Flexibility Services

Design consultation response summary
Dec 2017

Flexibility Services

Design consultation response summary

Contents

Introduction

UK Power Networks published the Flexibility Services Design Consultation[1] in July 2017 for a period of three weeks. We sought input from flexibility providers and wider industry to support the design of distribution-level contractual flexibility services that we intend to contract for from 2017. We wanted to understand capabilities, preferences, and dependencies in a number of design areas including payment structure, compatibility with other third party services, performance and baselining, and procurement timelines.

We would like to thank all those who took the time to speak with us and responded to the consultation. Stakeholders' input has informed our starting position to contracting flexibility. We received 19 responses from potential providers with a large representation from aggregator companies and storage developers.

This report summarises the responses and presents general trends, with anonymised results against each of the 20 questions from the consultation. Note that percentages given in the report is as a proportion of parties who directly answered the specific question. We then outline our initial approach and rationale on the key areas, whilst also maintaining the ability to adjust our initial approach based on the responses we receive in the tender. We hope this report will be a valuable addition to the literature on DSO flexibility services.

As the industry goes through a period of significant change, the service design will also inevitably change. We shall continue to monitor and improve the service with ongoing engagement with industry as we gain experience and develop DSO[2] capabilities.

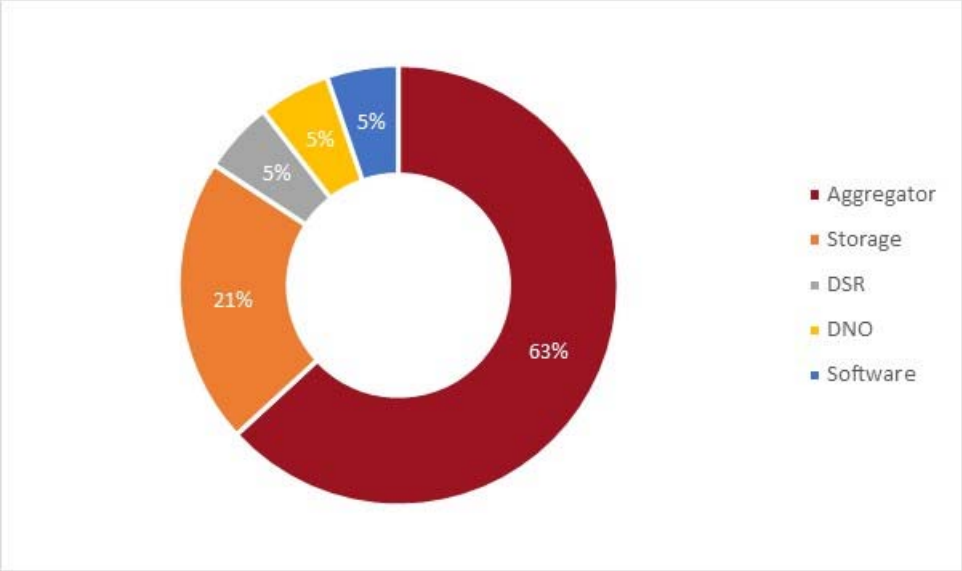

Figure 1: Consultation responses by stakeholder type

[1] http://www.ukpowernetworks.co.uk/internet/en/have-your-say/listening-to-our-connections-customers/flexibility-services.HTML
[2] Distribution System Operator – see more on our Future Smart consultation http://futuresmart.ukpowernetworks.co.uk/

1 Service requirements

Section 4 of the consultation sets out the high-level requirements and characteristics of the service. We proposed and sought responses on the minimum eligibility requirements, in terms of MW and duration capability, and the length of contract.

Q1: What are your views on the proposed 500 kW threshold as the minimum size for directly participating in the tender?

- This question refers to the proposed minimum portfolio capability required to contract directly with the DSO, meaning that any volumes of less than this will need to be part of an aggregated portfolio.
- 87% of responses addressing the question supported the proposed 500 kW threshold as a reasonable level, with one party saying it was suitable in terms of tangible size versus cost. Another in reference to electricity storage said such a size could be sited relatively easily. Several parties however consider it a starting point with scope to go lower in future.
- One respondent highlighted the potential challenges of achieving this aggregated level in a highly localised area where individual demand customers will be smaller than 500kW.

Q2: What are you views on the duration requirement that providers need to meet? How long can your assets maintain delivery?

