

UNITED KINGDOM ATOMIC ENERGY AUTHORITY
Minutes of the 4th Board Meeting in 2016

Date: 20 June 2016

Location: Llewellyn-Smith Room, K2,
Culham Science Centre

Members present:

Roger Cashmore, Chairman
Keith Burnett
Steve Cowley
Norman Harrison
Jim Hutchins
Peter Jones
Chris Theobald

In attendance:

Adam Baker (BIS)
Martin Cox
David Martin
Catherine Pridham
Maya Riddle (secretary)

Apologies: -

Rob Buckingham, RACE Director (1-3)*
Martin Townsend, BD Manager (1-3)
Ian Chapman, Fusion Programme Manager (7)
Mark Shannon, Programme Office Manager (7-8)
Laura Duxbury (9)

* Joined by conference phone

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1 Chairman's Opening Remarks

- 1.1 Roger Cashmore welcomed everyone to the meeting.

2 BD Review

- 2.1 Jim Hutchins said that the paper followed on from the discussion at the last Board meeting. There were basically two business development models which UKAEA could follow - 'cash generation' or 'enabling wider growth'.
- 2.2 While moving towards profitability should be a general strategy, he suggested that the main justification for UKAEA should be the wider one of job creation and value in UK plc by enabling market share growth through transfer of technical knowhow.
- 2.3 Steve Cowley said that UKAEA's drivers encompassed both of these models; providing more financial resilience for UKAEA and also using UKAEA's capability to enable jobs and growth in UK plc.
- 2.4 Jim Hutchins said that in order to support growth there needed to be investment on the commercial side and he supported the use of CSR funding to build capability. He also suggested setting up an advisory board with suitable external expertise.
- 2.5 Adam Baker advised considering how one would measure success, for example how to quantify the impact on UK plc.
- 2.6 Steve Cowley said that one metric was ITER contracts won by UK Industry. RACE had provided support to a number of UK-led consortia, which had already won several million euros worth of ITER contracts.
- 2.7 Roger Cashmore concluded that further thought was required regarding an advisory board.
- 2.8 The Board noted the report

3 Business Development Update

- 3.1 Rob Buckingham apologised for the late paper, this provided background information on the sales pipeline.
- 3.2 UKAEA had been granted funding from the CSR for business development. This was being used to support the start-up phases of RACE and MRF and to support new business opportunities.
- 3.3 He had recently provided evidence to Science & Technology Committee on development of robotics in the UK. The Research Councils & Innovate UK had also presented and had proposed the creation of a national institute for robotics & artificial intelligence.
- 3.4 Jim Hutchins said that RACE with its application of fusion technology and robotics to challenging and hazardous areas, provided the best vehicle for business development. It also supported areas of government interests.
- 3.5 David Martin countered that there were other development opportunities.
- 3.6 Martin Townsend said that two proposals approved for CSR funding were to produce business cases in areas fusion technology and design.

- 3.7 Roger Cashmore said that he would like to see a roadmap/plan for business development.
- 3.8 The Board noted the update.

Rob Buckingham and Martin Townsend left the meeting

4 Minutes of the 20 April 2016 meeting

- 4.1 Members reviewed the matters arising and the actions.
- 4.2 Roger Cashmore provided an update on the recruitment of a new CEO. The Secretary of State had agreed the shortlist. The candidates were visiting Culham later this week for a tour and to meet with senior management. The interviews were being held next week. It was hoped that a decision would be made before the summer recess. The appointment required sign off from the Cabinet Office, Prime Minister's Office and the Treasury.
- 4.3 There was an emergency board meeting in diaries for 26 June and a provisional staff talk on 27 June in the event of a vote to leave the EU, in the forthcoming referendum.
- 4.4 The Board approved the minutes of the Board meeting on 20 April 2016, subject to two corrections.

