

MEETING REPORT

14 – 15 March 2018



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BUSINESS ENGAGEMENT FORUM MEETING REPORT 14-15 MARCH 2018

The Business Engagement Forum (BEF) is one of our key approaches to interaction with the users of our research. The forum launched in 2016 to act as a means of engaging businesses with collective interests across the whole of our research base. In the third meeting of the forum we engaged the members on:

- Prosperity Partnerships, to obtain input into the future of the scheme.
- Centres for Doctoral Training, to update the forum on the current call and allow discussion on business support for CDTs.
- Business Engagement and influencing strategy, with a view to understanding the ways business wants to engage with EPSRC, as well as receiving feedback on the BEF.
- Impact, to share EPSRC'S current approaches to accelerating impact and to receive feedback on these approaches.
- Capital Infrastructure, to introduce and explain our capital portfolio and to gain input into the UKRI infrastructure roadmap.

Each of the above topics was discussed in facilitated sessions at the meeting. The outputs of each session are summarised in the sections of this report, with actions detailed for each section.

We would like to thank the members of the forum for their valuable input over the two days of the meeting and we will continue to engage with members between meetings.

Summary of actions

- We greatly value the forum's feedback on the Prosperity Partnerships scheme. Before announcing round 3 we will reflect on the success of round 2 and we will take the feedback from this session on board as we develop the 3rd call.
- We will carry out a sector gap analysis of the Prosperity Partnership grants after the outcomes of the second round are known.
- We will investigate the benefits of enabling consortia to bid for Prosperity Partnerships.
- The outputs of the CDT session will influence the guidance developed for letters of support for CDTs in the full proposal guidance for the 2018 call. And we will develop clear guidelines for companies on expectations in a letter of support.
- We will explore options to lower the barriers to providing evidence against research area strategies, as well as how to present our portfolio in a simpler way.
- The feedback on the BEF will be analysed further, with an action plan developed to take suggestions forward with respect to how we engage with the BEF members. This feedback is especially timely as we transition into UKRI and EPSRC is looking to highlight its USP in business engagement.
- We will be engaging with a range of partners over the coming months with respect to the development of the Strategic Delivery Plan.
- We are developing a booklet for business which provides an overview of EPSRC and we will look at the feasibility of providing an organogram of staff.
- The current IAAs will go through a mid-term review in 2018 so alongside this the discussion at the BEF will influence our forward plans around impact. This discussion is also timely as we transition into UKRI and are thinking about impact across UKRI.
- We will work with universities to promote the IAA more widely to businesses and encourage show case events.
- We will promote equipment.data and Konfer more widely.
- We will feed the information gathered into the UKRI infrastructure roadmap. There will also be further opportunities to contribute to the roadmap; if you are keen to be involved please contact Andrew Wright.

The meeting started with a welcome from Helen Niblock (Senior Manager Business and University Engagement), followed by an EPSRC, UK Research and Innovation (UKRI) and Industrial Strategy update from Kedar Pandya (Associate Director for Business Engagement and Industrial Strategy) and Daniel Smith (Head of Business Engagement and Industrial Strategy). During the open question and answer session questions were raised about the differences that would be seen in UKRI and further details around the Industrial Strategy and the different funds. The meeting then moved on to the facilitated sessions as described below.

Session 1: Prosperity Partnerships

Aims of the session

- To showcase funded Prosperity Partnerships
- To get input on Prosperity Partnerships 3 call

The Prosperity Partnerships scheme is currently going through the second round of the call, so it was timely to reflect on the success of the first call and discuss the future of the third call. Zoe Brown from EPSRC who leads the scheme gave a short introduction to the aims and ethos of the scheme and welcomed our external speakers. To celebrate the success of the pilot call we invited Professor Stephen McArthur (University of Strathclyde) and Jim Sibson (Babcock) to talk about their relationship and the initial stages of their project, as well as how they manage the project - Delivering Enhanced Through-Life Nuclear Asset Management.

The forum were then asked to discuss two questions:

- Should the next call be community led (open to all topic areas) or have an element of being strategic? (directed topic areas)
- Should EPSRC encourage different sizes of companies to be involved in the next Prosperity Partnership call?

The discussions on these questions are summarised below.

