

The Voice of the Networks



Energy Networks Association

Future Worlds consultation responses

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National Grid ESO
1st November 2018

General Housekeeping

Amenities

- Both male and female toilets can be found in the corridor.

Emergency Exit

- Fire escape door is located in the corridor. Signage can be found above entrance.
- There is an emergency alarm test at 2:00pm. Please remain seated until the test is completed.
- Should there be an emergency, the alarm will sound and instructions will be give via the PA system.

Wifi

- Login: *ENA Wireless*
- Password: *R0ut3rEn3rgy!*

Tea & Coffee

- Tea, coffee and biscuits can be found next to reception or the members area.

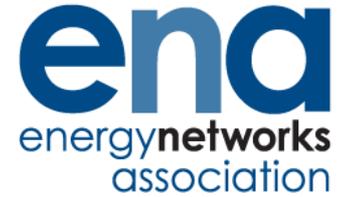
Attendance

- Please remember to sign the attendance sheets on the tables.

Correspondence

- If you would like to receive information about the Open Networks Project or have any feedback you would like to submit, please get in touch with us at opennetworks@energynetworks.org.

Slido Polls



We will be using Slido's Polls feature to collect your thoughts on aspects of today's presentation on the Future Worlds consultation responses.

You can access this by going to www.sli.do (or downloading the app for iOS or Android) and entering the following details and going to the 'Polls' tab:

Event code: #FW18

Login: Your name

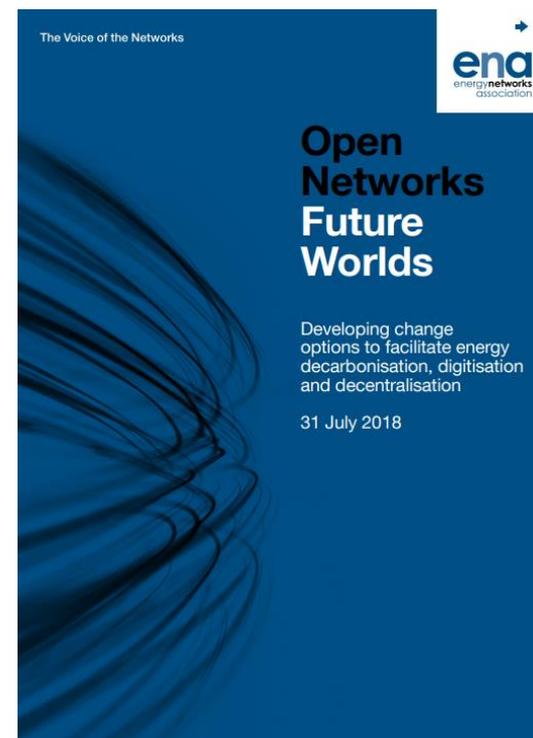
Password: ENA

Future Worlds Overview



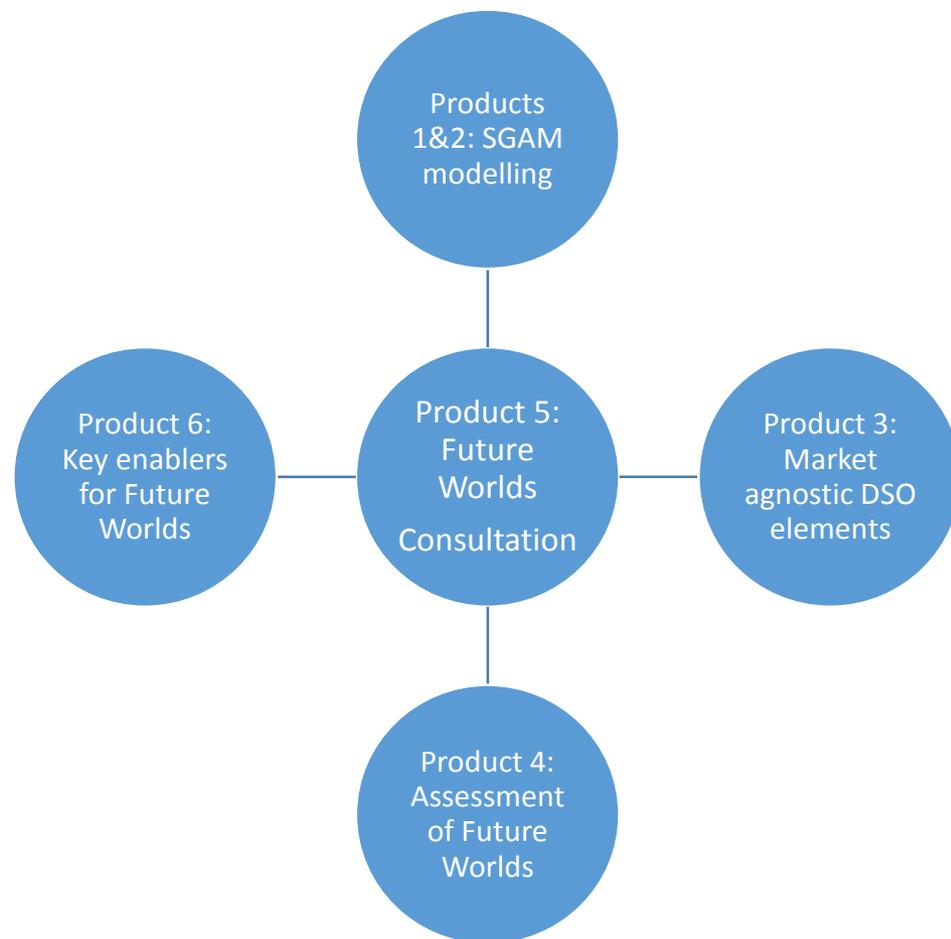
‘Future Worlds’ is the output of a substantial stakeholder engagement process to map and describe a number of potential future electricity networks (“Future Worlds”) capable of supporting the smart decentralised energy industry that the UK is transitioning towards.