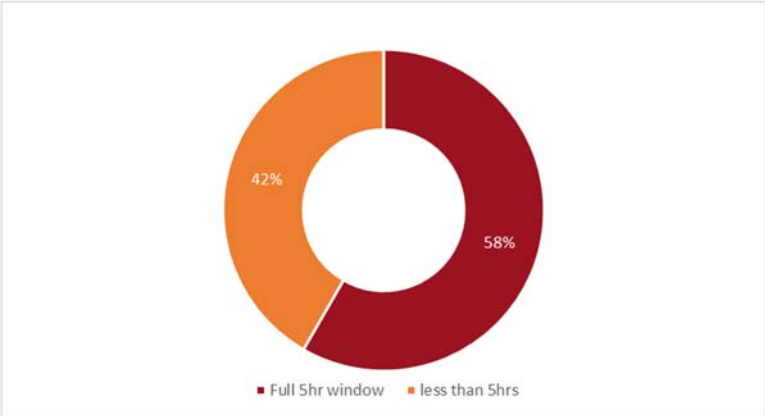

Figure 2: Responses on duration capabilities

- This question refers to the required length of time in which flexibility can be continuously delivered. We indicated the typical length of the availability window as 2-5 hours in the consultation paper, and our preference for having sufficient energy capability for the full window.
- 58% of responses to this question said that they could maintain delivery for the full window. The remainder said that maintaining delivery for long-durations would be difficult or not possible.
- Generation sets are most suited for long duration requirements albeit some struggling beyond three hours, whilst 30 minutes was the maximum acceptable duration for DSR. One party made the distinction between different types of loads in their duration capabilities. Battery storage and other storage technologies could be appropriately sized, but respondents warned of higher costs.
- Several responses suggested pooling resources and technologies together to deliver a long duration requirement, such as aggregators pooling DSR resources. However, some respondents warned against over specifying duration requirements for it could impede participation and increase costs. One respondent said that all durations should be allowed and valued accordingly, whilst another wanted energy/power requirements to be set dynamically.

Question 3: What contract length options would you like to see offered? Do you think a maximum of four years is suitable, too short, or too long?

- We proposed offering a range of contract terms in the consultation of up to four years citing the precedence of Enhanced Frequency Response (EFR).
- Having a range of contract lengths available received most support in the responses. There was general agreement that long-term contracts support new assets and short-term contracts are suited to existing assets looking to maximise returns. Long-term contracts may also favour aggregators/DSR as it reduces administration and helps justify investment. Several respondents noted the trade-off, with one party commenting on the potential tension in creating a level playing field. A couple of parties enquired whether long-term contracts should only be available to new assets.
- 85% of the responses were generally supportive of a four-year term, but often came with caveats including exit clauses, dependencies on third party services, the ability to alter the portfolio, and the service's ability to stack. Two responses were opposed to a four-year contract as it could lock in inefficient prices and create barriers to entry, whilst two other respondents suggested 15 year contracts (similar to the capacity market). One party said that to ensure fairness in procurement long-term contract terms must be enforced (cannot be changed), whilst another wanted clauses to negotiate changes in requirements during the contract term.
- Some parties also linked the length of contract to the frequency of the tender round (long-term is suited to a single tender round), frequency of utilisation (infrequent utilisation suited to long-term contract), and the application (long-term versus short-term requirements).

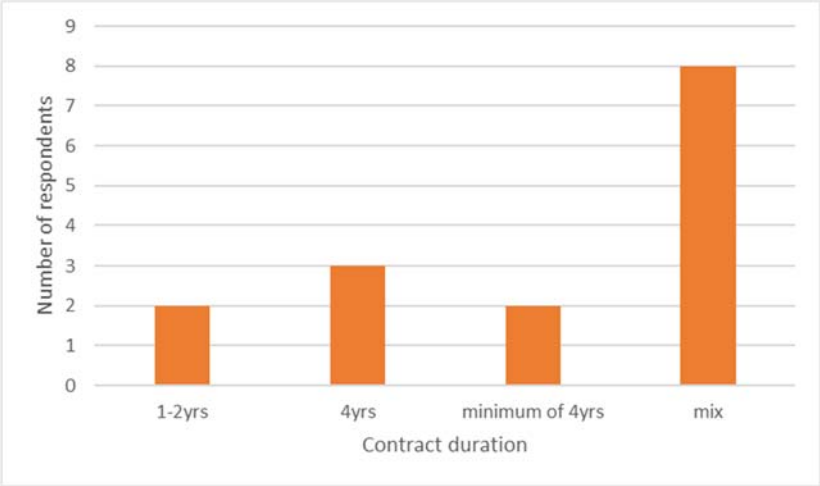

Figure 3: Responses on length of contracts

Summary of Service requirements

Response summary	Our initial approach
• 87% of responses supported the 500 kW minimum size threshold, but indicated scope to go lower. • 42% of responses could not sustain delivery for the full availability window. With 30 minutes as the maximum that DSR can deliver. • The majority of responses supported a mix of contract lengths. • 85% of respondents supported having a four-year contract option.	• A minimum size requirement of 500 kW gives a reasonable level of capability per contract. This can be reviewed based on tender responses and on experience and capability. • A minimum duration capability of 30 minutes would enable DSR participation whilst also provide a reasonable level of duration capability. The assessment should consider variations in tendered duration capabilities. • A range of contract lengths should be offered, that can be up to four years to provide longer-term certainty for new sources of flexibility. To ensure a level playing field, this should be available to all providers and technology types. • The service requirements outlined above should be continuously reviewed using learnings from National Grid's work on standardising and simplifying Balancing Services, as well as developments by other DSOs.

2 Service windows and payments

Section 5 of the consultation discussed a number of payment structures and their relative benefits:

- Option 1) Tendered Availability price but fixed Utilisation price – *a single competitive price makes the assessment more transparent over a dual price sending a clearer market signal.*
- Option 2) Availability and Utilisation prices tendered competitively – *prices are reflective of the market, different providers and technologies.*
- Option 3) Nomination payments in addition to Availability and Utilisation – *enables optimisation by the DSO and release of flexibility back to the market when not required.*

Q4: Out of the different payment structures discussed, which approach do you prefer? Are there alternative options that you would suggest?

