

UKAEA Board Meeting

Meeting Reference UKAEA(23)A3

Date	Monday 15 th May 2023		
Time	1030-1700		
Location	UKAEA Culham Campus– Caesium Room, Building B24		
Members:	David Gann (Chair)	Attendees:	Adam Baker (DESNZ)
	Ian Chapman		Nick Garcia (DESNZ)
	Stephen Barter		Justin Kingsford
	Richard Hookway		Alli Brown
	Eithne Birt (remote)		Tim Bestwick
	Luc Bardin		Joe Milnes
	Stephen Hillier		Ruth Elliot
	Sue Gray		Lyndsey Mooring (secretariat)

Apologies David Sandford (DESNZ)

Agenda Items

- Chair's opening remarks** led by D Gann: The new members and attendees were introduced and welcomed by the board. The current members introduced themselves to the new members.

Chair updated board on NED vacancies; one will wait until the UKIFS NED recruitment is completed to support reciprocity on the UKAEA board. For the other role the long list has been compiled, it does not require number 10 approval, and the process is continuing to select a short list.

Chair has been in discussion with Alex van Someren (National Security Chief Scientific Adviser) regarding the opportunity to support them in increased understanding of board work. This will be progressed via them attending a UKAEA Board meeting as an observer, with a follow up attendance at a subsequent meeting to update UKAEA Board on Cyber Security.

DESNZ update on Chair recruitment, which is a Number 10 appointment and these are all under strain presently. Planning for a potential gap includes considering an interim chair, or deputy chair, filled by a current NED.

Declarations: None declared

Actions:

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)3/1	1	Schedule observer and cyber briefing by Alex van Someren (National Security CSA)	LM/DG	July

Decisions:

UKAEA(23)3D3/1 Board agreed that Alex van Someren could attend as an observer, and then again to brief Board on cyber security

2. Minutes and Actions Review, UKAEA(23)M2 led by D Gann:

Minutes review:

- UKAEA(22)M2
 - Pg 2 Executive board report bullet 5 incomplete
- Action review:
 - i. UKAEA(22)4/2 UPDATE: with executive, will come to next board meeting
 - ii. UKAEA(22)4/3 UPDATE: 2 Factor Authentication only available for website, not app, therefore we will not use, action closed
 - iii. UKAEA(23)2/1 UPDATE: completed in May meeting
 - iv. UKAEA(23)2/2 UPDATE: moved back to July meeting
 - v. UKAEA(23)2/3 UPDATE: completed ahead of May meeting
 - vi. UKAEA(23)2/6 UPDATE: Included in May pack, close by end of week if no further comment received

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

Exec highlighted the following to Board:

- Latest information on ITER programme rebaseline was shared verbally.
- Current and imminent narrative, including credibility of fusion, was discussed along with strategic impacts to UKAEA's future plans.
- Exec asked to provide draft of key points from latest ITER news, linked to the STEP timeline, to assist Board's understanding.
- Board will communicate its view to Department and government via a letter on what the UK may consider for fusion, association versus alternatives to Euratom R&T and therefore ITER based on the latest ITER programme information.
- DESNZ provided positive update on government support and progress of the fusion Regulatory framework. This is assisted by the recent US announcement and Agile Nations work supported by FSA.
- Approval updates for STEP business case provided, including update on the PIC review from last week. Conditional approval is expected, with a focus on commercial aspects.
- UKIFS chair update given by Chair of People and Remuneration Committee who has led on the recruitment. Short list of 8 candidates have now been interviewed and the panel have reached consensus on preferred candidate, which has been communicated to SoS for decision.
- Board asked for Executive's thoughts on situation with supplier of CHIMERA; the relationship's positives and the nature of first-of-a-kind engineering considered, noting that this has informed the whole plant partners approach for STEP delivery.

