

ESO Technology Advisory Council Control Room of the Future sub-group

TAC Control Room of the Future 21/10/22

Date: 21/10/2022	Location: Virtual
Start: 10:00	End: 12:00

The feedback captured during the meeting on the Axis collaboration tool can be found in the accompanying spreadsheet. This document summarises the feedback received verbally and via the Chat function.

All material from the meeting can be found on the GBESO Technology Advisory Council MS Teams site: <https://nationalgridplc.sharepoint.com/sites/GRP-UK-National-Control-ESO-Technology-Advisory-Council>

Participants

Attendee	Organisation
Angela Wilks (Chair) (AW)	GBESO
Andy Hadland	Head of Technologies EMEA - Green Investment Group
Steve Sinclair (SS)	Flexitricity
Anthony Riding (AR)	Elexon
David Sykes (DS)	Octopus Energy
Samuel Nhavira (SN)	Transport for London
Kane Forkasiewicz (technical secretary)	GBESO

For specific agenda items

Attendee	Organisation
Bernie Dolan (BD)	GBESO

Apologies

Attendee	Organisation
Claudia Centazzo	Independent

Chris Kimmett	Reactive Technologies
Chris Dent	University of Edinburgh
Peter Stanley	Elexon

Agenda

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1. Welcome and introductions
 2. Minutes of last meeting and matters arising
 3. Feedback from last meeting
 4. **Optimisation and Innovation proposals with universities discussion**
 5. Next meeting and calendar
 6. AOB
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Discussion and details

#	Topics discussed
1.	Welcome and introductions <ul style="list-style-type: none">The chair welcomes all members of the group. All present members give an introduction.
2.	Minutes of last meeting and matters arising <ul style="list-style-type: none">No comments on the minutes from the last meeting were raised.
3.	Feedback from the last Meeting <ul style="list-style-type: none">No feedback from the last meeting
4.	Optimisation and Innovation proposals with universities discussion <ul style="list-style-type: none">BD poses various questions to the panel to gain insight into their experience for similar innovative projects within their organisations, these were:<ul style="list-style-type: none">What has been your experience going from innovation to production code?How do we “seed” innovators to come up with new solutions for our problems?How do you support projects built on open source that need 24x7 support?What emerging technologies should we look at?How do you get your organisation to accept automation and associated cultural change?What are the pitfalls for an organisation that wants to be truly innovative but also must keep the lights on?Following the open questions BD then gave an overview of ESO’s current approach to innovation projects to set the context for the questions.SS acknowledged how difficult it is to productionise innovation code in any operational systems. Their organisation adopts a continuous improvement approach where the changes are broken down into small improvements. Project roadmaps can be broken down to smaller deliveries and each improvement can be measured and feedback can be gained before proceeding further. This can be a lot easier than step-change implementations.AH gave an alternative approach to user mapping when trying to incorporate automation which is to think of automation is another user alongside the power system engineer and identify the overlaps. The user requirements for automation will demand different information at different places to a human user. A hybrid approach could be taken to adopt elements of the automated approach piece meal.DS made the point that in their organisation innovation is driven from the bottom rather than the top whereby people are empowered to making changes and launching small products that can be quickly modified accordingly to improve them. Truly innovative organisations rely on a culture which enables your people to try different things. ESO has the challenge that it cannot implement something that has a risk of going wrong due to the critical nature of its role. Stage gates requiring reports after each stage slows down changes and can inhibit innovation so perhaps elements from innovation within a start-up organisation could help ESO. It is also important for ESO to partner with the right organisations that are innovative and can move fast. Would it be possible for ESO to build a team of in-house people that are empowered to drive these projects instead of outsourcing them?SS reinforced the points made by DS and mentioned that there are very good tools around containerisation which can aid deploying innovation code into production. It enables deploying code much more quickly wrapped in a container that mitigates a lot of dependency issues.AW raised a point about ESO’s funding for IT projects and how the current budget model works and if FSO presents an opportunity for improvement.BD responded by saying that ESO must set budgets based on what’s required in 5 years and what’s required in 10 years. The challenge with this model is that it goes against an agile view where you don’t know what you’ll be building in 5 years’ time. It would be good to have a funding

model where you work on much shorter time horizons and gain funding based on showing progress made over the previous year.

- AR offered insight into their business planning, and they focus on what capabilities they need to focus on. For a focus on innovation, you need to focus on building data and analytics capabilities and ensure there is adequate funding to achieve it.
- AW posed an open question to the group as to how ESO moving forward can attract the right talent to develop its systems.
- DS answered by highlighting that people aren't just motivated by compensation but also by being able to solve problems that have tangible benefits. People in software engineering and data desire impactful work and the ESO can certainly offer that. To retain people, they need to have the scope to build and make a difference themselves. Any administrative barriers will put off engineers as it prevents them from focusing on writing code and seeing the impact it has.
- BD asked for recommendations from the group about how ESO can best be transparent with industry about what it's doing.
- SS mentioned that when it comes to automation the important thing is just to be clear about what the intention is. A large part of the industry is also automating processes so it's likely that there will be interactions between automation processes.

5. Next meeting and calendar

- The chair will send out another poll to ascertain the best time for the next meeting.

6. AOB

- There was no AOB.

The chair closed the meeting by thanking members for their participation.

Decision Log

Note – this document contains current decisions and a rolling history of decisions. The complete log may be found in:

<https://nationalgridplc.sharepoint.com/sites/GRP-UK-National-Control-ESO-Technology-Advisory-Council>

Decisions: Made at last meeting

ID	Description	Owner	Date
1	Terms of Reference agreed	All	ERSG-1
2	Meeting frequency to be monthly	All	ERSG-1

Action Item Log

Note – this document contains in-progress items and a rolling history of completed items. The complete log may be found on the GBESO Technology Advisory Council MS Teams site:

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Action items: In progress and completed since last meeting

ID	Description	Owner	Due	Status	Date raised
1	Provide comments on Terms of Reference	All	26/11/2021	Closed	26/11/2021
2	Update TOR based on feedback received in the first meeting	GBESO	03/12/2021	Closed	26/11/2021
3	Determine the time and date for the next meeting	GBESO	21/11/2022	Re-opened	21/10/2022
4	Circulate the minutes within the group for comment at the next meeting	GBESO	21/11/2022	Re-opened	21/10/2022
5	Circulate the agenda for the next meeting	GBESO	21/11/2022	Re-opened	21/10/2022
6	GBESO to create clearly defined problem statements for the meeting to provide advice on.	Rob Rome	25/02/2022	Closed	26/11/2021
7	ID to share the list of companies GBESO have visited / will visit for learning on transformational projects.	Ian Dytham	25/02/2022	Closed	26/11/2021
8	GBESO to consider the Aletheia Framework TM and feedback on its application to the Network Control and Balancing programmes.	Rob Rome	25/02/2022	Closed	26/11/2021