People & Process Advisory Group

Meeting 5 Minutes

Date: 08/11/2023 Location: Virtual

Start: 13:00 **End:** 15:00

Participants

Attendee	Organisation
James Edwards-Tombs (Interim Chair)	ESO
Barbara Bormann	Drax
Ali Nicholl	IOTICS
Prof Chris Budd	University of Bath
Gea Mikic	Icebreaker One
Alastair Martin	Flexitricity
Ankit Patel	Arup
Jonathan Barcroft	ESO
Divya Mahalingam (Facilitator)	ESO

Agenda

- 1. Apologies for absence
- 2. Discussion: Data sharing infrastructure high level roadmap
- 3. Discussion: Integration with the data sharing infrastructure
- 4. Discussion: Determining the operating environment
- 5. Next meeting
- 6. AOB

Discussion and details

- 1. Apologies for absence
 - Teodora Kaneva techUK
 - Claire Addison Flexitricity (Alastair Martin covered in her absence)
 - Kevin Reeves KJR Digital

2. Discussion: Data sharing infrastructure high level roadmap

• Revised mission statement: Creating the common data sharing infrastructure to enable an ecosystem of connected digital twins that will facilitate the transition to net zero.

Reflection Points

- Do you have any feedback on the updated mission statement?
- Is the overall purpose and objective of the milestone plan clear, does the format convey it clearly?
- Are there any other enablers and decisions that should be included?

Discussion

- Group liked the revised mission statement.
- It was agreed that the mission statement has clear message for the audience and relatable to the Virtual Energy System (VirtualES) programme.
- It was suggested to add endnotes for the acronyms even though they're recognised. For example: It was asked: 'What does RIIO stand for?'. ESO confirmed Revenue = Incentives + Innovation + Outputs and refers to the Networks price control framework from Ofgem.
- It was advised a clearer scope of MVP (Minimum Viable Product) would be useful in the milestone plan.
- It was discussed that the people who deal with data aren't necessarily the people who subscribe to ESO communications. It could be beneficial to educate people through different communication channels about how to receive regular updates through emails and subscribing to newsletter for the latest developments.
- ESO reassured the group that our Stakeholder Engagement team are doing that work, engaging with both internal and external stakeholders regularly about the VirtualES programme development.
- Link to 'Plugged In News from ESO' was shared with all the members on the MS Teams chat.
- It was proposed to consider delivering the MVP inside the horizon 1 timeline, allowing enough time to test and rethink on some important technical aspects different code models, architecture approach or ontology for the next round.
- The enablers will support in bridging the gaps in building the VirtualES infrastructure and service model inside horizon 2 timeline.
- It was mentioned that effective communication and coordination are essential enablers. For
 example, a clear communication plan with key players like Ofgem and DESNEZ helps to
 establish expectations, ensure everyone is on the same page and the product is developed on
 time and within budget.
- It was agreed that we could face technical challenges such as scalability, security, and performance which can be a significant hurdle when creating an MVP and can reduce complexity by addressing them at the initial timeline plan.
- It was concluded that an MVP is not a finished product but a starting point for future development. Therefore, it is essential to monitor its performance, gather feedback, and make improvements based on data-driven decisions.

3. Discussion: Integration with the data sharing infrastructure

Definitions of the following concepts.

- <u>Data sharing infrastructure</u>: the digital services, standards and tools that support the exchange of data between participants across the sector.
- <u>Common Digital Assets</u>: include the common energy digital tools, services, and infrastructure that are created, deployed, and used across the energy sector.

Reflection Point

Are these definitions clear and is anything missing?

Discussion

- Group confirmed the definitions are clear, but it was raised that the digital services, standards
 and tools that support the exchange of data between participants across the sector will be using
 decentralised or centralised approach.
- ESO clarified that the agreement as the trust framework will be that organisations can speak to each other. The programme will not create a centralised data store and is following a decentralised model.
- ESO confirmed that on the architecture side, the data will never pass through ESO. It's the enabling process and tools that will allow organisations to speak to each other.
- It was concluded by ESO that we plan to develop the services, connectivity, standards, and processes to be used. This can be achieved by sticking to a clear definition and scope of MVP.

