

GuildHE and CREST Consultation response - Innovate UK's integration with Research UK (February 2016)

1. What do you see as the main benefits of the integration of Innovate UK with Research UK and how will integration provide opportunities not currently available, or taken, to increase innovation?

Research UK could learn very useful ways of working from Innovate UK to provide opportunities for innovation and to enhance research in the UK. We see the following as the main benefits of integration.

Successful and sustained engagement with business and industry: Innovate UK has an excellent track record of engaging with businesses and industry. The relatively recent rebranding of the Technology Strategy Board to become Innovate UK has enabled the body to better encompass the full breadth of UK economic activity and this transition has been largely successful. Amongst smaller and specialist institutions we now see engagement with Innovate UK programmes across the board of subject areas, not simply from technology, engineering, and science. The body has also broadened its base of business partners, engaging with SMEs through to large businesses. In its current configuration RCUK does not enjoy such successful relationships with business, and where this is occurring, the activity is relatively niche, such as the match-funded industry club schemes provided by the BBSRC. These schemes support research with innovation in mind; however current RCUK programmes are not so well adapted and responsive to the innovation process and may certainly benefit from closer contact with Innovate UK.

Providing funding mechanisms at every level of scale: Successful innovation requires investment and support at all levels of risk and scale, and a successful innovation ecosystem recognises that new ideas may arise from any source; flexibility is paramount. Innovate UK have developed a range of funding mechanisms that scale up from very small grants, such as Innovation Vouchers (currently £5k), to very large grants, for example late stage development grants as part of the Catalyst fund. These also reflect the various risk levels associated with the development of new ideas. For SMEs and new researchers (those new to research or new to research funding applications), in particular, access to small scale grants - not loans - provide a vital 'first rung' on the innovation ladder and represent help at the riskiest stage - proof of concept. Larger scale funding, which takes a virtually-market-ready product or service to market, is least risky; here loans are potentially more appropriate. What we currently see with innovation-type funding at RCUK, and similar funders such as HEFCE and the EU, are diminishing opportunities for the riskier 'first rung' funding. For example RCUK KE funding schemes are directed towards those who have already secured grants as 'follow-on' funds; institutions that meet a threshold for overall RCUK income receive assistance for KE through schemes such as the impact accelerators, further concentrating available funds for such activity; and other innovation funding has in-built restrictions, for example HEIF has thresholds for eligibility based on a level of ROI not reasonably achievable by smaller or specialist institutions due to the scale of their overall operation. The net result means most institutions look to other, less stable sources, such as charities, to fund such activity at these riskier, entry levels of funding. This limits the scope, reach, and sustainability of the projects. This is also true for research funding; as RCUK and EU grants tend towards larger packages which may reduce the administrative burden, there is a lack of entry routes to achieving grants and very high competition for those smaller grants that do exist. Research UK could learn much from recognising this significant difference between the way their portfolio is managed as compared to Innovate UK, and that potential 'good ideas' that are being missed because nascent concepts have limited mechanisms for support.

Prioritising proof of business case over track record: Innovate UK offers an open, accessible, level playing field for funding. Recipients of funds comprise a broader church of institutions and businesses that are currently supported by RCUK. Applications are judged on the proof of a business case for support. Whilst RCUK funding prioritises excellence above all else, it cannot be ignored that the track record of researchers continues to play a significant role in the peer review of applications. There are good reasons for looking for a track record; with high competition and due diligence with public money it is understandable that research funds are placed in a 'safe pair of hands'. However, Innovate UK mechanisms demonstrate a good alternative which allows applicants with varying track records and levels of experience to access support at levels that are appropriate to their idea and their need. As recent reviews, including Nurse, have pointed out, it is important for the health of UK research that new researchers, emerging research methods, and innovative disciplinary combinations are supported; integration of the approach taken at Innovate UK could provide some useful solutions and models here.

Enabling multi- and inter-disciplinary projects: Due to the emphasis on innovation and the thematic calls, Innovate UK has a greater ability to support multi- and inter-disciplinary projects. These collaborations, such as those supporting wearable technologies, are at the cutting-edge of innovation. This is a major strength of Innovate UK and it enables a wide diversity of higher education institutions to get involved in the schemes. It is of particular benefit to specialist institutions where researchers are often current practitioners and maintain close links with industry which are perhaps better suited to these innovation-led schemes than what the current RCUK portfolio offers. Interdisciplinarity is a central issue raised in the Nurse Review and we identify access to models of enabling, designing calls to encourage, and assessing the feasibility of multi-disciplinary bids as a key potential benefit of closer working between Research UK and Innovate UK.

Models and mechanisms for working effectively with and for regions: Smaller and specialist institutions are anchored in their local regional economies, creating excellent relationships with local businesses, public infrastructure and regional organisations including the LEPs. The emphasis maintained by Innovate UK on regional working is highlighted by these institutions as vital to the success of projects. Regional agents and advisors who help broker relationships and place researchers through schemes such as Knowledge Transfer Partnerships complement institutions' knowledge of their local economy and help them achieve more. This is a major difference to the more centralised approach taken by RCUK, and we would hope that any integration of the two bodies gave both confidence and a useful mechanism to RUK to extend their reach into the regions.

However we caveat any perceived benefits of integration with the need to fully acknowledge the significant culture-shift that would be required to effectively embed these into current RCUK behaviours and priorities which differ greatly from Innovate UK and which are long-established modes of operation.

