

UKAEA Board Meeting

Meeting Reference UKAEA(23)A5

Date Monday 18th September 2023

Time 1130-1700

Location Zeta room, Culham Conference Centre Members Eithne Birt (chair) Ian Chapman Stephen Barter Richard Hookway Ruth Elliot

Tim Bestwick

Luc Bardin Sue Gray Stephen Hillier

Apologies

Attendees Lyndsey Mooring (Sec) Justin Kingsford David Sandford (DESNZ) Alex van Someren (National Security Chief Scientific Adviser (observer) David Gann (UKIFS NED)

Agenda Items

1. Chair's opening remarks led by E Birt: Chair commented on their first time at the meeting as interim Chair; thanked LM for their time as secretariat and welcomed DG in his new role as Chair of UKIFS. The transitional period for UKAEA and UKIFS relationship was noted. The Board welcomed Alex van Someren as an observer, they commented on their interest with future energy security and other alignments with their role and expertise.

DESNZ updated the Board on the progress made regarding UKAEA Chair recruitment.

Chair updated Board on the 2 appointments for the Science NEDs that will join as of 1st October.

Declarations: None declared

2. Minutes and Actions Review, UKAEA(23)M4 led by E Birt:

Minutes review:

- UKAEA(22)M4
 - Pg 4 last bullet typo amend cold to could

Actions:

- UKAEA(23)4/1 Light touch review, on agenda completed
- UKAEA(23)4/2 IC letter to PM, superseded, closed
- UKAEA(23)4/3 DG NED 1:1 done, completed



3. Executive Board report, UKAEA(23)5 Board report, led by I Chapman, T Bestwick, J Kingsford, R Elliot:

Exec highlighted the following to Board:

- Japan fusion moonshot has now been confirmed, taking the total to 10 moonshots, no budget yet announced.
- JDR programme clarification: regarding TAP the review has been done, we await the readout and anticipate receiving CST approval.
- Extension to manage interim for JDR has been requested from DESNZ as UKAEA has reached it delegation limit, await letter to confirm, therefore currently out of process as we wait for the confirmation letter.
- For next Spending Review STEP, JDR, Alts, and facilities operations combined equal £1.5bn request over a 3 year period. Exec highlighted that currently UKAEA budget is £740m for same time period, therefore we are aiming for a doubling of budget. There is support for these major programmes at all levels, however there may be pressure to reduce some.
- Board discussed the ring fence situation of the Alternatives budgets, that next required business case approvals for the Alternatives portfolio. UKAEA currently plan 3 business cases 1) overarching portfolio 2) ITER and ITER dependant items 3) fusion fuel capability. We are hoping to bring business cases to Board in Jan 24. DESNZ confirmed the available funding is up to £650m subject to business cases announced by Treasury.
- Board discussed the outcome of the HIF decision, next steps and political landscape it sits within.
- The reassessment of Alternatives funding in terms of priorities was discussed, particularly regarding the Cluster developments.
- The published statements by the wider fusion community in Europe regarding the Alternatives news was of interest to the Board. Discussion considered the goodwill this may indicate and the impact of association to Horizon. IC commented further on the conversations held with the fusion senior leadership.
- Board welcomed the plans to change the name of the Alternatives portfolio.
- We have completed the RAAC return for central government.
- The termination of the contract as noted in the report was given context. The contract is on hold and won't need to be re-let.
- Notice of contravention discussed, lessons learned highlighted to Board, ways to improve relationships noted as key.
- Behavioural safety training now at 83%; auxiliary site workers cohort to progress during October.
- Security health check noted now as green.
- Exec highlighted the opportunity to match fusion expertise of recent UKAEA retirees with needs of fusion ecosystem. Proposing to set up Ltd company to progress this opportunity. Investor interest noted as still increasing, how to deliver against the need in a concept agnostic manner considered, as was the closed nature of some of the request for information emerging, conflicts of interest clearly require careful management; perception versus legal delineation considered. The economic value of such an endeavour noted, also in the context of governance and decision making; interim plans for managing this outlined to the Board. The need for due diligence by SQEP within the fusion community outlined to Board as a driver for this. Other equity holders for this company and wider opportunities for funds commented on by Board. Lessons learned by Board from similar experiences flagged; the early stage of the idea noted, further information will be brought back to Board.