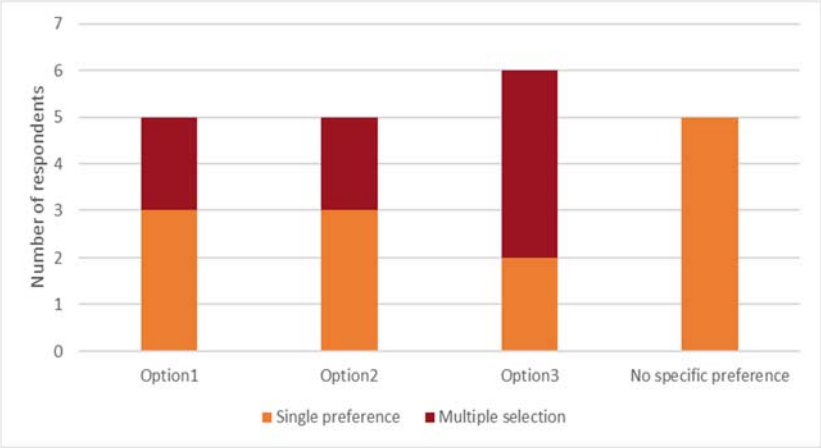

Figure 4: Responses on payment structure preference

- Respondents were divided almost equally amongst the three options plus no preference.
- Those that supported Option 1 cited its simplicity and transparency in assessing a single price, and for several parties availability was more important than utilisation payments.
- Those that supported Option 2 were generally opposed to a fixed utilisation price, and cited proven use in Balancing Services. One respondent said fixed prices should not feature in a market and raised concerns that it would not cover the marginal costs of different providers.
- Those that supported Option 3 cited the ability for providers to better optimise their portfolios to participate in other markets when not required by the DSO. Those opposed, thought it would increase complexity.

Q5: Under the proposed payment structure whereby utilisation (and nomination) is fixed, can you suggest at what level these prices should be set?

- This question refers to Option 1 and Option 3, and seeks to understand at what level prices should be fixed.
- Some of the suggestions include utilisation payments that cover the marginal cost of providing the service, use a methodology similar to the capacity market's Cost of New Entry, or reflective of opportunity costs.
- A couple of responses required more information to answer this question, including duration requirements and the ability to stack other services.

Q6: Under Option 3, whereby UK Power Networks will set a Nomination window via a nomination instruction, what notice period would you require?

- This question refers to Option 3, when a notification is sent from the DSO to the provider to "arm" the service, which is distinct from an instruction to utilise the service (although some of the responses may have referred to the latter).
- Suggestions included alignment with weekly STOR, a 4-hour notice period similar to the capacity market, and a notice period of 1-4 hours for DSR where the longer the better. Parties with battery-based solutions said that batteries need very short notice periods. One party indicated that the notice period could be dynamically adjusted with proportional fees.
- One party in referring to the utilisation notice period, indicated that long notice periods could actually be more difficult to deal with because it requires new operational processes.

Summary of Service windows and payments

Response summary	Our initial approach
• Respondents were divided almost equally between the different payment structures proposed. • There were concerns expressed for our preferred payment approaches due to the difficulties associated with a fixed utilisation price and complexity of a nomination mechanism. • In general, respondents did not appear to be overly concerned with the potential reduction in assessment transparency of dual tendered pricing.	• Starting with competitively tendered availability and utilisation prices may be appropriate due to its relative simplicity, avoids the complexities associated with administered pricing, and has proven use in Balancing Services which providers will be familiar with.

3 Service compatibility

Section 6 of the consultation discussed the interaction between a peak-shaving DSO service and other third party services. It then presented two options for managing conflicts given in terms of which party manages the risk:

1) No exclusivity, but the Network Operators over-procure to ensure reliability; and
2) UK Power Networks has exclusive rights to flexibility, with participants responsible for managing conflicts.

Q7: Do you recognise and agree with the synergies and conflicts identified between flexibility services?

- All parties that answered this question generally agreed with the synergies and conflicts presented in the paper, but also made a number of additional comments, which we summarise below.
- *Capacity market*: a couple of responses suggested that the DSO service be listed in the capacity market rules similar to Balancing Services to enable compatibility.
- *Balancing Services*: as one respondent commented, frequency response services rely on the provision of availability rather than actual delivery (conflict/synergies are not just energy direction). The probability of conflict may also be low as Balancing Service enactment is infrequent, and due to the proposed changes to Balancing Services, one respondent encouraged further dialogue and evolution of the service.
- *Supplier services*: one of the responses suggested an order of priority, where system support services should have priority over economic support services such as for a supplier.
- *Network services*: one respondent pointed out that there is potential for internal conflicts between DSO services tendered for potentially overlapping parts of the network.

Q8: What are your views on the options we presented to deal with service conflicts? Do you have alternative suggestions?

