

UNITED KINGDOM ATOMIC ENERGY AUTHORITY
Minutes of the 2nd Board Meeting in 2018

Date: 8 May 2018

Location: Llewelyn-Smith Room, K2
Culham Science Centre

Members present:

Roger Cashmore, Chairman
Ian Chapman
Norman Harrison
Shrin Honap
Jim Hutchins
Sue Scane
Adrian Smith
Chris Theobald

In attendance:

Adam Baker (BEIS)
Peter Jones
David Martin
Maya Riddle (sec)
Catherine Pridham
Kay Nicholson (Item 3-5)
Colin Walters (Item 6)
Mark Shannon (Item 4 & 7)
Alli Brown (Item 8)

Apologies:

None

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1 Chairman's Opening Remarks

- 1.1 Roger Cashmore welcome Shrin Honap, Sue Scane and Adrian Smith as new non-executives to the board and thanked them for their patience during an lengthy appointment process.
- 1.2 He informed members that Shrin would take over as chair of the Audit Committee and that Peter Jones would provide a transfer. He was looking for Adrian provide advice on research and the academic community and for Sue to help with local politics.
- 1.3 Martin Cox had stopped attending meeting and he offered Martin thanks for his contributions to the Board over the years.
- 1.4 Normally sub-committee meetings were held before the Board meeting, but today we had to rearrange timings as Ian Chapman needed to leave to travel to Princeton.
- 1.5 Peter Jones said had had a useful briefing meeting with Shrin Honap.

2 Minutes of the 14 March 2018 meeting

- 2.1 The Board approved the minutes of the Board meeting on 14 March 2018 and the key actions were reviewed.

Kay Nicholson joined the meeting

3 CEO's Report

- 3.1 Ian Chapman provided background information on the JET operating contract and the process of getting it extended to the end of 2020.
- 3.2 The current scientific programme ran through until the end of 2020.
- 3.3 The Director General at ITER, Bernard Bigot, had written to say that it would be useful for ITER if JET continued operating past 2020. The Commission was currently looking at the next framework programme.
- 3.4 Ian Chapman highlighted other key points from his report, which included:
 - There was positive news in the US with the budget for fusion funding increasing. This included a remedial programme to fix NSTX;
 - Sharon Ellis had visited the US and discussions included a collaboration between UKAEA and Princeton;
 - UKRI had formed and was undertaking a road-mapping exercise for UK scientific infrastructure;
 - We were looking to collaborate with STFC on a digital twinning bid into the UKRI strategic priorities fund;
 - The NDA was intending to fund a revision of the JET lifetime plan as the plan was 10-years old; and
 - BEIS had asked with us to work with the Regulators on how to regulate a fusion nuclear site.
- 3.5 The Board noted the report.

Mark Shannon joined the meeting

4 COO's Update

- 4.1 David Martin informed members of evidence which had recently come to light, which showed one of the Cavendish supervisors displaying un-safe working practices at Culham. Cavendish had undertaken a pause for safety with its staff and had investigated. We were awaiting a meeting with their senior management.
- 4.2 It was disappointing as we had put a lot of effort into behavioural safety and promoting the reporting of incidents, and yet bystanders had not stopped the work or reported it.
- 4.3 Kay Nicholson said that UKAEA staff were very proactive at reporting and that the system allowed anonymous reporting, however, there seemed a reluctance for some contract staff to use the system.
- 4.4 David Martin said that the second meeting of Programme and Major Project Committee had been held. This would provide greater transparency of the delivery challenges and resource conflicts, and also generate a foreword look at resource requirements.
- 4.5 43 job offers had been made in the last month, but there were still over 100 vacancies. We also need to do more on packaging up work and contracting it out.
- 4.6 Jim Hutchins suggested considering a recruitment campaign for overseas PhD level engineers.
- 4.7 Shrin Honap asked about pay constraints and Adam Baker responded that UKAEA had negotiated some flexibility for Science, Engineering and Technology staff, but that profession staff were bound by public sector restraints.
- 4.8 David Martin and Mark Shannon look members through the major project dashboards. Key points included:
 - JET – there was a small water leak in central support column;
 - EDS – had moved to new reporting dashboard with earned value reporting. A combination of the supplier being late and insufficient resources meant that the project was behind schedule;
 - ESS – the estimate had risen substantially, mainly due to the increase in the radiation dose. Discussions were underway with ESS about the UK's in-kind contribution. We had permission to go ahead with the procurement exercises but not yet make commitments;
 - MAST Upgrade - Commissioning had started and the initial bake was expected imminently. However, the delays meant that the first plasma was not now expected until December 2018; and
 - MAST-U enhancement – a new project manager had been appointed.
- 4.9 Adam Baker said that there was an ESS council meeting in June, which should provide more clarity.
- 4.10 Some of the non-executive found the new dashboard difficult to understand and Chris Theobald suggested addition of a strategic summary.
- 4.11 The Board noted the update.

