The Voice of the Networks

Energy Networks Association

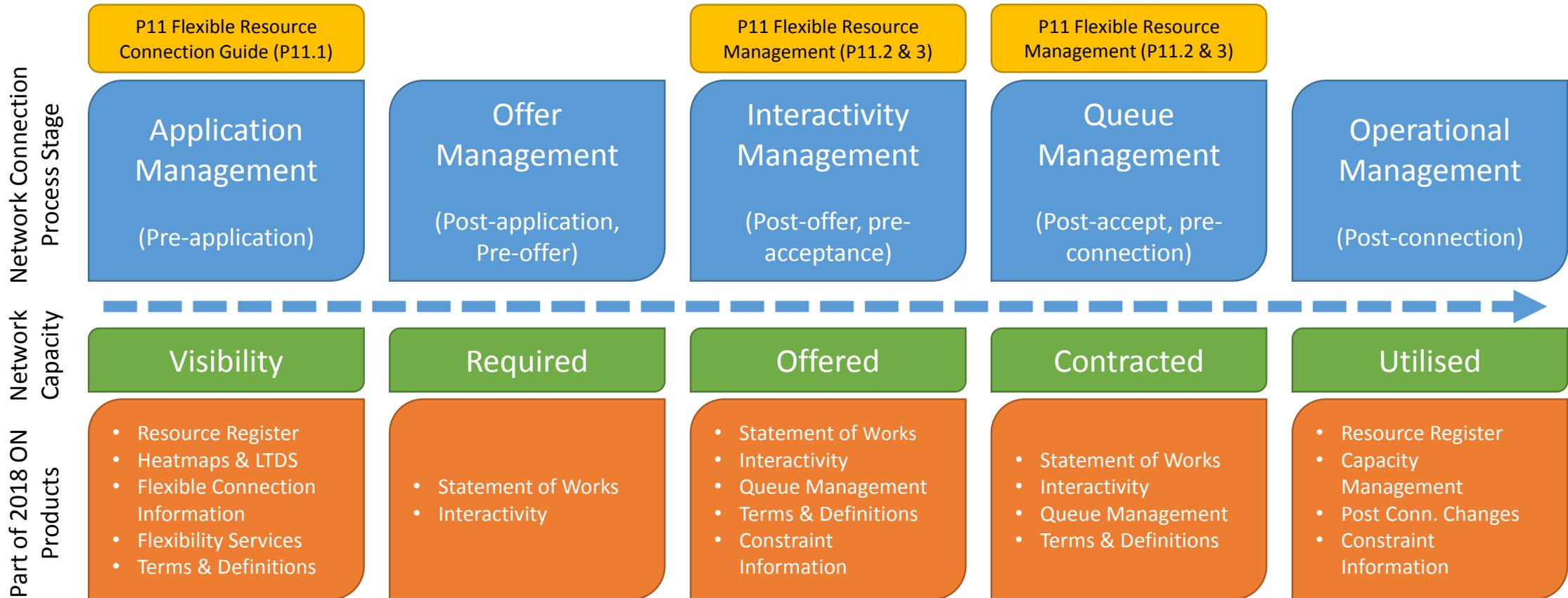**Treatment of Flexibility Consultation Response Themes**

Open Networks Project (WS1, P10)
September 2018

Contents

Connections Process – ON Coverage

The ENA Open Networks Project (ON) covers all core stages of the new connections process through various products. The Treatment of Flexibility product (WS1 P11) supports the development of three of these stages as shown:

P11 Flexible Resource Connection Guide (P11.1)		**P11 Flexible Resource Management (P11.2 & 3)**	**P11 Flexible Resource Management (P11.2 & 3)**	

Network Connection Process Stage

Application Management (Pre-application)	Offer Management (Post-application, Pre-offer)	Interactivity Management (Post-offer, pre-acceptance)	Queue Management (Post-accept, pre-connection)	Operational Management (Post-connection)

Network Capacity

Visibility	Required	Offered	Contracted	Utilised

Part of 2018 ON Products

• Resource Register • Heatmaps & LTDS • Flexible Connection Information • Flexibility Services • Terms & Definitions	• Statement of Works • Interactivity	• Statement of Works • Interactivity • Queue Management • Terms & Definitions • Constraint Information	• Statement of Works • Interactivity • Queue Management • Terms & Definitions	• Resource Register • Capacity Management • Post Conn. Changes • Constraint Information

Facilitating Connections Consultation

Licences and new connections processes originally written with traditional demand and generation in mind. Penetration and variety of non-traditional DERs has increased over time.

