Open Networks Challenge Group

5th May 2022
<table>
<thead>
<tr>
<th>Item</th>
<th>Start</th>
<th>Finish</th>
<th>Time</th>
<th>Item</th>
<th>Presenter</th>
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<td>5</td>
<td>Welcome</td>
<td>Maxine Frerk (Challenge Group Chair)</td>
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<td>Challenge Log</td>
<td>Maxine Frerk (Challenge Group Chair)</td>
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<td>3</td>
<td>14:10</td>
<td>14:20</td>
<td>10</td>
<td>Recent flexibility developments</td>
<td>Ben Godfrey (Flexibility Services Chair) Andy Wainwright (Whole Energy System Chair)</td>
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<td>4</td>
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<td>Standard Agreement (WS1A P4)</td>
<td>Andy Rice (Product lead)</td>
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<td>Procurement Processes (WS1A P2)</td>
<td>Steve Miller (Product co-lead) Helen Sawdon (Product co-lead)</td>
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<td>14:55</td>
<td>15:00</td>
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<td>7</td>
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<td>20</td>
<td>Dispatch Interoperability and Settlement (WS1A P3)</td>
<td>Joe Davey (Product lead) Tariq Hakeem (Product lead)</td>
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<tr>
<td>8</td>
<td>15:20</td>
<td>15:35</td>
<td>15</td>
<td>Whole Systems CBA (WS4 P1)</td>
<td>Ian Dunstan (Product Lead) Gary Dolphin (Product Lead)</td>
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<tr>
<td>9</td>
<td>15:35</td>
<td>15:55</td>
<td>20</td>
<td>Common Evaluation Methodology (WS1A P1)</td>
<td>Simon Brooke (Product Lead)</td>
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<tr>
<td>10</td>
<td>15:55</td>
<td>16:05</td>
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<td>11</td>
<td>16:05</td>
<td>16:20</td>
<td>15</td>
<td>2023 Scope development kick-off</td>
<td>Sotiris Georgiopoulos (ON Chair) Avi Aithal (ON Technical Lead)</td>
</tr>
<tr>
<td>12</td>
<td>16:20</td>
<td>16:30</td>
<td>10</td>
<td>CG areas of interest</td>
<td>Avi Aithal (ON Technical Lead)</td>
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<tr>
<td>13</td>
<td>16:30</td>
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<td>25</td>
<td>Structure &amp; content of future Challenge Group sessions</td>
<td>Maxine Frerk (Challenge Group Chair)</td>
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<tr>
<td>14</td>
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<td>17:00</td>
<td>5</td>
<td>AOB</td>
<td>Maxine Frerk (Challenge Group Chair)</td>
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</table>
Recent flexibility developments

Recent industry developments and flexibility workstream activities

Ben Godfrey (Flexibility Services Chair)
Andy Wainwright (Whole Energy System Chair)
Standard Agreement (WS1A P4)

Seeking input on recommended changes to contract schedules

Review material: Gap analysis paper

Andy Rice (Product team lead, NG-ESO)
Proposed schedule structure

During 2022 the P4 workstream are looking to align the schedules that support version 2 of the Standard Agreement. The proposed schedules are based on the current NGESO service based structure. Some of the benefits of moving to this service structure are as follows:

• Easier for providers to onboard as all legal and technical documents relating to that service are located in the same service structure

• Easier to isolate services when consultations for changes / amendments are required

• Allows for different requirements of individual services

• Across the services the structure and the look and feel of the documents will be consistent
The ‘schedule’ is now replaced by ‘Service Terms’ – which includes elements from existing schedule 1 and 2, i.e. service description, requirements, service window tables, charging and payment details.

