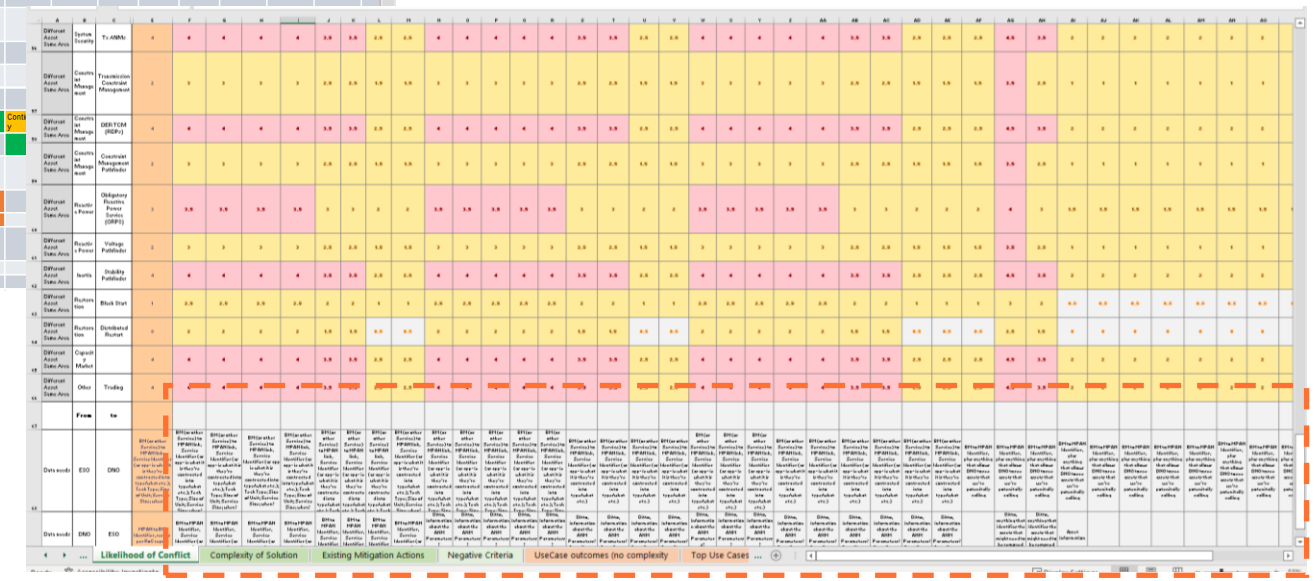
- Extensive reviews by the Technical Working Group
- Recommendation to Steering Committee to approve release
- Still sorting out access to underlying data (there is lots of it)

# Planning and Progress- Recap

| | Task | Sub-Task | Owner | 24th May | 31st May | 7th Jun | 14th Jun | 21st Jun | 28th Jun | 5th Jul | 12th Jul | 19th Jul | 26th July | 2nd Aug | 9th Aug | 16th Aug | 23rd Aug | 30th Aug | 6th Sep | 13th Sep | 20th Sep | 27th Sep | 4th Oct | 11th Oct | 18th Oct | 25th Oct | 1st Nov | 8th Nov | 15th Nov |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | Review Data | | SF/LH | | | | Contingency | Contingency | Completion | | | | | | | | | | | | | | | | | | | |
| 3 | | ESO | SF | | | | Contingency | Contingency | | | | | | | | | | | | | | | | | | | | |
| 4 | | DNO | All | | | | Contingency | Contingency | | | | | | | | | | | | | | | | | | | | |
| 5 | Review Process | | SF/LH | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | ESO | SF | | | | Report back | | | | | | | | | | | | | | | | | | | | | |
| 7 | | DNO | All | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Review Legal | | SF/LH | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | ESO | SF | | | | | Report back | Contingency | Contingency | | | | | | | | | | | | | | | | | | |
| 10 | | DNO | All | | | | | | Contingency | Contingency | | | | | | | | | | | | | | | | | | |
| 11 | Create Project & Comms Plan | ESO/DNO | All | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Share with SG | | All | | | | | | | Contingency | Contingency | | | | | | | | | | | | | | | | | |
| 13 | Publish DNV work | | ENA | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Create changes to industry documents | | ESO/ENA/DNO's | | | | | | | | | | | | | Contingency | | | | | | | | | | | | |
| 15 | Prioritise use cases (impact assessment with RDP's) | | All | | | | | | | | | | | Contingency | Contingency | | | | | | | | | | | | | |
| 16 | Share with SG & Stakeholders | | SF/LH | | | | | | | | | | | | | Contingency | | | | | | | | | | | | |
| 17 | Consultation on changes | | ENA | | | | | | | | | | | | | | | Contingency | | | | | | | | | | |
| 18 | Implementation Proposals | | All | | | | | | | | | | | | | | | Contingency | | | | | | | | | | |
| 19 | Consultation on Proposals | | ENA | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Closure of consultation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Review Feedback and reissue final position | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Develop plans & share with SG | | DNO's | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | ESO | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Refresh Plans as required & share with SG | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Plan

Process for mapping data exchanges against the Use Cases has started



# Data Mapping Exercise- Progress

- ESO is sorting out approvals to release Aggregated BMU data to DNO's
- Group has been going through the various data items and enabling data
- Expect to approve it over summer & then release proposals to "increment 2" to include additional Use Cases
- Arranging an IT Meeting to discuss how we propose to exchange data (currently may use Data Portals)
- ESO has offered to run a PoC within the SMP Programme to test Primacy Rules in BaU (dependency on agreement of enabling data exchange)- this could increase the pace of implementation even further

# Next Steps

- Continue to progress “buckets” of Use Cases grouped by data exchange requirements
- Resolve IT solution to support this
- Provide regular updates to stakeholders
- Agreement to run a PoC within the SMP Programme (with DNO’s to consider)

# Questions

- Does approach sound sensible?
- Is there more that we could do to communicate progress better? E.g. would a monthly update on the website be advantageous?
- Are there any thoughts on what would increase the pace of change further?

