

UK Atomic Energy Authority	BOARD MEETING Meeting Reference UKAEA(24)6			
Date	20-21 November 2024	20-21 November 2024		
Time	1400-1710, 0845-1145			
Location	UKAEA FTF Offices, Unit2A Lanck Rotherham, S60 5FX	nester Way, Advanced Manufacturing Park,		
Members	Bernard Taylor (Chair) Eithne Birt Ian Chapman Ruth Elliot Tim Bestwick Luc Bardin	Stephen Hillier Richard Hookway Mary Ryan Sue Gray Robin Grimes Lee McDonough (DESNZ)		
Attendees	Edward Lewis-Smith (Sec) David Gann (UKIFS Chair) Justin Kingsford (UKAEA COO) Alison George (DESNZ)			
Apologies	J ( )			

### **Agenda Items**

- 1. Opening Remarks and Declarations led by B Taylor. The Chair provided an update on the ongoing Board Effectiveness Review, noting that Sir John has now met with most Board members as well as Paul Monks, Chief Scientific Advisor to DESNZ. On Monday Sir John visited Culham for meetings with the Executive Team. The next steps are as follows:
  - Report writing; findings and recommendations to discuss with Chair; by 20 December
  - Presentation to UKAEA Board: 30 January 2025
  - Final report shared with UKAEA and DESNZ: February
  - Formal endorsement and review of plan to address recommendations: March 2025 (Board meeting)

Declarations: None.

2. Minutes and Actions Review, UKAEA(24)M5 led by B Taylor:

Minutes review: Approved.

Actions review:

Reference	Action	Owner	Due	Status	Update / Steer for Chair
UKAEA(24)4/2	Update on the Board Effectiveness Review	E Lewis-Smith	November	open	As above.
UKAEA(24)5/1	DESNZ DG and UKAEA CEO to review European collaboration talks and report back to Board in view of potential decision points in November.	I Chapman	November	open	This was covered during the Executive Report item. Closed.
UKAEA(24)5/2	UKAEA to itemize its activities against HMG	R Elliot	November	open	The Board agreed that this was covered in the



Growth Mission ahead of		subsequent item on Industrial
SR25		Strategy. Closed.

#### 3. Sub-Committee and PAC updates, led by R Hookway, E Birt and R Grimes

**UKAEA (24)6 ARAC report.** The Board congratulated the team on winning the PWC Building Public Trust award for reporting in the Public Sector. The Board considered the ongoing Eurofusion Extension of Audit Findings process and the likely drivers behind this exercise. With regards to UKAEA risks as considered by ARAC, R Hookway noted the intent to consider more detail on "child-level" risks and mitigations as well as "parent-level" risks.

**UKAEA (24)6 REMCo report.** E Birt welcomed the appointment of Sharon Taylor as Director of People and Culture, noting the critical importance of the Culture element in that role. The Board noted that an amended Terms of Reference for REMCo (noting its official title of People and Remuneration Committee) would be submitted to the Board in due course. The Board also welcomed the focus on senior personal development.

**PAC update.** R Grimes confirmed that PAC's scope and approach will remain broadly as is. R Grimes also informed the Board that PAC had stated that many of the presentations given were of exceptional quality and that UKAEA's leadership in fusion was important for global efforts, not just those of the UK.

**4. UKAEA Group Executive Board Report, UKIFS Executive Report & Risk Report**, led by I Chapman, T Bestwick, J Kingsford, R Elliot.

#### UKAEA(24)6 - UKAEA Executive Board Report and Annex A.

The Board welcomed the updates on Budget 25-26 settlements and ongoing F4E access negotiations. The Board also acknowledged that – in the face of some external commentary on JET operations – the UK position has not changed. I Chapman also provided updates on Japan and Korea, and on timings and planning around CHIMERA. The Board also noted:

- that further efforts on regulation by UK regulators and potentially the Government is needed to drive forward international efforts:
- that minimizing financial risk and liabilities is a key consideration in UKAEA's options analysis around repurposing of the JET flywheels;
- that recent recruitments of IP managers in both UKAEA (PSRE) and UKIFS would help drive necessary changes to current practice in this area. The Board also tested UKAEA's readiness to manage a growing portfolio of IP and the associated workload.

#### UKAEA(24)6 - UKIFS CEO Report to UKAEA Group Executive Committee

The Board noted:

- the establishment of a regulatory forum between UKIFS and regulators, agreeing that this will benefit the establishment of a detailed fusion regulatory framework in the UK to help ensure that fusion is regulated effectively and proportionately;
- the progress on the Whole Plant Partner procurement process and acknowledged opportunities and pressures in relation to the ongoing financial position.

Reference	Action	Owner	Due
UKAEA(24)6/1	Establish a metrics driven approach to UKIFS reporting	D Gann	March

#### UKAEA(24)6-Board Risk Report-November 2024

The Board tested the hierarchy of risks and the assignation of ownership, accepting that as UKIFS is fully established this needs to be worked through. The Board considered whether additional or alternative risks



should be included on the dashboard. The agenda item on fusion computing planned for the next Board meeting should also consider the risk element of this topic. The Board also welcomed the ongoing development of a comprehensive plan on security.