Topic areas vs open call

The forum agreed that the current open format works well. Having an open call enables sectors and projects to come in that might be missed with a priority driven call. This also enables a diversity of companies and universities to apply, but having the large commitment requirement from companies does mean that the company thinks strategically about their investments. It was also highlighted that partnerships will naturally form around the areas of business interest. The forum observed that EPSRC have not been overloaded with applications so far, so keeping an open call is manageable. However, it was recommended that EPSRC do a gap analysis to ensure that there is an appropriate spread of sectors involved in Prosperity Partnerships.

It was however remarked that a topic driven approach can get people working together. There is then the question of how to choose the topic areas, whether they would be EPSRC specific, or across Research Council remits. The fact that enabling technology can be beneficial across sectors also needs to be considered.

Engaging different sized companies

The forum discussed the opportunity for getting SMEs involved in the Prosperity Partnership scheme. As currently there are no restrictions on company size; the constraints are the large amount of matched funding a company has to contribute, as well as demonstrating an existing relationship with a university research group. It was therefore suggested that SMEs could be brought on board to the projects as partners to develop a supply chain for the research, this could be done by stipulating an SME quota for the call. The forum discussed the benefits of having SMEs involved, which include, bringing in new thinking, working with the best companies in a research

area, the agility of the smaller companies to react to change and facilitating this way of working will build relationships for future projects. Another way of encouraging involvement of SMEs could be to encourage non-competitive consortia to come together to work on a project. This approach may require input from EPSRC to encourage these groupings.

The forum then discussed the barriers to SME involvement in Prosperity Partnerships. A barrier to contribution could be the intellectual property arrangements as SMEs are less likely to hold unique IP and in a consortia arrangement it is more complicated to agree IP. If SMEs were to be bought into projects as minor partners then there could be the risk that they get overpowered by the larger companies. There was also a discussion around technology readiness levels, as the call is run by EPSRC the research funded should be TRL 1-3 and SMEs may be looking to work at higher TRLs.

The forum also discussed the involvement of charities and other government funded agencies who cannot currently lead Prosperity Partnerships but can be involved as project partners.

Outcomes and actions

- We greatly value the forum's feedback on the Prosperity Partnerships scheme. Before announcing round 3 we will reflect on the success of round 2 and we will take the feedback from this session on board as we develop the round 3 call.
- We will carry out a sector gap analysis of the Prosperity Partnership grants after the outcomes of the second round are known.
- We will investigate the benefits of enabling consortia to bid for Prosperity Partnerships.

Session 2: Centres for Doctoral Training (CDTs)

Session aims

- To update the BEF on the CDT call and timelines
- To highlight points of interaction with business
- To give the BEF an opportunity to ask questions about the current CDT call
- To get companies to think about what the students gain from the company involvement in the centres

The session was introduced by Maggie Wilson (Joint Head of Building Leadership) who, gave a brief presentation on the current CDT call timeline and business involvement, as well as introducing the UKRI Future Leaders Fellowships scheme.

The forum were then asked to discuss one aspect of a good letter of support i.e. what are you as a business bringing to the centre and the enhancement of the training of the students in terms of:

- Shorter term aspects
- Longer term aspects i.e. how can companies get involved and contribute to CDTs in the longer term

Letter of support discussion

The forum discussed what business can offer CDTs in the short term. This can come in the form of training students through teaching, supervising projects and secondments and mentoring.

Companies could also provide support to projects by providing materials, equipment and data.

Companies can influence the direction of a CDT and the projects, however it was felt that this is easier for some companies than others depending on their size and flexibility. Business should demonstrate their existing relationship with the universities in their letter of support and show that

they have co-created the centre. To enable the sharing of ideas and peer-to-peer learning the research should be at a pre-competitive stage.

In the longer term all parties benefit from the 2-way sharing of information which can be accelerated through secondments and cohort events for students hosted by the company. The sharing of expertise over time can lead to domain expertise and allows both the company and student to get to know each other for future employment opportunities.

General points about letters of support included, that there should be an internal control mechanism within the business to manage the letters and a senior signatory signifies a strategic level of support. It was suggested that having internal guidance in the company should be best practice.

