

# **Rural Affairs and Environment Consultation on the Research Strategy for 2016-2021**

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## **1. Introduction**

The Scottish Government's (SG) Rural Affairs and Environment (RAE) portfolio is supported by scientific services provided through SG's Rural and Environment Science and Analytical Services Division (RESAS) and the CAMERAS<sup>1</sup> partners.

The annual investment of ca. £57 M in research through RESAS represents a major contribution to the needs of both the SG and the individual and collective membership of the CAMERAS partnership. This consultation is concerned with the future direction of the investment supported directly by RESAS.

The purpose of this consultation is to seek your views on the scope and content of the draft strategy and to establish:

- the high level vision for the 2016-2021 period;
- the key underlying principles for future funding;
- priority outcomes and themes for future support;
- appropriate funding and delivery mechanisms; and
- knowledge exchange and performance management approaches.

## **2. Context**

### **2.1 Rural Affairs and Environment portfolio (RAE)**

This consultation concerns the land based investment in research made by RESAS and the strategy to be adopted for the commissioning of work for the 2016-2021 period. It represents a contribution to the broader RAE landscape of science complementing existing sectoral strategies, including marine and the strategies of CAMERAS partners.

The RAE portfolio also includes forestry for which Forest Research, a UK wide agency funded through Defra, is the SG's principal source of research and funding. Strategic priorities for that sector are set out in the 'Science and Innovation Strategy for Forestry in Great Britain'.

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<sup>1</sup> Coordinated Agenda for Marine Environment and Rural Affairs Science - the CAMERAS partner organisations are: Food Standards Agency Scotland (FSAS); Forestry Commission Scotland (FCS); Quality Meat Scotland (QMS); Scottish Government, including: Marine Scotland Science (MSS), Rural and Environment Science and Analytical Services (RESAS) and Science and Advice for Scottish Agriculture (SASA); Scottish Environment Protection Agency (SEPA); Scottish Water; and Scottish Natural Heritage (SNH).

The RAE portfolio operates against a background of on-going change. For example, the SG is in the process of establishing a new food body, Food Standards Scotland (FSS), the role and functions of which may have implications for the work to be commissioned through this strategy. The SG will examine the merits of co-ordinating all SG funded research on food safety and nutrition, and what role FSS might or might not play in commissioning and directing that research after 2015.

## **2.2 The Rural and Environment Science and Analytical Services (RESAS) contribution**

The portfolio of strategic scientific research and related activities commissioned through RESAS supports the development and delivery of rural and environmental policy and the achievement of the Government's single purpose and wider objectives as set out in the [National Performance Framework](#) .

The RESAS portfolio has a particular focus on supporting a Greener, Smarter and Wealthier Scotland and contributes towards the achievement of a number of national outcomes including:

- We value and enjoy our built and natural environment and protect it and enhance it for future generations;
- We reduce the local and global environmental impact of our consumption and production;
- We are better educated, more skilled and more successful, renowned for our research and innovation.

The specific contribution made by the RESAS investment in scientific research is to underpin our rural communities and businesses; the productivity and profitability of our agricultural sector; the sustainable use of our natural resources; the prevention and effective management and control of animal and plant diseases and our ability to respond effectively to global challenges including sustainable nutrition and climate change.

Through repeated funding cycles RESAS has maintained long-term investment in Scotland's capability and capacity in this area of land-based science, notably through its Main Research Providers (MRPs)<sup>2</sup> . We estimate that our investment supports some 1790 jobs including 440 highly-skilled posts.

The skills and expertise maintained through this investment are highly valued by funders and scientific collaborators alike with the result that these Scottish-based researchers are active in many countries across the globe. We estimate that in 2012-2013 our funding for the MRPs was instrumental in leveraging an additional £23 M from other sources with over £9 M of this from funding for industry related research.

