

Written Evidence Submitted by
Professor Matthew Flinders, Sir Bernard Crick Centre, University of Sheffield
(RFA0106)

1. The government plans to create a new UK research funding agency. It will be ‘broadly modelled’ on the US Government’s Advanced Research Projects Agency (ARPA). The government’s July 2020 *UK Research and Development Roadmap* suggested that at least £800m will be invested in establishing this new agency. According to the recent roadmap ‘This body will back breakthrough technologies and basic research by experimenting with new funding models across long-term horizons.’ Although a more detailed blueprint for ARPA is not available what is relatively clear is that it will be born out of perception within government that the existing research landscape is for some reason less able or willing to operate on a high-risk, high-gain, high-reward, high-agility, high-ambition basis. It is beyond the scope of this submission to reflect if it really is beyond the bounds of possibility that other elements of the UK research and development system could not be adapted to achieve these ambitions. The clear benefit, however, of creating a new organisation is that bureaucratic processes, external relationships and the dominant research culture can be designed and shaped around a vision of future needs rather than within the boundaries of pre-existing structures.

2. It is in exactly this context that this submission highlights three inter-related issues that the Science and Technology Committee might want to consider as it undertakes this inquiry. These issues can be summed up in the following questions which, in turn, provides the structure for the remainder of this submission.

- a. *Risk*: How will the new agency’s approach to risk be balanced against its existence within a very high-blame low-trust political environment?
- b. *Range*: How will the new agency stay ‘in-SHAPE’ and ensure that it draws-upon the emerging insights from across the full scientific spectrum and therefore not fall foul of the ‘parallel streams dilemma’.
- c. *Leadership*: How will an approach to talent management and research leadership be cultivated and nurtured in order to ensure that the new agency is a sustainable, efficient and resilient part of the broader research infrastructure?

3. A key background document for understanding the government’s approach and thinking *vis-à-vis* a new funding agency is Michael Gove’s Ditchley Annual Lecture on ‘The Privilege of Public Service’ that he delivered on the 27 June 2020.¹ This provides something of a halfway house between the various blog-posts and extended essays produced by the Prime Minister’s Chief Adviser (and previously Michael Gove’s special adviser), Dominic Cummings, and the far more measured and succinct statements provided by the government. The American ARPA – which became DARPA in 1972 when ‘Defense’ was added to its name – is praised in Mr Gove’s lecture for its wholehearted approach to innovation; while the UK is portrayed as possessing a risk-averse and bureaucratically bound system – ‘The whole culture of Government... is hostile to risk, adventure, experimentation and novelty’. A huge body of political and administrative science has for some decades demonstrated the existence of a strong ‘negativity bias’ in public affairs but what remains unclear is how the proposed new UK funding agency will be *empowered to fail* in a socio-political context that generally adopts an immature attitude to failure? What will the formal organisational status of this new agency be and how will that status guarantee the necessary levels of independence and operational discretion?

¹ <https://www.gov.uk/government/speeches/the-privilege-of-public-service-given-as-the-ditchley-annual-lecture>

4. This focus on the design and architecture of the new agency flows into a second point and the need to make sure that it remains 'in-SHAPE'. This has nothing to do with the physical or mental wellbeing of the proposed agency's staff (although that it not a topic that should be overlooked given the pressures it is likely to experience) and is in fact a plea to recognise the role of the Social Sciences and Arts in terms of supporting *People* and the *Economy* (SHAPE).² The simple point being made is that the background narratives currently informing the discussion surrounding a new ARPA-style funding agency in the UK are heavily dependent on fairly technocratic, STEM-based and data-driven assumptions about unlocking potential and driving economic growth. And yet as the government's 'roadmap' acknowledges, although almost in parenthesis, the social sciences, arts and humanities can provide the foundational insights about individual and collective behaviour without which the full potential of biotechnological or healthcare- related progress will never be achieved. Making sure the proposed ARPA stays 'in-SHAPE' therefore reflects the existence of a growing research base on the importance of disciplinary range if truly transformational breakthroughs are to be achieved.

5. The notion of staying 'in-SHAPE' flows into a final focus on the health of the talent streams and research leadership capacity that will ensure the proposed research funding agency fulfils the ambitions that have been set for it. The major issue here is that neither the UK's higher education system nor its broader research and development ecosystem have ever really taken the issue of research leadership seriously. As a recent major review that was commissioned by the ESRC/UKRI illustrates in great detail, a rather amateurish approach and culture still exists when it comes to thinking about research leadership and this is the most common reason why major investments fail.³ The creation of UKRI and initiatives such as the Future Leaders Fellowships represent steps in the right direction but far more needs to be done. Therefore if the new agency is to be 'fit for the future' then thinking about research leadership and talent management needs to be at the core of the planning process from the outset; not least because the available evidence suggests that a key role of particularly successful, respected and high-achieving research leaders is to protect their organisation from going MAD (i.e. multiple-accountabilities disorder) and through this protect the space for innovation, risk and creativity. In relation to research leadership the creation of a new UK funding agency could provide a huge opportunity to embrace a fresh approach - especially in relation to embracing the issue of equality, diversity and inclusion as a challenge rather than a problem – and through this offer positive insights and demonstrate 'best practice' both nationally and internationally.

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² <https://thisisshape.org.uk/>

³ <https://esrc.ukri.org/files/research/fit-for-the-future-research-leadership-matters/>