

Summary report and conclusions of the Strategic Advisory Board for RESAS-funded science

May 2019



Scottish Government
Riaghaltas na h-Alba
gov.scot

Summary report and conclusions of the Strategic Advisory Board for RESAS-funded science

18 March 2019

1. This summary report sets out the main findings and conclusions of the work of the Strategic Advisory Board (SAB) for science funded by the Rural and Environment Science and Analytical Services Division (RESAS) of the Scottish Government. It draws on, and flows from, the accompanying document that sets out the evidence and commentary that the SAB has heard over the course of its work to date.

2. RESAS funding directly supports Scottish Government's research needs and contributes to world-leading science. It also leverages an additional 50-60% in external funding, recruits and trains talent, enhances Scotland's international reputation, educates Scottish society and pioneers innovation that sustains and supports the resilience of the Scottish economy, contributing to National Performance Framework outcomes. Reducing this funding would leave some Scotland-specific issues under-researched, limiting our foresight on some important issues and future challenges, and restricting the wider benefits that might flow from this investment.

3. The model and system of funding used to date will not be fit for the future, because:

- the scientific evidence needs of Scottish Government and its stakeholders are evolving, as their external drivers also evolve;
- there are wider opportunities that both funder and providers need to maximise;
- the Main Research Providers (MRPs) need to develop to ensure their sustainability;
- financial resources for research have been constrained.

The status quo is not an option. The current system must evolve and the risks of inaction outweigh any benefits of inaction.

4. **Scottish Government and its research providers are co-dependent.** Both must work to ensure that Scotland can secure the science it will need, and to capture the opportunities in science provision and funding across the UK and beyond.

Present status

5. RESAS funding in the 2011-16 and 2016-21 funding cycles substantially supported the MRPs, which received 88% of the £100M total RESAS funding in 2016-17 and 2017-18. This funding represented 40-80% of the total research income of each MRP. Centres of Expertise that bring input from the wider academic community received most of the balance.

6. The research supported is very wide-ranging, covering discovery science and translational research, long-term monitoring and short-term evidence synthesis. There are synergies among these diverse activities but specifying and resourcing the work also brings tensions and trade-offs. This challenge is shared by similar research programmes elsewhere.

7. Research capabilities and evidence needs change over time. The fitness for purpose of the research portfolio has been assessed in a series of reviews, though the SAB recognises that its work has concentrated on short-term needs and priorities and that an assessment of Scotland's strategic requirements in this area is also needed. Since 2005, the research portfolio has evolved progressively. **More decisive action is now required to maintain alignment with Government needs.**

Future strategy

8. The SAB here summarises the strategic needs and directions for the RESAS research portfolio, in order to inform RESAS' forward planning. Ongoing, cross-sectoral collaboration is required to develop the research plans in the next funding cycle, and inter-institutional coordination is required to deliver the research.

9. The planning process must now embody these strategic considerations, and could do so in several forms. The alternatives presented to the SAB include viable strategic options. **The choice among these options is a decision for Ministers.**

The action needed by RESAS

10. The role of Government should be:

- to frame and specify the need;
- to facilitate the provision of evidence (in formats appropriate to meet the need), through funding, access to data, expertise and other resources; and
- to work with the research providers to ensure that research outputs are interpreted, disseminated and used.

11. RESAS should articulate the future scientific evidence and resources that it needs for all the policy areas that it is responsible for supporting, and be responsible for sourcing and, where necessary, contribute to interpreting that evidence for use in policy development and implementation.

12. Each of those needs should be linked to a clear policy driver, be time bound and prioritised. The list of needs should be public, developed with stakeholders, and subject to regular review. The list will act as a signal to the whole academic community and other funders of scientific research of the needs of the Scottish Government ECCLR portfolio and the agri-food related elements of the REC portfolio.

13. The list of needs should be the basis for deciding what to fund and (in consultation with the research providers) how best to deliver the scientific evidence, supported by funding mechanisms that are sufficiently flexible to allow resource to be realigned when required.

14. Scottish Government must consider funding mechanisms that allow for a range of research providers. The spectrum of appropriate providers is expected to vary between the different types of research activity that the Government needs.

15. Scottish Government must take care to identify and protect the research capacity and data that are unique to, and essential for meeting, Scottish-specific issues. The research system elsewhere can powerfully supplement but cannot replace this research capacity. Maintaining this capacity also brings significant, additional benefits to Scotland (noted in paragraph 2).

The action needed by the Main Research Providers

16. **It is primarily a matter for the MRPs themselves, as independent organisations, to achieve their long term sustainability.** RESAS funding is a core part of their business models, albeit varying in importance among the MRPs. The Scottish Government should avoid needlessly precipitous change that risks unintended pressure on critical infrastructure and critical human capital, as the MRPs pursue strategies that strengthen their sustainability.

17. If scientific endeavour is to be optimised then both Scottish Government and the MRPs should be aiming to maximise the impact of the available resources, including leveraging additional science funding in support of the Scottish Government's needs.

18. The Scottish Government should invite the MRPs to bring forward considered models for their individual and collective futures that will help to maximise impact of the available RESAS science spend; that continue to attract the best talent; and that enable them to increase the leverage of Scottish Government money for the wider benefit of Scotland.

19. Among the options considered to enable that outcome, changes in the form of funding provision from the Scottish Government or consolidation of the current provider base should not be ruled out, though significant change of this type will not be easy.

20. However, a significant reduction in funds to the MRPs is unlikely to be substituted fully (or possibly at any significant level) by funding attracted from other, external sources, because the national and international funding landscape is highly competitive. Over-reliance on leveraged funding brings risks to the nation's long-term research capacity and the generation of knowledge underpinning growth in the Scottish economy.

Time frame and issues for change

21. To complete the ambitions set for this funding, **Scottish Government and its research providers must now co-develop a system that allows the Scottish Government to meet its future needs.**
22. The process of change will take time but it is a reasonable ambition that the longer-term changes pointed to in this report can start in the next funding cycle, from 2021.
23. It will be **for Ministers to decide on:**
 - the future balance of resources across the different areas of research,
 - the balance of research activities, where discovery science and translational research, long-term monitoring and short-term evidence synthesis are all required, and
 - the source and mechanisms of funding.
24. The issues and choices before Ministers are shared elsewhere in the landscape of institute-based science, where there is considerable experience that both RESAS and the research providers can draw on to help them in this endeavour, including from the SAB.



© Crown copyright 2019

OGL

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at
The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-78781-799-9 (web only)

Published by The Scottish Government, May 2019

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS578990 (05/19)

W W W . G O V . S C O T