Even though cash support is required, the companies should not forget that in-kind contributions are also valuable and should be highlighted in the letter of support. It is recommended that companies highlight in their letters of support the need for a CDT in this space and the added value that a CDT will provide and the benefits to the company.

General discussion around CDTs picked up on that the students are well rounded from completing taught modules, there is relevance to the student and the company and there is flexibility within CDTs.

Outcomes and actions

- The outputs of this session will influence the guidance developed for letters of support for CDTs in the full proposal guidance for the 2018 call.
- We will develop clear guidelines for companies on expectations in letters of support for CDTs.

Session 3: Business Engagement and Influencing Strategy

Aims of the session

- To show case studies of where business has influenced EPSRC strategy
- To get feedback on our communication routes & find ways to give a stronger voice to business and their needs
- To discuss future plans of the BEF

This session was split into two sections: Balancing Capability and the Business Engagement Forum. Emily Flowers (Senior Manager, Balancing Capability) talked through the background and future plans for Balancing Capability, as well as case studies of where businesses have influenced EPSRC strategy. One of these case studies was provided by Mark Purdie from AstraZeneca who talked about their involvement in the Healthcare Technologies Interdisciplinary Research Collaborations call.

The attendees then discussed the following questions:

- How has your organisation inputted to EPSRC in the past? What information has this been?
- What are the current barriers to inputting information to EPSRC?
- How might we all ensure that EPSRC's industrial partners are enabled to input information and evidence in the future?

Balancing Capability

When discussing how organisations have inputted into EPSRC the level of engagement varied between delegates, and the various mechanisms that people have used were shared. This included responding to consultations and requests for information such as strategy development and data sharing. Companies find relationships with EPSRC staff valuable for information sharing, this includes Portfolio Managers, themes and the Business Engagement team. This engagement occurs through formal meeting and phone calls, informal meetings and advisory boards. It was shared that a number of companies also have links into other government departments such as Department for Digital, Culture, Media and Sport (DCMS), Department for Transport (DfT), Department for Business, Energy and Industrial Strategy (BEIS) and Innovate UK.

As the level of engagement across the BEF varies the groups then went on to discuss the barriers. The main barrier to engagement is staff turnover and knowing who to talk to (in EPSRC and the company). Especially in smaller companies there is limited resource to carry out engagement and submit evidence which can be a limiting factor. If companies did want to submit evidence there is then a lack of knowledge on what format this should be in and how to submit evidence. The forum discussed alignment to EPSRC strategy, which can be a challenge as business tend to work at higher TRLs. Even though it was felt that the Research Areas are useful they are not always relevant to business and language varies across sectors which can be a challenge. The forum also feel that the changing environment is a barrier as there have been a lot of quick turnarounds required which cannot always be met and it's difficult to keep up with the pace of change and to be aware of relevant information. The commercial sensitivity and IP of business R&D can be a barrier to sharing information.

The forum then went on to discuss ways that EPSRC could help to improve engagement with business partners. It was felt that knowledge of who's who at EPSRC and routes to submit information could be clearer, this could be improved through an easier to navigate website or information booklet. To enable EPSRC to get a diverse view of the business landscape it was suggested that EPSRC could widen their engagement, for example with SMEs, industry bodies, catapults. The forum would welcome more meetings and access to their grant portfolio data.

Business Engagement Forum

In the second part of the session Helen Niblock (Senior Manager, Business Engagement) provided an overview of the aims and objectives of the BEF and reflected on what the BEF have achieved so far. The groups were then asked to complete a SWOT analysis of the Business Engagement Forum.

BEF SWOT

The strengths of the BEF were discussed and everyone agreed that it is a valuable network and they are pleased that it exists. Having the meeting enables businesses from across sectors to meet and network and it was felt that the frequency and format of the workshop is fit for purpose with a balance of information giving, sharing and facilitated sessions. It allows members to find out the latest information from EPSRC, meet with staff and business colleagues in an informal open environment.

The forum discussed some weaknesses to be taken into consideration. This included discussion around logistics such as timings and locations for the workshop. Feedback to take on board for the next meeting include to feedback on actions and outcomes from the last meeting as well as increasing the number of external speakers. Even though all forum members like being a part of the forum it was felt there could be greater transparency around membership, what is expected of members and how their information feeds into the rest of EPSRC. It was suggested that EPSRC reflect on the makeup of the forum for example the sectors, size of companies, supply chain and links to the Industrial Strategy.