 Overview of BD progress provided to Board. Discussion considered due diligence on businesses; opportunities for cluster development; opportunities for repurposing of Culham Campus buildings

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)5/1	3	Board to be updated on progress on fusion expertise ltd company	T Bestwick	January board

4. Sub-committee updates:

ARAC led by R Hookway: Main item reviewed was the Annual Report and Accounts; NAO sample evidence now all provided. Both ARA and Pension Scheme accounts anticipated to be laid after conference season. Other items included: audit action progress in good shape; most recent deep dive was on compliance risks; near misses reviewed and themes overviewed; counter fraud; UKIFS governance;

People & RemCo led by E Birt: the paper is available for NEDs, though was not circulated in the pack owing to the wider readership and sensitive items, these will be covered in the NED only section. The objectives of directors was a main focus, as was the Pay Flexibility case.

Property Sub-committee led by S Barter: meeting was postponed owing to Alternatives announcements, rescheduling imminent. The resourcing need flagged again; the property strategy needs attention. Resourcing when the 2 NEDs onboard next month will help with such resourcing. The outcomes from the latest effectiveness review regarding the sub-committee was highlighted.

5. Annual Report and Accounts, UKAEA(23)5, R Elliot: Progress and next steps overviewed to Board. Board commented on the high quality of the report and how it meets the needs of many audiences. How to best utilise the report was considered – e.g the "Fusion energy at a glance". UKAEA has embraced a digital platform approach for the document, so it can be widely shared in electronic form.

The next steps for branding were overviewed to Board.

UKAEA(23)D5/1 ARA approved subject to final approval by ARAC.

6. Update from DESNZ, D Sandford:

The Board were updated on:

- Upscaling and restructuring of the fusion energy team reflecting the increased profile and excitement around fusion.
- The change of Secretary of State, and the great feedback received after her recent visit to Culham.
- The department's current priorities, including imminent updates of the announcement on Euratom alternatives and of the UK fusion strategy, and UKAEA Chair recruitment.
- A possible increase of seniority of the Board representative from DESNZ.
- 7. Board Effectiveness Review, UKAEA(23)5 Board Effectiveness Review Findings 2023, led by E Birt: A light touch, self-assessment was conducted with a streamlined question set from those asked in 2021. Key themes and recommendations were discussed, and the significant points from NED 1:1 reviews with the Chair were shared. NEDs were asked to provide suggestions for further support to UKAEA outside of regular meetings.

UKAEA(23)D5/2 Board effectiveness review recommendations adopted

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)5/2	7	Action board effectiveness review recommendations	E Birt	January

8. UKIFS Governance documents and transition plans, "CD_STEP" Documents, 10 in total, see SharePoint folder, led by P Methvan: Papers and discussion covered the topics of governance arrangements, commercials, and transition criteria. A complex series of approvals and requests was navigated, and a path forward identified.

The Board welcomed the significant progress made in developing the material by STEP, and noted the critical importance of UKIFS being able to operate at pace, while at the same time providing an appropriate degree of assurance. DESNZ noted that it was looking to reconstitute the Fusion Senior Steering group.

Commercial and target operating model:

- The Board noted the depth of the detail provided, commenting that in the time frame, and given the nature of the detail, it was not easy to provide board level assurance on the commercial and target operating model readiness criteria and gateways.
- It was agreed that the proposed Commercial Readiness criteria should go forward to the IPA. Further independent validation from a Government Commercial Officer would be sought as directed by MPRG.
- The Board commented that it was difficult to pass informed judgement on the criteria for ITPD without considering the wider commercial strategy this sits within. A follow-up sub-group session will be arranged to provide additional advice.
- A small sub group of the board agreed to meet to review the commercial and target operating model readiness criteria. In parallel with this activity the team should continue to develop their planning on the basis of the criteria they proposed.

