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ESO Technology Advisory Council

TAC-14

Date:	01/03/2024	**Location:**	Virtual
Start:	09:00	**End:**	12:30

All material from the meeting can be found on the ESO Technology Advisory Council website:
https://www.nationalgrideso.com/who-we-are/stakeholder-groups/technology-advisory-council

Participants

Attendee	Organisation
Eric Brown (Chair)	Independent
Chris Dent	University of Edinburgh
Alex Waslin (AW)	BP
Alastair Martin	Flexitricity
James Houlton	Amazon Web Services
Shubhi Rajnish	ESO
Cameron Shade (CS)	ESO
Joseph Stepney (JS)	ESO
Naomi Baker	Energy UK
Jim McOmish	Scottish Power Energy Networks
Simon Pearson (SP)	Independent
Anthony Riding	Elexon
Kate Garth	RWE Renewables
Fred Drewitt (FD)	Shell

For specific agenda items

Attendee	Organisation
Vinesh Lakhani	ESO
Brendan Lyons	ESO
Manos Loukarakis	ESO
Mayank Jha	ESO

ESO

Andrew Fletcher	ESO
Colm Murphy	ESO
Brian Nixon	ESO

Attendee	Organisation
Teodora Kaneva	TechUK
Randolph Brazier	Energy Networks Association
David Sykes	Octopus Energy
Alvaro Sanchez Mirales	STEMY Energy
Jo-Jo Hubbard	Electron
Andy Hadland	Independent

Agenda

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1.	Welcome & Apologies
2.	Minutes of last meeting and matters arising
3.	Feedback from the last meeting
4.	TAC You said, we did
5.	Digitalisation Strategy
6.	DevSecOps transformation
7.	FSO
8.	Open Balancing Platform Update & Roadmap
9.	Subgroups update
10.	Next meeting
11.	AOB

Actions

ID	Action Description	Owner	Due	Status	Date Opened	Comments
A01	Discuss with MAC chair possible joint discussions in the future	Chair	07/06/2024	New	01/03/2024	
A02	Investigate whether teams can be used as an offline communication method with TAC members.	JS	07/06/2024	New	01/03/2024	
A03	Organise September meeting in person	CS	06/09/2024	New	01/03/2024	
A04	Share purpose of subgroups with AW	CS	07/03/2024	Complete	01/03/2024	

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| A05 | Include Chair in subgroup meetings | CS | 07/06/2024 | New | 01/03/2024 | Strategy subgroup shared. |
| A06 | Work with SP and FD to organise a session with another sector | Chair | 06/09/2024 | New | 01/03/2024 | |

Discussion and details

#	Topics discussed

1. **Welcome & Apologies**
- The new TAC chair introduced himself and the TAC members introduced themselves.

2. **Minutes of last meeting and matters arising**
- This was skipped but covered across the feedback section and AOB.

3. **Feedback from the last meeting**
- A summary was given of the actions taken since the presentations last month.

4. **TAC You said, we did.**
- A summary was given on actions taken since the TAC survey results last year followed by actions taken based on feedback during the TAC meetings.

Discussion
- A discussion took place regarding closer ties and discussions with the markets advisory council (MAC) which members reacted positively too.
- In person meetings were discussed with an agreement to do them once a year with the next one in September. There were suggestions working in a hybrid fashion with some virtual and others in person could work as it does in other councils.
- ESO will investigate possible methods of utilising teams for sharing information offline.
- TAC member offered the option of inviting some of their members to subgroup meetings if the agenda was shared in advance.
- Suggestions were given to learn from other sectors specifically telecoms, air traffic control and utilities.
- Praise was given to the OBP delivery and how transparent it was with industry especially given the risk and challenge. Customers were more patient when they could see what the issues were and wanted the ESO to get it right.

5. **Digitalisation Strategy**
Joe explained ESOs new digital charters for business areas as smaller versions of the Digital Strategy Action Plan and shared an example for energy planning.

Discussion
- TAC feedback that mindset is really important which is implicit here, it would be good to see something explicit around people.
  - What we want to achieve is increasing our pace and responsiveness to change, using technology to automate and drive things faster but how do we change the mind of people stuck in their ways?

TAC question is ESO a Digital company or a more responsive agile organisation enabled by Digital?