2. What are the main risks for both business and research of the integration of Innovate UK into Research UK?

Innovation and Research are distinctive activities, and whilst their loci have significant points of interaction, the two are not interchangeable terms and represent quite different drivers and goals. Research and innovation have a comparable status and any integration of the bodies that support them should recognise this.

For innovation, there is a risk that integration will result in an over emphasis on research and that innovation, particularly small scale but high risk grants that support proof-of-concept, will diminish

in importance. Furthermore over-emphasis on research commercialisation, and similarly easy to quantify innovation outputs, would be to the detriment of the subtlety of the UK innovation ecosystem. This is particularly the case with regard to SMEs, and where innovations are more service driven and process based and therefore less commercially visible.

For research, integration of the two bodies poses equal risks. Over emphasis on innovation-led research may result in diminishing funding envelopes for blue skies or pure research. Pure research remains a vital cornerstone of the UK research landscape and continuing to fund this often high-risk activity is essential for the progress of knowledge and understanding in every discipline. A similar risk was identified for the dual funding system in the government's Green Paper. It is essential that any bundling of funding mechanisms does not result in support being channelled away from higher risk or less well-established research activity.

It is crucial to consider that Innovate UK grants do not solely support research activities at universities. The grants play a vital role in enabling knowledge exchange activities, collaborations with businesses and the innovation of new, risky concepts beyond research activities, and these may relate to teaching or other business development functions of the university. This may be particularly true in the case of smaller and specialist institutions where staff and technicians take on multiple roles and often maintain connections with industry as practitioners. Integration with Research UK therefore risks over-emphasising the relationship of innovation to research at the expense of these other sites and forms of innovation activity.

As we have outlined above access to other streams of funding for innovation-related and knowledge exchange activities is diminishing for a great many higher education institutions. HEIF - often referenced as a primary fund for innovation in universities - is not available to all institutions due to the thresholds of ROI required. Smaller and specialist institutions are less likely to receive HEIF, and they are also less likely to be eligible for bolt-on innovation and knowledge exchange funding that currently exists at RCUK due to their low levels of research grant funding from RCUK. Innovate UK grants therefore represent one of the most important, most stable opportunities for funding these kinds of activities through access to public funding. The grants are at a greater diversity of scale which make them more accessible to newer researchers, riskier ideas, and a greater range of collaborators. It is a concern that integration with another body may affect the openness of the competition and risk further concentration of available funds for these activities.

Innovate UK is not as developed a 'brand' as RCUK, and some would argue it has not been given the time to bed in to fully exploit its potential to achieve longer term gains, particularly for SMEs where time to consider R&D options is rare and businesses take time to wake up to the opportunities available. We believe there is a danger of Innovate UK being 'swallowed up' by the larger, more established Research UK infrastructure, if that infrastructure is largely drawn from the current Research Councils. In so doing, some of the nuances in their approach may be lost. For example, and as outlined previously; Innovate UK grants provide essential 'lower rungs' of entry level funding that capture new, risky innovations and ideas - many comparable schemes at RCUK have been closed; Innovate UK have developed a very good and trusted network of regional agents and advisors that are crucial to the successful deployment of grants and management of projects, and this regional awareness is not so apparent amongst RCUK and is crucial to successful collaborations. Furthermore, KTPs are a good example of innovation and university-business interaction that do best when they are given time to develop and establish good practices well beyond the timeframe of individual governments. These programmes are successful and have a long track record. There is a danger that such programmes, if changed unnecessarily, such as being converted to loans rather than grants as

might be suggested by the direction of travel laid out in the CSR and Nurse Review, may be irrevocably damaged, and will be scaled back and/or made unattractively complex.

Considering the proposed integration of the two bodies in the light of other current economic policies, we are concerned that there is a lack of coherency with other stated goals and directions of travel. The emphasis on devolution and regional activity would suggest against a move to centralise research and innovation activity, rather, it suggests better understanding of regional strengths and more effective distribution of support and services. Dilution of the regional reach of Innovate UK would therefore be hugely counter productive. We see a risk for business and research alike in not aligning this proposed integration with other information gathering activities, such as the Science and Innovation Audits, and more general economic goals to best achieve the desired outcome for economic growth in the UK.

In short, we would be wary of the unintended consequences of a deep integration of the two bodies which did not recognise and allow for their different purposes to be upheld. In his review Sir Paul Nurse emphasises closer working and a better alignment of funding streams, particularly cross-cutting thematic activities, which bring the best of Innovate UK and Research UK to the table. We would welcome full consideration of the subtlety of his recommendations to achieve an effective balance between the desire to simplify the landscape and the need to maintain good, existing practices that achieve results.

3. Are there any specific issues Government should consider when looking at the practical arrangements of integrating Innovate UK into Research UK?

We would welcome any harmonisation of procedures for applying for and reporting on funding. There has been some movement in this direction, such as the adoption of the JeS application system by Innovate UK to handle research partner applications, as they do for RCUK grants. It will prove advantageous for researchers to use familiar systems to apply for funding; at present Innovate UK applications are phrased and constructed very differently to RCUK grants and the lack of coherence is a perceived barrier to uptake of the schemes.

The missions of Innovate UK and Research UK are distinct; we would welcome the maintenance of their respective purposes and objectives. Full integration may not result in overall benefits to both but rather result in an overly large and complex structure with which higher education institutions, researchers and knowledge exchange professionals cannot easily work, and which look like a closed shop to SMEs with little time to dedicate to R&D. Joint working, harmonisation of processes, and better synergy between the two bodies whilst their independence is maintained would however be beneficial.