ESO

Use Cases Advisory Group

Meeting 5 minutes

Date:	17/11/2023	**Location:**	Virtual
Start:	10:00	**End:**	11:30

Participants

Attendee	Organisation
Professor Jim Hall (Chair)	University of Oxford
Corinna Jones	National Gas
Dr Hilary Williams	Energy Systems Catapult
Dr Robyn Lucas	Modo Energy
Sarah Rigby	Scottish and Southern Electricity Networks
Joanna Webb (Technical Secretary)	ESO
James Edwards-Tombs (Observer)	ESO
Dozie Nnabuife (Observer)	ESO
Precious Akponah (Observer)	ESO

Apologies

Attendee	Organisation
Dan Monzani	Aurora Energy Research
Nick Watson	National Grid Ventures
Peter Philip	Scotia Gas Networks

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Agenda

1.	Welcome, introductions and apologies for absence
2.	Minutes of last meeting and conflicts of interest review
3.	Update on the ESO Virtual Energy System programme, use cases and advisory groups
4.	Introduction and purpose of session
5.	High-level roadmap for delivery
6.	Workstream integration and advisory group input
7.	Data needs planning
8.	Final reflections
9.	AOB and next meeting

Discussion and details

#	Topics discussed
1.	**Welcome, introductions and apologies for absence** • The Chair welcomed everyone to the meeting and introduced the new member. • The Technical Secretary gave the apologies for absence: o Dan Monzani – Aurora Energy Research o Nick Watson – National Grid Ventures o Peter Philip – Scotia Gas Networks
2.	**Minutes of the last meeting and conflicts of interest review** • The minutes of the previous advisory group meeting on 15/09/23 were approved as an accurate record. • No conflicts of interest were declared.
3.	**Update on the ESO Virtual Energy System programme, use cases and advisory groups** • The ESO gave an update on the programme, including: o The Energy Bill reaching royal ascent and paving the way for the FSO to be created as an independent public corporation and its new roles. o Memorandum of Understanding signed with the National Digital Twin Project, Department for Business and Trade, on technical and data sharing alignment. o Ofgem to consult on the energy data sharing infrastructure development and implementation in spring 2024. o Updates and next steps for the CrowdFlex, Powering Wales Renewably, Advanced Dispatch Optimiser and CReDo+ use cases. o The Data & Technology and People & Process advisory groups updates, who have been focusing on managing security and determining the operating environment.
4.	**Introduction and purpose of the session** The ESO summarised the briefing pack, the aims of the meeting and what input the ESO would like from the advisory group.

5.   **High-level roadmap for delivery**

- The ESO gave further detail on the mission statement, which has been revised following feedback from all three advisory groups, and the ESO also gave background information on the draft high-level roadmap for the delivery of the Virtual Energy System programme and the FSO's future digitalisation roles, which are both work in progress.

Reflection points

1. *Do you have any feedback on the updated mission statement?*
2. *Is the overall purpose and objective of the milestone plan clear, does the format convey it clearly?*
3. *Which of the horizons outlined in the high-level roadmap do you see the Use Cases Advisory Group making the most significant contribution?*

Discussion

- Further clarification was given by the ESO on the relationship between the ESO developing the data sharing infrastructure and the ESO using the infrastructure. The core mission of the programme is to develop the energy data sharing infrastructure to enable organisations to build and connect their digital twins and the ESO is also, in tandem, developing use cases to test and demonstrate the benefits of the data sharing infrastructure. The ESO confirmed that the mission statement will be reviewed in the future as the programme develops.

- Some questions were asked about why some goals of the programme were omitted from the mission statement, such as to increase resilience and to make the energy system more cost effective. The ESO confirmed that the mission statement needed to be concise and after reviewing all three advisory groups feedback it was concluded that the net zero goal was supported for the mission statement by the majority.

- The Virtual Energy System programme roadmap was supported and made sense to the members, who felt it was useful and appreciated it mapped out visually in this way.

- It was suggested that it is very important to do the detailed and robust planning for the programme at the beginning, covering all aspects of project management such as the needs, requirements, risks, uncertainties, barriers, change control, testing of MVPs, prioritisation and workstream integration.

- It was noted that many energy industry vectors are focusing on improving data and digitalisation in their organisations, but there will need to be significant support and guidance to align with the Virtual Energy System programme. Also, that organisations are already working on data models so aligning with the Virtual Energy System in their activities is already relevant.

- The ESO confirmed that in the recently published Future Systems Network Regulation (FSNR) from Ofgem it was announced that it is likely there will be consultation in early 2024 on the developer and implementor roles for the data sharing infrastructure. It is likely that regulated networks' licence conditions will include using a common data sharing infrastructure in RIIO-3, potentially with linked incentives.