#### 5. UKAEA Group Risk Appetite, led by I Chapman and N Barber (online)

#### **UKAEA(24)6-Group Risk Appetite**

N Barber summarized the report submitted, explaining the difference between "appetite" (what is desired) and "tolerance" (what we are prepared to accept).

The Board sought amendments on content under the headlines of "ethical", "culture" and "compliance with non-legislative requirements and good practice", with the latter element to return to UKIFS Board for review. Subject to these amendments, the Board agreed that it was content subject to the requested changes.

Reference	Decision
UKAEA(24)6/D1	The Board approved the Group Risk Appetite subject to amendment as requested
	and circulation of the final version for information.

#### 6. Tritium Fuel Cycle Collaboration, led by R Elliot and S Wheeler (online)

UKAEA(24)6 - Tritium Fuel Cycle Collaboration November 2024 – DOCUMENT A. Background and key issues

UKAEA(24)6 - Tritium Fuel Cycle Collaboration November 2024 – DOCUMENT B. Collaboration and Secondment Agreement (near final draft)

### UKAEA(24)6 - Tritium Fuel Cycle Collaboration November 2024 – DOCUMENT C. Legal assessment and other considerations

S Wheeler reiterated that the aim of this endeavour is a step towards industrial scale of UKAEA's tritium capability. The Board agreed that this opportunity – as with other comparable opportunities – should be appraised in the round, and on these terms the Board judges this to be an excellent deal for UKAEA and the UK. The Board tested a number of clauses, considering issues of reciprocity and value to the UK, and was reassured that the proposals represented a positive and fair deal for both sides. Nonetheless, the Board recognised that careful ongoing monitoring will be required as the agreement is implemented.

The Board considered how best to turn this agreement into a significant strategic opportunity for the future, and also how to renew efforts on engaging with other established energy firms to encourage them into fusion. The Board asked the team to work closely with Government ahead of an announcement. The Board congratulated the team in achieving this outcome.

Reference	Decision
UKAEA(24)6/D2	A) The UKAEA Board approves the signing of the Collaboration Agreement between UKAEA
	and ENI SpA subject to review by UKAEA Executive Committee and subsequent final
	approval by the UKAEA Chair and CEO
	B) That, subject to the above, Prof Sir lan Chapman as CEO is directed to sign the
	Agreement in accordance with UKAEA's Delegation Manual and processes
	C) That an appropriate decision record is made available to ENI.

#### 7. Culham Data Centre, led by I Chapman and J Milnes (online)

The Board welcomed the update, noting the many issues yet to be worked through.

#### 8. Campus development - high level strategy, led by R Elliot

#### **UKAEA(24)6-Campus Development strategy**

The Board agreed with the direction of travel as described in the paper. The Board tested the economic implications of the options considered, and how those options compared with precedents.



#### 9. Insurance Policy proposal, led by R Elliot and I Korner (online)

#### UKAEA(24)6-Insurance policy proposal

The Board heard that the proposals overall are projected to save UKAEA around £400,000 per annum. The Board tested the linkage between UKAEA's insurance framework and the broader fusion insurance and liabilities framework.

Reference	Decision
UKAEA(24)6/D3	The UKAEA Board approves the Insurance Policy, subject to routine review.

#### 10. UKAEA Group appointments, led by R Elliot and I Korner (online)

#### **UKAEA(24)6-UKAEA Group Appointments**

Reference	Decision
UKAEA(24)6	The Board approves:
/D4	The appointment of Ian Korner as Director of AEA Insurance Limited with immediate effect.
	The appointment of Ruth Elliot as Senior Representative for Pensions

#### 11. Property sub-committee shutdown, led by B Taylor

#### UKAEA(24)6-Property Sub-Committee Shutdown

The Board agreed that property development should continue to be regularly reported to Board, particularly given the high profile ongoing opportunities, and that the Board will seek to strengthen its capability in property development in the context of innovation. The Board asked for sight of the final Terms of Reference for the Corporate Development Committee.

Reference	Decision
UKAEA(24)6/D5	The Board approved the closure of the Property Sub-Committee, in line with recent UKAEA
	governance changes.

Reference	Action	Owner	Due
UKAEA(24)6/2	Submit finalised Terms of Reference for the Corporate Development Committee to the Board for information.	T Bestwick	March

# 12. HMG Industrial Strategy UKAEA draft response, led by I Chapman and E Lewis-Smith UKAEA(24)6-Industrial Strategy UKAEA response – summary

The Board suggested that the UKAEA's response should identify and propose solutions to systemic barriers experienced by UKAEA and other organisations in similar positions. The Board also suggested:

- Foregrounding the short-term adjacent opportunities of fusion;
- Making clear the increasingly central commercialisation and supply chain capability aims of the fusion programme, on top of R&D;
- Updating the summary materials on the UK's fusion programme to reflect the increasingly positive picture on "market pull" for UKAEA's technical capabilities and the changing investment picture;
- Noting the contribution of the UK's fusion programme on the Government's objectives on energy transition and growing high-skilled jobs.