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<sup>2</sup>Biomathematics and Statistics Scotland (BioSS), Moredun Research Institute (MRI), Scotland's Rural College (SRUC), Royal Botanic Garden Edinburgh (RBGE), the Rowett Institute of Nutrition and Health (RINH) within the University of Aberdeen and the James Hutton Institute (JHI).

Internationally Scotland has established a hard won and enviable reputation for the quality of its agricultural and environmental research. A very significant benefit of this is Scotland's capacity to understand and use, for Scotland's benefit, the outputs of research funded and/or undertaken by others.

### **2.3 'Scotland's Future' - the Scottish Independence Debate**

This consultation takes place against the backdrop of the Scottish Independence debate. The period covered by this strategy and the programme of work to be commissioned through it may coincide with the start of Scotland's future life as an independent country.

The White Paper on 'Scotland's Future' makes clear that a strong research base is essential to the ambitions of a strong and confident Scotland. A clear message is recognition that the best research takes place across boundaries, be they political, geographical, organisational or disciplinary. Scotland will ensure that appropriate systems and structures are in place to enable Scottish-based researchers to remain active and valued contributors to the UK research base and to the wider international scientific community.

'Scotland's Future' also re-states the SG's commitment to the sectors and assets to be supported through this research strategy.

- It recognises that Scotland's agricultural sector underpins the rural economy and our successful food and drink sector. Scotland's farmers and crofters, in their stewardship of our land, contribute greatly to our natural heritage, and support our environment and successful tourism sector;
- Scotland's rural and island communities are a significant and prominent part of our nation, culture and economy. Rural Scotland is a significant part of Scotland's economy as a whole and intrinsic to Scotland's identity, and to our appeal as a visitor destination;
- Scotland has a spectacular natural environment and rich biodiversity. The Scottish Government recognises that our natural assets underpin our economy and the health and wellbeing of our citizens and visitors;
- Scotland's rich natural resources are central to our identity as a country and as a people. They underpin the growth of a thriving rural economy and the industries of tourism, farming, fishing, forestry and food and drink, as well as new opportunities in renewable energy.

### **3. Future strategic requirements**

The existing research strategy and portfolio of research concludes in March 2016. It is therefore timely to establish the SG's future needs and priorities for the portfolio. The strategy which emerges from this consultation exercise will provide the strategic framework for the commissioning of work programmes for the 5 year period from April 2016.

The proposals set out in this document are focused on establishing the high level outcomes, principles and priorities for the RESAS portfolio of research. It is not intended to set out detailed needs and priorities of individual groups of end users. Information to inform the detailed content of the programme will be gathered through further stakeholder events and consultation prior to commissioning the new research portfolio during 2015.

#### 4. Vision

The SG's vision for this strategy is:



The vision places research at the heart of Scottish society and looks to its researchers to visibly and proactively contribute to the health, wealth and wellbeing of the nation by applying its collective talents to the benefit of all of Scotland's people.

#### 5. Strategic Priorities

The high level aim for the SG's investment in research remains to contribute to its single purpose - "to focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth".

The broad direction for 2016-2021 therefore remains unchanged.

The three strategic priorities adopted for 2011-2016 were:

- Supporting policy and practice;
- Supporting innovation and the economy;
- Scientific resilience.

These were underpinned by two further priorities that support scientific excellence and impact and collaborative and multi-disciplinary working ([Research Strategy 2011-2016](#)).

Since the broad direction remains unchanged **we propose to retain the same strategic priorities for RESAS investment over the period 2016-2021**. The underpinning priorities are now captured within the 'Enabling Principles' for the strategy.

**Question 1:** Do the 2011-2016 strategic priorities remain robust and relevant for the period 2016-2021?

## 6. Enabling Principles

Core to the successful delivery of this strategy will be an ethos of collaboration within the science base and an outward facing focus on the needs of end users.

A number of enabling principles can be identified that should pervade all aspects of the portfolio. These can help focus the efforts of both the research community and end users for what will represent a significant investment of public funding.