Changes have been made to processes, but Ofgem have challenged industry to make further improvements in their Smart Systems and Flexibility Plan published in July 2017: Issue and Action 1.6.

Issue: Network connection rules were not designed with storage in mind, which can lead to a number of issues including a lack of understanding of how storage connections should be treated (by both network operators and connecting customers) and the cost and time of connecting.

Action: We expect network operators and industry to continue to improve network connections for storage – in particular, acting now to clarify the connection process (including for domestic and co-located storage), increasing transparency about where to connect, and implementing better queue management. Ofgem will use the Incentive on Connections Engagement, an incentive developed under the RIIO framework, to assess if distribution network operators are addressing these issues and ensure they are engaging with connection stakeholders and responding to their needs.

Licensees have committed to addressing the fair treatment of all flexibility point collaboratively through Workstream 1 of the ENA Open Networks Project.

Facilitating Connections Consultation
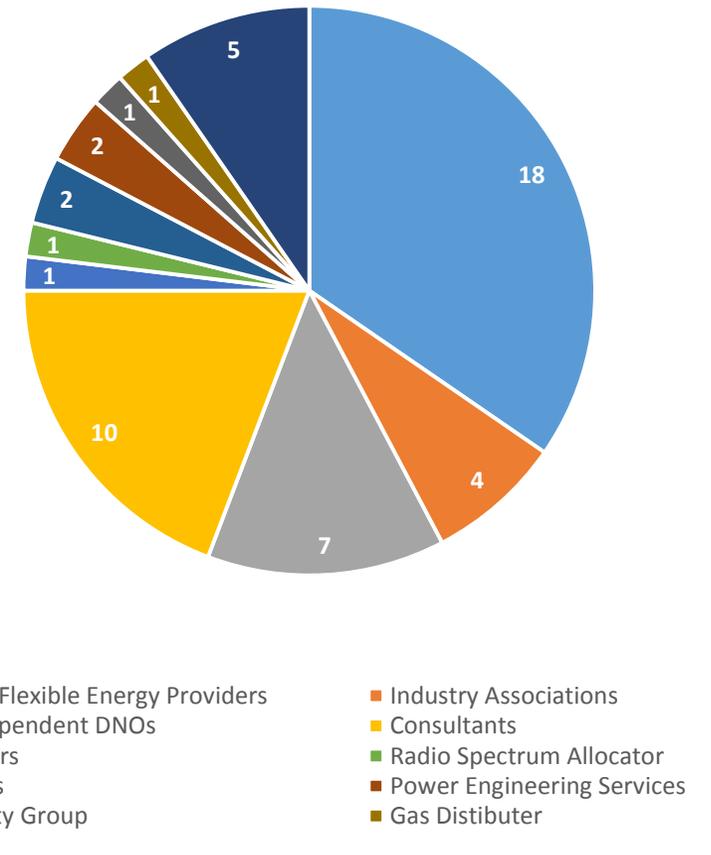
Consultation Questions

1. Under what circumstances do you think customers/flexibility/storage service providers should be connected ahead of other resources to enable better use of existing network capacity?

2. Where do you believe the opportunities lie in the existing connections process for storage and other DER to be connected ahead of other resources so that they can enable better use of the existing network capacity that is available?

3. Do you think that the work proposed under the Facilitating Connections (WS1 P11), Good Practice ahead of Connection Applications (WS2 P1) and Good Practice Following Connection Applications (WS2 P5) products go far enough in addressing gaps in the existing queue management process? If there are gaps, what are they?"