# Flexibility Products

Guy Shapland (SPEN-D) (Technical working group co-lead)

# Introductions

- ENA Open Networks - Market Development - Flexibility Products Technical Working Group
- The Group Members

| Flexibility Products Technical Working Group | | |
|---|---|---|
| Laura Brown | NPg | Co-Lead |
| Guy Shapland | SPEN | Co-Lead |
| Reece Breen Begadon | ENA | |
| Matt Watson | NGED | |
| Sam Do | UKPN | |
| Catherine Winning | SSEN | |
| Keith Evans | ENWL | |
| Cormac Bradley | NIEN | |
| Aoife Bradish | ESB | |
| Damien Kelly | NGESO | |
| Apostolos Koutras | GTC/BUUK | |

## Session Plan

- Introduce the challenge we have
- Ask some initial questions of the group
- Explain our scope
- Introduce our approach to solving the challenge
- Check your understanding as we go along

# Current Distributed Flexiblity Product List

- The ENA ON have developed four distinct, standardised Distribution Flexibility Market Products

| Product | DNO Requirement* | Payment and Dispatch Structure* |
|---|---|---|
| **Sustain** | To manage an ongoing requirement to reduce peak demand | Typically, dispatch is scheduled well in advance for a fixed fee |
| **Secure** | To manage peak demand on the network, usually weekday evenings | Predominantly paid based on utilisation, but with some use of availability payments also. Timing of dispatch can varies by DNO |
| **Dynamic** | To support the network during fault conditions, often during maintenance work | Typically dispatched at short notice with low availability payments and high utilisation payments |
| **Restore** | To support the network during faults that occur as a result of equipment failure | Typically dispatched at short notice with low availability payments and high utilisation payments |

* Original design use

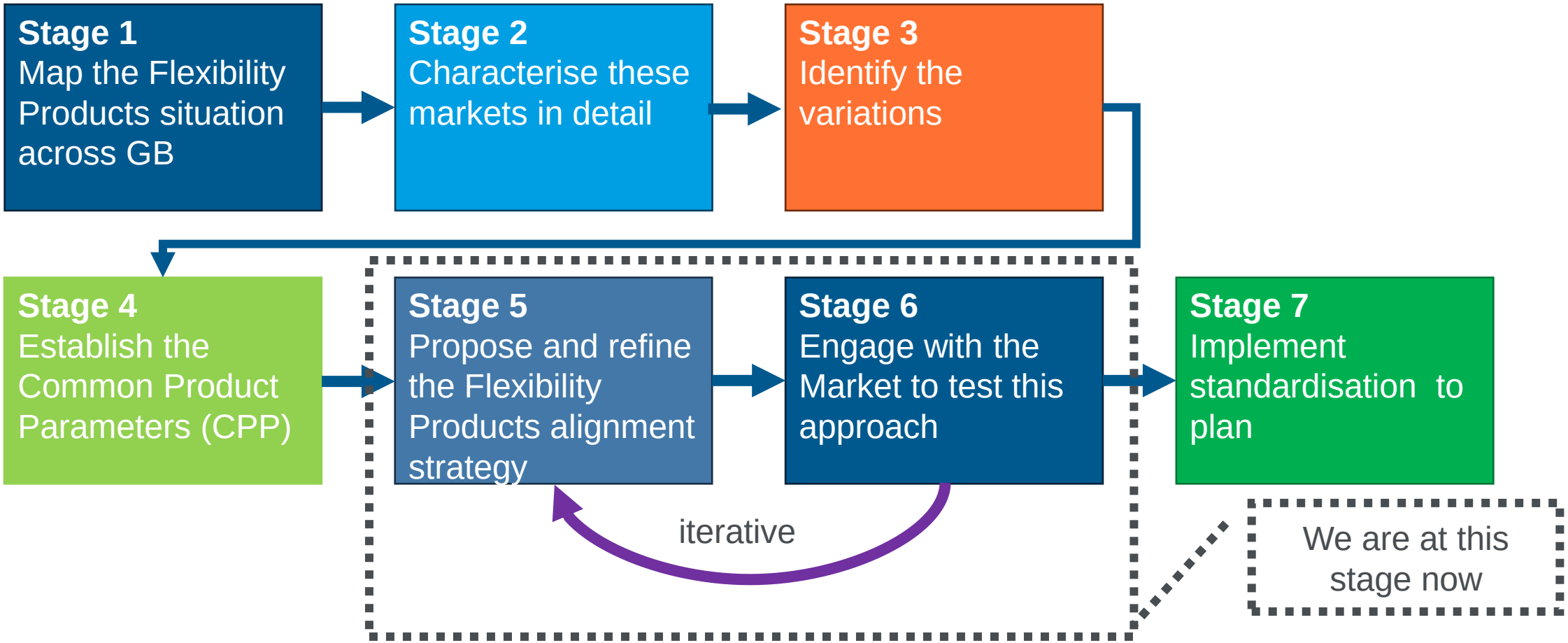
# Flexibility Products Alignment

- As the GB Distributed Flexibility Services market has matured, the use cases for the standardised Distribution Flexibility Market Products has expanded
- The four Products have been used to facilitate a range of new and interesting markets increasing market fluidity extensively
- However, due to local technical reasons and/or market reasons (such as FSP capabilities) some localised deviation in utilisation approach has been taken by the Network Companies
- Responses to our Stakeholder Survey 2022 have suggested that Flexibility Service Providers (FSPs) would prefer more clarification of the difference and ideally to **align the products** again by definition