- Power distribution on site and implications for future plans and construction was discussed, emphasising the issue of contractual power rather than physical power. SSE management meeting scheduled 20th June to progress options.
- Council and planning for HIF, driving critical path for road infrastructure, mainly consists of an accumulation of small setbacks
- Safety training and context of bonus to safety trainers provided, followed by discussions on mandatory safety training, the current Corporate Measure, and what should count as mandatory.
- Land purchase in adjacent site has been paused.
- The recent Fusion Industry Programme Showcase event was highlighted to the Board.
- The recent investment round for private fusion companies was noted to Board. It then discussed the wider landscape and the appropriate narrative for a national lab and the actions planned by the Board. The early-stage discussions for a fusion fund with other organisations was updated to board.
- Corporate risks were reviewed. Changes to Director of People and status of third line of defence given particular attention.
- The importance of Innovation and spill over benefits provided by UKAEA was captured.

Actions:

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)3/2	3	Exec to provide key points from latest ITER news, linked to the STEP timeline, to assist Board's understanding.	IC	July
UKAEA(23)3/3	3	Exec will update Board at next meeting regarding fixes to mandatory safety training, considering the relevant Corporate Performance Measure	Exec	July
UKAEA(23)3/4	3	Comms update for next meeting to consider suggested messaging owing to the critical timing for perception of fusion	TB	July

4. Finance update, UKAEA(23)3 Finance, led by A Brown: Points highlighted included:

- Budget for FY 23-24 was set and approved in time, so UKAEA will now report against that
- Management accounts have now been closed for FY 22-23
- Provisions and liability lines captured separately
- Lifetime Plan will be submitted mid-June to DESNZ
- Overall performance good news, deficit target to depreciation came to zero as planned
- 39 out of 49 Corporate Performance Measures met, subject to audit, which will result in this year's bonus payment. There is no indication that such a bonus payment will cause wider political issues, which had been considered in previous years. Board approved that subject to audit the corporate bonus will be paid this FY
- Impacts to UKAEA owing to machinery of government changes were discussed; we will be getting new DESNZ finance business partners; there may be further work in support of the Arm's Length Body review finance and efficiency aspects. Culturally, the department is experienced building large infrastructure which will be useful to STEP, delivery is also a major focus, so DESNZ representatives anticipate UKAEA and Board will feel a positive from the change.

- Effective levelling of financial phasing was discussed at a strategic level, including how companies engage with UKAEA. The other view of when UKAEA receives funding, for example mid-year, was also noted
- Clarification was sought on variance within the budget, mostly capital rather than revenue; this was contextualized with the phasing within Fusion Foundation’s construction projects.

Decisions:

UKAEA(23)D3/2 Board approved that subject to audit the corporate bonus will be paid this FY

5. Sub-committee updates:

ARAC led by R Hookway: Interim meeting held last week to discuss governance statement and Lifetime plan.

P & RemCo led by E Birt: Latest review of ToRs has been finished, to come to Board for approval.

Property led by S Barter: Sub-committee meeting held last week, focusing on: local bypass, power supply, delays to partners owing to funding rounds, property strategy now updated (will come to Board), progress on Harwell JV.

- Board considered membership of the Property Sub-committee; owing to recent Board changes there is currently a space for a NED.

Actions:

Action ID	Section	Action Items	Owner(s)	Target time
UKAEA(23)3/5	5	Approve P&RemCo ToRs at next meeting	DG	July
UKAEA(23)3/6	5	Property Strategy to come to Board for endorsement	SB/RE	July

6. Technical update: IP/ Innovation and Private Fusion Collaborations, led by H Lewtas, C Peters.

C Peters, Interim Head of Business Development, gave a presentation on the current landscape of private fusion companies and UKAEA’s methods to support it. Board discussed:

- Key account managers are being put in place, remit for these discussed
- Approach to Collaboration (Framework) agreements; clarity given on IP arrangements, it also noted the role of a national lab to make fusion happen, versus a profit only focus
- Board sought details on UKAEA’s approach to costing for such work
- Trends in commonality for private companies is being considered, supported by brokering activity
- How we value our “brand” and how to leverage for the best benefit to UK

H Lewtas, Head of Innovation, gave a presentation on the UKAEA Innovation Department and its portfolio, highlighting.