- **Exchanging Knowledge** – effective knowledge exchange is essential to ensure that knowledge is clearly communicated to end users<sup>3</sup> and that relevance and impacts are maximised for them.
- **Inspiring Innovation** - symbolises the aspiration to constantly look for new and novel approaches including facilitating interdisciplinary research; enhancing the funding base; and collaboration and cross-partner working to deliver solution focused impacts.
- **Maintaining National and International Capability** – supporting and sharing the physical and intellectual assets within the science base including infrastructure, equipment, data and expertise and other research platforms (e.g. farms) to safeguard the continuous development and retention of internationally recognised expertise within Scotland.

**Question 2:** Do these 'enabling principles' set the right context or should additional principles be adopted?

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<sup>3</sup> Government/policy makers/implementers; commercial business, the public (including schools and other sectors across the community); other stakeholders (includes farmers, land based industries, health care professionals etc.) and also the scientific community.

## **7. Research Themes for the future**

### **7.1 Current research strategy themes (2011-16)**

The current portfolio of research is structured around two Strategic Research Programmes and eight Research Themes:

#### I.Environmental Change

- 1) Ecosystem services
- 2) Water and renewable energy
- 3) Land use
- 4) Economic adaptation

#### II.Food, Land and People

- 5) Food
- 6) Health and welfare
- 7) Healthy safe diets
- 8) Rural communities

Annex A sets out this structure schematically.

### **7.2 Business change drivers**

The SG's focus on its single purpose has helped to establish an approach where all sectors can contribute to its high level priorities in a transparent and coordinated way. For example, the SG has set demanding targets for reductions in Scotland's greenhouse gas emissions and policies and schemes have been established to ensure that the farming sector can contribute to these including 'Farming for a Better Climate'. Other examples include the coordinated and whole production chain approach adopted for Scotland's 'Food and Drink' policy.

'Real world' societal challenges are inevitably inter-related and multi-faceted in nature. Achieving sustainable outcomes for the long standing and well established primary production sectors requires an approach where decisions are made in full recognition of the associated compromises and trade-offs. For example:

- How can agricultural productivity be maximised without using more land while adapting to climate change, reducing emissions and maintaining biodiversity and other ecosystem services?
- How do we use our knowledge of current and emerging strategic risks from animal and plant disease to reduce the risks to agricultural and forest productivity and the wider environment?
- What opportunities are there to increase the long-term health prospects of the individual by adopting diets that are healthy, nutritious and affordable and at the same time reduce the load on our health services and support Scotland's food producers?

Over the period of the current portfolio a number of examples can be identified to illustrate how funders and the scientific community have come together to mobilise the necessary resources and to build the teams required to address such complexity. These include:

- The well-publicised challenge represented by the requirement to produce sufficient food to feed a growing population against the backdrop of a finite land resource and the unpredictability associated with climate change has resulted in concepts including ‘food security’ and ‘sustainable intensification’;
- Humanity is ultimately reliant on a planet where the natural processes and services on which we depend, but often take for granted, continue to function. Recognition of this has led to concepts including ‘ecosystem services’ and the more readily quantified ‘natural capital’, the latter being defined as the stocks of natural assets which include geology, soil, air, water & all living things;
- The societal, economic and environmental challenges associated with responding effectively to outbreaks such as Ash dieback have emphasised the need to develop more integrated responses to understand the future risks to animal and plant health in the context of economic, social, and environmental impacts. This includes the way we use emerging technologies and develop future capability for evidence and knowledge management;
- There is also increasing recognition that, on their own, the weight of facts and evidence are often insufficient to persuade individuals and communities to ‘do the right thing’ and to contribute to the delivery of goals of wider societal benefit, e.g. around diet, health, energy, climate change, animal welfare, the economy etc. Delivering effective policy therefore requires a greater understanding of the opportunities and approaches to influence behaviours.