5 Board sub-committee chairs update:

17 May Board Assurance Committee

- 5.1 Chris Theobald provided highlights from the meeting, which included:
 - compliance with mandatory safety training;
 - review of the committee's terms of reference. There was a query over the inclusion of 'quality of science'; and
 - progress with succession planning for safety related posts.
- 5.2 Steve Cowley said that the Culham Programme Advisory Committee provided advice to the Board on UKAEA's scientific output. In addition, there were periodic reviews of UKAEA, with the most recent being the EPSRC review of fission and fusion research in the UK.
- 5.3 It was agreed that a review of the Board sub-committees and advisory committees should be undertaken.

8 June Remuneration Committee

- 5.4 Norman Harrison provided highlights from the meeting, which included:
 - the Executive team's performance had been reviewed and bonus levels agreed, which had been forwarded to BIS;
 - a process for review of non-executive director performance was agreed;
 - a candidate under the Women on Board scheme should be joining the Board in September; and
 - retention of scientific staff was discussed.

8 June Audit Committee

- 5.5 Peter Jones provided highlights from the meeting, which included:
- the combined UKAEA pension accounts were reviewed. Subsequently two numbers had been corrected and a clean audit completion report received from the National Audit Office. Subject to a satisfactory visit by UKAEA's head of internal audit to the pension team, the final accounts were ready to put forward for signing;
 - there were a few internal audit actions which had not been closed out on time; and
 - the annual report from the senior information risk officer (SIRO) was noted.
- 5.6 Roger Cashmore confirmed board endorsement, subject to the point above, for the recommendation of pension accounts to Sir Martin Donnelly for signing.

6 CEO's Report

- 6.1 Steve Cowley said that it was good that the Minister, Jo Johnson, had visited Culham last month to open RACE & MRF. He was able to see how important EU funding was to UKAEA.
- 6.2 Progress was being made in the construction of ITER; the tokamak building was coming together and more than 50% of the work was out with industry.
- 6.3 A DoE report by Dr Moniz, USA Energy secretary, to the US Congress recommended that the US remained in ITER until at least end of 2018.
- 6.4 The MAST-U machine was coming together, but there was still a lot to do. The drive was for a campaign at the end of 2017.
- 6.5 A proposal had been put forward to EUROfusion for further enhancements to MAST-U. This was being reviewed in July.
- 6.6 The source of the high voltage breakdowns in the JET SF₆ tower had been found and rectified. However, on 21st May a fault in one of circuit breakers caused an electrical flashover, damaging one of the main transformers. The manufacturer had provided new fuses.
- 6.7 The power systems team were to be commended for rapidly responding to incident. Re-start activities should resume later this week.
- 6.8 On the media front he had contributed to a special Fusion edition of Nature Science, published in May, and UKAEA was exhibiting at the first New Scientist Live show in September.
- 6.9 Jim Hutchins sought clarification about the end-point of the MAST-U project and noted that previously this had been machine pump-down, but that the boundaries between the project and machine restart were being reconsidered.
- 6.10 Chris Theobald expressed concern over project slippages and cost increases. He asked about the incident and noted that it had been reported under RIDDOR.
- 6.11 Roger Cashmore said that the focus should be on completing MAST-U project, but that afterward there should be a detailed review. He also said that there was still not enough clarity on the project dashboards.
- 6.12 The Board noted the report

Steve Hall, UKAEA Apprentice manager and Apprentices joined the Board for lunch. The apprentices informed members of the activities they undertook which led to them winning the Brathay Challenge Apprentice team of the year, beating teams from significantly larger Apprenticeship schemes.