The opportunities for the future were discussed and as we're in an evolving landscape it was felt that the BEF could be a more reactive network and learn from other UKRI partners. EPSRC have a strong advocacy network in the BEF and with the formation of UKRI there are opportunities for EPSRC to use this voice. It was felt that more could be done to share best practice regarding how companies manage their interactions with universities and managing various schemes of research and training. To add an extra dimension to the meetings it was suggested that technology and media could be used (e.g. online voting and feedback) as well as looking at the option of site visits. To enable EPSRC and the delegates to get the most out of the meeting it is recommended to send the agenda well in advance and to set some pre-work for delegates.

Finally the forum discussed potential threats to the BEF. These mainly include unknowns such as UKRI and Brexit. It was felt that there needs to be demonstrable impact from the BEF otherwise there is the risk that people will not engage and attend the meetings. With regards to membership, there is the risk that the BEF would get too diluted if membership becomes too large.

Outcomes and actions

- We will explore options to lower the barrier to providing evidence on research area strategies, as well as how to present our portfolio in a simpler way.
- The feedback on the BEF will be analysed further, with an action plan developed to take suggestions forward with respect to how we engage with the BEF members. This feedback is especially timely as we transition into UKRI and EPSRC is looking to highlight its USP in business engagement.
- We will be engaging with a range of partners over the coming months with respect to the development of the Strategic Delivery Plan.
- We are developing a booklet for business which provides an overview of EPSRC and we will look at the feasibility of providing an organogram of EPSRC staff.

Session 4: Impact

Aims of the session

- To inform the BEF of the Impact strategy
- To hear from a university how they use their Impact Acceleration Account (IAA)
- To inform the BEF what is available through the IAA
- To gather the BEF's perspective on how we seek to realise impacts from EPSRC investments

The session was introduced by Chris Gibson (Manager, Impact Team) who gave an overview of the range of ways EPSRC promotes and accelerates impact. We then invited Keith Dingwall from the University of Glasgow to speak about how they have benefitted from their Impact Acceleration Account (IAA).

Following the talks, the delegates were asked to discuss the strengths, weaknesses and opportunities for improvements in EPSRC's approach to supporting impact, mainly focussing on the IAA.

The forum discussed the strengths of EPSRC's approach to accelerating impact and it was agreed by all that the major strength is the flexibility of the mechanisms. The accelerating impact strategy has engendered a culture change in academia to think about commercial exploitation which is enabling research potential to be unlocked. The IAA allows investment in potentially riskier projects and the flexibility allows easier access. The forum like the people element to the IAAs which allows secondments to take place, for relationships to be built and enabling early career researchers to access the funds.

There are however some weaknesses to the mechanisms for impact which include the access to information on the IAA scheme and which universities have them. It is believed that the IAA is only

known to these involved, it could be advertised more widely to businesses to get involved. It was felt that EPSRC could make more of the output from the IAAs to capture success stories. The forum discussed the allocation of IAA and the algorithmic based funding could be a weakness because not all universities that companies want to work with have IAAs and not all universities that have a strong research base are the best at translating research. The flexibility of the award could be perceived as a weakness because companies working with various universities have to figure out the different governance and management structures of the IAAs. This flexibility also leads to reduced control from EPSRC so it was suggested that there should be more monitoring of the accounts.

Opportunities to improve the IAA were then discussed, one of which is to increase the visibility of the IAAs as a scheme, as well as the universities which hold IAAs to business. There were suggestions to increase the impact of IAAs by linking them to other organisations and activities such as knowledge exchange via Higher Education Innovation Funding (HEIF), Local Enterprise Partnerships (LEPs), Innovate UK and Knowledge Transfer Partnerships (KTPs). Other suggestions include showcases of IAAs and building networks and cohorts between universities. Showcases and events would also enable better match-making between universities and companies to enable acceleration of the impact. There were also suggestions for managing the IAAs within universities such as getting greater involvement from businesses on the allocation of funds as well as people development by allowing PhDs and PDRAs to manage IAA projects. IAAs are a valuable mechanism so the forum believe that greater transparency on the outcomes of the IAAs would be an opportunity to show the work that has been done.