### **7.3 Proposed research themes (2016-2021)**

The need to evolve from a functional/structural view of systems to one that acknowledges the complexity of the challenges in terms of unpredictable causes and effects is considered essential. The next portfolio must consequently adopt a whole ‘systems thinking’ approach if it is to generate the new knowledge and insights and deliver research outputs that contribute to meeting the SG’s vision and outcomes.

This has long been recognised by the scientific community, as has recognition of the need for an inter- and multi-disciplinary approach to delivering outputs that are of practical use in helping address such complex societal issues. These are characteristics of the current portfolio that will need to be retained and reinforced for the next. The 2016-2021 research strategy needs to be positioned so that it can take full advantage of the approaches embodied by ‘systems thinking’.

The strategy should consequently be structured in a way that supports and encourages collaboration across the scientific community and maximises the amount of inter-disciplinary work within and across research themes. **Consequently we propose to move from the two programme, eight themes structure to just three strategic high-level research themes that support a number of specific policy outcomes:**

- **Health & Wellbeing** – about ensuring we have healthy and vibrant communities that are built around community led innovation, good local environmental quality and secure supply chains. The **outcomes** sought include:
  - Resilient communities;
  - Safe food and secure food supply chains;
  - Healthy and sustainable diets;
  - Encouraging the uptake of key low carbon and other behaviours contributing to broader societal wellbeing;
  - Diverse and resilient energy supply chains.
  
- **Productive and Viable Land Use** – supporting a diversity of rural industries, food and other primary production, helping Scottish businesses innovate, using the best available tools and knowledge, generating and adapting new options and solutions for Scottish agriculture. The **outcomes** sought include:
  - An innovative and competitive rural economy;
  - A profitable and sustainable food and drink industry;
  - Productive, profitable and sustainable agriculture built on;
    - High health and welfare livestock; and
    - Appropriate land use;
  - Integrated pest and disease management.
  
- **Ecosystem Services** – using our natural capital within a framework that helps ensure the integrity, health and functionality of key ecosystem services are maintained while at the same time maximising their contributions to the high-level outcomes sought. The high level **outcomes** include:
  - Optimised climate change mitigation and adaptation strategies;
  - Food security and sustainable intensification;
  - Development of low carbon and efficient waste management systems;
  - The integrated management of water and land resources including;
    - Sustainable flood risk management for rivers and coastal erosion risks.