- ESO is moving to Digital first and a Digital leader, having this in mind from a business model but also recognise a wider purpose of Net zero so don't want to take away from that saying ESO is strictly a digital and data company.

TAC recommendation that as data becomes more complex, data engineering becomes more complex and internal data divides appear based on who needs the data and who controls access to the data causing a complex problem.

- Suggestion to bring the ESO data strategy to TAC to talk about ESO's hub and spoke model to enable access to the data via advanced analytics environments.
- Further TAC confirmation that to be a Digital organisation it is fundamental for people who are not data experts to have rapid access to data.
- Discussing the charter example the TAC highlighted 1: Digital Planning Capability looks daunting however everyone wants 3: Scalable Data platforms and once the ESO tackles that number 1 looks less challenging.
- TAC asked if the ESO are engaging externally on these challenges for wider collaboration.
  - The wider data initiatives are engaging externally as well as internally.
- TAC Policy question, for the decisions that sit behind the Digital policy when do the ESO need decisions for interested parties who want to know how best to engage and what to do?
  - This is more targetted at making the right plan and strategy for becoming Digital first. Rather than answering the business decisions. It would be a mistake to wait for all those answers and then look at building the technology. What do ESO need to focus on for the short term and what is the focus on for the long term. For instance, building the platform but not the products which go on top keeping that technical flexibility.
- TAC asked what does the charter mean to a DNO?
  - The charters are internally for the organisation, how the ESO collaborates with customers is part of the answer but not the principal reason for the charter.
  - These are mini digital strategies on what Digital first means for the ESO in each of these areas. When and where to collaborate such as information and data sharing needs to be built into the charter.
- A DNO perspective was shared that this work is broadly aligned with the connections reform programme and the strategic connections groups, although there hasn't been a lot of DNO engagement it is comforting it is aligned.
  - A key part of this needs to be interfacing with local authorities at the heart of the decision-making process. Some don't have the technology, so it needs to be made easy for them, something that deals with a lot of different formats and takes work away from them.

6. DevSecOps transformation

Vinesh shared plans to improve developer experience, automate onboarding, foster cross-functional collaboration and customer value.

Discussion

- Vinesh presented the ESO progress on DevSecOps and plans for the future through cultural change, automation, measurement and sharing.
  - Culture first to drive cross functional change, shifting left, increasing reliability, test driven development and maintaining a customer perspective.
  - OBP is the first test bed bringing theory into practice and once it is proven scaling it across ESO.
  - This is achieved through a blended learning approach based on how people learn differently.
- TAC question on what ESO sees as cross functional, technology teams or business and tech teams.
  - Initially technology but bringing in the business next.

A follow up question on where the accountability sits.
- This is with the product owner who is in the business but sits with DD&T operating as one.

The TAC were interested as to whether centres of excellence were used.
- ESO users these for sharing and the creation of the developer hub for sharing best practices.

Automation is being embedded including security and testing all the way to production, some areas have additional steps such as in CNI and in others they are not necessary. Aiming to increase speed to value and increase consistency.

- Measuring DORA and flow while driving cost optimisation such as turning off environments when they are not in use and embedding live feedback into development environment such as highlighting security issues during the development phase not after.
- TAC said this was great but a risk on scaling automation is losing sight of what you're trying to achieve and shifting focus to achieving targets rather than the end objective.
  - The DevSecOps work is 1 part of what is happening, the ESO is also focusing on Agile which talks more to what value should be delivered. This is about increasing the speed and safety of delivering that value.
- The TAC asked if Gen AI and automated coding is part of this.
  - This is on the horizon and is something the ESO is looking at but has not identified anything that solves its biggest problems.
  - The TAC offered to have a conversation about this.
- The Developer Hub was explained utilising software such as backstage, speeding up developer onboarding, consistency and reducing load on new developers. The TAC agreed this was a great choice.

7. **FSO**

Colm and Brian presented the FSO programme to create NESO. They covered new roles, governance, technology separation and transformation.

