

# Energy Networks Association

## Open Networks response to Impact Assessment consultation

# Aims of presentation

- To provide you with:
  - Background to Future Worlds and Impact Assessment (IA) consultations
  - an explanation of our analysis of the IA consultation responses
  - a summary of the stakeholders' comments to the IA consultation
  - an overview of next steps for DSO transition.

# Future Worlds consultation



Launched on 31 July 2018 and closed on 25 Sept 2018, consultation aimed at giving stakeholders the opportunity to comment on five potential Future Worlds capable of delivering decarbonisation through a smart decentralised energy industry.

This wide ranging consultation sought feedback on the Future Worlds, the Smart Grid Architecture Model used to model the Worlds, the actors operating in the Worlds and our intended approach to assessing the Worlds using an impact assessment.



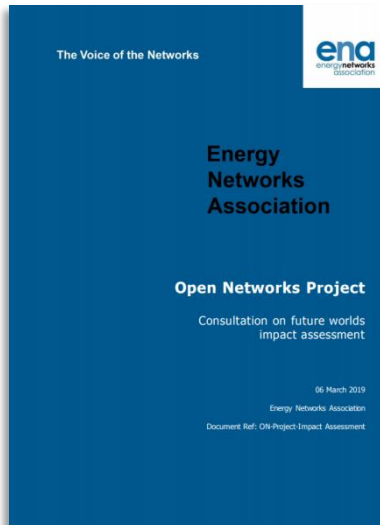
[http://www.energynetworks.org/assets/files/14969\\_ENA\\_FutureWorlds\\_AW06\\_INT.pdf](http://www.energynetworks.org/assets/files/14969_ENA_FutureWorlds_AW06_INT.pdf)

# Impact Assessment consultation

Launched on 6 March 2019 and closed on 1 May 2019, consultation aimed at giving stakeholders the opportunity to comment on Baringa's impact assessment work and help shape next steps for the DSO transition.

The consultation sought answers to 20 questions designed to stimulate and guide discussions within the industry and between stakeholders on the various models emerging, the DSO role and effective coordination of DER.

The purpose was to build an evidence base from the Open Networks project to help inform the next steps to implementation of DSO and discussion on policy in a decentralised, decarbonised and digitalised energy landscape.



<http://www.energynetworks.org/electricity/futures/open-networks-project/future-worlds/future-worlds-impact-assessment.html>

