

Technology Strategy Board

Driving Innovation

Governing Board Meeting

Minutes of the 46th Meeting

The meeting was held on 20th May 2014 at 6 Mitre Passage, London

Attendance

Board:

Phil Smith
David Grant
Iain Gray
Andrew Milligan
Hazel Moore
Doug Richard
Ian Shott
Christopher Snowden
Bob Sorrell

Apologies:

Mike Carr
Stewart Davies
Sara Murray
Colin Paynter

BIS:

Amanda Brooks

Executive:

Simon Bennett
Kevin Baughan
Simon Edmonds
Mark Glover
Graham Hutchins
Guy Rickett
Aileen Thompson
Nigel Townley

For Emerging technologies and Industries:

Paul Mason
Steph Morris

Welcomes

1. The Chair welcomed the Board to its 46th meeting and to the to the digital innovation centre.
2. He reported that he had spoken at a commercialisation conference the previous day and had been pleased to observe that most attendees had heard of the Technology Strategy Board. He commented that this was a noticeable shift from the past.
3. He reminded the Board of the main items of business for this meeting which were strategy items arising from the previous meeting. They were the Emerging Technologies and Industries Strategy and the International and EU Strategy.
4. He conveyed apologies for absence from Mike Carr, Stewart Davies, Sara Murray and Colin Paynter.
5. He welcomed Kevin Baughan, new Director Technology & Innovation to his first meeting. Kevin Baughan introduced himself and reported that he had had a full programme in this first two weeks and had been impressed by an energetic and passionate team. So far he had been impressed by the processes and was making a first attempt at getting a grip on the programme and its tight circumstances. He

planned to bring a paper to the October meeting about the future evolution of the programme.

Minutes of the 45th meeting (paper: TSB2014-02-13)

6. Paragraph 7: The Board noted and re-emphasised the need for focus on delivery in the Graphene and Turing institutes. Kevin Baughan reported that CDE Catapult was well connected with the team establishing the Turing institute.
7. The Board approved the minutes of the 45th meeting.

Chief Executive's report (paper: TSB2014-03-02)

8. Iain Gray introduced his report. The following issues were discussed:
9. **All staff update:** A film of the all staff update event was presented to the Board
10. **Board membership and recruitment:** The Chair reminded the Board about the Board membership vacancies and expressed his frustration about the slow progress in recruitment. AB confirmed that the process would look in particular for perspectives from life science, agrifood and big business, from a diversity of backgrounds. The Board also recommended seeking international and regional perspectives.
11. **Catapults:** Iain Gray reported that the Cabinet Office gateway review of Catapult governance and project management had been a success and given a green assessment.
12. **InnovateUK 2014** – Iain Gray reminded the Board that the Innovate UK event would take place on 5-6 November, in Old Billingsgate, and was aiming to attract 2000 people per day. It would be used to project the new brand image. The itinerary was coming together and the businesses that Technology Strategy Board supports would be invited to showcase their work. He asked members to put it into diaries and be involved in the programme. He promised a more detailed briefing at the July meeting (**action**). Aileen Thompson agreed to check whether links with DSTL had been made for Innovate UK and Amanda Brooks agreed to raise the opportunity for participation in the event this with DSTL at a forthcoming meeting (**action**). A core strand will be working with the research community.
13. **Brand strategy update:** Amanda Brooks reported that ministers were excited at the prospect of the new name and brand and Aileen Thompson reported that the necessary ministerial level signoff on rebranding had been sought and was expected soon. Once approved, work on the brand visuals would commence and the transition was planned to be delivered through a managed process and to be completed over the next 18 months.
14. **Assisted Living Innovation Platform:** Iain Gray reported that he expected the case for extending the Assisted Living Innovation Platform to be presented to the Board in October after advice from the Steering Board.
15. **ETI:** The Board noted that the business members of ETI had confirmed their commitment to the 10 year programme but had decided not to renew into ETI 2 and would confirm this at the ETI Board the following day. The Board discussed the implications of this decision including the need to pick up and extract the value of some elements of the ETI agenda and manage a clean wind-up. There were also some overlaps with the Energy Systems Catapult agenda. Amanda Brooks reported that there were some imminent people issues that would need to be dealt with as soon as this was made public. The Board agreed that whilst there were elements of