The consultation did not seek to recommend any particular Future World but instead to understand them, creating a common view of how each works allowing informed debate and decisions to follow.



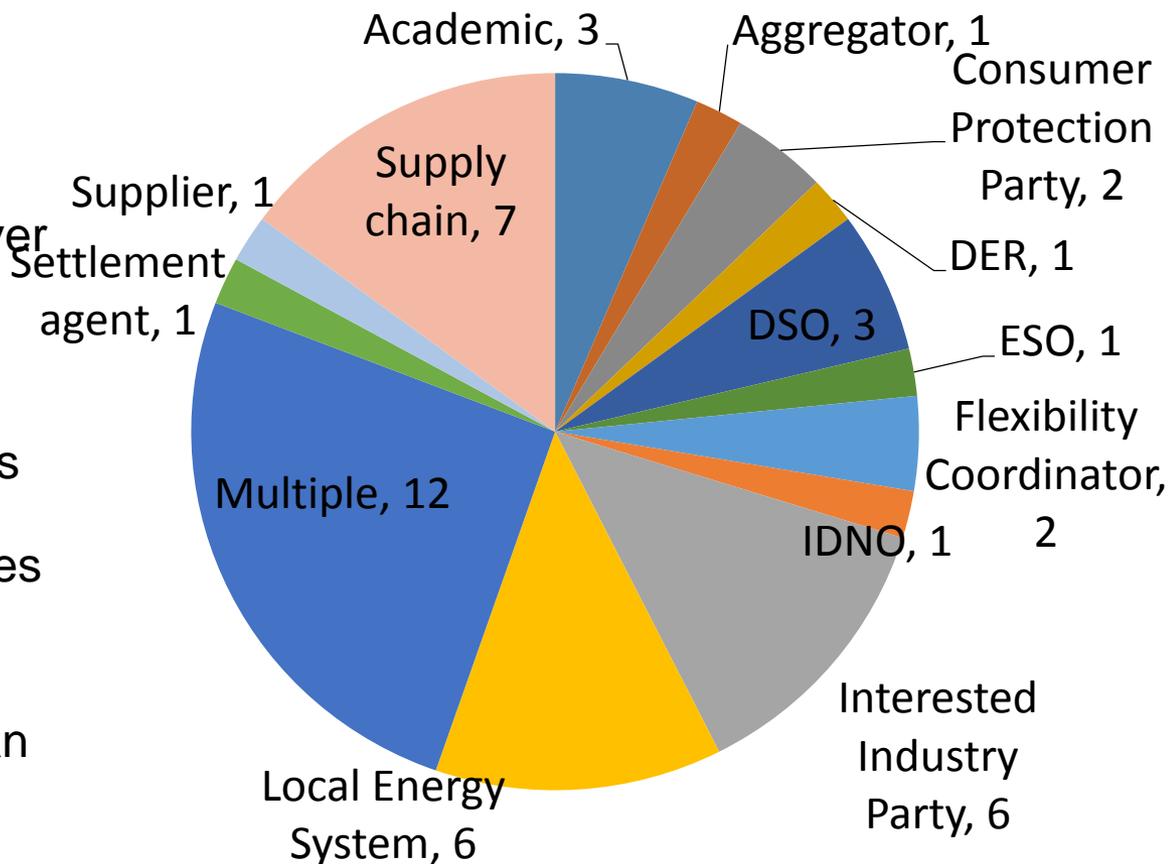
Overall aims

- The Future Worlds consultation built on the 2017 Commercial Principles paper, but considers all the functions of DSO rather than simply market models.
- In brought together many of the key products for workstream 3 in 2018 such that the overall aims of the consultation were;
 1. **Obtain feedback on the ‘future worlds’ developed and their associated SGAM models**
 2. **Review draft criteria and proposed structure for the Impact Assessment**
 3. **Obtain feedback on both key enablers and market agnostic DSO elements to inform these products.**