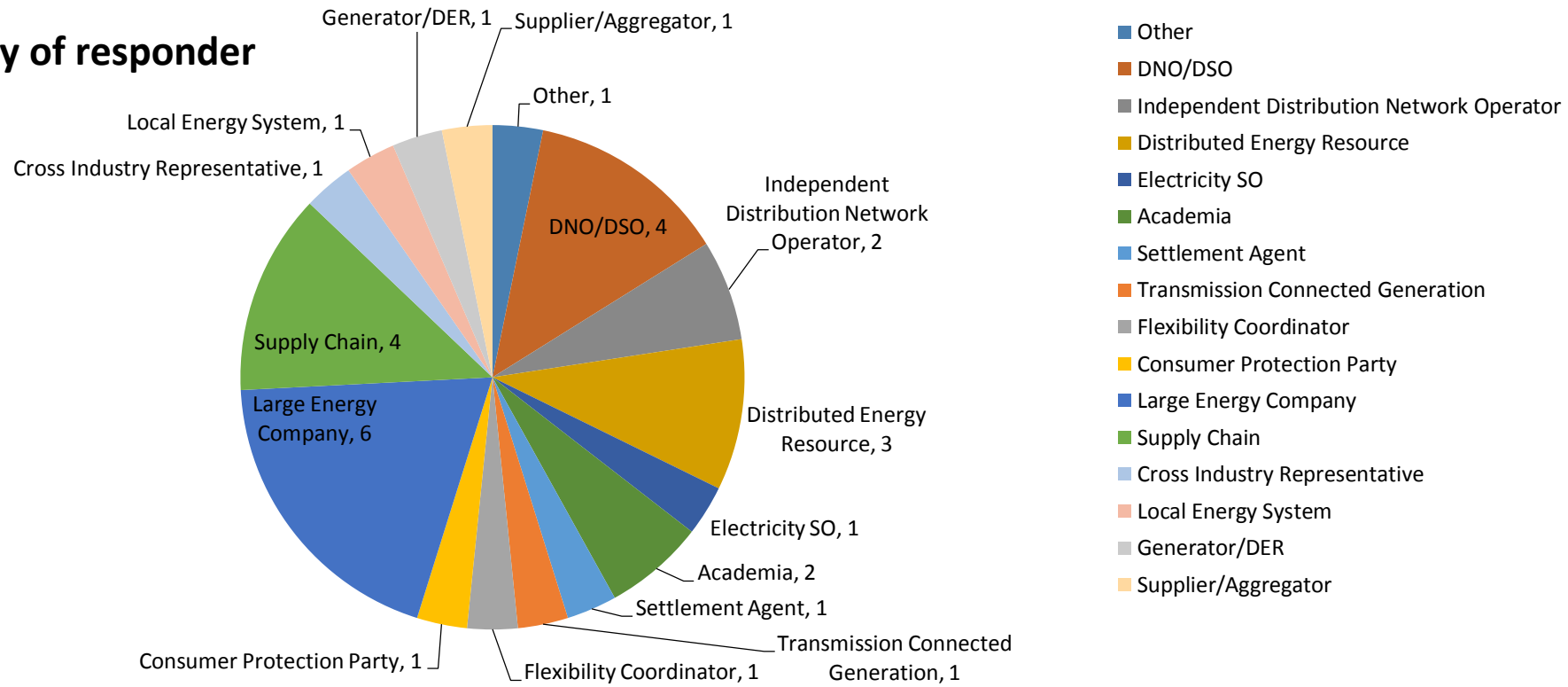
# Analysing your responses

- Product group graded each question response into 'broadly agree', 'agree', 'broadly disagree', 'disagree' and 'no comment' categories and produced a pie chart for each question
- The response to consultation questions that relate to a particular theme have been shown in the relevant section in this presentation; responses to all 20 questions are set out in an annex
- Pie charts presented exclude DNO/IDNO and ESO responses and 'no comment' category to concentrate on external stakeholder input. However, network companies are important stakeholders in ourselves, therefore any future steps must take into account these views and preferences.
- Product group analysed each response and pulled out the key messages, grouped under the six themes of: Value of Impact Assessment; Transition Paths; Assessment of Worlds; Comments on specific Worlds; Further work for consideration by WS3; and Policy & decision making
- Key messages from each responder were distilled into a set of common stakeholder views
- Developed a referral flag for highlighting stakeholders' relevant comments to 2019 WS3 Product Leads for consideration in their delivery plans

# Consultation respondents

Thirty one responses were received from sixteen stakeholder groupings:

**Q1 - Category of responder**

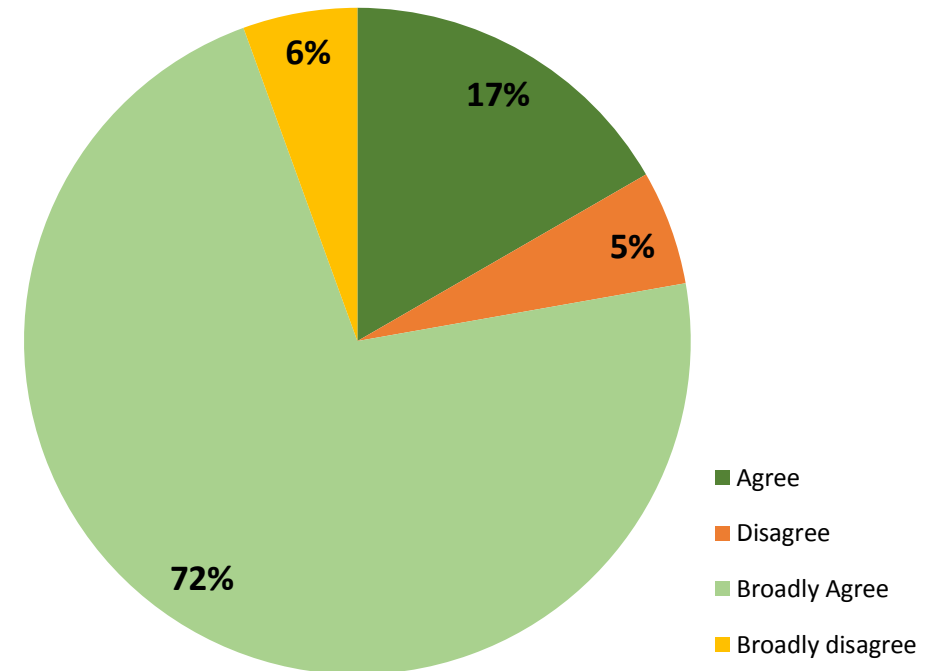


# General feedback on the Impact Assessment

## Summary

**89% of non-network operator stakeholders agreed or broadly agreed with the insight and conclusions presented in the Executive Summary of the Impact Assessment**

Do you agree with the conclusions and insights within the Executive summary?  
*(Q3, based on 18 responses)*



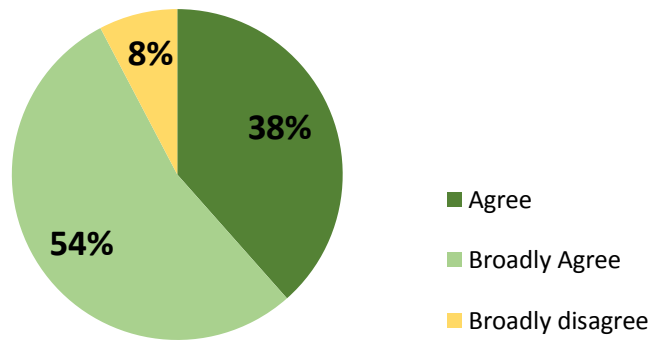
# Feedback on assessment of the Future Worlds

## Summary

**80% of non-network operator stakeholders agreed or broadly agreed that the approach taken to assess the implementation costs of each was appropriate**

Do you agree or disagree on the approach used to assess the overall potential benefits of improved system operation?

*(Q11, based on 13 responses)*

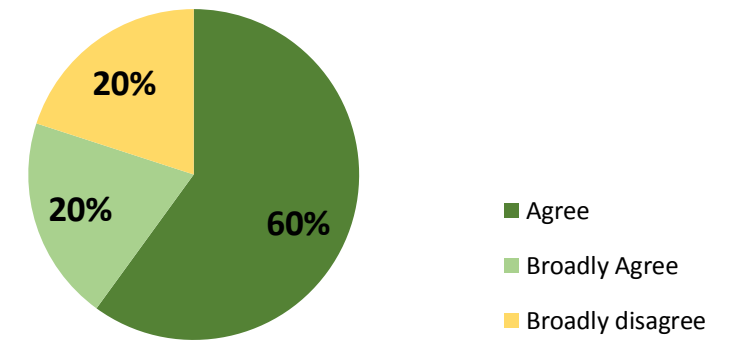


## Summary

**92% of non-network operator responders agreed or broadly agreed with the approach to assess overall potential for benefits from better system operation**

Do you agree or disagree with the approach used to assess the costs of each world?

*(Q15, based on 10 responses)*





Some stakeholders expressed the following views

- **Wider whole-system cost and benefit analysis**
- **Challenge to the assumption that all worlds achieve full benefits**
- **Access to markets under Worlds A needs to be considered**
- **System reliability is not prominent enough in the assessment**



## Response from Open Networks

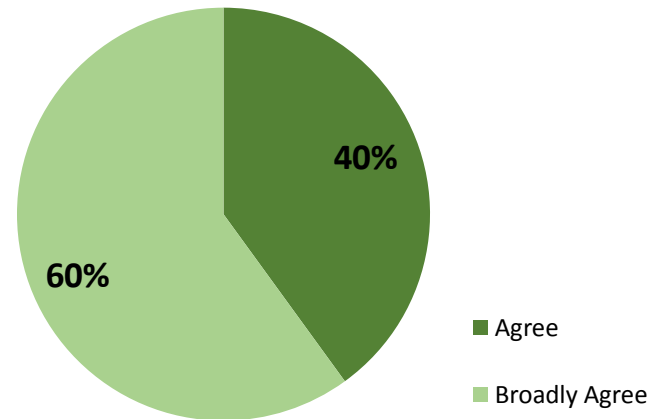
There is no current plan to revisit the Impact Assessment at this stage. However these comments provide useful context to the conclusions and insights presented. They also allow any future work in this area to take on board the suggestions.