4. With promotion of flexibility in mind, does the definition of the problem outlined in this Call for Evidence report align with your thinking? What additional elements would you suggest be incorporated to add value to future work?

5. The conclusion (from the key findings through this product) suggests that the issue is less with the existing queue management processes and more to do with market certainty, tender requirements, service availability and T&D network constraints. Do the findings of DNO practices align with your experiences to date? Please provide details of your experiences.

6. The next stages include a detailed gap analysis, roadmap, good practice guide and action plan. What information could we include as part of these outputs to provide customers with the tools to help progress through the connections queue?

Webinar

Questions

1. Where can I find more information on import and export queues and how they work in detail?

2. Is it likely that the roadmap and good practice document (prepared at the end of the year) will emphasis in renewables and storage or is it going to be technology neutral?

3. It is still not clear from the consultation document what the 'findings' are. Would it be possible to clarify what the findings are as part of this call? This may be down to some wording being a bit vague in the document.

4. Q5 talks about "market certainly, tender requirements, service availability and T&D network constraints", I was struggling to find the reference to these points in the main document. Will that be in the additional information to be published?

5. RE case study: Could any of the export assets commit to exporting at specific unconstrained times? If technically possible why would you only consider fast-tracking storage?

6. Will the next stage cover situations where two schemes in the queue result in no net network impact when combined?

The formal responses can be found on the Open Networks Website.

Webinar Participants

- Suppliers/Flexible Energy Providers
- DNO/Independent DNOs
- Aggregators
- Academics
- Community Group
- Other
- Industry Associations
- Consultants
- Radio Spectrum Allocator
- Power Engineering Services
- Gas Distibuter

Response Summary

16 formal responses from:

- Association for Decentralised Energy (ADE)
- Centrica
- Drax Power Limited
- EDF Energy
- Energy UK (EUK)
- EON
- Highlands and Islands Enterprise (HIE)
- Innogy
- National Grid SO
- Orsted
- Renewable UK & Scottish Renewables
- Scottish Power Renewables (SPR)
- SSE
- Solar Trade Association (STA)
- UK Power Reserve (UKPR)
- Wales & West Utilities

Consultation Responses

- Supplier/Flexible Energy Provider
- Industry Association
- Network Company
- Public Authority
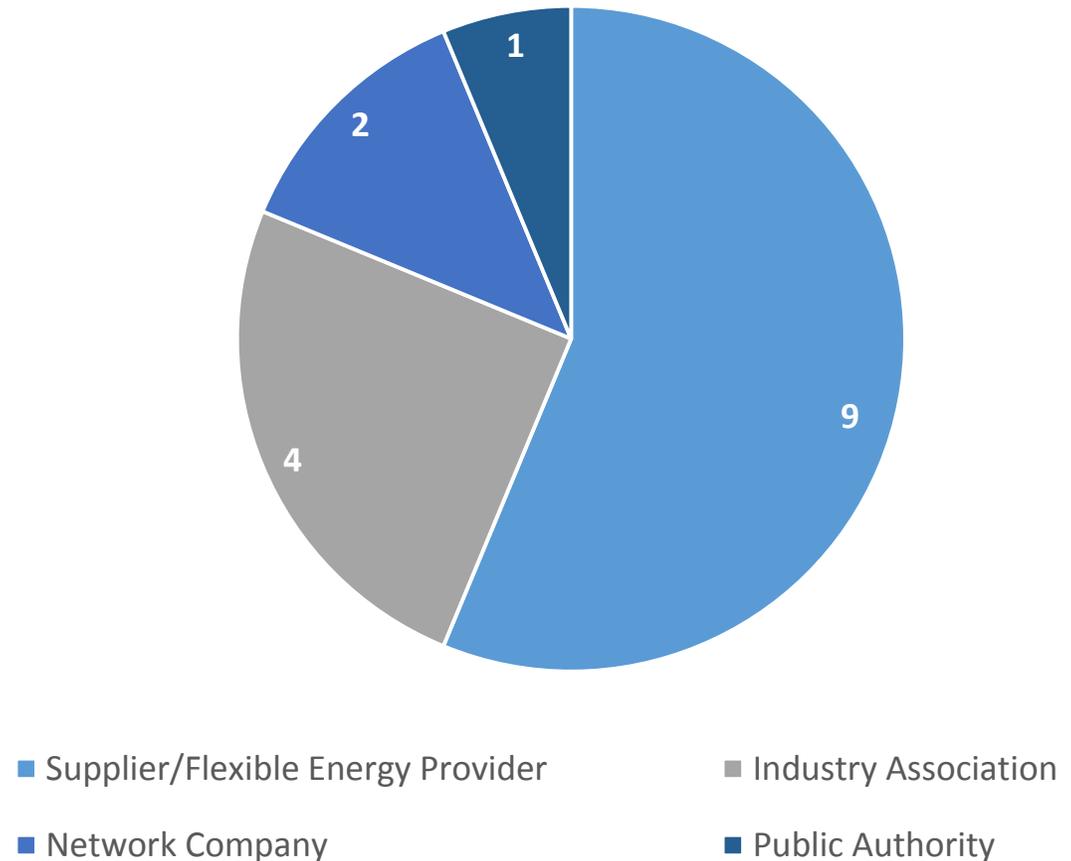
Response Summary