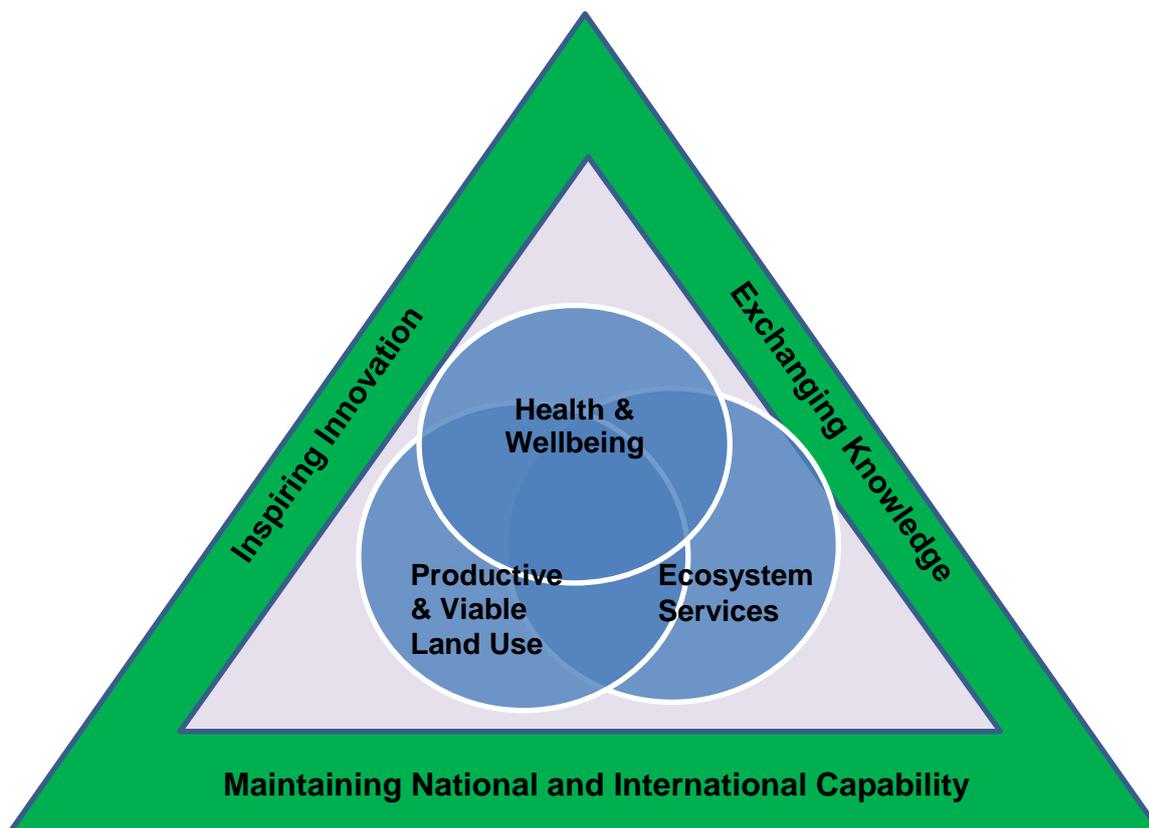
The schematic in Figure 1 includes these proposed themes and sets them within the framework of the three enabling principles identified earlier. While each theme has its own particular focus it must also be outward facing and reach out to the others. Adoption of the enabling principles will be crucial to successfully building effective interface areas between the themes – symbolised by the overlapping areas.

Figure 1  
**STRATEGIC PRIORITIES**

**Supporting Policy and Practice**

**Supporting Innovation and the Economy**

**Scientific Resilience**



**Question 3:** Are the high level outcomes sufficiently clear, if not, what changes would you propose?

**Question 4:** Are the three broad themes identified an appropriate way of structuring our work? If not, what alternatives should be considered?

## **8. Science Delivery model for the Portfolio**

### **8.1 Current delivery model**

A schematic of the structure of the current portfolio is provided in Annex A together with the 2013-2014 financial allocations and Annex B a brief summary of the key attributes of its component parts. Further information is available at <http://www.scotland.gov.uk/Topics/Research/About/EBAR>. Its main features are:

- two strategic research programmes ('Environmental Change'; 'Food, Land and People');
- three policy facing Centres of Expertise (CoEs);
- two business facing Strategic Partnerships (SPs); and
- an Underpinning Capacity funding stream for each MRP that supports the maintenance of key assets and contributes to their long-term sustainability;
- commissioning of short-term policy-led projects and funding for partnerships with other research funders through the Contract Research Fund.

## **8.2 Simplifying the delivery model**

The structure of the portfolio is complex and experience to date, from the perspectives of both the SG and its research providers, is that the high degree of compartmentalisation has in some respects been unhelpful. The number of structural and management units is perceived to have introduced additional barriers to the effective integration of all relevant work within the portfolio, hindered delivery of the strategic objective of collaboration and multi-disciplinary working and added a high overhead in terms of management. The complexity of the structure and the number of organisations involved has also resulted in funding arrangements for the SG that are considered unnecessarily burdensome.

There is consequently an appetite for simplification. The SG therefore proposes to take the opportunity to use the commissioning for 2016-2021 to improve the delivery model whilst retaining its most valued attributes including a focus on the impact of the research and its benefits to end users and fostering collaborative and multi-disciplinary working.