Discussion
- Colm and Brian introduced themselves, what they do in the FSO programme and a brief run through of what the programme is trying to achieve.
- TAC asked how the team is being constructed, focusing on the ESO to NESO roles and the new capabilities verse managing the seperation from National Grid.
  - The programme is accountable for both. The key outcome of creating the NESO is not ending up with a separate ESO with a couple of gas additions. Focusing on whole system teams enabling strategic planning.
- Further questions based on losing things once separating from National Grid such as transmission ownership and what is the effect of separating the IT systems.
  - Day 1 of the seperation is the launch of the new organisation, the team need to ensure the technology capability continues from service agreements.
  - How the ESO would like to transform in the future is also being looked at rather than waiting for Day 1.
  - There is a significant amount of work regarding the logical seperation of ERP systems such as Finance, HR and procurement.
  - In regard to losing access to anything ESO has been legally separate since 2019 operating at arm's length and for anything that could have an impact long term arrangements are being put in place.
- TAC congratulated the team on the ERP work, as boring as that might be it is key to the industry that it works well, finance especially.
- The TAC asked if the charter thinking was being applied to this such as alignment to the broader digital strategy.

- Brian is not only part of the FSO transformation he's embedded in the ESO DD&T team so fully aligned which the TAC found really encouraging.
- ESO asked if there were any pitfalls the TAC could share that would help the transition be more successful.
  - The TAC offered to have further conversations regarding other separations they have been part of.
  - TAC suggested investing in the reorientation of people. The ESO has ensured people are the centre of the transformation, the people, their skills, knowledge and capability is the reason the ESO was picked for this so there is a whole pillar on people within the team focused on them.
- The TAC suggested transformation managers at the same level as programme managers originally from business areas that transition into the business roles once the transformation is complete ensuring continuity.
  - This concept is something similar to what is being applied in the programme and is something the ESO are happy to discuss further to learn from the TACs experience.
- The FSO is a topic the TAC would like to bring back later in the year particularly to see how the NESO is going specifically the digitalisation progress.

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8. **Open Balancing Platform Update & Roadmap**

    Brendan, Manos, and Andrew updated on OBP progress and performance and the differences between OBP Lite and OBP Strategic.

    Discussion

- The roadmap was discussed with a potential reprioritisation to serve OBP strategic better, if the decision is made it will be shared towards the end of March in the balancing industry update.
- OBP went live on the 12th December, there has been a lot of progression not without its challenges.
  - Some challenges included high-cost clipping, creating instructions at a reasonable cost but not taking into account the ramp down and the cost increase during that.
  - Most of the issues are resolved with a few final edge cases being worked on
- Another issue is related to instruction creation with some being created that cannot be issued. ESO wondered if the TAC had any similar experience and suggestions on how to resolve them.
  - A suggestion was building the constraints into the optimiser based on what the assets can do and ruling out assets that cannot meet the needs.
  - This is not necessarily what is done in this country and the TAC member was happy to take an offline call to share experience.
- OBP lite and OBP strategic were explained by the OBP Chief architect, what was delivered for the first release and plans for the strategic solution.
- The TAC praised the OBP team as a fantastic project with full engagement and transparency. When the go live happened some time was taken out, it was short, everyone knew what was going on and it was all done under a bright light which must have been daunting but deserves massive praise.
  - Feedback was given that it is common to front load discussions on batteries and for good reason as the sector needs support. However, the small zone shouldn't be forgotten both need to be discussed as they are both important.
- The ESO took the decision to go live even with an issue as they saw value in what was available and thanks the TAC for the feedback.
- The TAC asked for a future discussion on SCADA data for battery assets.
  - ESO offered to do an update at next TAC as there are grid code conversations happening now.

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9. **Subgroups**

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There has been a Digital and Data Strategy subgroup meeting held on the 12th January and the next meeting is 12th April.

Control room of the future subgroup has not happened since the last TAC. There is a new chair in place and plans to create a regular cadence going forward.

Feedback was received that there haven't been many subgroup meetings, and a regular cadence would be welcome.

Confirmation that the subgroups are not made exclusively of members from the main TAC but if members are interested, they can still attend if they do not already.

10. Next meeting

- 7th June 2023, 09:00 – 12:30
- Plans are for the September meeting to be in person (location to be confirmed) with an optional virtual attendance.

11. AOB

- The chair has a desire to reflect on how the TAC can best serve the ESO and has an interest in understanding the impact it was having and opened the floor to feedback.
- Looking forward to the formation of NESO there was a suggestion of considering new members to broaden the discussion and knowledge.
- The Chair will work with ESO on a forward-looking programme such as revisiting the FSO discussion held today.
- ESO asked for suggestions that come to mind that have not been explored in previous sessions.