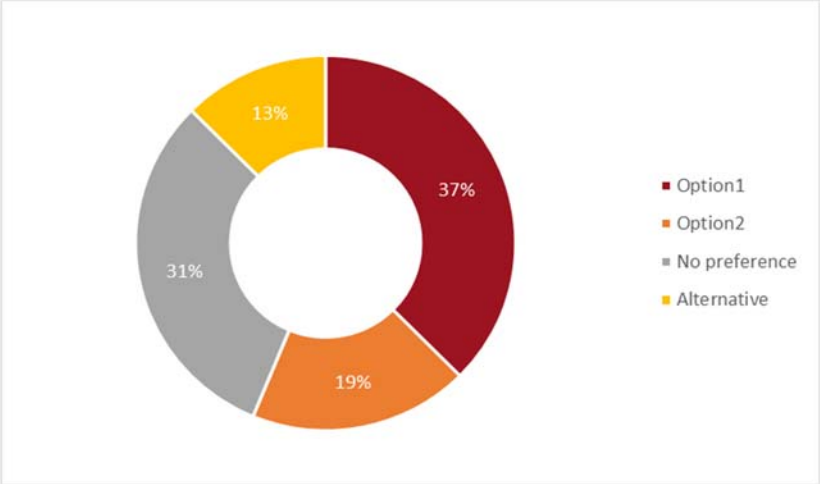

Figure 5: Responses on dealing with service conflicts

- Just over a third of the responses (37%) favoured Option 1 (overprocurement and no exclusivity) predominantly due to opposition to Option 2 (exclusivity and participants manage risk) citing barriers to entry, impact on competition, and higher costs. There was moderate support for Option 2 (19%) with one respondent arguing that providers cannot “serve two masters at the same time” but that exclusivity should be rewarded, fearing that stacking of incompatible services could devalue services in the long-run. One respondent with no preference said it depends on the DSO’s risk appetite. There was a number of additional comments, which we have summarised here.

- One party suggested no overprocurement and no exclusivity, saying that the DSO does not have sufficient insight into customer behaviour and could lead to the perception that DSR is unreliable. They go on to say that rather than explicit exclusivity clauses, the DSO should focus on designing incentives to reflect the required reliability. Some parties however wanted the DSO to state what services can and cannot be stacked.
- Overprocurement may be necessary to mitigate network risks and encourage market participation, but that providers should manage more of this risk as the market matures.
- Another respondent suggested a secondary market to allow providers to trade obligations and hence manage delivery risk.
- One respondent pointed to the industry work looking at flexibility and encouraged a co-ordinated approach between the DSO and the GB System Operator (GBSO).

Summary of Service Compatibility

Response summary	Our initial approach
• Respondents generally recognised and agreed with the synergies and conflicts presented, but did not find agreement on the solution. • More parties (37%) preferred it if the DSO manages conflict risks through overprocurement and service non-exclusivity, but there were also opposing views expressed.	• Appropriately designed incentives in the contract to encourage reliability and availability can overcome the need for exclusivity clauses. This will need to be monitored as incentives can change with opportunity costs. • Overprocurement secures against underdelivery, and is prudent since the level of availability and reliability is uncertain under new, non-exclusive, service terms. The level of overprocurement should be optimised over time. • Rather than be explicit on what third party services can or cannot be stacked, which are likely to change, it would be better to design the service terms to accommodate actions deemed compatible. • Coordination amongst other industry stakeholders will be required to overcome conflicts particularly with Balancing Services. We shall continue to work with industry stakeholders on the longer-term framework for coordination of flexibility.

4 Performance incentives

Section 7 of the consultation covered how the baseline and payment mechanisms incentivise performance. We noted that there could be many possible variants to the baseline, whilst suggesting two potential options. We also consider the significance of the baseline in accommodating service compatibility.

Q9: Do you have a particular preference of baselining methodologies? If not, do you think the Demand Turn Up baseline methodology is a suitable approach for your assets?

- There was a mixed response to this question. A third supported the Demand Turn Up (DTU) baseline (average of previous four comparable days) because of its simplicity, a third proposed alternatives, whilst almost another third had no preference saying that there was no perfect baseline.
- Some of the alternative suggestions included using the state of charge of battery storage, the baseline used in the capacity market, or the last observation point prior to instruction. A baseline using history was said to be appropriate for services with long notice periods, whilst the state immediately before enactment is appropriate for services used to meet a short-term need.
- Indirectly related to baselines is the point of metering. A couple of respondents indicated preference for sub-metering on the asset rather than the boundary meter.