Service specific glossary as required

Detail which was included in Schedules 4, 5, 6 & 7 of DNO agreements, and supporting detail from ESO suite now included in named Annex’s – i.e. Communications, Performance Monitoring, Technical Requirements

Such as Sites/DER details, Form for unavailability, Performance reports and ESO templates

ESO Forms A, B and C, DNO Agreement ‘form’, contract award notice
<table>
<thead>
<tr>
<th>Service Terms</th>
<th>ESO Element</th>
<th>Title sections (V1.2/ESO)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 1 - Service Description</td>
<td>Service Terms</td>
<td>Permitted Extensions &amp; Periods, Service Parameter Tables, Service Failure Reporting, Service Window Tables, Service Requirements, Invoicing Process (if different to Clause 11) Charges and Calculation tables, Reduction, Withholding and recovery of payment detail (if required)</td>
<td></td>
</tr>
<tr>
<td>Schedule 2 - Flexibility Service Charges</td>
<td>Service Terms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule 4 - Communications</td>
<td></td>
<td>Representative, Process and systems for Communication, Acceptance of Instructions, Reporting and Escalations Process</td>
<td>DNO Communications Annex</td>
</tr>
<tr>
<td>Schedule 6 - System/Technical Requirements</td>
<td></td>
<td>Flexible power/API set-up etc</td>
<td>DNO System/Technical Requirements</td>
</tr>
<tr>
<td>Schedule 7 - Special Requirements</td>
<td></td>
<td>‘Special’ Requirements (SSEN use for Company H&amp;S documentation, SPENs Modern Slavery additions)</td>
<td>DNO Special Requirements Annex</td>
</tr>
</tbody>
</table>

**Service Specific Glossary**

- Participation Guidance Doc
- Tender Rules*
- Testing Analysis Tool
- Testing Guidelines
- Testing Analysis User guide
- Forms & Templates

**Annex's**

- Schedule 3 - Sites & DER Unavailability/Remedy Template/Form
- Performance Report template

**Forms & Templates**

- Provider Data Template
- Tender Data Template
- Form A
- Form B
- Form C

**Signatures**

- DNO Signature Page
- Post Contract Award Notice

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The voice of the networks
Procurement Processes (WS1A P2)

Seeking early input on potential alignment approaches to pre-qualification across DNOs and ESO.

Steve Miller (Product co-lead, NG-ESO)
Helen Sawdon (Product co-lead, WPD)
Product objective

Seek alignment of procurement processes across DNOs and ESO. With specific focusing on pre-qualification requirements and, to consider steps needed for evolution towards closer to real time procurement.
2022 Activities

Progress to date

• **Recommended steps to real time procurement paper completed;**
  • Current network procurement processes and future development plans were reviewed.
  • Steps for short, medium and longer term actions recommended to move towards real time procurement.
  • Will be included in the July consultation for stakeholder feedback.

Next Steps

• Pre-qualification standardisation recommendations - July 2022
• Detailed implementation plan to progress short, medium term actions for real time procurement – Nov 2022
• Detailed implementation plan to align pre-qualification – Dec 2022
2022 Activities – Next Steps continued

Pre-qualification standardisation recommendations

• While some commonality already exists, it’s recognised that aspects of pre-qualification processes vary across Networks. This deliverable will:
  • Collate existing approaches to pre-qualification for DNOs and ESO and review alongside the gap analysis conducted by P4 to:
    – Identify pros and cons across ways of working.
    – Identify areas for alignment.
  • In addition:
    • relevant learnings from Single Markets Platform will be identified.
      – Including evolution of the ESO pre-qualification processes.

• Final report, due in July, will include recommendations for the alignment of criteria and approach to pre-qualification
2022 Activities

What do we want from the Challenge Group

- Views on potential for alignment and our outlined approach.
- Which aspects of pre-qualification currently present the biggest challenge to new market entrants - commercial or technical?
- Which aspects are most important for the short and medium term to market participants?
- What are the issues and blockers facing new market participants?

Further information

Flexibility Services Tender dates for 2022 for DNO/ESO [here](#)

steve.k.miller@nationalgrideso.com
hsawdon@westernpower.co.uk
Dispatch Interoperability and Settlement (WS1A P3)

Setting out long term direction and seeking early input on priorities areas to be addressed regarding dispatch.