### **8.2.1 Portfolio Review**

The main components of the existing delivery model are described below and views are sought on how this might be strengthened for the next portfolio. A review of the current portfolio is already underway comprising four projects:

- Relevance and Impact (for non-scientific end users);
- Scientific Quality & Scientific Impact;
- Funding & Delivery Model;
- Underpinning Capacity.

The review will be completed in the autumn of 2014 and its outcome will inform decisions on future science delivery models.

### **8.2.2 Investing in the Main Research Providers (MRPs)**

For 2011-2016 the majority of the SG's research needs for the RAE portfolio continue to be met by its MRPs. Support for the long-term scientific and economic viability of the MRPs is also provided through 'Underpinning Capacity' funding.

The programmes of strategic research are currently delivered exclusively by the MRPs.

Through long-term investment and successive funding cycles the capacity and capabilities of the MRPs has been shaped to follow and closely deliver to the SG's needs. The outcome is that the physical and intellectual assets held by the MRPs, especially the collective knowledge and experience of their staff, represents a unique and valuable resource that would be extremely difficult to replace or replicate elsewhere.

Complementing the MRP capacity is the considerable expertise and knowledge base within the Higher Education Institutes (HEI). During the period 2011-2016 the Scottish Universities have primarily been drawn in as partners of the CoEs and SPs. In 2013-2014 they will receive a total of ca. £3.3 M and £1.2 M respectively for their contribution to these.

**The SG proposes to continue to use the MRPs as its principal provider of strategic research and to assign the majority of its resources to these institutes. SG, however, also recognises the valuable contribution made by the HEIs and wishes to see collaboration between the MRPs and HEIs enhanced during the next portfolio period.** It is essential that the on-going commitment to the MRPs provides a platform for building links and collaborations with the wider scientific community and with other funders of research.

**Question 5:** How can the SG maximise the benefits of on-going investment in the MRPs to build and benefit from connectivity with the wider science base?

### **8.2.3 Centres of Expertise**

As part of the 2011-2016 portfolio 'Centres of Expertise' (CoEs) were introduced to facilitate the connection between the research base and the needs of those delivering and developing policy, including within the Scottish Government. Three such CoEs are now in operation for [Climate Change](#) , [Water](#) and [Animal Disease Outbreaks](#). While the detailed structure and operation of the CoEs continues to evolve, the feedback to date has been overwhelmingly supportive. **We therefore propose that CoEs will continue to be included in the portfolio beyond 2016.**

**Question 6:** What are your views of the performance and operation of the CoEs to date, are there any additional areas that would benefit from such support?

### **8.2.4 Strategic Partnerships**

In supporting the Scottish Government's single purpose of 'sustainable economic growth' it is essential that its research investment contributes to innovation and delivers economic impact.

Two relevant sectors of the economy highlighted in the Government's Economic Strategy are life sciences (where the RAE portfolio supports animal and plant science) and the food and drink sector.

As part of the 2011-2016 portfolio 'Strategic Partnership' (SPs) initiatives were established for 'Animal Science' and for 'Food and Drink' with the objective of strengthening links between research and business for these sectors. These initiatives, while making a valuable contribution, are not considered to represent the optimum mechanism or focus for aligning research outputs to business needs. Business benefits continue to flow from the wider portfolio, especially in areas of historical strength such as plant breeding and livestock improvement, but these are not reliant on the SPs.

**We therefore propose that SPs as currently formulated will not form part of the 2016-2021 portfolio and will explore alternative mechanisms to ensure that research delivers for innovation and the economy.**

One attribute of the present SPs that the SG wishes to retain is support for the connection between our Main Research Providers (MRPs) and the Higher Education Institutes (HEIs). The support provided through the Scottish Funding Council (SFC) for its Innovation Centres and their broader prioritisation and promotion of innovation and impact makes for a natural partnership and outlet for collaborative working.