Overall Support for Promotion of Flexible Resources
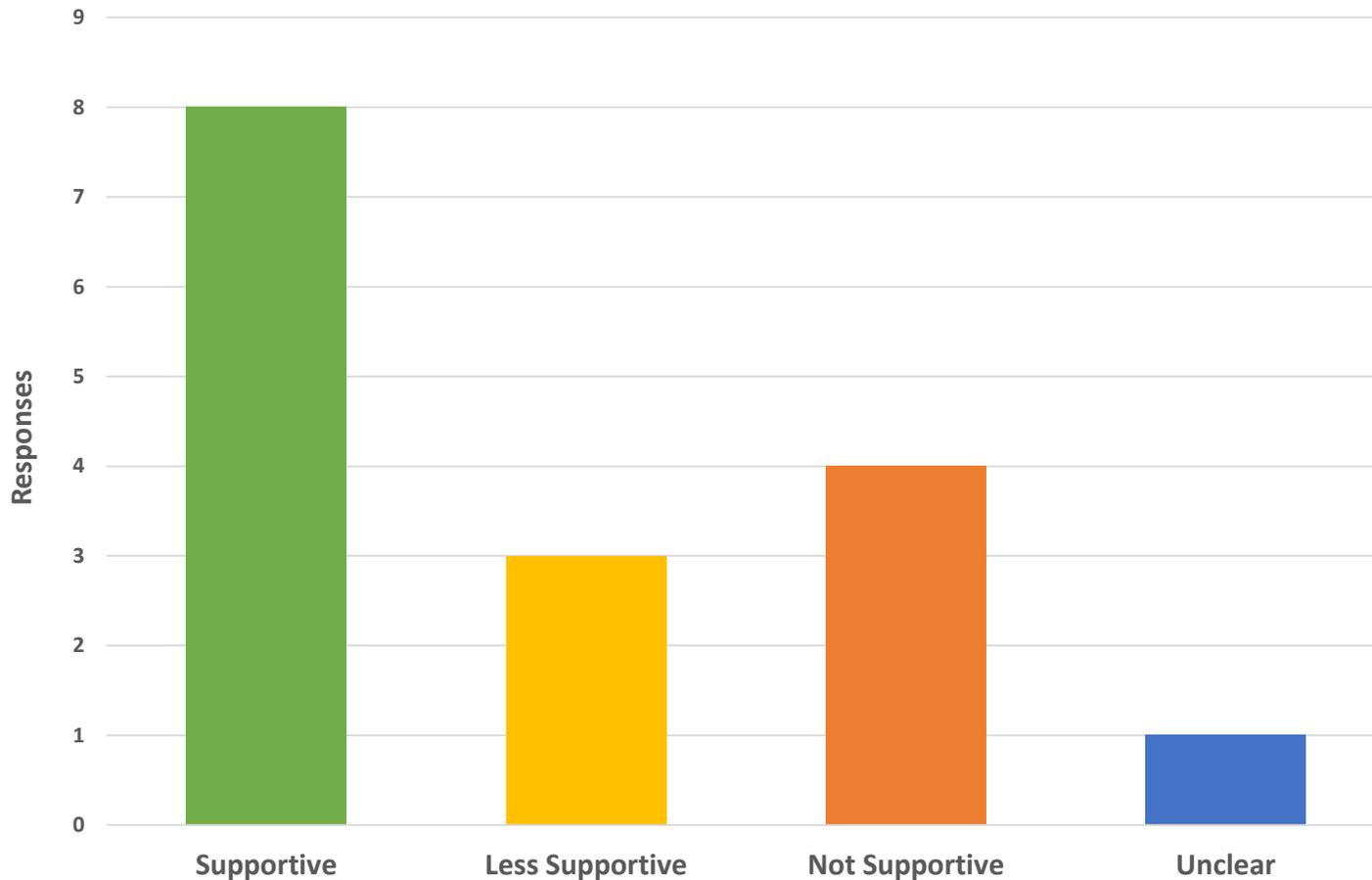
- The majority of respondents were supportive of promoting flexibility in queues though in nearly all cases very rigorous processes and controls were sought;