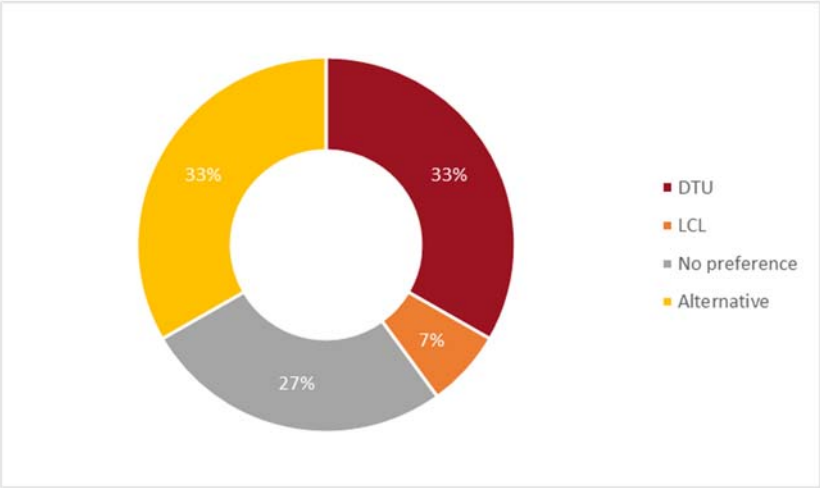

Figure 6: Responses on baselines

Q10: Can you suggest how we can adjust the baseline calculations for "compatible" actions from providers? For example providers that runs for Triad or a GBSO service during the service windows.

- This question addresses the significance of the baseline in accommodating actions deemed synergistic and hence supporting service compatibility. In the paper, we noted the potential difficulties in administering adjustments, and sought views on how we could implement it.
- Most parties that responded to this question were in favour of a mechanism to adjust the baseline for compatible actions, but approaches suggested varied amongst parties. We summarise below:
  - Various parties proposed data flow arrangements where the provider or a third party notifies the DSO of compatible periods for adjustment. A couple of respondents highlighted the risk of gaming under such an approach stating that the DSO needs powers to validate.
  - A couple of parties suggested use of a target level, such that if consumption or generation was below or above this level then they are deemed to have delivered.
  - A couple of parties preferred using data immediately before instruction, avoiding the need to use historic periods.
  - Respondents also highlighted the importance of deterring gaming and that providers should only be rewarded based on what is delivered and what is additional.

Q11: What are your views on non-delivery penalties as we have described them? At what level should the under-delivery incentives be set?

- Most parties recognise the importance of performance incentives with four respondents saying the proposal was fair.
- Three responses suggested an acceptable performance level of between 80 - 90%, with several parties referencing the tiered performance reduction approach used in Balancing Services to avoid over-penalising for specific events.
- Four parties favoured a cap to the "penalties" saying that it would otherwise deter participation, and that non-financial incentives, such as considering previous performance, would be sufficient. One respondent cited frequency response and capacity markets as evidence that penalties beyond the value of the service was not required.
- There were four responses in favour of "penalties" being higher than the value of the service to incentivise reliable delivery particularly if it is a system service. One respondent noted the weaker penalty regime of other services as a signal that reliable performance is not expected.
- Whilst not directly related to this question, one party mentioned the need to test the capacity from time to time to ensure that the capacity exists.

Summary of Performance incentives

Response summary	Our initial approach
• A third of responses supported one of the suggested baselines (DTU baseline), a third suggested alternatives, and just under a third had no preference. • Most respondents wanted a mechanism to accommodate compatible actions in the baseline. • Most respondents supported the use of non-delivery incentives, but were divided between those that wanted it capped at the value of the service, and those that wanted it to be greater.	• The simplicity of the proposed baseline becomes complex with the introduction of data flow/flagging mechanisms to adjust the baseline (increased administration, risks of gaming, and fair payments). We considered alternative baseline approaches, and identified that the target level baseline can be both simple and accommodating of compatible actions. It is also consistent with the objective of ensuring load remains below a level used for network planning. There should be some flexibility in terms of baselines offered where justified. • Performance related payment deductions capped at the value of the contract would encourage participation in a new service. The impact on incentives for reliable delivery will need to be monitored. • Performance related payment deductions, can be applied monthly using a tiered approach to incentivise reliable delivery without overpenalising for specific events. Full payments will apply if performance is at least 90%, whilst anything below will see stepped reductions in payment, with no payments made if performance is less than 60%.

5 Procurement process

Section 8 of the consultation discussed the different stages of procurement and proposed a timeline for a 2017 tender and a future procurement process. We sought stakeholder input on the proposals.

Q12: Does this year's tender timeline provide sufficient time for providers to offer their existing capacity?

- Over half (60%) of the responses agreed with this year's timeline for existing capacity albeit the timelines were said by some to be challenging. Respondents also cited dependencies on getting information on network locations and service requirements, and on whether the service is compatible with existing contractual commitments. One respondent said that despite the time pressures, it is still better to proceed and learn.
- Those that disagreed with the timelines raised similar issues to the above, but also in relation to allowing new flexibility to participate.