**Question 7:** Do you agree with the SG's proposal to end support for SPs and to explore alternative mechanisms to strengthen engagement between its investment in research and the business sectors it aims to support?

**Question 8:** Do you have any proposals for how the research portfolio can better link to the business community to deliver the desired outcome?

### **8.2.5 Underpinning Capacity**

In 2013-2014 some £9.7 M is being invested in [Underpinning Capacity](#) at the MRPs. This funding supports the on-going maintenance, development and continued access to nationally important data and collections; supported to deliver advice; the development of new areas of science; post graduate training and for leveraging funding from other sources.

We are reviewing with each individual MRP the performance of our current arrangements for Underpinning Capacity.

**We propose to continue with the Underpinning Capacity funding stream for the 2011-2016 period but the outcome of our review may result in some changes in the detailed content for each MRP.**

**Question 9:** Is the purpose and value of underpinning capacity sufficiently clear, if not how can it be improved?

### **8.2.6 Contract Research Fund**

The £5 M Contract Research Fund (CRF) fulfils two main functions.

Firstly it provides a source of funding for the commissioning of short term policy led research projects. It is an especially important route for gaining access to specialist skills in areas of expertise that either fall out-with or exceed the capacity or capability provided by the MRPs.

Secondly, it provides the source of funding for RESAS to enter into partnerships with other research funders thereby supporting capacity building in areas of common interest and fostering connectivity across the UK research base.

**Question 10:** Do you have any views regarding the performance and use of the Contract Research Fund including how it could be improved?

**Question 11:** Could the overall delivery model be further simplified in a way which still enables SG to meet its strategic priorities for the portfolio, if so how?

## **9. The 'Supply' Base**

No single funder of research is able to take sole responsibility for or fund an entire area of research. The on-going investment by RESAS needs to be viewed as sitting within a broader landscape of funders within and beyond the SG.

### **9.1 CAMERAS**

The strategy set out here needs to recognise that broader funding landscape and ensure that there is connectivity and cohesiveness. RESAS will continue to support this by facilitating key links and interfaces with partners, including in Scotland with CAMERAS organisations that have, as part of their remit, the alignment and coordination of scientific activity.

The SG is committed to the CAMERAS initiative and in particular to the partnership's responsibility for the alignment and coordination of SG funded science. We will therefore work actively with all our CAMERAS partners, including integrating and coordinating research and evidence provision through implementation of a RAE Evidence Strategy.

**Question 12:** Do you have specific suggestions as to how the RESAS research strategy can contribute to the delivery of the objectives of the CAMERAS partnership?

### **9.2 Scottish and UK Research Council Funding**

Relevant examples of coordination within Scotland include RESAS funding for the university sector for their contribution to CoEs and SPs, which provides a connection to the pool of expertise primarily supported through the Scottish Funding Council (SFC). Outwith Scotland the SG uses the CRF to enter into partnerships with other funders including the UK Research Councils and the Technology Strategy Board. The objective of these collaborations is to contribute to research areas of particular relevance to Scotland and to foster scientific connectivity across the UK science base and beyond.

Successful delivery of the strategic priorities proposed here is ultimately dependent on the long-term viability, vigour and fitness for purpose of the science base. In addition to delivering outputs that are relevant and deliver impact for stakeholders the science base also needs to retain scientific quality and resilience. **SG will continue to work jointly with other research funders to secure the science base in Scotland.**

**Question 13:** Do you have any suggestions for developing the partnership with other research funders?

### **9.3 Higher education sector**

The SG also needs to ensure it has access to expertise that is additional to, complimentary to, or simply not available within its MRPs. This need is recognised in the 2011-2016 portfolio where relevant parts of the university sector have become valued partners in and received funding for their contribution to the CoEs and SPs.