Review material: Dispatch gap analysis

Joe Davey (Product lead, WPD)
Tariq Hakeem (Product lead, NG-ESO)
2022 Work

- Building on previous 2019 WS1A P3
- Focus on standardisation of dispatch and settlement processes
- First half of 2022 will focus on dispatch
- Second half of 2022 will focus on settlement
- For dispatch the product will consider interoperability across various systems (DNO, ESO, and third-party platforms)
Definitions

Dispatch (from 2019 work)
- “Process through which the DNO informs a flexibility provider of the required level of service within operational timescales”

Dispatch Interoperability
- “A standard set of policies and procedures to communicate and instruct a Service Provider to deliver a contracted service”

- The process of dispatching services has been decoupled from individual products as much as possible
  - Minimises dependencies on other WS1A products
  - Reduces risk of standardisation limiting the future development of flexibility products
Phases of Dispatch

- Declaration of availability by Service Provider
- Acceptance of offered services by System Operator
- Scheduling of services to run by System Operator
- Instruction of services to run by System Operator
- Cease instruction to stop operation of services
- Monitoring of services
- Post-action reporting
- Cancelation of dispatch
Current View

• General view is that APIs will be used to manage dispatch in the long term
  – Other methods are likely to be retained as backup options or for smaller FSPs
• WS1A P3 members are open to the idea of adopting a common API
  – Needs to be suitably flexible to accommodate potential future requirements
• Currently reviewing existing dispatch standards to see if any of these could be appropriate to align to
  – Technical specifications are excluded from the scope of the product group therefore the likely outputs will include a recommendation to adopt an existing standard in principal or the development of a bespoke API
Whole Systems CBA (WS4 P1)

Overview of CEM & Whole Systems CBA interactions report

Review material: CEM & Whole Systems CBA interactions report

Ian Dunstan (Product lead, WWU)
Gary Dolphin (Product lead, NG-ESO)
Background

• In the last two years the ENA Open Network Projects has developed two key cost benefit analysis tools:
• In Work Stream 1A (Flexibility Services) a **Common Evaluation Methodology** and associated Tool
  – allows the user (primarily distribution network operators) to evaluate flexible and non-flexible solution options and provide information and insights to the user for deciding on the appropriate solution
• In Work Stream 4 (Whole System) a **Whole System CBA** has been developed
  – allows the user to evaluate a range of options from a whole systems perspective
• Designed by different Product teams but created in parallel
  – Teams have worked collaboratively to ensure consistency
CEM and Whole System CBA interactions report

- During the creation of both CBA tools, both Product teams have had similar questions on the uses of the two evaluation tools, their overlap and interactions and independencies.
- The report has been written to clarify the similarities, differences and interactions between the two evaluation tools.
CEM and Whole System CBA tools in a nutshell

- **Common Evaluation Methodology Tool**
  - Designed to be used solely by distribution network operators to aid decision making about network intervention solutions by testing different flexibility strategies

- **Whole System CBA Tool**
  - Allows the user to consider problems through a whole system lens
### Key features of the CEM and Whole System CBA tools