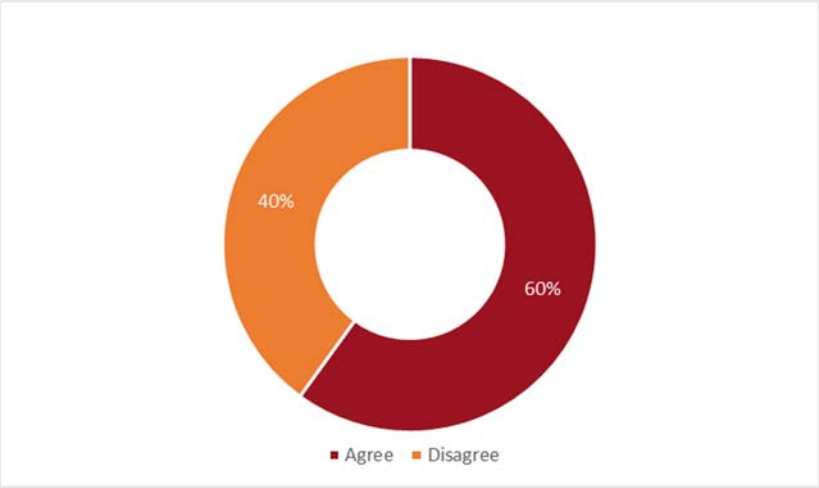

Figure 7: Responses on this year's tender timeline

Q13: What are your views on the proposed future procurement process, and how can it be improved? Can you indicate whether the proposed lead times between the different stages of procurement is suitable for new, as well as existing, capacity?

- Four parties agreed with our proposed future procurement process, whilst three responses said it did not provide sufficient time to recruit new customers. One party wanted an arrangement where aggregators can bid for a firm contractual commitment prior to recruiting customers. Another respondent suggested that the DSO take an active role to help in the recruitment process.
- A couple of respondents gave lead-times; new builds can take up to two years from award to operation, whilst recruitment of customers would take around four to nine months.
- Some respondents liked the continuity of an annual tender round whereas others favoured more frequent tendering to allow new flexibility to participate. A couple of parties wanted a more lightweight process with an online platform said to enable procurement as and when required.

Q14: Will an online registration and bidding platform help make the process more efficient and reduce barriers to entry?

- The majority of respondents to this question were favourable towards a platform and viewed it as a method of increasing transparency and efficiency, with some saying more so than reducing barriers to entry. The benefits mentioned include making it easier to register and participate, reduce overheads, better matching of needs to flexibility, improve visibility and coordination, and transparency.

- One respondent wanted to see a common best-practice procurement model developed with other DSOs to reduce administrative burden for bidders, extending this to common contractual terms.

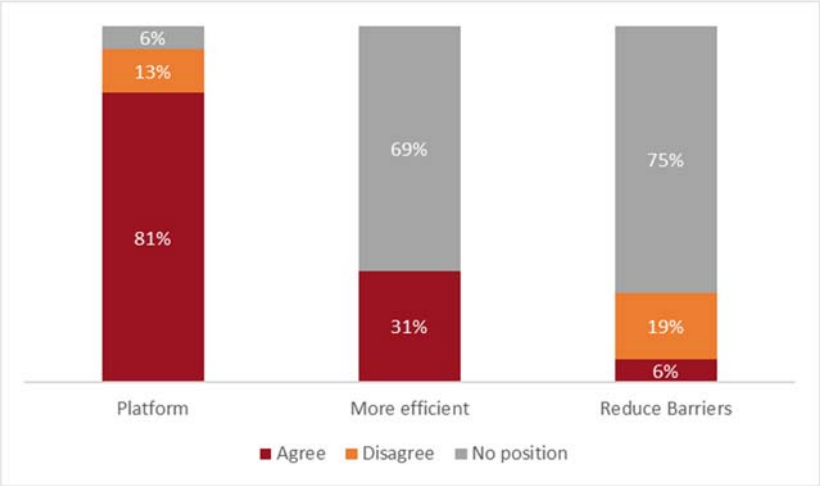

Figure 8: Responses on use of a platform

Q15: How can the procurement be scheduled to help align with other flexibility services?

- The majority of the respondents favoured alignment with other flexibility services for reasons of efficiency (bidders avoid duplicate efforts) and DSO benefits (access resources on the back of the more valuable services).
- Six responses mentioned the capacity market pre-qualification windows. Three respondents suggested alignment with frequency response services, and one party suggested publication of results before STOR tenders.
- Several respondents mentioned the developments in Balancing Services and that it is a good opportunity for greater coordination with National Grid. One respondent says the potential transition towards near-real-time procurement may negate need to align. Another respondent said that there needed to be an industry wide approach, whilst raising the concern that if all DSOs were to hold tenders at the same time then the industry would receive too many enquiries within a short period.

Q16: What information do you need pre-tender and post-tender to support your bid submissions?

- Responses covered a wide range of required information this includes:
  - Pre-tender: locations, volumes, service requirements, prices, tender timeline, likely utilisation, service payments, de-rating factor, eligibility requirements (connections, metering), penalty regime.
  - Post-tender: tender results (accepted volumes and prices, company name), meaningful feedback, visibility of reinforcement works.

Summary of Procurement process

Response summary	Our initial approach
• 60% of respondents agreed with this year's tender timeline, but was considered challenging by some. • There was a mixed response to the future procurement process, with concerns on the time available for new flexibility. • The majority of respondents were in favour of an online registration and bidding platform to support an efficient and accessible tender process. • The majority of respondents favoured alignment of DSO procurement with other flexibility services including the capacity market and Balancing Services.	• Learnings from the first tender round will inform the future process and therefore it is worth continuing with a procurement event in 2017. • Procurement by delivery seasons (similar to STOR) allows bidders to offer services for a future delivery season that reflects the required lead-time from award to delivery. • As with new assets, aggregators can bid in a volume that is not yet available, but with additional requirements in the tender and mechanisms to monitor delivery post-tender. • An online platform for registration and bidding could offer material improvement to the procurement process, and should be developed to support the enduring process. • Where possible, the timing of the procurement event should take into account the timings of other key flexibility events to support stacking and the DSO's ability to procure flexibility. • Transparency of information is necessary for the market to deliver cost-effective flexibility, but consideration should be given to whether publication of certain information could hinder cost-effective procurement within the context of a localised market.