# Approach

# Approach: Alignment of the Flexible Products across GB and IRE



# Stage 1: Map the Flexibility Products situation across GB Approach continued

- For each strand a defined list of **Common Product Parameters** are described
- They provide the **characteristics** the Market Provider can utilise to describe the Flexibility Service Need
- A small, finite list of options are available to complete the definition of the Flexibility Product

- **For example:-**
  - Common Product Parameter Name: Availability Payment Unit
  - Aligned Definition: The Units used for Availability Payments
  - Aligned Options available: £/MW/h
    £/MWh
    £/h

**Stage 1**
Map the Flexibility Products situation across GB

# Stage 1: Map the Flexibility Products situation across GB and IRE
# Status of deployment as of March 2023

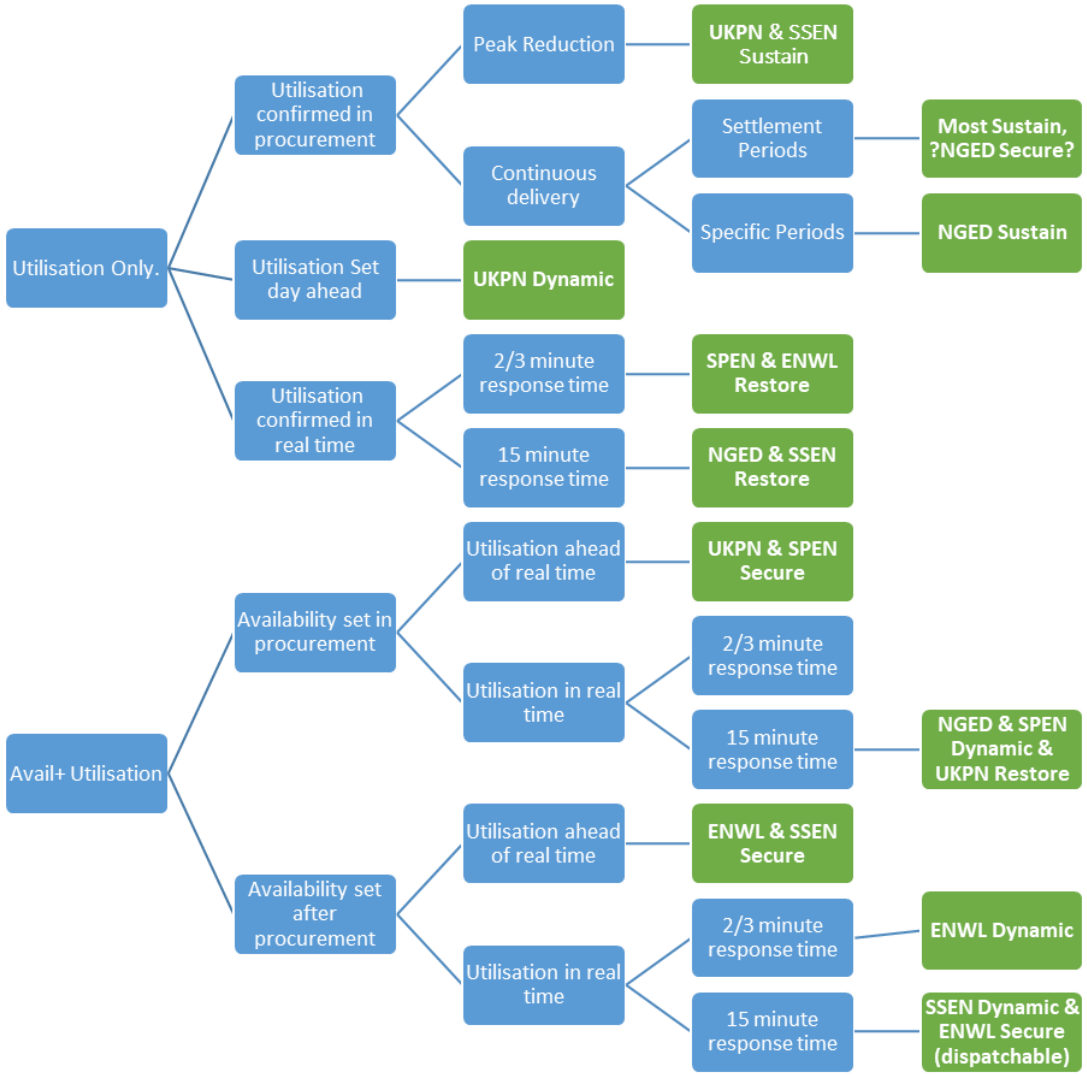
| Deployment of Products by Network Company | | | | |
|---|---|---|---|---|
| As of March 2023 | Sustain | Secure | Dynamic | Restore |
| ENWL | Tendered (Not Dispatched yet) | Tendered/Progressed Procurement (Not Dispatched yet) | Tendered/Progressed Procurement (Not Dispatched yet) | Tendered (Not Dispatched yet) |
| SSEN | Scheduled Service | Tendered | Dispatched | Dispatched |
| SPEN | LV Sites to be dispatched from Nov 2023 | Dispatched | Dispatched | No |
| NPG | Dispatched | No | No | No |
| UKPN | Scheduled Service | Dispatched | Dispatched | Dispatched (in testing mode only) |
| NGED | Completed trials BAU Tendering and progressing procurement | Dispatched | Dispatched | Dispatched (in testing mode only) |
| ESB | Tendering Planned Q4 2023 | Tendered/Progressed Procurement (Dispatched in test mode) | Tendered/Progressed Procurement (Dispatched in test mode) | Tendered (Not Dispatched yet) |
| NIE | Procured but not called on it yet | Dispatched | Tendered/Progressed Procurement (Dispatched in test mode) | No |