UKAEA(23)D5/3 Proposed commercial readiness criteria approved for issue to IPA after seeking additional advice

Governance:

- To enable UKIFS to launch and develop its modus operandi, the UKAEA CEO and another UKAEA NED would sit on the UKIFS board. A reciprocal arrangement was discussed, and arrangements should be reviewed periodically as appropriate.
- Strong connections between UKAEA ARAC and UKIFS ARAC will be required. Some options
 were discussed including sequencing meetings such that some common items overlap and
 direct reporting is possible. The Board felt that reciprocal membership of sub-committees was
 not necessary as long as the arrangements were robust and efficient.
- It was agreed that the proposed Commercial Readiness criteria should go forward to the IPA. Further independent validation from a Government Commercial Officer would be sought as directed by MPRG.
- DESNZ has yet to review the governance documents in detail and noted that it may wish to
 reserve the ability to appoint an NED to ensure it has oversight of certain decisions. There was
 some discussion around whether this was necessary as UKIFS is a subsidiary of UKAEA. The
 STEP programme will propose a list of "Reserved Matters" which would need DESNZ decision
 or involvement; these will then be contained within an updated Framework Document.

- STEP proposed a sidenote to the current UKAEA framework documents. Given the need for revisions to the UKAEA framework agreement is specific to one area, the Board expressed a preference for speedy amendment rather than a side note or other interim measure.
- The Board suggested that the UKIFS Board TORs include a more explicit reference to intellectual property and commercialisation strategy.

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)5/3	8	Setup sub-group for review of commercial and target operating model readiness criteria	P Methvan/ Charles Price	October
UKAEA(23)5/4	8	STEP to provide proposals for UKAEA and UKIFS ARAC arrangements	P Methvan/ Charles Price	December ARAC
UKAEA(23)5/5	8	Propose a list of "Reserved Matters" which would need DESNZ decision or involvement	P Methvan/ Charles Price	December Board
UKAEA(23)5/6	8	Agree new framework document	DESNZ	March 2024

UKAEA(23)D5/4 UKAEA CEO and UKAEA NED will sit on UKIFS board to support establishment of the UKIFS board. A reciprocal arrangement will be established.

9. Update on CHIMERA and H3AT projects, led by S Wheeler: An overview of both projects was provided, highlighting the progress, challenges, benefits, and opportunities of each. Discussion included the impact to the UK supply chain if appointing/attracting investment from non-UK companies, ownership of IP, tension between adjacent hydrogen generic technology and fusion specific applications, and that there are lessons to learn for the fusion fuel capability. The Board noted that an increased capability in partnering is required within UKAEA.

10. Finance update, UKAEA(23)5 Finance, led by A Brown:

Points highlighted included:

- New Head of Pensions has started. Their priority is a governance review.
- Considerable change activity continues driven both internally and externally. Changes will improve management and programme reporting up to Board
- Corporate milestone tool will be revised to review impacts, improving reporting.
- Support from DESNZ was required for FIP and FFP reprofiles, appropriate governance on JDR, and an updated delegation note for alternatives.
- Contingency and headroom are tighter than in previous years. Finance are increasing the amount of longer-term profile planning to manage the situation.
- **11. Fusion Fuel Capability update, led by** A Quadling: The aim of the facility is to prove predictable, reproduceable tritium generation. The spend this FY will be used to identify the scope and plans for a rig, as well as to understand where to leverage industrial partnerships.

12. Any Other Business led by E Birt;

- i. ALB review recommendations to Secretary of State Review had a good outcome with noncomplex actions. Expect agreement by the Secretary of State
- ii. George Freeman (Minister for DSIT) letter on pay flexibility amongst PSREs has been extended to understanding of international competitive landscape. A restructure in the DSIT science section



sees a new recruit to cover UKRI and ARIA. DESNZ will help to ensure that UKAEA can access the conversations.

End of Minutes