6 Connections process

Section 9 of the consultation paper discussed the interaction between the connections process and the procurement process. It highlighted three potential issues as speculative connection applications, interactive connection offers on a provider's ability to deliver flexibility, and connection of storage in an import-limited location.

Q17: Do you agree with the options we have presented to overcome speculation and interactivity, and our minded to position of requiring an accepted connection offer as a pre-condition to tender?

We asked respondents to provide their views and preferences out of the following options:

1. Allow potential participants to tender before they receive a connection offer
2. Require assets to have an accepted connection offer before participating in the tender
3. Require assets to have a connection offer before participating in the tender
4. Modify the process to align with participation in the flexibility tender

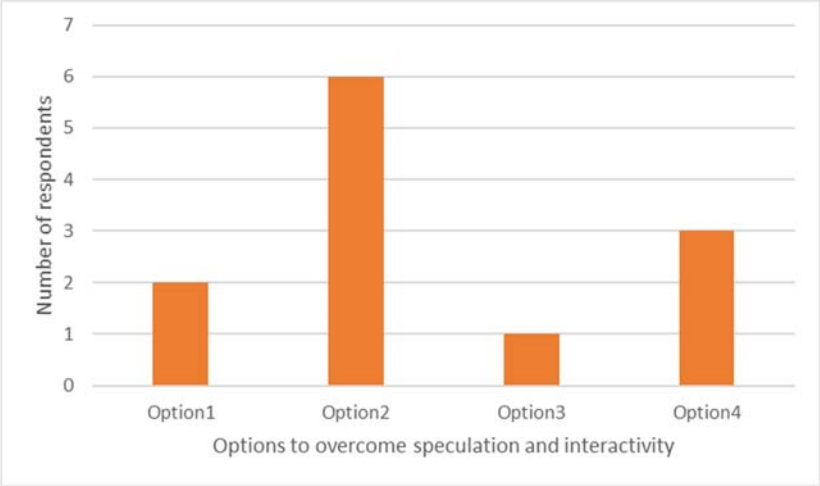

Figure 9: Responses on options to overcome speculation and interactivity

- Several respondents agreed that speculation could be problematic to the development of a fair and transparent market. Option 2 received most support in agreement with our minded to position in the consultation paper, but there was a near equal number opposed (sum of the other options) citing barriers to entry and increased cost of abortive works as a result. One party said that this option was simple, but implies that UK Power Networks were only contracting with those looking to connect anyway, which may not result in sufficient competition.
- Other responses preferred alternative approaches to manage speculation in relation to Option 1 or 3, including the use of bid bonds. One party highlighted that a connection is only one of several variables required in building a new asset, and UK Power Networks should instead manage connection requirements post tender using milestones.
- The interactivity queue was only referenced in support of Option 4. Proponents of this option said that those providing benefit to the network should be promoted over those that are not, with one respondent suggesting that those who have been unsuccessful in the tender should lose their connection offer. Whilst recognising the significant change, one respondent flagged the value of looking at the connections process to establishing a flexibility market. One respondent said that focus should be on offering better connection options rather than changing the process itself.

Q18: What are your views on a flexible connection for storage assets that restricts import at peak times?

- Just under half of responses (43%) were supportive of a flexible connection and having limits on imports was sensible. A number of parties identified compatibility problems with frequency response (as the most valuable flexibility service) if import is restricted during the peak hours. One respondent said that prices would be higher as a result. One respondent noted that because a frequency event will be rare, the DSO should accept risk of conflict for the benefit of the wider system.