- 10 New projects
- Innovations champions embedded across all programmes
- Training methods
- Exploitation plans
- Cross sector networking

- Metrics for measuring outcomes

Board discussed:

- How to monetize IP at varying stages and across a portfolio
- Board understood the constraining factors of time with technical experts and budget for the innovation department; how to help technical experts balance work to include effort on innovation
- DESNZ noted the breadth of information captured in the presentation graphics
- Lessons that can be learned from how equivalent technical industries manage innovation effort – eg. Medical sector
- Length of gestation time to commercial benefit and managing expectations
- Knowledge asset capture

7. **Rotherham plots, UKAEA(23)3 Rotherham Plots**, led by S Wheeler: Photos were provided to add context to the paper submitted; the opportunity and associated timelines were overviewed - 24 months to build, leased not owned, client fit out ~£5m with ongoing yearly cost of £0.5m, so revenue commitment not capital. Key decisions points noted. Board discussed:

- next steps and Board's role within it;
- the benefits to STEP and other programmes, CHIMERA future plans.
- A more robust evidence base will be required at a later stage.
- The benefit to siting at Rotheram in support of capturing manufacturing and associated activities and talent available.
- Next step will also have to agree financial commitment with DESNZ.

Decisions:

UKAEA(23)D3/3 Board agree for Executive to continue work to increase footprint at Rotherham

8. **JDR Outline Business Case, UKAEA(23)3 JDR OBC**, led by I Chapman, H Turnbull-Jones and L Thorne: The progress in approvals, including Infrastructure and Projects Authority (IPA) and Technical Advisory Committee (TAC) reviews were updated to board, as was the resulting change to a tranching approach for the business case and the associated decision points. Board discussed:

- The clear plan presented
- The economics of the different options, with a big difference identified as the reuse of buildings.
- The potential impacts of tranching the programme and the flow of approvals and funding
- The holistic cost to the UK of the options and how to compare the options, also the value of them and the assumptions that can be made for the economic case, being Green Book compliant
- Clarity given that UKAEA is pursuing approval of the strategy and allocation of funding for first tranche. Context of tranching approach logic as seen within government given by DESNZ
- Board identified risks associated with the Tranche approach and the ability to secure funding at the appropriate moments, maintain continuity of activity across Tranches, and engage the confidence of suppliers to invest across Tranches.
- Value of IP unlocking and potential realization within alternative approaches
- Factoring in external expertise in support of next stage of the business case

- Board thanked the business case team

Decisions:

UKAEA(23)D34/ Board approve the JDR outline business case, subject to comments given within the meeting

9. Blankets capability, UKAEA(23)3 Fusion Fuel Capability – Blankets Programme for Alternatives, led by A Quadling: An overview of the capability proposed was provided to the board:

- Sovereign capability opportunity in fusion fuel
- Neutron source linked to breeder configuration, materials capability and digital expertise has been identified as logical approach
- Nothing done at this scale yet in the world
- Line of sight to a demonstrator was noted as key
- Clarity given on £200m line item asked for within the Alternatives SOBC; realistic anticipated spend in this and next FY provided, dependent on funding decisions, ~£80m for neutron source next steps

Board discussed:

- Relevance to STEP is de-risking, owing to validation of models
- Partnering approach and resulting scope share and IP ownership, i.e., neutron source development
- Impact of Association, for UKAEA and the global fusion community
- Next steps of discussions with vendors and progression of exciting opportunity
 - Workshops scheduled for June/July; therefore, return in September meeting
- Pre-decision spend in support of progression

10. 22-26 Strategy v. 2 and 23-24 Delivery Plan, UKAEA(23)3 23-24 Delivery Plan DRAFT, UKAEA(23)3 Strategy 22-26v2, , led by L Mooring

- How to represent UKAEA and its relationship with ITER was again considered for such communications
- Enhancing the messaging around International Partnerships more broadly was discussed.
- Intended audiences for such documents was discussed; the requirements as set by the sponsoring department were noted, with the current strategy deemed appropriate by DESNZ
- The potential to link the delivery plan to Board scheduling was captured.

Decisions:

UKAEA(23)D3/5 22-26 v2 Strategy and 23_24 Delivery plan Approved subject to Executive doing a final pass of minor changes

13. Any Other Business led by D Gann;

- i. Use of UKAEA email addresses will be enacted
- ii. Safety based site visit still required
- iii. Board effectiveness reviews are due, light touch review to be enacted for this year

End of Minutes