- 4 respondents were not supportive, believing the concept was "*discriminatory and unfair*";

- While direct support for promotion was mixed, almost all respondents supported the work by Open Networks and the Charging Futures Forum in this area.

- Nearly all respondents raised concerns about discrimination and anti-competitive arrangements through an approach focusing on the flexibility resource technology.

Response Summary

The four stakeholders deemed not supportive of the concept of flexible resource promotion (EDF, RUK/SR, SSE & UKPR) made the following statements:

As business models change over time, the benefit a particular asset has to the system will also change. We do not believe therefore that it is practical to advance a project based on a benefit that might change.

Our view is that there is no mechanism under the current access arrangements to promote storage or any other 'flexibility' ahead of others in the queue and to do so would be discriminatory and unfair.

Whilst some customers / flexibility / storage service providers may offer potential system benefits, our view is that it is not the role of the network operator to give preferential treatment to any customers / flexibility / storage service providers.

We support the approach according to which if a customer (storage or otherwise) does not cause a constraint then they will be offered a solution commensurate with the requirements on their application form.

Such a technology-driven approach to determine a different treatment of storage and other DER in an application queue would lead to positive discrimination which could not appropriately reflect the real value.

In practice, different users may be able to provide different types of flexibility services thus it may not be appropriate, or even possible to objectively rank which users may be more deserving of being promoted within the queue.