- It was asked which of the identified high level use cases would be most relevant for regulated networks. The ESO confirmed that Ofgem were considering using the data sharing infrastructure for regulatory reporting. The programme is considering a MVP for the new FSO Centralised Strategic Network Planning role.

- Concerns were raised about cyber security and the related legal frameworks for accuracy of data and sharing data, and that data requirements and risks for all energy vectors need to be considered. The ESO confirmed that the current focus in Workstream 2 (the common framework) is on security and trust and the programme is working with the Security Services to ensure compliance.

- Some members of the group commented that the roadmap timeframe is quite long and asked which elements of the roadmap are future-proof for the foreseeable and which are likely to change? The potential advancements in technology, e.g., machine learning, and markets, e.g., frequency of market settlements, and other aspects of how the energy industry operates need to be taken into account. There is currently a Review of Electricity Market Arrangements (REMA) taking place that could impact the programme. The ESO have a technology horizon

> scanning function in the innovation department that will need to provide input to the programme, as will similar teams in other energy vectors.

- As the roadmap is over 12 years and it is unlikely the programme team will remain the same, it was suggested that there needs to be accurate documentation to ensure handover to future team members is successful.
- The ESO confirmed that the roadmap is a work in progress and will be taking all three advisory groups' feedback and working further with the regulator and Government, and will come back to the groups with further updates and details in the future.

6. **Workstream integration and advisory group input**

- The ESO covered how the three programme workstreams (Stakeholder Engagement, Common Framework and Use Cases) integrate, collaborate and communicate and how the advisory group's input has contributed to progressing the use cases workstream.

Reflection point

4. ***Based on experience of the advisory group to date are there any changes you would like to see?***

Discussion

- The group commented that from initial broad scope discussions, the group has evolved and now has more of a picture of where the Virtual Energy System sits in a complex landscape, and discussions are becoming more defined, such as the programme roadmap.
- When available, more detail was requested on the roadmap:
  - More information about the steps on the journey
  - Expand on the destination
  - Risk and barriers
  - A roadmap that could be shared more widely
- Of the 26 use cases identified, it was asked which are a priority for the regulated energy networks, as it is proposed that it is a licence condition to use the data sharing infrastructure. It was confirmed that Ofgem have published an initial view recently in the FSNR Decision document.
- More detailed discussion was requested, about future use case challenges, and the next 2-3 years of the roadmap, so the group can fully share their experience and expertise.
- It was highlighted that the group provided valuable input from different external perspectives, from technical, project management and programme delivery viewpoints, and the members' organisations are key stakeholders for the future Virtual Energy System.
- Questions were raised about the other two advisory groups' discussions and if there is any overlap. It was suggested that it might be useful to have a joint session for all three groups.
- The ESO were asked what it would find most useful from the advisory group input, and it was confirmed that the programme is looking to test thinking, avoid duplication and align best practice.
- The ESO said it would also like to support and partner with other organisations to develop their Virtual Energy System ideas and use case projects, to test integration and interoperability, and to show the benefits of the common framework being developed. It was suggested that a gas use case might be a priority to develop.
- It was highlighted by the ESO that the outcomes of the Ofgem consultation on the data sharing infrastructure in 2024 and the related FSO's roles, when they are confirmed, will have an impact on future group discussions.

Recommendations

- A joint session for all three advisory groups at some point in the future.
- An interactive workshop for future gas use case ideas.

7.   **Data needs planning**

Reflection points

     5.   *Do you think the identified characteristics covers the scope of the use case?*

     6.   *Are there any other characterises that you think would be important to analyse?*

Discussion

- Perhaps the use case characteristics could benefit from having complexity and scale attributed to them, such as the number of them, the size of them, the size of their contribution (such as a large scale but fewer of them, or small scale but a large number of them).
- Also suggested was confidentiality and security license status.

Recommendations

- It was suggested that the ESO review the UCL review of ontologies for infrastructure to ensure the programme is aware of the frameworks from other industries.

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8.   **Final reflections**

- The Chair thanked the group for their attendance and valuable contributions.

9.   **AOB and next meeting**

- The date and time of the next advisory group meeting was confirmed as Friday 19th January 10am-11:30.
- It was suggested that the group try to aim for an hour and a half meetings in the future as it should be possible to have the discussions in this time and will ensure the group makes the most of the members' valuable time.

Recommendations

- The agenda for the next meeting is under discussion but may feature the overarching use cases that the programme is working on.
- More detail on the roadmap was requested and the roadmap destination, and review the use case priorities to ensure they will get to the destination.
- It was requested that the Technology Horizon Scanning team at the ESO present at a future advisory group as future technologies will affect the roadmap destination.
- A workshop with the group, or external representatives from energy or other industries was suggested for future meetings.
- The ESO said that if any members would like to suggest a guest to attend and share learnings with the group that would be welcomed.