- ETI which had been constitutionally difficult, there was a need to capture the IP and other positive outputs from the ETI that shouldn't be lost or forgotten. There were some lessons in the membership organisation of the ETI that should be learned and understood in the creation of the Turing Institute.
16. **Longitude Prize:** The Board noted the launch of the Longitude Prize and its attendant publicity and questioned why, as the main funder, it was attracting less attention than the administrative lead, NESTA. The Board noted that a contract had now been signed with NESTA to ensure suitable coverage. The Board recommended a significant social networking campaign to raise the Technology Strategy Board profile in this prize. The Board also noted the need to switch to the new brand in this campaign when there is a lull after the launch.
 17. **Organisational development:** The Board noted the appointment of Anne Dixon who was due to start as Director Operations on 1st August. The Board discussed whether communications was the right directorate to host innovation networks and noted that this was planned to continue as a separate special transition project for a while yet.
 18. **Quantum technologies:** Simon Bennett reported that of the £270M programme, £150M was expected to be allocated to 4 or 5 university "hubs" and £60M for doctoral training. £32M (over 5 years) was allocated to the Technology Strategy Board for innovation projects and he was in discussion with EPSRC on how best to do this. The KTN had set up a special interest group and an emerging technologies call was due in the summer. There was a challenge in that research council money cannot be spent with industry. Mark Glover reminded the Board that this initiative was being used as a pilot for new way of working with research councils and DSTL on a coordinated programme.
 19. **Evaluation:** The Board noted the busy programme of evaluations and questioned whether there was too much to take on. Mark Glover assured the Board that the programme was deliverable as the studies were phased and all outsourced. He was also recruiting into that team and keeping the metrics Working Group informed of progress.
 20. **Dashboard:** Iain Gray reported that the team was reviewing the RAG criteria used in the dashboard in light of learning from 12 months usage.
 21. **IT Support:** The Board questioned the executive on the funding constraints relating to IT. Nigel Townley explained that it was necessary to get Cabinet Office approval for all substantive IT projects and that such approval had been turned down in recent hours. Amanda Brooks undertook to give BIS support to get this issue resolved.

Finance and Risk Paper: TSB2014-03-03

22. Graham Hutchins introduced the paper which provided an update on the FY 2103/14 year end. He explained that the accounts for the year were with the auditors and reported that no substantive issues had been raised so far.
23. He described the year end situation and a slight pre-audit overspend on resource, underspend on capital and overspend on administration, amounting to an overall overspend of £7.4M which had been inside the promises made earlier to BIS. A shift from resource to capital, relating to the Future Cities Demonstrator, had helped BIS in their capital overspend challenge.
24. Iain Gray reported that for the current year, the Capital and resource imbalance problem continued and that he would have to take some drastic management action on Smart if he could not achieve a switch between capital and resource allocations

by August. The Board agreed that it must be made clear to BIS what the risks were if that eventuality arose..

25. Amanda Brooks reported that BIS would not know whether it would be in a position to help with this until August. The Board expressed its concerns that Government must recognise its responsibility to own and solve this problem. It agreed to write to ministers to seek a discussion about the seriousness of this problem (**action**).
26. Graham Hutchins reminded the Board of the top risks on the register and pointed out that the highest risk, concerning the leadership team, would be dropped from the list as a result of new appointments.