<table>
<thead>
<tr>
<th>Common Evaluation Methodology Tool</th>
<th>Whole Systems CBA</th>
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<tbody>
<tr>
<td><strong>Scope of costs analysis</strong></td>
<td><strong>A range of licensee and third-party costs</strong></td>
</tr>
<tr>
<td>DNO costs only</td>
<td><strong>A range of licensee and third-party benefits</strong></td>
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<tr>
<td><strong>Scope of benefits analysis</strong></td>
<td><strong>Built on the Ofgem CBA template with ability to vary fixed parameters</strong></td>
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<tr>
<td>DNO benefits only</td>
<td><strong>Built on the Ofgem CBA template with fixed parameters</strong></td>
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<tr>
<td><strong>Evaluation methodology</strong></td>
<td><strong>Evaluates a whole system problem</strong></td>
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<tr>
<td>Built on the Ofgem CBA template with fixed parameters</td>
<td><strong>Evaluates flexibility services</strong></td>
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<tr>
<td><strong>Primary use case</strong></td>
<td><strong>Financial analysis of each solution, including optimal contract period, ceiling price and option value</strong></td>
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<tr>
<td>DNO costs only</td>
<td><strong>Financial analysis of each solution, including sensitivity analysis, tipping points and distributional impacts</strong></td>
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<tr>
<td><strong>Outputs</strong></td>
<td><strong>Built on the Ofgem CBA template with ability to vary fixed parameters</strong></td>
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<td><strong>Evaluates flexibility services</strong></td>
<td><strong>Built on the Ofgem CBA template with fixed parameters</strong></td>
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<td><strong>Financial analysis of each solution, including optimal contract period, ceiling price and option value</strong></td>
<td><strong>Built on the Ofgem CBA template with ability to vary fixed parameters</strong></td>
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<tr>
<td><strong>Evaluates a whole system problem</strong></td>
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</table>
CEM and Whole System CBA can be used in conjunction

- The output of the CEM Tool can be used as an input to the Whole System CBA
Conclusions

• The CEM and Whole System CBA are both evaluation tools
• Both built around the Ofgem CBA
• CEM more aligned to Ofgem CBA – only takes into account costs and benefits of the DNO user
• Whole System CBA has been developed to take into account a range of costs and benefits from across multiple parties, for example between gas and electricity networks, or interactions with transport, water, waste etc
• The two tools can be used in conjunction, with the output from the CEM used as an input to the Whole System CBA
• The Product Teams have considered whether the two tools should be combined
  – This has been declined due the resulting complexity of the model
• The two Product Teams will continue to work collaboratively to ensure underlying methodologies and techniques remain consistent where appropriate
Common Evaluation Methodology (WS1A P1)
CEM consultation feedback and discussion on challenges of further development

Simon Brooke (Product lead, ENWL)
Valuing optionality within the CEM consultation

**Responses**

- 7 respondents split across 3 industry sectors
- General support for ENA work
- Suggestions included:
  - CEM is part of Whole Systems CBA tool
  - A variable for installation workforce hours
  - Active consideration of energy efficiency
  - Further development of option value, standardising probabilities
  - DNO-specific data publication
- No clear direction as some stakeholders prefer simplicity whilst other suggested probabilistic analysis e.g. Monte Carlo
Further development

Discussion on challenges of further development

• How do we obtain broad feedback from stakeholders on CEM Tool development?
  • User Forum, consultation, webinar, academic review and critical friends had limited success

• Should our focus be on increasing the knowledge of the CEM Tool and its use after this rapid period of development before further change?

• How do we ensure further developments are the right thing to do?
  • Simplicity aids accessibility vs complexity reduces accessibility
Break
2023 Scope development kick-off
Early discussion and input

Sotiris Georgiopoulos (ON Chair)
Avi Aithal (ON Technical Lead)
Challenge Group areas of interest

Summary of feedback on Challenge Group areas of interest beyond WS1A

Avi Aithal (ON Technical Lead)
## Challenge Group Areas of interest

- Total number of responses: **7 CG members**
- Votes include both (“high interest” and “nice to cover” topics)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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<tr>
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<td>WS2 P2</td>
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<td>DER Visibility &amp; Data Sharing</td>
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Structure & content of future Challenge Group sessions

Open discussion on how to best present and seek input on content at future challenge group meeting

Maxine Frerk (Challenge Group Chair)
Avi Aithal (ON Technical Lead)
Useful Links

Programme Scope for 2022

2021 End of Year report

Stakeholder events & supporting material

DSO Roadmap

Dissemination Forum application

We welcome feedback and your input

Opennetworks@energynetworks.org

Click here to join our mailing list