**Stage 1**
Map the Flexibility Products situation across GB

# Stage 2, 3 and 4 : Outcome of assessing the variations

Product Characteristic

Mapped to DNO




**Stage 3**
Identify the variations

# Stage 2, 3 and 4 : Characterise and assess the variations

## Outcome from our mapping exercise (GB)

**Stage 3**
Identify the variations

| Payment Structure | Availability Request Timing | Utilisation Instruction and timing | Delivery Expectation | Maximum Response Time | Availability Period | ENWL | NPG | NGED | SPEN | SSEN | UKPN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Utilisation Only | - | Utilisation confirmed in procurement | Peak Reduction | - | Settlement Periods | | | | | Sustain | Sustain |
| | | | Continuous delivery | | | Sustain | Sustain | Secure | Sustain | | |
| | | | | | Specific Periods | | | Sustain | | | |
| | | Utilisation set day ahead | | | Settlement Periods | | | | | | Dynamic |
| | | Utilisation confirmed in real time | | 2 to 3 minute response time | | Restore | | | Restore | | |
| | | | | 15 minute response time | | | | Restore | | Restore | |
| Availability and Utilisation | Availability set in procurement | Utilisation ahead of real time | | - | | | | | Secure | | Secure |
| | | Utilisation in real time | | 2 to 3 minute response time | | | | | | | |
| | | | | 15 minute response time | | | | Dynamic | Dynamic | | Restore |
| | Availability set after procurement | Utilisation ahead of real time | | - | | Secure | | | | Secure | |
| | | Utilisation in real time | | 2 to 3 minute response time | | Dynamic | | | | | |
| | | - | | 15 minute response time | | Secure D* | | | | Dynamic | |

*Secure D = Secure Dispatchable

# Common Product Parameters

# Stage 4 : Common Product Parameters

- The products are characterised in three main strands of alignment area
  - Structure
  - Availability
  - Utilisation
- Some elements will not be aligned as they are specific to a site specific variable:-
  - Flexibility Zone
  - Distributed Energy Resource (DER)

**Stage 4**
Establish the Common Product Parameters (CPP)

# Stage 4 : Common Product Parameters – Structure

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Structure** | Payment Structure | How the service is structured.<br>(i.e. what is the DNO asking of the FSP) | Utilisation Only, Availability and Utilisation * |
| | When prices are set (procurement timescales) | Time before use that prices are determined | - Years, Months, Weeks, Days,<br>- Or Operational |

**Stage 4**
Establish the Common Product Parameters (CPP)

*proposing to remove Availability Only option as only used at ESO

# Stage 4 : Common Product Parameters – Availability (Page 1 of 2)

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Availability** | Availability Request Mechanism | How availability is requested from providers | Request initiated by DNO, Request Initiated by FSP |
| | Availability Request Timing | When availability is requested from providers | procurement, operational |
| | Availability Changes Allowed? | Can FSPs change their availability declaration post acceptance? | Yes, No |
| | Minimum Aggregate Unit Size | The minimum volume requirement for provision of availability | e.g. 50kW, 1MW, N/A |
| | Partial Availability Acceptance Possible? | Whether the DNO can accepted a portion of the offered volume | Yes, No |

**Stage 4**
Establish the Common Product Parameters (CPP)

# Stage 4 : Common Product Parameters – Availability (Page 2 of 2)

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Availability** | Time Variable Availability Volumes Allowed | Can the FSP provide different volumes for availability for the different periods within the availability window? | Yes, No |
| | Availability Payment Unit | The Units used for Availability Payments | £/MW/h, £/MWh, £/h |
| | Availability Period | The unit of time considered for Availability Instructions | EFA blocks*, Settlement Periods, Minutes |

*EFA - Electricity Forward Agreement
EFA Blocks – time frames in which electricity is traded

**Stage 4**
Establish the Common Product Parameters (CPP)

# Stage 4 : Common Product Parameters – Utilisation (Page 1 of 2)

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Utilisation** | Utilisation Payment Unit | The Units used for Utilisation Payments | £/MWh, £/MW/season |
| | Utilisation Period | The unit of time considered for Utilisation Instructions | EFA blocks, Settlement Periods, Minutes |
| | Delivery Expectation | How the FSP is expected to respond to a utilisation instruction | ▪ Continuous (a sustained delivery over the entire utilisation window)<br>▪ Peak Delivery (targeting the maximum response that can be delivered within the window)<br>▪ Maximum generation cap |
| | Maximum Response Time | Time from Utilisation Instruction to full output | Procurement, 15mins, 2 mins |
| | Payments during response time? | Are FSPs paid during the response time | Yes, No |