The responses

- Consultation closed on 25th September
- 47 responses have been received
- 12 responses are from parties who believe their activities cover multiple Future Worlds actors.
- 9 responses are from parties who do not recognise themselves as a Future Worlds actor. These are described as either interested industry parties or academics
- Broad spread across actors; some actor groups greater than others



Consultation areas

The Future Worlds

- A description of the five Future Worlds

The Smart Grid Architecture Model

- A high level summary of the methodology employed to build the Smart Grid Architecture Models

The principle of neutral market facilitation

- An overview of why the principle of neutral market facilitation is important

Stakeholder insights

- Key stakeholder insights for each of the 23 actors described in the models

Assessing the Worlds

- Our intended approach to impact assessment modelling of the worlds inviting your views

Key enablers for the Future

- A description of the key enablers needed to deliver the future worlds

Proposed next steps

- A summary of our proposed next steps including our work on least regrets analysis

The review process

Detailed review

- All responses have been reviewed on a section by section basis by relevant workstream 3 members
- Two individuals have reviewed each section to ensure all feedback is captured

Summarising key points

- Key messages have been summarised from the detailed
- More detailed points will be retained and used in development of specific products

Informing next steps

- The key messages for each section have reviewed as a whole
- This has allowed us to streamline the messages and align with the consultation aims

Aim 1 – Future Worlds feedback

1. Broad agreement for principle of neutral market facilitation
2. Mixed responses as to whether the worlds provided a good spread of options
3. World C is more a layer than a world in its own right
4. SGAM modelling work was thorough and useful for engagement and defining the worlds
5. Wide observation of SGAM's limitations including human behavior, cross-vector
6. Need to consider other actor data links in SGAM and complete lower level modelling
7. Potential for new actors including 'market facilitator', 'tech /platform provider', 'researcher', 'Flexibility Marketplace', 'Community Energy', 'HHDA management and associated providers'

Sli-do poll; which feedback element do you believe is most relevant

Aim 2 – Inform the impact assessment

1. Wide support for the Impact Assessment approach with some comments on short timescales
2. Proposals to consider hybrid worlds and transition phases for each world
3. Numerous suggestions to clarify/ amend/ extend the assessment criteria in the four cases
4. More emphasis on range of customer types in the assessments
5. Wide support for joining data provision sub-group

Sli-do poll; which feedback element do you believe is most relevant

Aim 3 – Informing key enablers and next steps

- Key enablers;
 1. Broad agreement on the Key Enablers
 2. Strong support for the short-term priorities – especially network visibility at the low voltage and the provision of information for 3rd parties
 3. Common/standardised approach across the industry
 4. The enablers are generally viewed as the same, but noting the detail will be different for each world
 5. Consideration to Home Energy Management Systems, consumer access devices and interactions linked to Internet of Things
 6. External enablers not considered

Sli-do poll; which feedback element do you believe is most relevant

- Next steps
 - Broad support for our suggested next steps, with a need for continued stakeholder engagement (to ensure regional needs are considered and impacts/risks well managed).

Feedback for 2019 work programme consideration

- Need to consider in greater detail;
 1. Whole Energy System
 2. Appropriate routes to market
 3. Flexibility market principles
 4. Local markets and peer to peer trading
 5. Local Energy Solution (including potential differentiation from Community Energy schemes)
 6. IDSO
 7. WS2 customer definitions and need for additional social research to better understand behaviours

Sli-do poll; which feedback element do you believe is most relevant

- General feedback; Open Networks should avoid the temptation to pick near term/easy changes rather than those that are more difficult but potentially more beneficial. (Eg. Charging)

Broader feedback for BEIS and Ofgem

- Views provided on the following topics. We believe it is more appropriate for these areas to be passed on to Ofgem and BEIS as part of the evidence pack in 2019;
 1. DNO – DSO separation
 2. DNO participation in flexibility markets as a provider
 3. Neutral market facilitator as a regulated activity
 4. Clarification of when it is appropriate to use of flexibility of the network itself
 5. Need for backstop when the market fails to deliver
 6. Some respondents suggested the pace of change implies that an incremental approach to transition is the only viable option.
 7. A recognition that to implement some of the next steps will require the support of regulator and broader industry (eg. Charging, planning standards and codes).

Sli-do poll; which feedback element do you believe is most relevant

Next Steps

Impact assessment

- Feedback already considered in development

Other 2018 feedback and potential new areas

- Consider as part of 2019 Open Networks work programme

Broader messages

- Ensure all non-confidential responses are published