Mark Shannon left the meeting

5 Risk Report

- 5.1 Kay Nicholson gave a presentation to take members through key points in the report. This included:
- There were a couple of errors in the graphics, and a revised paper would be issued;
 - Organisational growth brought opportunities and also risks. We couldn't recruit fast enough, so were looking at third parties;
 - The risk trends showed some movement;
 - New risks included that the new Cabinet Office initiative on procurement could impact the renewal of the ASW supplier contract; and
 - The risk of a breach of SHE policy had gone up.
- 5.2 Shrin Honap said that it would be useful to have more detail on EU exit risk and Chris Theobald said he would like to understand the fall-back plan for top 3 risks.
- 5.3 Sue Scane said that she found it a helpful report.
- 5.4 Adrian Smith suggested a risk that UKAEA was not proactive enough in its communications and influencing.
- 5.5 The Board to note the report and agreed the Risk Appetite Statement.

Kay Nicholson left, and Colin Walters joined the meeting

6 National Fusion Technology Platform (NFTP) Update

- 6.1 Colin Walters said that he had only been with UKAEA for three weeks and thanked Andrew Hynes, who had been acting-director.
- 6.2 He gave a presentation on NFTP. Key points included:
- The project was to establish two new facilities – Fusion Technology Facilities (FTF) and Hydrogen-3 Advance Technology (H3AT);
 - The objective was to maximise the benefit for UK industry by building a capability in fusion and enabling £1B of ITER contracts;
 - It was intended to partner/engage with industry all levels including SME as well as maximising synergies with national labs, catapults & universities;
 - A sponsor group had been set up, including stakeholders, which had approved the programme management plan;
 - Lesson learnt from other projects were being incorporated into the planning;
 - The main risks were that the building costs were higher than budgeted, that procurement of items over £10m would need to go through Cabinet Office process and that the delivery of the large electro magnets would be challenging;
 - A number of requirements capture workshops and meetings had been held and these were being used to inform facility specifications;
 - Options for siting the facilities were being considered, including the possibly siting some of these off site;
 - A major gateway review with BEIS would be undertaken in April 2019 and the aim was to get facilities open in 2021; and

- Part of the money was being used to provide seed corn funding for work which could give the UK a benefit. A call had been issued to industry for ideas for risk reduction projects.

6.3 Jim Hutchins asked about resourcing and Colin responded that a nucleus was already in place, which would grow to ca. 200 people.

6.4 Ian Chapman said that it would be beneficial for the Board to visit J25.

6.5 Jim Hutchins offered to look at magnet specifications.

6.6 The Board noted the update

Colin Walters left and Mark Shannon joined the meeting

7 MAST Upgrade External Review Update

7.1 Mark Shannon informed members that the MAST Upgrade project had been started in 2010, with an original estimate of £31m and a completion in 2015. We had obtained £20m from EPSRC for hardware and had to fund the manpower from existing budgets. The total costs had risen to over £50m, with completion in 2018.

7.2 The CEO had instigated a review to capture the lesson learnt. The review started in February and had been undertaken by a panel consisting of Jerome Pamala, Greg Willets, John Eldridge, Austin Bell, Chris Theobald and himself.

7.3 The report had just been finalised and key findings included:

- Underestimation of resources, this was in partly due the level of re-work and unexpected technical problems;
- Unavailability of sufficiently skilled resources; and
- Inexperienced project managers.

7.4 There was a series of recommendations, which were being used to formulate an action plan. Some of the issues were already known and had been built into the Integrated Delivery Process (IDP), which provided a staged and gated process for projects.

7.5 Roger Cashmore said that he had agreed not to circulate the report to the Board until management had had time to review and respond to the findings.

7.6 Jim Hutchins asked for progress reports to the Board.

7.7 The Board noted the update.

Mark Shannon left, and Alli Brown joined the meeting

8 P12 Financial Report

8.1 Alli Brown provided highlights from the report, which included:

- The headlines had out turned very close to the operational budget targets;
- The capital target was also very close, thanks to a large amount of procurement in the final month;
- As agreed with EPSRC there was an underspend on the UK fusion programme;

- There was an underspend on the JET programme. This would push spend into 2018/19 and put pressure on the EPSRC figure due to the UK host contribution; and
 - Property had performed very well. This was due to very high tenancy levels.
- 8.2 Jim Hutchins asked about the RACE building extension and Adam Baker confirmed that it was in the allocation letter from BEIS, which amounted to formal approval to spend.
- 8.3 Shrin Honap asked how the year-end results would compare with the accounts and Catherine responded that there were a number of differences.
- 8.4 Peter Jones commended the detail and coverage in the report.
- 8.5 The Board noted the financial position at the end of period 12.

Alli Brown left the meeting

9 Draft Corporate Plan

- 9.1 Ian Chapman said that UKAEA was required to produce an annual corporate plan and submitted it to BEIS. The draft corporate plan expanded on how UKAEA aimed to deliver its mission and goals.
- 9.2 Adam Baker said that it was a great report, but that it was missing the longer-term vision that Ian often presented.
- 9.3 Shrin Honap commented that it was ambitious given the current funding and resource constraints, but that this was ok as long as the plan showed the organisations aspirations.
- 9.4 Sue Scane said that the plan was very consistent with the induction material and Board papers.
- 9.5 Catherine Pridham advised that there were drafting issues on the Harwell/Culham section.
- 9.6 The Board agreed the document, subject to changes above.

10 Any Other Business

- 10.1 Roger Cashmore said that the Board would be undertaking a visit to Harwell the following day.
- 10.2 The next meeting was on Monday 2 July 2018

Secretary Maya Riddle
Chair Roger Cashmore