**Stage 4**
Establish the Common Product Parameters (CPP)

# Stage 4 : Common Product Parameters – Utilisation (Page 2 of 2)

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Utilisation** | Minimum Utilisation Time | The minimum time a unit can be instructed for | 60 minutes (Hour), 30 minutes (Half Hour) |
| | Minimum Utilisation Volume | The minimum volume that can be instructed | kW |
| | Utilisation Instruction Timings | Timeframes in which utilisation Instructions are communicated. | Procurement (long-term), Operational (short-term/real-time, Medium-term |
| | Partial Utilisation Instruction possible | Whether the DNO can instruct a portion of the available volume | Yes, No |
| | Time Variable Utilisation Volumes Allowed | Can the DNO vary the utilisation instruction for the different periods within the availability window? | Yes, No |

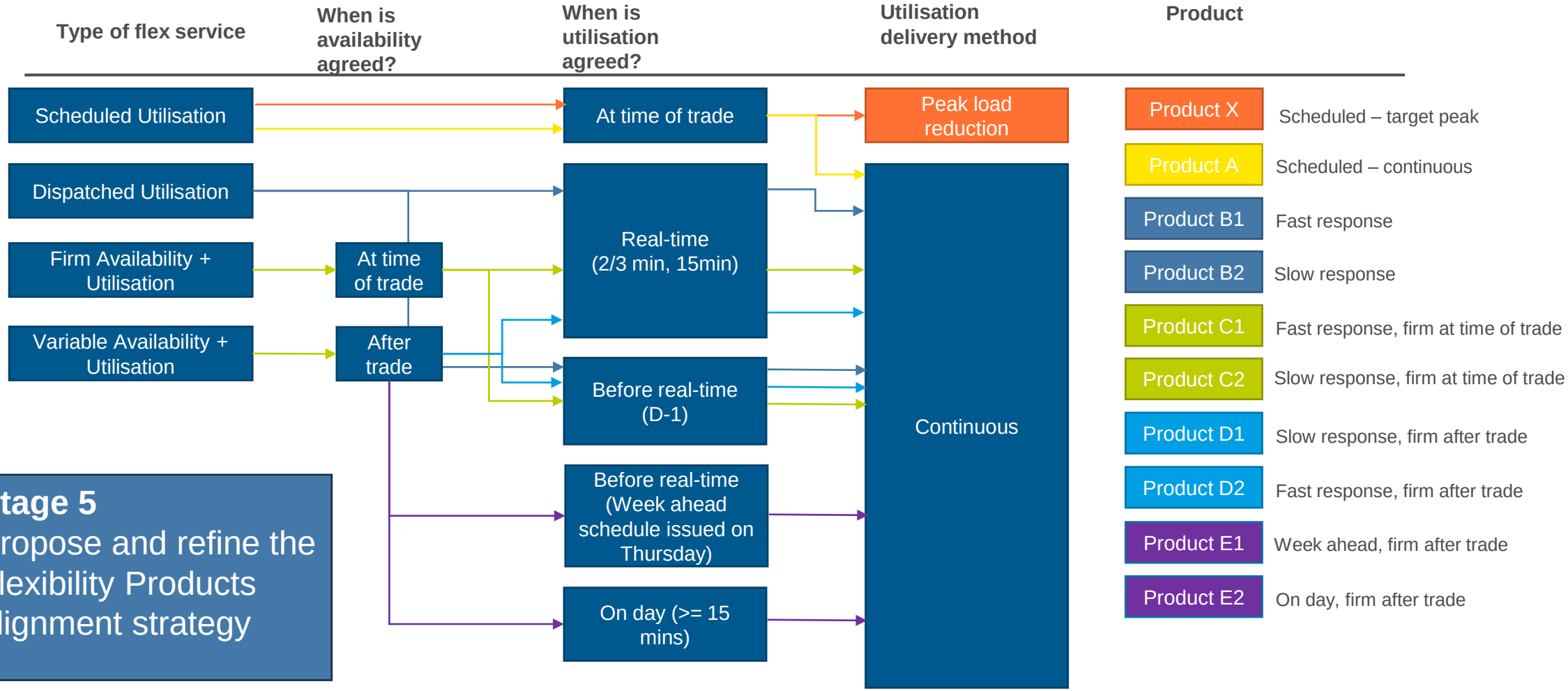
# 5: Propose and refine the Flexibility Products alignment strategy Future State – our initial proposal for consolidation

- **We are proposing to refine the way we describe the products to assist the market in understanding our network need under four strands of flexibility service**
  - Scheduled Utilisation
  - Dispatched Utilisation
  - Firm Availability and Utilisation
  - Variable Availability and Utilisation
- **This will take into account**
  - When the availability is agreed with the FSP
  - When utilisation is agreed
  - The utilisation delivery method