# Feedback on the value of Impact Assessment

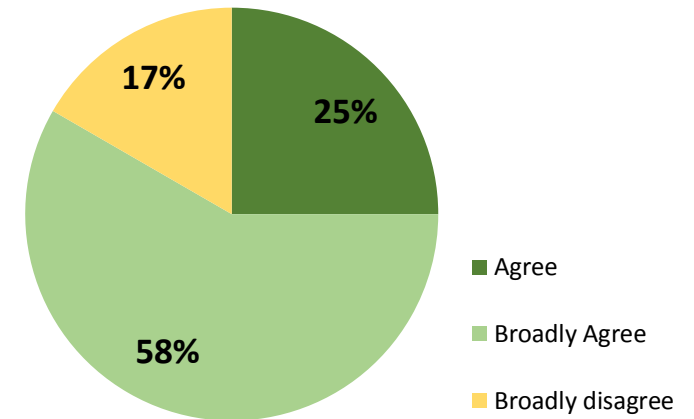
## Summary

**83% and 100% of non-network operator responders agreed or broadly agreed with the approach taken to deal with the uncertainty surrounding the quantification of benefits and cost respectively and how this was presented in the Impact Assessment**

Do you agree or disagree with the approach to dealing with the uncertainty/range of costs?  
*(Q16, based on 10 responses)*



Do you agree or disagree on the approach taken to deal with the uncertainty/range of benefits?  
*(Q13, based on 12 responses)*



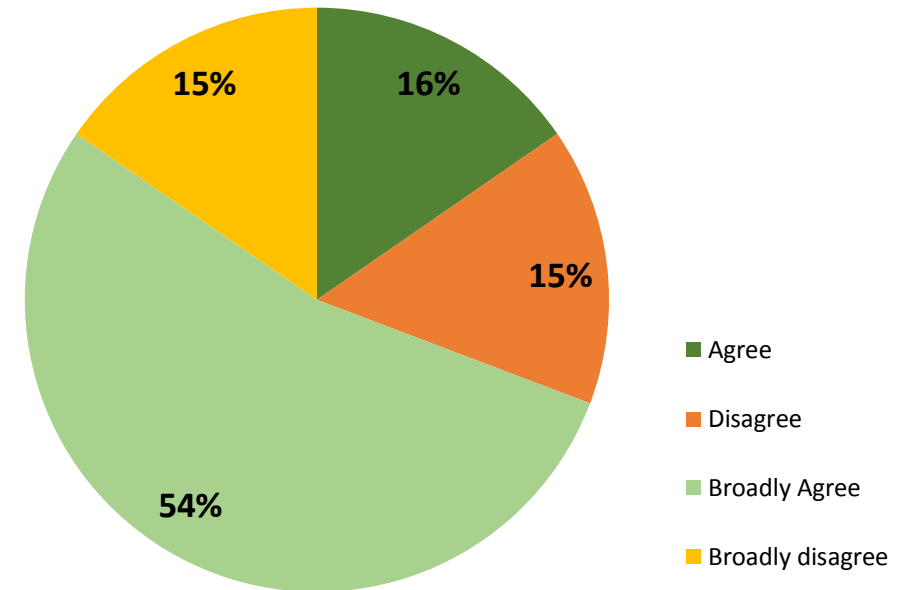
# Feedback on the value of Impact Assessment

## Summary

**70% of non-network operator stakeholders agreed with the assumptions used for quantifications of benefits and for the minority that disagreed, a summary of their further comments can be found in the table right**

Do you agree, disagree on the key benefits assumptions contained within Appendix B (e.g. all Worlds, apart from World C, achieve the same benefits by 2050 etc.) and used in the impact assessment?

*(Q10, based on 13 responses)*



# Feedback on the value of Impact Assessment

## Some stakeholders expressed the following views

- Stakeholders broadly agreed with the approach taken to produce the Impact Assessment
- Uncertainty of values in the assessment suggests this assessment is not robust enough for decision making at this stage
- Assessment is heavily networks-focused
- There is a heavy reliance on assumptions in the assessment



## Response from Open Networks

Developing a least regrets pathway allows us to consider options in the future as more evidence becomes available. Any significant shift in future roles and responsibilities will be supported by a robust Impact Assessment on developed operating models. No future options and pathways are off the table at this stage.