Emerging Technologies and Industries Strategy Paper: TSB2014-03-04

27. Paul Mason and Steph Morris joined the meeting.
28. Kevin Baughan introduced the topic and commented that the Emerging Technologies and Industries process was a key element in the Board's capability to understand where technologies and industries emerge from and suggested that this issue should be at the heart of the organisation's long term strategy.
29. Paul Mason and Steph Morris gave a presentation on the rationale and strategic issues for an emerging technologies and industries strategy and the process and criteria used to identify priority areas. They discussed the Steering Group's role and the emphasis it had placed on accelerating UK interest in these areas. They agreed to circulate the long-list of candidate emerging technologies and industries (**action**).
30. Hazel Moore, Chair of the Steering group commented that the team had done an excellent job in identifying interesting new opportunity areas, bringing together many parties, developing messaging, engaging ministers and creating momentum.
31. In discussion the following comments were made:
 - a. There was some antipathy towards energy harvesting as it was seen as irrelevant to grid energy. However, the true value was in powering distributed devices such as would be necessary in the growth of the internet of things and autonomous sensing but this needed communicating better.
 - b. The group had demonstrated the ability to develop and apply a very robust and comprehensive process but could deliver a lot more with more money and make even more of an impact and feed the pipeline into the wider programme.
 - c. There remained a challenge in landing the message that these were important future technologies and industries and that the Technology Strategy Board was at the centre of the thinking in this area. The science and research communities could do a lot better in communicating this and the Technology Strategy Board should position itself as the go to institution whenever this is issue is raised. It should be a priority to consider how to push this as part of the rebranding.
 - d. This area needed more funds and more leverage. The team had done a good job so far but this needed to be placed within the Technology Strategy Board as a higher strategic priority and funding diverted from other areas. The scale up in 2015/16 would be a good moment to do that.
 - e. There was a clear need to align the work in this area better with the research councils. The "Arrows" approach might help. Amanda Brooks recommended developing this type of investment for a joint Autumn Statement bid with the research councils.

- f. Aligning this process to the outcome of the REF process was worth considering. The REF process generated a huge amount of potentially very useful data, which could be mined to inform and communicate future strategy.
 - g. Positioning the programme with David Willetts and the 8 great technologies should be a priority and it should also be emphasised in the launch of the new brand.
32. The Board expressed its thanks to Paul Mason and Steph Morris for an impressive and clear presentation. It agreed that excellent progress had been made in this area and resolved to discuss it further in the July meeting as a candidate area for an autumn statement bid (**action**).
33. Paul Mason and Steph Morris left the meeting

Audit and Risk Assurance Committee Paper: TSB2014-03-06

34. Iain Gray nominated Bob Sorrell as Chair of Audit Committee effective from the end of June 2014. The Board **approved** the appointment of the new chair.
35. The Board thanked Andrew Milligan for his service and noted that a process should commence to seek a new member once the new Board members were in place later in the year.
36. Andrew Milligan reported that it had been a privilege to work on the committee and to see the progress that the organisation had made. He recommended that the committee grow by an extra member and that membership terms be designed to restrict annual turnover to just one member.

European and International Strategy Paper: TSB2014-03-05

37. Mark Glover introduced the paper. He explained that the emerging strategy was based on wide inputs including from the Board. He explained that strategy covered three strands which the Board discussed:
- a. **Europe as a funder and collaborator.** The framework programmes and now Horizon 2020 had delivered well to the UK academic community but UK businesses had been underperforming but were getting better. Support for UK Business had been patchy. Horizon 2020 was well aligned to Technology Strategy Board interests and there more opportunities there. The key tools for supporting business in gaining support were the NCPs and the EEN. NCPs had been brought in house and were organised to align to the thematic programmes. The Technology Strategy Board had set up a Brussels office to connect business and catapults into support opportunities.
 - b. The Technology Strategy Board was also bidding to run the UK EENs. It looks likely that to be successful but, if not, will still use them but it would be set back. Scottish enterprise will put in a separate EEN bid because they don't know which way the independence referendum vote will go. The EEN consortium looks like a geographical version of the KTN and so there may be an opportunity to align with the KTN sometime in the future. However, it was too early in the life of the KTN to consider a merged organisation and, for the moment, the Commission was seeking a distinct network.
 - c. An explicit monetary goal should be set to raise the return to business from EU programmes, with a target number of engaged companies over a number of year. It was also important to consider what kind of added value was actually

being sought. Universities lose money in EU projects but do them for the credibility and partnerships. The same is probably true for some companies.