These stakeholders were generally supportive of the work proposed as part of the Open Networks Project, Ofgem access arrangements review and work under the Charging Futures Forum. However, they have significant concerns about the implementation of flexible resource promotion.
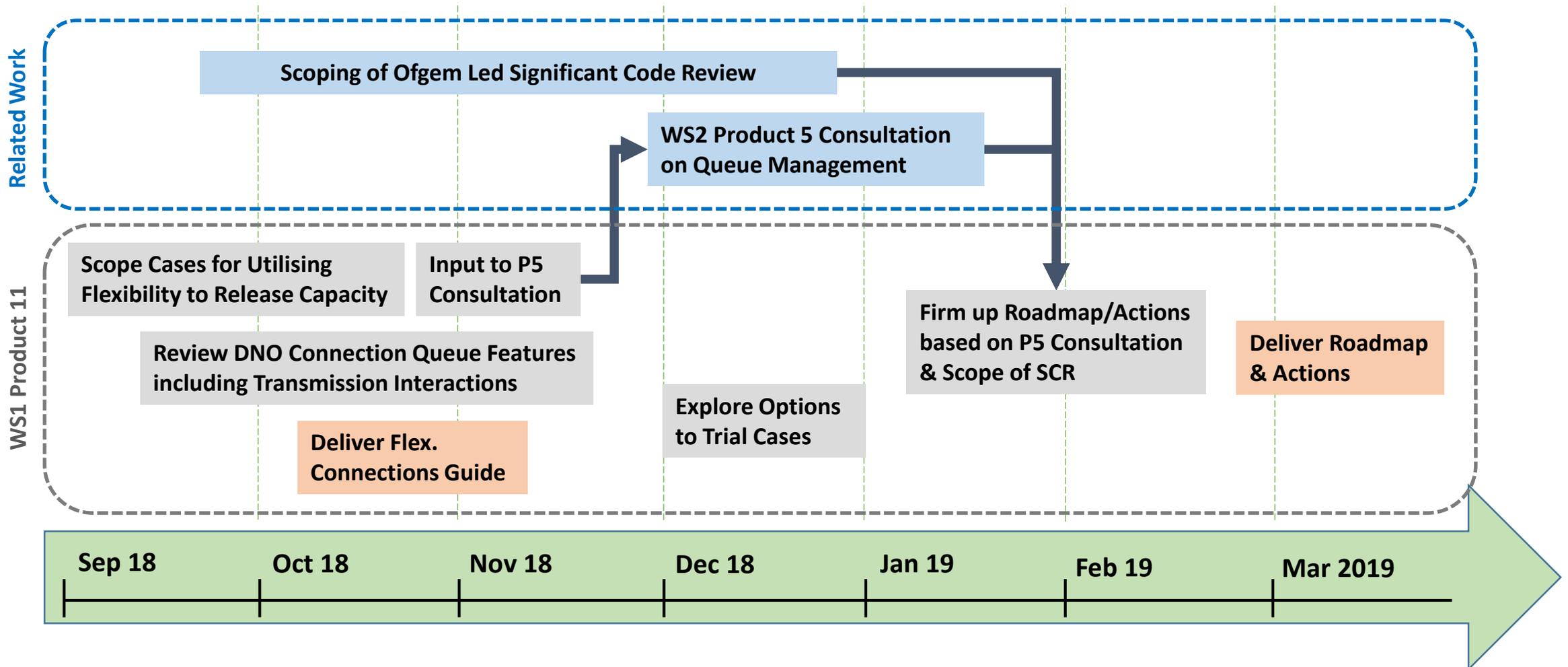
Response Summary

Some of the key consultation views are as follows:

- A **clear transparent process** is needed with **well defined principles** and tests;

- The importance of certainty around **connection timescales** and possible **impacts if flexible resources are promoted**.

- **Differences between how DNOs manage queues** at present. **Queue position is key** and could make or break projects.

- Continued **importance of physical network reinforcement**.

- Several respondents raised concerns on **DER behaviour** and whether the promotion of flexible resources would continue to provide **benefit over time**.

- Use of **flexible resources to unblock queues** should be linked to **wider service opportunities for flexible resources**.

- **Trials or real examples** should be included in Open Networks Good Practice Guides.

- Respondents were supportive that Facilitating Connections (WS1 P11), Good Practice ahead of Connection Applications (WS2 P2) and Queue & Interactivity Management (WS2 P5) covered the right ground.

Next Steps

The deliverables planned in response to the consultation feedback are as follows:

- Continue to produce and publish a connections guide for flexible resources, offering customers a clearer view of the current offerings and processes.

- Develop a set of worked examples during a dedicated workshop for the potential future movement of flexible resources in the pre acceptance queue, based upon real connection applications and stakeholder feedback.

- Liaise with the Interactivity and Queue Management product team to integrate the examples within the upcoming November 2018 consultation.

- Develop the roadmap in line with the Charging Futures Forum, more specifically the Access Reform consultation, to facilitate progression in 2019 following direction from the regulator.

- Construct the associated report to offer a baseline on which future work can build when combined with the Access Reform consultation and Interactivity and Queue Management consultation.