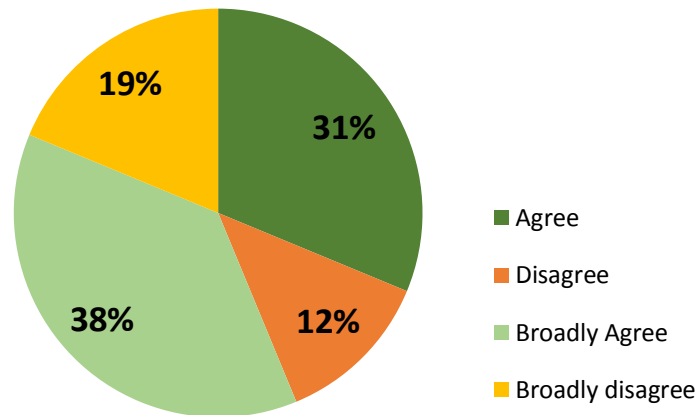
# Feedback on the Transition Pathways

## Summary

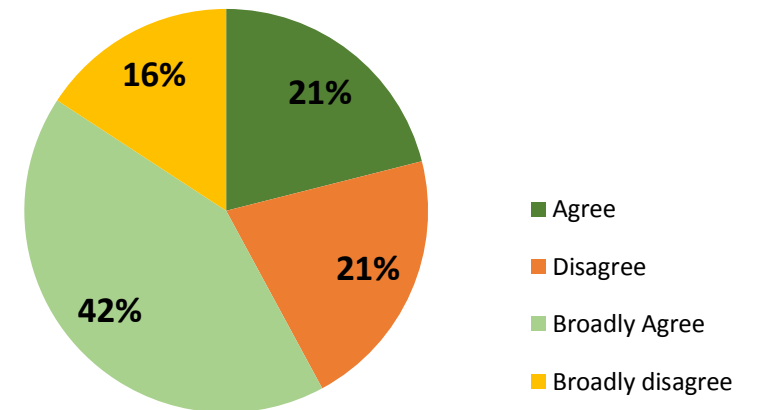
63% of non-network operator stakeholders agreed or broadly agreed with the potential transition pathways >>

>> However, 72% of non-network operator stakeholders suggested there are other potential options for transition pathways

Do you believe there are any other viable transition paths?  
*(Q5, based on 16 responses)*



Do you agree with the options set out as potential transition paths?  
*(Q4, based on 19 responses)*

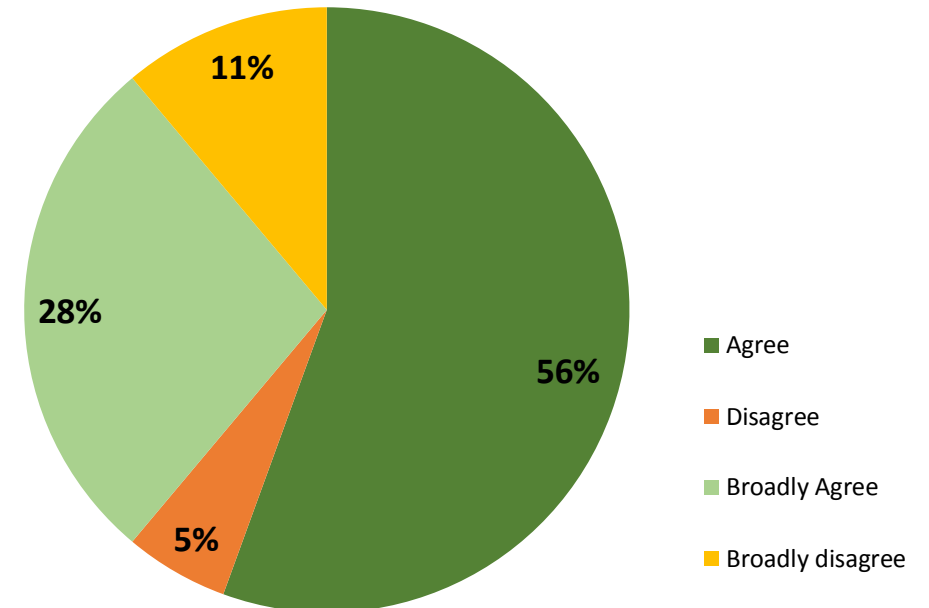


# Feedback on the Transition Pathways

Do you agree with the assumption that all transition paths start in Stage 1 of World B?  
*(Q6, based on 14 responses)*