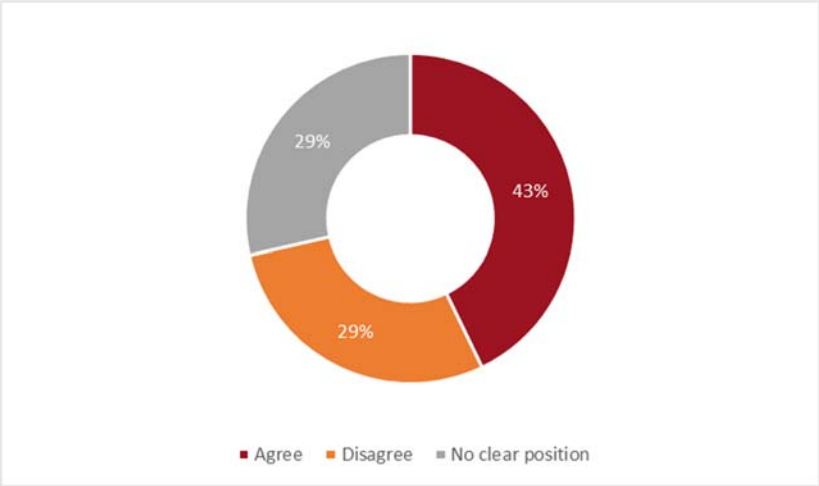

Figure 10: Responses on flexible connections for storage

Summary of Connections process

Response summary	Our initial approach
• More respondents were supportive of having an accepted connection offer as a pre-condition for participation. However, there was near equal number of respondents opposed. • 43% of respondents supported a flexible connection for assets with import capacity. Those opposed were primarily concerned with being unable to provide frequency response as a result.	• An accepted connection offer as a pre-qualification condition reduces connection risks in the procurement of flexibility. This arrangement can be justified where the primary purpose of the provider's connection is to access other higher revenue streams. However, to encourage participation in a new service and reduce the lead-time from announcement of hotspot to tender, we can move the connection from a pre-qualification requirement to a post-tender milestone, but with greater evaluation in the assessment and post-tender monitoring. The efficacy of this approach will be monitored. • There was appetite amongst several respondents for the connections process to be changed to favour connectees that provide flexibility. We will work via the Open Networks[3] project, to investigate this area further in 2018. • The main barrier for storage connecting into an import-limited network, through a flexible connection, is access to the frequency response market. We shall continue to work with the GBSO and wider industry on developing greater coordination.

[3] http://www.energynetworks.org/electricity/futures/open-networks-project/open-networks-project-overview/

7 Assessment methodology

Section 10 of the consultation paper discussed how we might assess offers based on few variations to the bidding parameters. We noted that in practice there would be multiple bidding parameters, which makes assessment more complex.

Q19: Do you think the proposed assessment methodology will deliver cost-effective DSO services, whilst also being fair and transparent for participants?

- Just over half of the respondents agreed with the general approach as outlined in the paper, with some parties commenting on the need for transparency (on assumptions and locational quirks) in order to reduce risks to bidders. One party wanted to understand how we would assess dual prices, whilst another said that proximity from the network constraint should be a consideration. One respondent preferred a dynamic setting for procurement and activation of the service, which requires a more complex assessment.
- Parties that disagreed had concerns about potentially accepting offers out of stack order, which may occur when optimising across multiple tendered dimensions including capacity, duration, and time. This could deter participation unless the reasoning was clear.
- One respondent said the DSO should allow the process to evolve over time to reflect experience and learning.

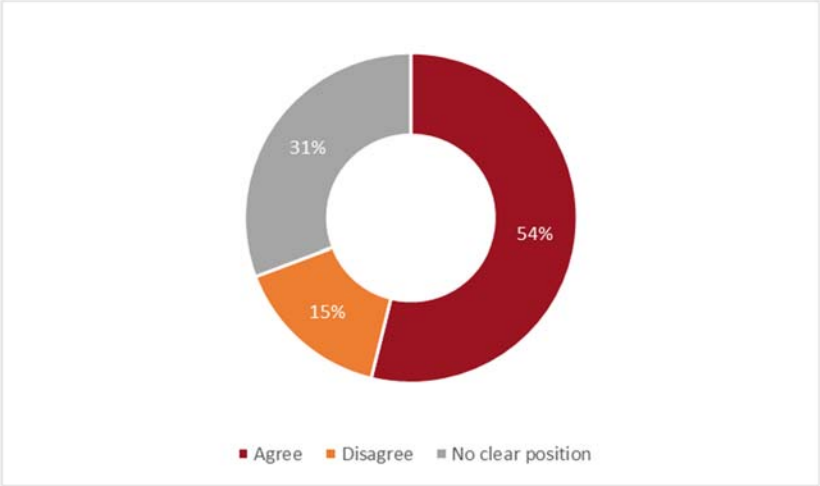

Figure 11: Responses on the assessment methodology

Q20: What other considerations should we bear in mind when comparing between tenders, and between tendering and conventional options (e.g. capability, reliability, carbon impacts)?

- The responses proposed a range of considerations:
  - *Carbon*: several responses were in favour of considering the carbon impact in the assessment with one respondent proposing the use of technology bandings to accommodate this. A couple of responses however wanted a fair technology agnostic assessment pointing out that other mechanisms and authorities charge and regulate carbon and environmental impacts.
  - *Reliability*: the reliability of the provider or technology should also be considered in the assessment. There was also mention of cyber security.
  - *Redundancy*: One respondent suggested that an aggregated portfolio is less risky than a single site, and queried how it will be considered in the redundancy requirements.
  - *Value*: One respondent wanted the DSO to set out how it values different parameters in order to bid and configure their solution. Another also wanted to know the price cap or the value of the traditional alternative.

Summary of Assessment methodology

Response summary	Our initial approach
• 54% of respondents agreed with the general approach to assessment of tenders. • Respondents also commented on the need for transparency when assessing multiple parameters. As the economic selection of offers could mean accepting offers that appear out of price order.	• Assessment of multiple parameters increases the complexity and hence transparency of the assessment process. Where possible, decisions should be made transparent to bidders. • The approach should be reviewed using learnings from National Grid's work on standardising and simplifying parameters in Balancing Services. • The DSO, as market facilitator, should continue to treat all customers and providers fairly, this includes being technology agnostic in the assessment.