People & Process Advisory Group

Meeting 4 Minutes

Date:	13/09/2023 Location:	Virtual
Start:	13:00 End:	15:00

Participants

Attendee	Organisation
James Edwards-Tombs (Interim Chair)	ESO
Kevin Reeves	KJR Digital
Ali Nicholl	IOTICS
Prof Chris Budd	University of Bath
Gea Mikic	Icebreaker One
Simon Evans	Arup or ESO?
Maria Kordoni	ESO
Jonathan Barcroft	ESO
Joanna Webb (on behalf of Divya Mahalingam)	ESO

Agenda

1.	Apologies for absence
2.	Discussion: Introduction and mission statement
3.	Discussion: Publication retrospective
4.	Discussion: Defining roles & responsibilities - implementation entity
5.	Next meeting
6.	AOB

Discussion and details

- 1. Apologies for absence
 - Barbara Bormann Drax
 - Claire Addison Flexitricity



2. Discussion: Introduction and mission statement

- Proposed mission statements:
 - Option A: Enable an ecosystem of connected digital twins to facilitate the transition to net zero.
 - o Option B: A national strategic ecosystem of digital assets for the whole energy system.
 - Option C: Enabling the creation of an ecosystem of connected digital twins of the entire energy system of Great Britain.
 - o Option D: Facilitating an interoperable mesh of digital twins of the GB energy system.
 - Option E: A shared industry ecosystem in which connected digital twins of the GB energy system drive the transformation to net zero that is reliable, affordable and fair for all.

Reflection Points

- Do these statements reflect the programme?
- Please share your preference or suggestion if none of the above resonate.

Discussion

- It was discussed that the mission statement outlining a company's objectives, what it wants to accomplish and why its efforts matter are key points.
- Group agreed Option A and E is clear and precise, also defines 'why?' which is beneficial in defining the mission statement.
- ESO requested everyone on the call to share their views which included Arup and ESO.
- Both ESO and Arup picked Option C as first preference, followed by Option A.
- It was proposed that the mission statement helps the organisation focus and stay on track to make the right decisions about its future, linking that to specifical net zero needs to be considered.
- Option B and D had least preference as they indicate less about net zero.

3. Discussion: Publication retrospective

 Our advisory group meetings were focussed on the development and review of the best practice recommendations which were published on 7th August 2023. For this Advisory Group, we would like your feedback on the overall experience.

Reflection Points

- Based on experience of the advisory group to date are there any changes you would like to see?
- Are there other People and Process factors that you feel need additional focus at this stage?

Discussion

- ESO thanked all the members for their continuous support and helping in keeping the Virtual Energy System (VirtualES) programme in line with its vision and long-term goals.
- Group also showed personal interest in attending the advisory meeting in person which would allow to collaborate with the other two advisory groups.
- It was agreed that the six priority factors support the development of an energy sector data sharing infrastructure. By addressing these factors together, actors can create a harmonised data architecture that will support the VirtualES.
- Discussion moved to machine vs human; it was advised that the priority factors could be more focused on these points:
 - o What does it mean to a person to interface with that digital twin?
 - How are they going to drive value from it?

- How will it make them feel?
- It was proposed to consider these above points into the VirtualES programme workings, as this could be one of the barriers to adoption.
- It was agreed that interaction between humans and the digital twin, and how a person drives value from it plays an important role, but it was questioned that if whether machine and human interface should come under socio or technical factors.
- It was explained that human-machine interface is an interesting and valuable piece of work which was introduced in the 'Raising awareness and fostering culture' report, but question of having it under socio or technical will be an open question.
- ESO advised that it could be applicable in both socio and technical because the machine to human interaction will not solely be focussed on developing the individual twins which would be the responsibility of who owns that twin, but also on external users. This will be considered further in future.
- The group identified ethics and transparency, from experience of discussions in applications of Artificial Intelligence (AI), as an area of concern and suggested these could be created as an extra key factor.
- It was mentioned that aligning codes and standards with processes while ensuring transparency and ethics is a big challenge. The group agreed that transparency and ethics are a big area that people are generally worried about, asking *'is your digital twin really a digital twin or is it being used for something else?'*
- Transparency is best practice and needs to be built into VirtualES' infrastructure.
- Further consideration is required of whether ethics and transparency are sufficiently covered by existing key factors and cultural values which underpin all design decisions.

6. Discussion: Defining roles & responsibilities - implementation entity

• As part of the next phase of work we are working on defining the roles & responsibilities in more detail and impact of implementation entity.

Reflection Points

- Are there other roles & responsibilities that you feel need additional focus at this stage from the preferred governance model?
- Do you agree that the Virtual Energy System programme aligns to this definition of an implementation entity?
- Do you agree with the need to identify and set procedures & standards for these common tasks?

Discussion

- Group confirmed the proposed governance model (Co-Led) is a good piece of work.
- It was advised to align this governance model to some of the existing frameworks.
- It was discussed that VirtualES will help organisations connect their digital twins and could have a use case of passing regulatory information to the regulator and/or government, which will need highly skilled staff.
- It was agreed that it's quite a technical undertaking and there might be a need to align this toplevel framework to the Information Technology Infrastructure Library (ITIL) or one of the agile frameworks, where roles and responsibilities are well defined, which the technology world would understand It would also help accelerate this programme potentially.
- The group agreed that the ESO VirtualES programme aligns well to the definition of an implementation entity. It was mentioned that looking at the kind of role of the implementation entity, identifying funding routes and works with orchestration body could be challenging.
- ESO was asked and confirmed that Innovation and VirtualES programme have received funding through Strategic Innovation Fund (SIF).



- The legal aspects of the implementation entity were discussed. A licenced and regulated body driving that infrastructure could be good but may cause tensions with the wider market.
- It was agreed that the need to identify and set procedure & standards for these common tasks is crucial.
- It was stated that the VirtualES must agree points like flexibility, connected ecosystems, and define what outputs need to look like for the different implementation entities if templates are required and these can be developed over time.
- It was noted that there are projects ongoing within water that are attempting to bring common approaches to data governance and frameworks. The group emphasised interoperability across sectors as well.

Recommendation

• It was suggested to think about the legal framework and open banking models to look at the legal difficulties aligned to technical architecture.

7. Next meeting

• The next meeting will be held on Wednesday 8th November from 13:00 to 15:00.

8. AOB

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