## Summary

**84% of non-network operator stakeholders agreed or broadly agreed that all transitions paths start in World B Stage 1 which is closest to current arrangements**



# Feedback on the Transition Pathways

The following comments and suggestions were included in consultation responses

- Many views on the transitional paths shown with alternatives offered
- Whilst most stakeholders agree with World B stage 1 start some suggest current arrangements are closer to World D stage 1
- Pushback on Baringa assumption that World A is optimum for high DER penetration with some citing World B as credible alternative
- Timescales suggested are too long; action needs to be taken now
- Potential for regional differences in timescales



## Response from Open Networks

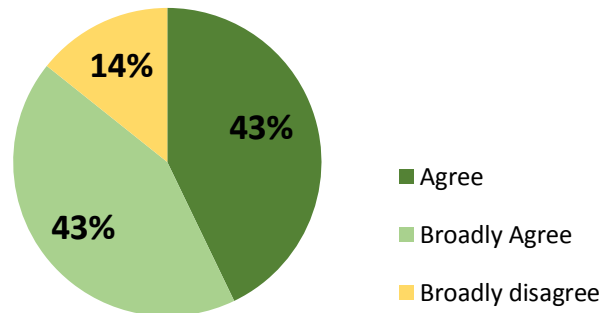
We agree that action needs to be taken now, which is why we are suggesting practical development of DSO – ESO coordination now. There is no “no change” option – we need to enhance DSO – ESO coordination to start to realise DSO benefits for customers and consumers. As above, no future options/pathways are off the table at this stage.

# Feedback on Policy and Decision making

## Summary

86% of non-network operator stakeholders agreed or broadly agreed with the unintended consequences identified in the Impact Assessment

Do you agree or disagree with the list of potential unintended consequences identified in Section 4.5, and their prioritisation and potential mitigation as charted in Figure 20?  
(Q20, based on 14 responses)



The following comments were included in consultation responses regarding Policy and Decision making

- Need for clear and co-ordinated policy and regulatory direction
- Need for clear delineation of roles between DSO and DNO
- Regulated monopolies should not participate in competitive markets
- Need to maintain optionality between transition paths at this early stage
- Need for compliance with EU legislation

## Response from Open Networks

We will clearly not develop any models that are non-compliant with legislation and we will develop DSO ESO coordination to reflect European direction. We are not ruling out any options for the future and will work further to help inform the development of roles, responsibilities and functions for DSO/ESO coordination



# Feedback on the Future Worlds

## Summary

The Future Worlds were the subject of a previous consultation in which stakeholders showed broad support for their value in further assessing future arrangements for flexibility and the approach to carrying out an Impact Assessment of potential future arrangements. Although not in response to a specific consultation question, some stakeholders shared their views on specific Future Worlds and these are shown below.

# Feedback on the Future Worlds

The following comments were made by some stakeholders in their responses

- Questioned validity and usefulness of World C as a standalone World assessed on the same basis as the other four, it should be considered as an underpinning layer in each of the other Worlds.
- World A should be removed from further analysis as it is not a viable option, with questions over incompatibility with EU framework and likelihood of DSO not being a market facilitator.
- Certain preference for hybrids e.g. 1) Worlds C & E, 2) Worlds A or D combined with World E.
- Certain preferences for a World or sequence of Worlds e.g. 1) World B, 2) World D, 3) World E (addresses conflict of interest, but so could a truly independent) , 4) World B, then World D
- Clearer definition of World E needed to understand how it compares relatively to other Worlds



## Response from Open Networks

The model that we will end up with will not be any of the worlds as defined in the Impact Assessment. We need to practically develop the optimum model for DSO ESO coordination as a starting point on the transition pathways and this is likely to draw key elements from other models and challenge existing assumptions made by Baringa in the Impact Assessment