Timeline

Related Work

Scoping of Ofgem Led Significant Code Review

WS2 Product 5 Consultation on Queue Management

WS1 Product 11

Scope Cases for Utilising Flexibility to Release Capacity

Input to P5 Consultation

Review DNO Connection Queue Features including Transmission Interactions

Deliver Flex. Connections Guide

Explore Options to Trial Cases

Firm up Roadmap/Actions based on P5 Consultation & Scope of SCR

Deliver Roadmap & Actions

Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Mar 2019

Appendix - Response Key Themes

Responses could generally be categorised into one of five themes:

1. Views on Process Requirements
2. Ensuring a Successful Process
3. Contracts & Service Opportunities
4. Improved Information
5. Other Issues

Appendix - Response Key Themes

Views on Process Requirements:

- A transparent process is needed
    - This should be transparent to both the flexible resource being moved and to other assets in the queue.

- A clear process is needed with well defined principles and tests such as:
    - Any process to promote flexible resources was only appropriate where unconstrained network access was not feasible.
    - Flexible resources should not be promoted above other resources that had been offered unconstrained access.
    - An impact assessment should be used to capture wider impacts (e.g. transmission costs, market effects) as well as local benefits.
    - If a resource is promoted there should be a clear benefit in enabling other capacity to be connected more quickly.
    - There should be no detrimental impact on other users in the queue.
    - DNOs should be applying a common process across licence areas.

Appendix - Response Key Themes

Ensuring a Successful Process:

- Several respondents noted the importance of certainty around connection timescales and possible impacts if flexible resources are promoted.

- Some mentioned the need to align queue management with transmission processes such as Statement of Works to ensure benefits are achieved.

- In response to Q5 on the relative importance of queue management to other factors, several respondents were strongly of the view that queue position remained key and could make or break projects.

- Checks on DNOs were advocated to ensure they worked to guidelines.

- Some highlighted that ENA guidelines on milestones (as developed by the DER Connections Group) were good but more consistency of application was needed.

- Some highlighted that there were differences between how DNOs manage queues at present.

- Physical network reinforcement remained important.

Appendix - Response Key Themes

Contracts & Service Opportunities:

- Several respondents raised concerns on DER behaviour and whether the promotion of flexible resources would continue to provide benefit over time. Several suggested:
  - o DNO-DER contract arrangements to ensure performance. (Nearly all respondents in favour of promoting flexibility saw this as being contingent on contractual arrangements to ensure DER performance.)
  - o Ongoing compliance and performance checks of promoted resources
  - o DER loss of connection rights if operation was not as agreed.

- Several respondents advocated that the use of flexible resources to unblock queues should be linked to wider service opportunities for flexible resources. The ON work across products needed to be developed with this in mind.

- The SO principles in ESO forward plan were highlighted as a good model to follow when developing flexibility services.

Appendix - Response Key Themes

Improved Information:

- Nearly all respondents asked for better information in areas including:
    - Where are the areas where unconstrained operation is feasible?
    - Where are distribution capacity constraints and opportunities to provide services to alleviate capacity constraints?
    - Better quality and more granular heatmaps.
    - More transparency of project positions in connection queues.
- There was concern that information to signpost opportunities could encourage a rush of speculative applications.
- Several respondents wanted to see a more comprehensive evidence base on which to base decisions and recommended good practice
- Perhaps tests or trials should be included in the P11 work to provide supporting evidence (e.g. a trial to see if existing storage can help with queue management).
- Information in a Good Practice Guide should include real examples.

Appendix - Response Key Themes

Other Issues:

- In response to Q3 on the wider ON work around queue management, respondents were supportive that WS1 P11 & WS2 P2 and P5 covered the right ground.

- The P11 work needs to link to other ongoing industry work.
    - In particular, the CFF work was highlighted as some felt that this was a better place to resolve some of these issues discussed.

- Several respondents thought that A&D fees would help.

- Some thought that DNOs need to be managing network unavailability risk and that this shouldn't be passed to DER.

- Some respondents thought DNO's were too conservative in how they calculate network capacity. More commercial approaches and the better use of smart technology were suggested.

- Wales and West Utilities highlighted the potential for increasing gas to electricity interactions through flexible arrangements on the gas network.