**Stage 4**
Establish the Common Product Parameters (CPP)

# 5: Propose and refine the Flexibility Products alignment strategy

## Future State – our initial proposal for consolidation




**Stage 5**
Propose and refine the Flexibility Products alignment strategy

# Open Networks 2023 – Flexibility Products TWG Outcomes plan

## Next steps for the Active Power Product Outcome

| | |
|---|---|
| 1. Collate the responses to the proposals | FP TWG |
| 2. Make final decision on the proposal | ENA Steering Group |
| 3. Establish the implementation plan | FP TWG and DNOs/DSOs |
| 4. Broadcast the changes to the market | ENA |
| 5. Implement | DNOs/DSOs |

| Key |
|---|
| Annual update |
| Development stage |
| Stakeholder engagement |
| Implementation |
| Continuation of group or work |

| Workstream | Technical working group | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Market Development | Flexibility Products | Updated active power product definition/specification | | | | | | | | | | | |
| | | | | | | | Implementation plan | | | | | | |
| | | | | | | | | | | Implementation and revision as appropriate | | | |
| | | | | | | | | | | Flexibility Product Catalogue Stackability update | | | Non-standard products review |

# Examples of Market Characterisations specific to Flexibility Zones

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **Technical Requirement** | Product Type | | Active Power, Reactive Power |
| | Service Direction | | GTD/DTU, GTU/DTD* |
| | Ramp Rate | Time from Turn up to full output | |
| | Islanded operation capability | | Yes, No |
| | Utilisation Likelihood | Estimation of incidence of occurrence | |
| | Availability Forecast | | MWh |
| | Utilisation Forecast | | MWh |
| **Commercial Requirement** | Availability Ceiling Price | The maximum availability price that can be accepted | |
| | Utilisation Ceiling Price | The maximum availability price that can be accepted | |



*Generation Turn Down/Demand Turn Up, Generation Turn Up/Demand Turn Down

# Examples of Market Characterisations specific to DER

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **DER Specific** | Response Time | | |
| | Maximum Run Time | | |
| | Minimum Run Time | | |

# Examples of Market Characterisations specific to DER

| Purpose | Parameter Name | Description | Options |
|---|---|---|---|
| **DER Specific** | Response Time | | |
| | Maximum Run Time | | |
| | Minimum Run Time | | |

# Settlement Processes

Gavin Stewart (SSEN-D) and Tariq Hakeem (NG ESO)

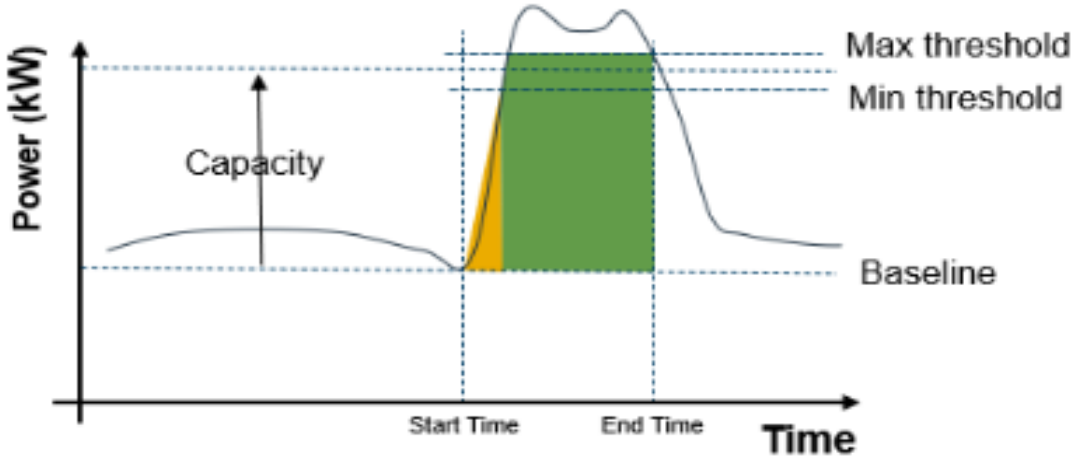
(Technical working group co-leads)

# Settlement Overview

# Introduction to Settlement

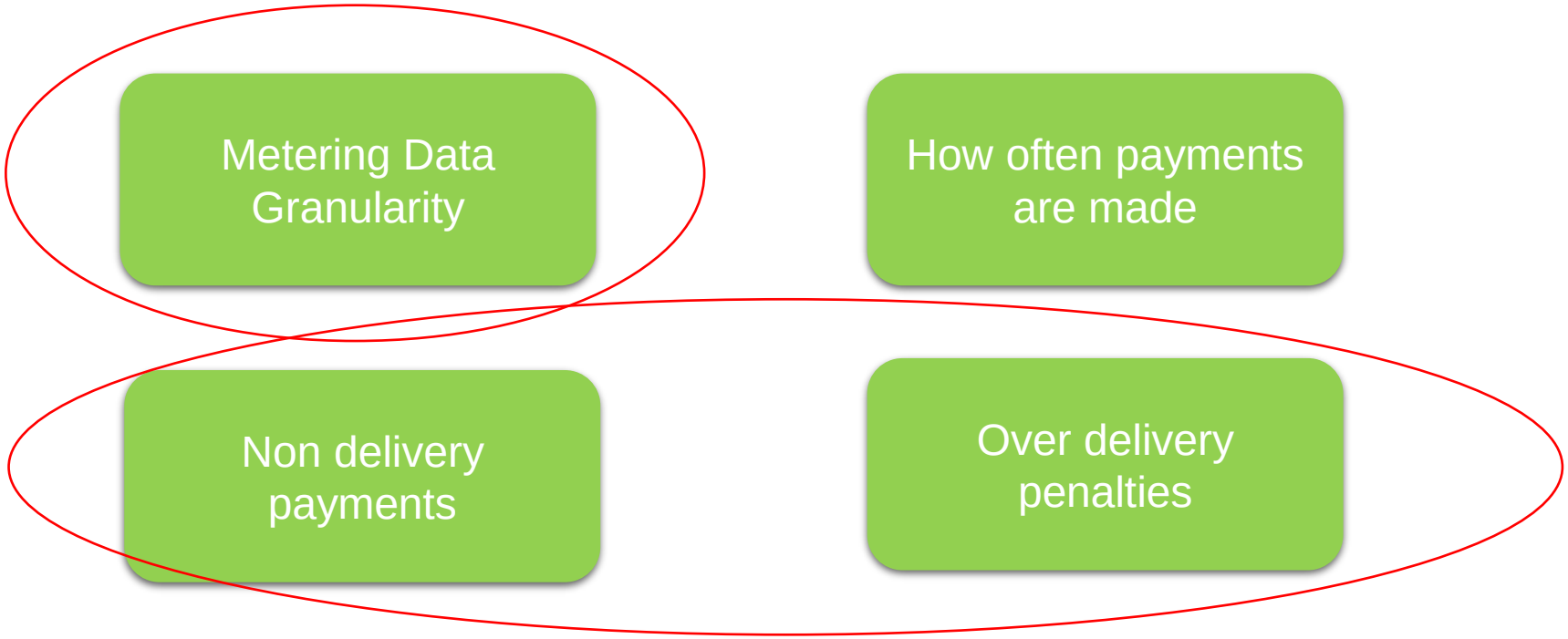
Main Outcome:

**Settlement process for the standardised flexibility service products to follow common settlement process by April 2024**

# Goal 1: Stakeholder Priorities

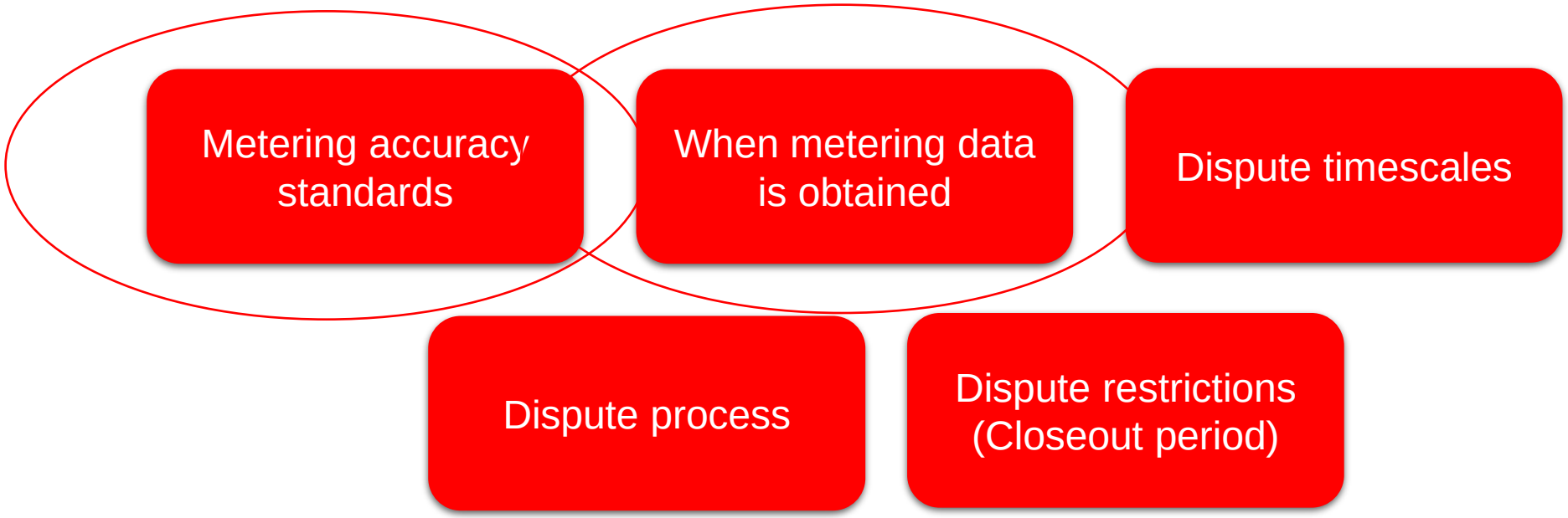
# Majority of DNO's aligned



# Some DNO's aligned

- Metering Data requested
- Site meter location (boundary or asset)
- End-to-end process timescales
- How delivery is measured
- Application of Baselining
- Under delivery penalties
- What performance information is shared

# Few DNO's aligned



# Out of Scope

| | Minded to position | | Minded to position |
|---|---|---|---|
| How metering data is transmitted | DNO's to facilitate either API or CSV formats. However, DNO's are not required to facilitate both. Minded to position is to standardise on API and CSV parameters. | Baselining methodology used | Baselining methodology was developed by previous ON products and should already be aligned. |
| Payment process (manual/automatic) | DNO's to facilitate manual or automated billing. However, DNO's are not required to facilitate both. | | |
| How payments are made | DNO's to facilitate self-billing or invoicing billing. However, DNO's are not required to facilitate both. | | |

# Summary

No major issues with it being out of scope this year.
However, there is a view we should continue to work towards standardising on a single method for interface and billing