Case Study - Open Banking

Reflection Point

Are there other features of Open Banking that could be applicable to the energy system?

Discussion

- It was discussed that open standards are key to facilitating data sharing across the industry.
- It was suggested that utilising open standards also reduces cost to individual organisations since
 the organisation needs to follow the shared standards as opposed to creating, maintaining and
 cross-referencing their own methodology.
- It was concluded that Open Banking demonstrates that creation of cross sector data sharing and digital twins are not solely technological problems.

Case Study - Data Trust & NUAR

Reflection Point

• Is there learning that can be taken from the centralised approach of NUAR data licensing or is a fundamentally different approach required?

Discussion

- NUAR is led by government and building the digital map of underground pipes and cables that will revolutionise the way users install, maintain, operate and repair our buried infrastructure.
- It was mentioned that the NUAR pilot was focused to create a secure data exchange platform to easily locate the digital map of where the assets are located.
- It was discussed that the geospatial commission's wider programme used the following areas as key learnings from the NUAR pilots:
 - Data sharing frameworks and mechanisms, particularly between private sector organisations.
 - Data security and the need to balance security with safety benefits from fewer asset strikes.
 - Understand the legalities and liabilities with sharing of infrastructure data.
 Understand data modelling, specifically how data can best be brought together from both private and public sector organisations and displayed in a single view.

Case Study - Trust Framework

Reflection Point

Are there any requirements that you believe are a priority for the trust framework?

Discussion

- It was explained that we need a functioning data ecosystem of users and suppliers of data, and the best way to achieve this is to adopt common, open standards for data sharing. To deliver this requires a governance framework for data access that creates trust.
- It was discussed that the data governance trust framework allows users to benefit from these values:
 - Firstly, it helps align the discovery and access of data in a manner that can scale to millions
 of use cases.
 - Secondly, it aligns the actors in the system around a secure and trusted environment from which they have a direct benefit to participate (as either a supplier or a consumer of data).
 - Thirdly, critically, a trusted framework can help align organisations around legal, IP, liability and rights issues in a manner that can unlock data sharing between organisations and across borders.
- It was concluded that the heart of the architecture is a federated approach to data sharing, namely that the data is not centrally stored, it is left with the data owner or controller and consent managed to allow those with permissions to access with conditional rules that have been agreed by the market.

6. Discussion: Determining the operating environment

 Determining the operating environment key factor focuses on understanding the ways Virtual Energy System can be operated sustainably as a steady-state entity. Through this key factor we aim to understand the pros and cons of various operating models, and to recommend a model that meets the requirements of the organisation, regulators, policy makers, and the wider sector stakeholders.

Reflection Points

- What considerations should VirtualES outline to make decisions on various options in creating a legal framework?
- Are you aware of, or working on, existing initiatives that can be considering this factor?
 Discussion
- It was discussed and agreed that the VirtualES needs an operating environment that:
 - Creates the legal framework it needs to be successful. For example, unlocking the key challenges in relation to the sharing of data.
 - Design and implement policies to implement new operating models. For example, mandate the interoperability requirement for energy data and data sharing protocols.
 - Provides a governance framework for assessing and working through risk and security implications.
 - Incentivise and enable collaboration between different actors in the sector, whilst addressing commercial sensitivities and conflicts of interest.
- Group suggested few projects which are using decentralised approach in data sharing and legal framework, some of them are:
 - A defence multi-country longitudinal manufacturing operational group, who are looking at date sharing across several different private organisations and different international departments of defence.
 - German-Swiss railway infrastructure project, who are using legal framework approach in sharing people data.
- It was concluded that to deliver meaningful change, the VirtualES will need a policy and legislative environment that will enable it to serve the entirety of the energy sector.

7. Next meeting

• The next meeting will be held on Wednesday 31st January from 13:00 to 15:00.

8. AOB

• The Chair thanked the group for their attendance and contribution.