Outcomes and actions

- The current IAAs will go through a mid-term review in 2018 so alongside this the discussion at the BEF will influence our forward plans around impact. This discussion is also timely as we transition into UKRI and are thinking about impact across UKRI.
- We will work with universities to promote the IAA more widely to businesses and encourage show case events.

Session 5: Capital Infrastructure

Aims of the session

- Inform the BEF of Capital Infrastructure strategy
- Showcase facilities and opportunities for business
- Opportunity to discuss the UKRI infrastructure roadmap

This session was introduced by Andrew Wright (Head of Capital Infrastructure) who provided an overview of the infrastructure capability that EPSRC provides.

The forum then discussed two sets of questions:

Sharing of Equipment

Much research requires specialist equipment and staff to interpret results, EPSRC invests capital funds into maintaining world class labs at universities. We would like to ensure maximum use is made of these investments, including links to industry:

1. What models of sharing / access are you familiar with?
2. Do you share company equipment with universities? If not, why not?
3. What are the barriers to using national facilities and university infrastructure?
4. Where can EPSRC help?

The forum discussed the models for sharing equipment that they are aware of, which includes the co-location of company and university equipment to enable sharing. Access to data, materials and software are also shared between businesses and universities. The method to access the infrastructure can vary from advertising through the university website, online portal and relationship building to be aware of what associates have. The point of access can include a pay as you go system, using an Innovate UK scheme or access through grants for national facilities.

The forum were then asked about their company sharing equipment with universities, which most companies do in some form, but there has to be mutual interest from both parties. The most frequent way of sharing equipment was through contributions to grants. There can also be block deals on accessing data for example.

Barriers to sharing equipment include if the company is already at full capacity for the use of the equipment and even if the company advertises the use of the equipment it is not always widely taken up. There is also the resource requirement for allowing external people to use the equipment and training or a technician that will need to be provided.

The forum went on to discuss their use of national facilities and university infrastructure and the barriers to their company using them. An issue for companies using this equipment is the sensitive nature of the research and the risk of competitors gaining access to results. There are barriers due to the physical location of the equipment, knowing what equipment is available, knowing who to contact and the process for getting access. Also, often the universities are not geared up for the quick response times required by business and there can be a lead time to gain access and the relevant training.

The discussion then led into how EPSRC can help facilitate access to equipment between business and universities. The forum felt that a long term strategy for infrastructure is required and this should be done in consultation across UKRI and wider stakeholders. It would be helpful for EPSRC to further promote equipment.data and Konfer and to look into funding a database to find equipment and store data from funded projects. It was suggested that the sharing of equipment could be assessed in grant proposals – has the applicant thought carefully about what is already out there.

UKRI Infrastructure Roadmap

The UKRI is embarking upon a strategic infrastructure roadmap exercise, with the aim to establish a roadmap of large investments until 2030. At this point information is being gathered before assessing the next steps:

1. Is there key, publicly funded Research and Innovation Infrastructure (RII) that you would like to flag as being of high importance to your organisation?
2. Are there any existing gaps in the RII landscape that you are aware of?
3. Are there any future needs and opportunities you would like to flag?
4. Are there any overlaps with existing industry roadmaps?

As part of the UKRI Infrastructure Roadmap the forum were asked to feedback their needs around equipment. The members shared facilities that they see as high importance to their organisation and then highlighted existing gaps.

The forum highlighted a number of opportunities to flag. Companies own bespoke equipment that they don't always know if someone else has an interest in, so there is greater opportunity for sharing here, especially across research councils and sectors as well as regionally and with

institutes. There is a need for greater visibility of equipment through a database and the possibility of a “try before you buy” scheme was suggested.

EPSRC asked if there were any other roadmaps or work going on in this area and a number of industry activities were highlighted.

Outcomes and actions

- We will look to promote equipment.data and Konfer more widely.
- We will feed the information gathered into the UKRI infrastructure roadmap. There will also be further opportunities to contribute to the roadmap; if you are keen to be involved please contact Andrew Wright.



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