- d. **Global partnerships:** The second strand was looking at the world at large for potential partners to access collaborators, markets, knowledge and supply chain partners. Obvious candidates were Brazil, China and India but there were others. The programme involved working with UKTI to identify innovation hotspots around the world and then looking into where in our thematic programmes we should seek partners.
 - e. The Newton fund was an attempt by BIS ministers to further the overseas innovation agenda but it is funded through overseas development aid and so must be used to benefit other countries. There was a risk that this became more political and less effective.
 - f. It was wrong to treat the EU as a single bloc. Individual EU nations had important specialist capabilities. E.g. Germany does a lot of work in renewables.
 - g. It was not clear what outcomes were sought from this part of the strategy. The deliverables, resources and link to the Technology Strategy Board's mission needed clarifying.
 - h. It would make sense to think about the overall strategic innovation goals in the Technology Strategy Board programme and then seek partnerships with those countries that were best placed to help deliver those goals. And only then to develop a resource and activity plan.
 - i. EPSRC appeared to be somewhat ambivalent about how well things had gone in developing direct relationships with some of the bigger high growth nations.
 - j. **International benchmarking:** The Board agreed that it must improve its understanding of international best practice in innovation support and that investment in this area would pay off.
38. The Chair summarised the discussion and the Board endorsed the overall direction of travel set out in the paper. It agreed to have a further discussion on the strategy in the autumn (**action**).
 39. Doug Richard proposed that the smaller high growth countries are also important in the innovation debate and these are also countries where the UK could make a difference and partnerships may deliver greater common benefit. E.g. Turkey, Indonesia, Columbia, Chile and Peru. He suggested that by working with such countries, the Technology Strategy Board could create zones of influence that work both ways. Helping them with capability to build an internal innovation system would encourage them to focus partnerships and collaborations in the UK and even to send their strong PhDs to the UK. It might make sense to try out a pilot programme, perhaps in partnership with some universities, starting small by offering secondments to seed a longer term programme. Iain Gray agreed to start such a discussion (**action**).

Closed session

40. The Board discussed:
 - a. Board member recruitment
 - b. CEO recruitment
 - c. Senior team recruitment and plans

- d. The Requirement for new members of Audit and Risk Assurance, Remuneration, and Catapults Committees.
 - e. The need for another look at HR and talent in the October meeting (**action**).
41. The Board reiterated its thanks to Andrew Milligan and to David Grant for their service as Board members since the Board's Inceptions as an NDPB in 2007.

Summary of decisions and actions:

No	Action	Responsibility	Target date
1	[Paragraph 12] check connection with DSTL for Innovate UK 2014.	Aileen Thompson	Mar 2014
2	[Paragraph 12] speak to DSTL about Innovate UK 2014.	Amanda Brooks	May 2014
3	[Paragraph 25] Write to the Secretary of State seeking a discussion about the seriousness of the capital/resource problem	Iain Gray	May 2014
4	[Paragraph 29] circulate the long-list of candidate emerging technologies and industries	Paul Mason	June 2014
5	[Paragraph 32] Bring to July Board meeting a discussion on emerging technologies and industries as a candidate area for an autumn statement bid	Kevin Baughan	July 2014
6	[Paragraph 35] The Board approved the appointment of Robert Sorrell to the chair of Audit and Risk Assurance Committee		
7	[Paragraph 38] Organise further discussion of international strategy in the autumn	Mark Glover	October 2014
8	[Paragraph 39] Commence discussions on an international partnership pilot programme	Iain Gray	October 2014
9	[Paragraph 40e] Bring HR and talent report to October meeting	Iain Gray	October 2014