

ENA Future Worlds Consultation

General questions

Q1. Please confirm which stakeholder group you believe that you belong to; this will enable the Open Networks Project to understand the spectrum of respondents to this consultation.

Distribution System Operator.

Q2. Please provide your views on Baringa's interpretation of the Future Worlds, detailed in Section 2, for the purpose of this impact assessment and the overall approach, highlighting any key strengths or weaknesses, or areas which should be explored in more detail?

In which concerns areas to be explored, there are some other European projects addressing flexibility coordination mechanisms as well. It would be useful to share lessons learned on several aspects, e.g. CBA analysis; DSO-TSO interoperability and possible governance and implementation models, amongst others.

The six questions answered in the report provide a relevant clarification on some crucial subjects. However, there are some concerns which should be further addressed:

Question ii) – we are not sure DSOs will not have to play a role in Balancing apart from World A. As a matter of fact, distributed generation and the need to balance supply and demand at a more local level would be applicable in any of the scenarios, notably in World B where DSOs will also need to take on this role in the long term.

Question iii) – on World B, although we agree on the prioritisation process, we also expect the long-term impact to be driven by the mechanisms in place for coordination between DSOs and the ESO which are strongly dependent on the interfaces between their systems and platforms, something we are working on as a way to foster the flexibility uptake in the coming years and has been coined with the name “Universal Market Enabling Interface” (UMEI). Further to this, the recent TSO-DSO report on “An Integrated Approach to Active System Management” (please check at https://www.edsofsmartgrids.eu/wp-content/uploads/2019/04/TSO-DSO_ASM_2019_190304.pdf), already touches upon several possible arrangements to coordinate DSOs and ESOs in their relationships with market parties and flexibility.

Question iv) – we agree there are complementary mechanisms to flexibility provided by DER that need also to be considered. On the subject, please take note that DSOs across Europe have agreed on a “toolbox” for flexibility provision that might be useful for future discussions (please check at <https://www.edsofsmartgrids.eu/wp-content/uploads/Flexibility-in-the-energy-transition-A-tool-for-electricity-DSOs-2018-HD.pdf>).

Question v) - World D stage 2 assumes that ESO would be able to coordinate flexible DER down to LV. However, it is important to highlight again the ASM report, which mentions that any asset which has the intention to participate in the flexibility market must follow several steps (e.g. unit & grid prequalification; evaluation of the bid; real time monitoring of the bid) which should be performed by the SO responsible for operating the grid to which the asset is connect. This means that in a hypothetical world D, although ESOs take a central role in the procurement and dispatch of flexibility services, at least the DSO should be involved in the steps highlighted above.

Executive summary

Q3. Do you agree with the conclusions and insights within the Executive summary? If not, please explain your rationale. Please provide reference to more detailed comments against individual sections if this is appropriate.

Please check the answer to question 17 on the qualitative approach.

As for the quantitative approach, we would like to stress that independently of the benefits and costs achieved for World D, it is difficult to envisage a future scenario where there is a disconnection between the use of DER resources and the operation of the systems to which they are connected. We see it more as a theoretical valid approach to compare different options.

Transition paths

Q4. Do you agree with the options set out as potential transition paths?

We see it as a good starting point. Having some future scenarios on the development of DER in UK (or even in Europe) in coming years will provide a clearer vision on which will be the most likely transition path to be considered.

Q6. Do you agree with the assumption that all transition paths start in Stage 1 of World B?

Yes, but it is of utmost importance that DSOs have the right means in place to ensure efficient system operation at distribution level, which means the “status quo”, by default, is no longer an effective solution.

Further work

Q7. 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?

Yes. We would like to add two complementary topics: i) the need to extend smarter operation of the grids to the lower voltage levels; ii) the need to articulate market and system operation by standardising the exchanges of information and services between players as a stepping stone for further developments.

Q8. What future work do you believe would enhance the debate and body of evidence around transitioning to the potential Future Worlds?

At least, starting a deeper discussion on future scenarios and their implications, from technical issues to roles and regulatory frameworks, in order to properly address the complexity of the energy transition processes.

As mentioned in our previous answer to Future Worlds consultation, policy makers, regulators and the remaining stakeholders, should become aware of the intrinsic relation between system operation and neutral market facilitation. There is much to be done apart from expecting DSOs and ESO to become market makers for flexibility or replacing investments through third-party flexibility offers.

Q9. Do you agree or disagree with the four categories of system operation benefits identified? Are there areas that should be excluded from the list and/or other areas that should be included?

In our view, it is also key to consider the costs associated to actions on DER which are not under control of the connecting system operator. There is seems to be a tendency to overlook this topic which is one to be considered when evaluating the cost-efficiency of the different Worlds.

Q10. Do you agree, disagree on the key benefits assumptions contained within Appendix B (eg all Worlds, apart from World C, achieve the same benefits by 2050 etc) and used in the impact assessment? If you disagree, please explain your reasoning. Do you have any other comments?

As a suggestion, it would prove useful to compare the approach taken in other European initiatives as a way to look for further insights and to eventual contribute to consolidating assumptions and results.

Q11. Do you agree or disagree on the approach used to assess the overall potential benefits of improved system operation?

Please see answer to question 10.

Qualitative assessment

Q17. Do you agree with the trade-offs of each of the Future Worlds identified against each of the high-level criteria in Table 1 of the Executive summary?

Agree with the following remarks:

- Decarbonisation of heat and transport (particularly if this accelerates in 2020s)
 - Complexity is unavoidable in any of the Worlds. With the proper means, we expect it to be manageable.
- Ease of market engagement for existing flexibility providers
 - The reasons to consider World D better suited to foster market uptake are not clear. Dependent on future system needs, most of them at local or regional level, new flexibility providers will need to join in which makes the current reality outdated.
- Lowest cost to implement and operate
 - There might be hidden costs, notably the ones resulting from impacts on distribution networks. In the end, cost-effectiveness should prevail.
- Minimise structural change from today
 - The way forward will need to address complexity in system operation. This is not to be considered a limitation but a step that can't be bypassed.
- Transparent, fair, neutral markets
 - In our view, we consider system operators neutral actors that operate in a regulated environment. Furthermore, we expect market operation to be better linked to system activities, which brings additional complexity in the event of separation between system operator and market facilitator roles.

Q18. Do you agree or disagree with the Appendix A approach of ranking of worlds to help identify the strengths and weaknesses of each World against each criteria? If you disagree please explain your reasoning.

It provides a clearer view on the potential benefits of and differences between the Worlds. Nonetheless, quantification of qualitative criteria might lead to different interpretations.

Q20. 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? If you disagree please explain your reasoning. Should the Open Network project progress further work on unintended consequences?

Prioritisation might be arguable. In our opinion, it is also important to clarify the impact of the unintended consequences as they can be more present according to the chosen World.