Ian Chapman and Mark Shannon joined the meeting

7 EPSRC Grant proposal

- 7.1 Ian Chapman providing highlights of UKAEA's scientific track record.
- 7.2 A case for UKAEA's next fusion grant (which the Board had approved in correspondence) had been submitted to EPSRC. The three main objectives of the grant were:
 - an R&D programme to prepare the UK for a leading position in ITER;
 - an integrated fusion power plant design programme; and
 - a programme of innovation to improve reactor performance and make them smaller and/or cheaper.
- 7.3 A number of funding scenarios had been put forward, the first was the minimum required to maintain a world-leading fusion research programme. If UKAEA was constrained to flat funding then programme cuts would need to be made, most likely was in remote handling, which would significantly impact on RACE. There would be further losses in matched European funding.
- 7.4 The case was due to go to referees next week and a review panel was expected to report to the EPSRC council in the autumn.
- 7.5 The Board noted the status.

Ian Chapman left the meeting

8 UKAEA Corporate Plan 2016

- 8.1 Mark Shannon said that the corporate plan built upon the strategy work done at the beginning of the year. The first part of the report showed UKAEA's corporate goals and how these aligned with BIS objectives.
- 8.2 The second part provided more detail on the strategies under each goal and which corporate performance measure would help deliver them.
- 8.3 The intention was to produce a non-commercially sensitive version of the corporate plan for staff, so that they could see how their work contributed to the corporate goals.
- 8.4 Adam Baker suggested that the narrative could be stronger and better articulation of the longer term vision, post-JET.
- 8.5 Keith Burnett said that the strategic importance of deuterium-tritium experiments on JET and the enormous leverage which the lab achieves should both be highlighted.
- 8.6 Steve Cowley said that the report had a new look and was a great start. It was agreed that plan would be updated to take account of member's comments and taken at the next meeting.

8.7 The Board noted the report.

Mark Shannon left and Laura Duxbury joined the meeting

9 Draft UKAEA Annual report 2015/16

9.1 Catherine Pridham said that the process for the Annual report & Accounts was later this year. The certified report needed to be laid before Parliament by 15 September (recess) as the accounting officer was leaving before Parliament resat.

9.2 NAO would be auditing during July and the report would be reviewed by the Audit Committee on 5 September. In parallel agreement from the Minister would be sought.

9.3 The government's guidance on the required format of the report had changed and a summary was provided in the annex.

9.4 An early draft of the front section of the document was provided. This included more scientific content. An updated version of the governance statement was also provided.

9.5 Members provided a number of suggestions and agreed to provide written input.

9.6 The Board noted the report.

Laura Duxbury left the meeting

10 P12 Financial report

10.1 Catherine Pridham highlighted key points of the financial position at the end of period 12, which included:

- the business development income target had been missed, but margin target had been exceeded, and the commercial property profit target had been achieved;
- there was an increase over the budget in the UK fusion programme, which was primarily due to higher EUROfusion funding;
- performance of the new Unit 4 Business World was still unacceptable, a key area of concern being procurement functionality, so there could be further delays to go-live; and
- CGI Logical (current payroll provider) was completing due diligence on whether UKAEA could move to its new payroll system and had given positive indication that implementation could be achieved on the required timescales.

10.2 Chris Theobald asked about cash balances and noted that this varied depending on timing of payments from the Commission.

10.3 The Board noted the financial position.

11 Property Update

11.1 Catherine Pridham gave a presentation on property activities. Key points included:

- the Genesis building had been constructed at Harwell and 5 tenants had been agreed. Further phases were being planned;
- planning consent for an innovation centre at Harwell had been approved, this would be funded by the Oxfordshire city deal. The development was planned to be in a quad formation, along with a gym and a restaurant;
- housing development on the Harwell campus and the land opposite were still under consideration by the local planning inspector;
- occupancy levels at Culham continued to be high;
- funding provided as part of the CSR would be used to invest in Culham site infrastructure;
- the draft local plan included an increase of 1000 jobs at Culham. Outline planning permission had been granted for 9,000m³ of development; and
- a public consultation about a potential energy storage facility at Culham would be held. If successful it would be one of the largest facilities of its type in the world.

11.2 The Board noted the update.

12 Any Other Business

12.1 The next Board meeting would be held on Monday 20 June 2016.

Secretary Maya Riddle

Chairman Roger Cashmore