



## ARPA style research agency

The Commons Science and Technology Committee have [published](#) their report on a new UK research funding agency.

In the conclusion to [their inquiry](#), they look at what the proposed new research ARPA's form, function and place in the research system should be. They find that the evidence they've taken does provide for an ARPA-like institution, but also note that "to date, it seems to be a brand in search of a product."

They say it must be able to operate independently and pursue "novel and contentious" research which has the potential to progress the economy and wider society. They also argue that the Government should identify a specific client for UK ARPA, which will make its remit, organisation and governance much clearer.

### Committee Recommendations:

*UK ARPA's form, function and place in the system:*

- The Government must, in its response to this Report, **clearly define UK ARPA's purpose**. This will, necessarily, be tied to and shaped by a specific client the Government identifies for ARPA.
- UK ARPA should **focus on 'mission-based' or 'challenge-led' research**, which has the potential to make transformative changes with implications for the economy and wider society.
- If the Government wants UK ARPA to pursue research programmes with the potential to have transformational effects on society—and its proposals suggest that it does—**UK ARPA must, firstly, fund research that would be considered too risky by the existing research and innovation system** and be prepared for some programmes to fail. Secondly, the Government must accept that these projects will take a long time, potentially 10–15 years, to 'bear fruit'. The Government must meet this ambition with long-term funding for the agency and the programmes it will fund.
- Given the size of UK ARPA's proposed budget we recommend that **the new agency focuses on no more than two strategically important missions**. This will increase the agency's chances of delivering on its stated aims of making breakthroughs with transformative implications for the economy and wider society.
- The Government must **think carefully about what the new agency's focus might be before recruiting a director**. It should consider the potential areas of focus recommended in the written and oral evidence submitted to this inquiry. It could also consider aligning UK ARPA's focus with other identified priorities and reviews, for example the Industrial Strategy, Net Zero or the Integrated Review of Security, Defence, Development and Foreign Policy. Clarity in this regard will ensure that the agency is led by the best person possible who can, in turn, help to refine and shape the organisation's focus.
- The [Haldane principle](#) **should not apply to how UK ARPA's overall focus is determined**. Ministers should play a role in shaping ARPA's initial focus.
- The ultimate **form and structure of the organisation** should be shaped by and evolve with its appointed director.
- The Government should **set out how this oversight will work in practice**, drawing on precedents such as scrutiny of the Security Services by the Intelligence and Security Committee.
- The Government should **be open minded on who the new agency's director might be**, should not disregard anyone at this early stage, and should be open to appointing an individual with a bold vision, creativity and drive.

- The Government should seek to create an environment characterised by **a high degree of autonomy and limited bureaucracy**. The Government should explain how it intends to establish and foster this culture in the new agency.
- The new director must therefore be **committed to creating a culture that empowers and emboldens** UK ARPA's employees. Depending on how closely the Government wants UK ARPA to replicate US DARPA, it should consider appointing a director with first-hand experience, or at least a good understanding, of DARPA in the US.
- The Government should **explain how UK ARPA's programme managers can be appointed** outside normal pay restrictions in order to ensure that they are sufficiently remunerated.
- To be effective, the new UK research funding agency **must be able to operate independently and pursue 'novel and contentious' research** without case-by-case Ministerial approval. If this is not possible within UKRI then there is merit in the Government establishing UK ARPA as a separate entity. Therefore, the Government must **clarify whether it intends to establish UK ARPA as a separate body or an agency within UKRI**. In doing so, it should be clear about whether this will require primary or secondary legislation and the likely timescales involved.
- The vehicle used to establish UK ARPA (i.e. legislation) must **allow for clear lines of communication between it, UKRI and the wider system**. This could be established through a memorandum of understanding (MoU) that both parties agree to. It should ensure that UK ARPA has the power—and, where appropriate, the duty—to **cooperate and share information with UKRI** to ensure that the two bodies work together effectively, and vice versa. What is deemed appropriate in this context must be weighed against UK ARPA's requirement for operational independence, which will necessitate bespoke oversight arrangements, including possibly less formal coordination with existing parts of the system than what is customary.

#### *Learning opportunity for the UK research and innovation system*

- We urge the Government to **maintain multi-year funding settlements for science** and encourage it to build on this through additional multi-year settlements in future Budgets and Spending Reviews to aid the UK's post-pandemic recovery.
- The Government should **carry out a review**, commencing before the end of the next financial year (i.e. 2021–2022), to explore how UKRI can operate with **fewer bureaucratic constraints and more freedom and flexibility** in how it allocates funds, while ensuring that it is held accountable for its expenditure. Specifically, it should consider:
  - i) the implications of **modifying or removing UKRI's requirement to seek Ministerial approval**, on a case-by-case basis, for anything deemed 'novel' or 'contentious',
  - ii) the extent to which the Industrial Strategy Challenge Fund's 'challenge directors' have been unnecessarily **hindered by bureaucratic constraints** in their work and whether this can be addressed,
  - iii) UKRI's capacity to **tackle the UK's strategic challenges** through its coordination of public and private sector research and innovation, and finally
  - iv) how effectively UKRI **facilitates interdisciplinary research** and the scope for improving it.
- UKRI should set out, in the Government's Response to this Report, when it will publish its equality strategy. The strategy should outline **how UKRI intends to improve the effectiveness of its equality**,

**diversity, inclusion** and accessibility processes and policies and how the effects will be measured and demonstrated.

The Government response is due by 12 April 2021.