#### 13. Finance update, including budget planning, led by R Elliot



#### **UKAEA(24)6-Finance Update**

The Board noted the paper submitted.

#### 14. Spending Review update, led by R Elliot

#### UKAEA(24)6-SR25 update

The Board noted the update provided. It considered where a small number of elements within UKAEA's bid should change to better address areas of risk discussed previously.

#### **15. STEP T2A Full Business Case**, led by I Chapman and P Methven (online)

#### UKAEA(24)6-STEP T2A FBC Board cover note

#### UKAEA(24)6-STEP T2A FBC Board

P Methven summarised the full business case as submitted. The Board acknowledged that the format of the business case can in places undermine the clarity and concision of the arguments but that this is to some degree unavoidable given the process mandated by DESNZ. The Board also tested what was an appropriate level of detail on presenting programme optionality in the business case and clarified the contractual mechanisms involved with the strategic partners.

The Board asked for changes to be made to the framing of the central options and the description of the standalone Tranche 2A benefits.

Reference	Decision
UKAEA(24)6/D6	The Board asked for the requested changes to be made and, following review by the UKIFS
	Board, that the STEP T2A FBC is resubmitted to the Board for approval by 9 December via a
	48 hour correspondence process.

Reference	Decision
UKAEA(24)6/WP1	The Board approved the STEP T2A Full Business Case by written procedure on 11
	December 2025. Additional feedback was provided to the team which will be addressed prior
	to submission.

# **16. UKIFS External Auditor Appointment**, led by R Elliot, D Gann and P Methven **UKAEA(24)6-UKIFS External Auditor Appointment**

Reference	Decision
UKAEA(24)6/D7	The Board approved the proposed appointment of the National Audit Office as the external
	auditor for UK Industrial Fusion Solutions Ltd for the 2024/25 Financial Year.

#### 17. Securing value update, led by I Chapman and T Bestwick

#### UKAEA(24)6-Securing value update

The Board discussion including the following issues:

- UKAEA's ongoing work to understand both VC investment opportunity on the horizon and wider market demand (both in nature and timing) across the identified areas;
- · How UKAEA will work through the business development and commercialisation issues involved;
- The ongoing coordination with UKIFS's programme of supply chain capability building;
- The need to grow UKAEA's Technology Transfer Hub to support this workstream.

J Kingsford noted a potential future conflict of interest which will be reported to Board formally if necessary.



The Board agreed to use their networks to consider suitable candidates who may be able to play a supporting role in this programme of work and report back to the Executive.

The Board agreed to use their networks to help identify potential visiting entrepreneurs/mentors who might be able to help with some of the specific innovation opportunities being identified by UKAEA's Innovation team. Ideal candidates might experience of developing new technology businesses, and specific market knowledge aligned to the opportunities emerging from UKAEA. Such people who are interested in spending some time with UKAEA innovators looking at the viability and planning for new businesses could play a valuable role in commercializing the opportunities arising from the fusion programme

## **18. Technical deep dive**: Fusion Technology division led by S Wheeler (online), M Gorley, M Stevenson **UKAEA(24)6-Fusion Technology pre-reading**

The Board thanked the team for the technical presentation. The Board considered the challenges associated with regulatory compliance in technical areas where regulators do not have technical competence to understand what an appropriate regulatory approach should be. The Board agreed that UKAEA as the developer should take the lead in building codes and standards to inform the regulatory framework, but that the regulators themselves need to lead on actually establishing the detail of that framework. The Board also tested the nature of the relationships between UKAEA and local universities.

Reference	Action	Owner	Due
UKAEA(24)6/3	Invite regulators to present to UKAEA Board their work on	I Chapman	September Board
	fusion regulation.		TBC

#### 19. AOB and Closing Remarks, led by B Taylor

a. Fusion Futures FBCs approvals

#### UKAEA(24)6-Futures FBC approvals overview

The Board noted the update paper submitted and agreed to be ready to review the business cases via correspondence in December.

Reference	Decision
UKAEA(24)6/WP2	The Board approved the Fusion Futures Full Business Cases by written procedure on 9
	December 2025. Additional feedback was provided to the team which will be addressed prior
	to submission.

#### For Information papers

#### UKAEA(24)6-Use of UKAEA / UKIFS emails

The Board agreed on actions to strengthen information sharing and ways of working, including:

- Setting up a whatsapp group for logistical communications;
- Board members owning UKAEA laptops where workload makes this worthwhile;
- Use of Board Intelligence for circulation of documentation in additional to routine Board packs;
- Cessation of using personal emails for anything other than notifications or logistical support.

#### Attendance record:

Position	Name	Present	Absent
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Members	B Taylor	1	
	Eithne Birt	1	
	Ian Chapman	1	
	Ruth Elliot	1	
	Tim Bestwick	1	
	Richard Hookway	1	
	Luc Bardin	1	
	Sue Gray	1	
	Stephen Hillier	1	
	Mary Ryan		1
	Robin Grimes	1	
	Lee McDonough	1	
Attendees	Edward Lewis-Smith	1	
	Alison George	1	
	David Gann	1	

### **End of Minutes**