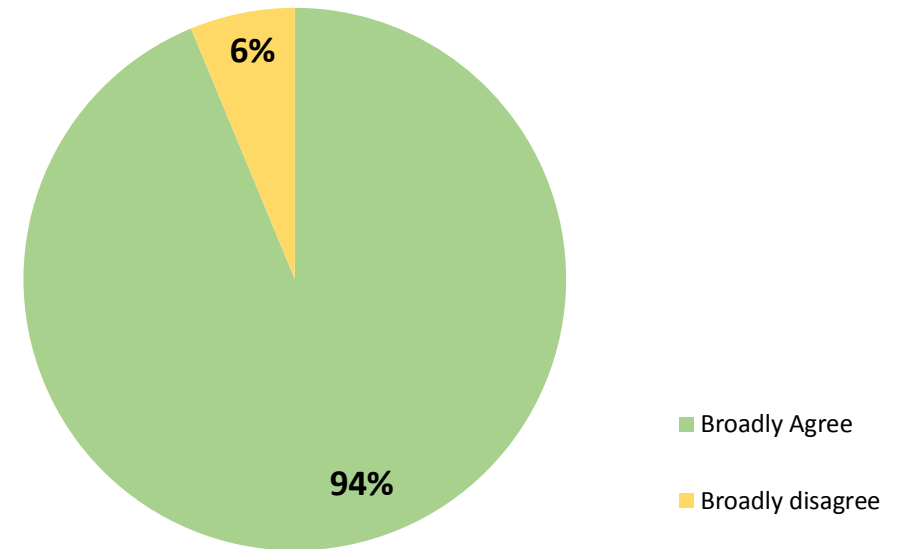
# Feedback on the Further Work

## Summary

94% of non-network operator stakeholders agreed or broadly agreed with the 2019 work-plan and areas of further work set out in the Impact Assessment

Do you agree with the areas identified for further work in the 2019 workplan and the further work ideas in the impact assessment or do you feel there are other areas of work that should be prioritised to progress in this area?

*(Q7, based on 16 responses)*



# Feedback on the Further Work

## The following comments were made by some stakeholders in consultation responses

- Further work in the cost assessment of the Impact Assessment in a range of areas:
  - 1) total system costs
  - 2) control and monitoring costs
  - 3) third parties' costs
  - 4) future system balancing costs
  - 5) NO and SO separation
  - 6) co-ordination at LV and across NO boundaries
- Further work in the market interactions for the Impact Assessment across the following
  - 1) flexibility and settlements markets
  - 2) flexibility and ancillary services markets
  - 3) local and national markets
- Facilitate information for routes to market for local community based DER
- Further work in the benefits assessment of the Impact Assessment to value flexibility for customers
- Review and align Impact Assessment with other international studies
- Make customers at the heart of decision making
- Update Future Worlds with Access & Forward Looking Charges reform work

# Feedback on the Further Work



## Response from Open Networks

We agree that the following elements are key to our future developments: realising customer benefits in decision-making; market interactions with flexibility (local DSO and national balancing/ancillary services); and reflecting the output from charging reform development as and when it is available

# Direction and next steps for DSO transition

- Clear steer from respondents that DSO transition starts with development of **DSO-ESO coordination**; this is the **least regrets path**, building upon existing practices whilst delivering **our Flexibility Commitments** and not excluding any other models in the future when we understand more on the liquidity of flexibility markets and the impact of charging reforms.
- Some DNOs have demonstrated benefits of enhanced coordination between DSO-ESO, and the learning will inform the work being delivered by Open Networks; this is **consistent with the DSO-TSO cooperation** approach of in Europe through Article 57
- Incorporating **price driven Flexibility** enhances the benefits for all development; DNOs are becoming increasingly active with increased DER/LCT take up, contracted DSO flexibility services, contracted ESO services and constraint management systems
- ED2 framework must support the progress at which DSOs evolve and be **flexible to allow for regional differences** to be taken into account in the future, where the evidence suggests a more efficient approach is best suited
- In distribution networks that are becoming increasingly active in the way they are evolving (i.e. increased DER/LCT take up, contracted DSO flexibility services, contracted ESO services, constraint management systems) it is prudent that **development towards a model more suited to the emerging environment** continues. This should take the form of a **least regrets approach** which can be evidenced as the most efficient and economically beneficial solution



## Response from Open Networks

The Open Networks Project will continue its work on defining the least regrets steps to ensure enhanced coordination between the DSO and ESO. As this work is delivered, updates on next steps will be communicated with stakeholders.