# Minded to position

# Minded to

| | Minded to position | Feedback |
|---|---|---|
| Metering Data requested | Agree a common set of parameters, compatible with both API and CSV formats | accepted |
| Site meter location (boundary or asset) | DNO's to facilitate asset or boundary metering locations. However, DNO's are not required to facilitate both. | accepted |
| End-to-end process timescales | DNO's to agree maximum timescales for each stage in the process. | accepted |

# Minded to

| | Minded to position | Feedback |
|---|---|---|
| How delivery is measured | Agree common calculation methodology for measuring delivering against baseline | accepted |
| Application of Baselining | Agree when baselining is applied | accepted |
| Under delivery penalties | Agree a common threshold for under delivery non-payment | accepted |

# Minded to

| | Minded to position | Feedback |
|---|---|---|
| What performance information is shared | Agree on a common parameters to be shared | accepted |
| Metering accuracy standards | Agree on a common metering standard | accepted - Cop 11 recommended |
| When metering data is obtained | Agree a common timeframe for when metering data is obtained | accepted |

# Minded to

| | Minded to position | Feedback |
|---|---|---|
| Dispute timescales | Align on dispute timescales (potential to be covered by Standard Agreement TWG) | accepted |
| Dispute process | Align on dispute process (potential to be covered by Standard Agreement TWG) | accepted |
| Dispute restrictions (Closeout period) | Align on dispute process (potential to be covered by Standard Agreement TWG | accepted |

# Summary

Stakeholders were comfortable with minded to positions. Continued engagement as we implement would be useful.
CoP 11 recommended for Metering Standards.
Link: New BSC Code of Practice (CoP11) sets standards for accuracy of Asset Metering Systems - Elexon BSC

# Goal 2: Metering Data

# Metering Data – Minded to position

- Build on last year's work and create a standard format for .CSV file.
- Review outcome of Dispatch system Interoperability and potentially adopt API standard.
- Build on last years work and create a standard parameter list for API's.

| | | Parameter | Example |
|---|---|---|---|
| **Status monitoring of services** | **Operational Metering / Delivery Readings** | Service Operator | Flex Serv |
| | | Dispatch Unit | Gen Set 5 |
| | | Start Time | 5/6/2022 18:01 |
| | | End Time | 5/6/2022 18:02 |
| | | Average Meter reading | 10 |
| | | Service Units | MW |
| | | Reading period | 30 mins / 1 min |
| | | Delivery Volume | 5 MWh |
| | | Baseline | |
| | **FSP status** | Service Operator | Flex Serv |
| | | Dispatch Unit | Gen Set 5 |
| | | Status | |
| | | Remaining service volume | 5 MWh |
| | | remaining Run time | 2 Hours |

# Minded to position - feedback

1) Are there any additional parameters required?
   No comments
2) Are there any parameters challenging to provide?
   No comments

3) As an FSP, do you have a preference with regards to .CSV and API?
   API as preference, however, there is an understanding not all service providers can provide it.

4) Are there any other formats for providing data we should consider?
   No comments: assume accepted

| | | Parameter | Example |
|---|---|---|---|
| **Status monitoring of services** | **Operational Metering / Delivery Readings** | Service Operator | Flex Serv |
| | | Dispatch Unit | Gen Set 5 |
| | | Start Time | 5/6/2022 18:01 |
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| | | Baseline | |
| | **FSP status** | Service Operator | Flex Serv |
| | | Dispatch Unit | Gen Set 5 |
| | | Status | |
| | | Remaining service volume | 5 MWh |
| | | remaining Run time | 2 Hours |

# Goal 3: Performance Incentives

# Performance Incentives

1) Should DNO's consider penalties for non-delivery?
   Monitor performance
   Remove contract
   Award good performance
   In terms of %, what threshold for non- delivery and for under delivery should be considered?
   Baselining dominated part of this discussion
   General view, 65% for non-delivery, 90% for under delivery,
   Need to be made clear in the contracts and dispatch instruction.
2) For under delivery, how should penalties be applied?
   (% reduction in payment, scaled based on delivery vs requested)
   proportionate pay in-between if there is value to the DSO

3) Are there other incentives to consider to help avoid under/non delivery?
   Incentives/penalties applied to different sized assets than smaller assets. [treating assets differently]

4) On a scale of 1 -10 (10 being very and 1 being not at all) how much does penalties restrict market liquidity?
   Didn't get a number but general opinion was it would restrict the market significantly.

# Implementation Tracker

## Go to tracker

# Q&A

# Agreeing the next Challenge Group agenda

Avi Aithal
(Head of Open Networks, ENA)

# Upcoming ENA events

Helen Jarva
(Open Networks Project Manager, ENA)

# Upcoming ENA events

## Oxford Energy Innovation Forum

### 19 September 2023, 090:00 – 17:00

Register here for an SSEN-hosted in-person tour and demonstration of elements of Project LEO & TRANSITION, followed by presentations of similar, flexibility-focused innovation projects from other networks.

## Open Networks Insights Forum

### 28 September 2023

Register here to attend the next Open Networks Insights Forum on the 28th September.

## Energy Innovation Summit

### 31 October – 01 November 2023

Join us in Liverpool for this year's Energy Innovation Summit (and Halloween!). Registration will open on the ENA website in Summer.

# AOB

# Useful Links

ON 2023 launch document

2023 Detailed work plan

2023 Strategic Roadmap for Flexibility

Stakeholder events

***We welcome feedback and your input***

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