Based on experience to date the **SG proposes to continue to develop its relationship and to strengthen engagement with the higher education sector.** We therefore wish to identify and explore mechanisms that can help deliver this. Areas of particular relevance are innovation and integrated research platforms in specific areas of science. Potential mechanisms include new collaborations with other research funders; investment in new or on-going initiatives, e.g. international research institutes; etc.

**Question 14:** Do you have any particular suggestions as to how greater engagement with the HEI sector might be achieved?

## **10. Knowledge exchange and performance**

An essential outcome sought from the Scottish Government's investment in research is **relevance** and that it should deliver **impact** for end users beyond the immediate scientific community and especially for those developing and delivering policy. That is why RESAS places such importance on the two strands of the current portfolio review exercise which will assess:

- Relevance and Impact (for non-scientific end users);
- Scientific Quality & Scientific Impact.

### **10.1 Outputs**

Successful delivery of this outcome requires that mechanisms are in place to deliver outputs and information that are usable for non-scientists; both in terms of content and timeliness, and that these are tailored to the specific needs of individual groups.

Research outputs are communicated in a range of ways through:

- Scottish Government's website;

- The websites of the CoEs and individual MRPs;
- Research briefings and other documents available on [knowledgescotland](http://knowledgescotland) ;
- Policy briefings;
- Stakeholder focused events, e.g. 'Potatoes in Practice';
- Public exhibitions and contributions to Scotland's Science Centres, Science Festivals and through the Gateway building at RBGE.

**Question 15:** Are the research outputs from the RESAS portfolio of research readily accessible or can this be further improved, if so how?

## 10.2 Performance management

The direction and performance of the current portfolio of RESAS funded research needs to be transparent and accountable. The overall direction is steered by a Strategic Research Programme Board (SRPB) whose role remit and membership is set out in Annex C.

During the period of the current portfolio regular bi-lateral meetings are also held between RESAS and the MRPs, CoE and SPs to discuss and resolve any issues affecting performance in the portfolio.

A performance management framework focused on outputs and outcomes is in place to monitor progress with delivery. Quantitative and qualitative performance metrics are gathered on a regular basis through the annual reporting cycle. The metrics are organised around the strategic priorities for the portfolio. The monitoring of progress through annual reports is complemented by the on-going portfolio review exercise managed by RESAS.

**Question 16:** Is the current performance management approach fit for purpose or can it be improved, if so how?

## 11. How to Respond

### 11.1 Responding to this consultation paper

We are inviting responses to this consultation document by **25 April 2014**. We would be grateful if you could use the Questionnaire provided at **Annex E** as this will aid our analysis of the responses received.

Please send your response with the completed Respondent Information Form (see 'Handling Your Response' below) to:

[RAEResearchStrategyConsultation@scotland.gsi.gov.uk](mailto:RAEResearchStrategyConsultation@scotland.gsi.gov.uk)

If you do not have access to e-mail, please return your comments/response with the Respondent Information Form by post to:

RAE Research Strategy Consultation 2016-2021  
RESAS  
Scottish Government  
1-C (South)  
Victoria Quay  
Edinburgh  
EH6 6QQ

If you have any queries, please contact Chris Rich at [chris.rich@scotland.gsi.gov.uk](mailto:chris.rich@scotland.gsi.gov.uk)

## **11.2 Handling your response**

We need to know how you wish your response to be handled and, in particular, whether you are happy for your response to be made public. Please complete and return the **Respondent Information Form at Annex E, which forms part of the Consultation Response Form** as this will ensure that we treat your response appropriately. If you ask for your response not to be published we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

## **11.3 Next steps in the process**

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public (see the attached Respondent Information Form) in the Scottish Government library and on the Scottish Government web pages. You can make arrangements to view responses by contacting the Scottish Government library on 0131 244 4552. Responses can be copied and sent to you, but a charge may be made for this service

## **11.4 What happens next?**

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us finalise the draft Strategy, which will provide the framework for commissioning new work over the period 2016-2021.

## **11.5 Consultation Process**

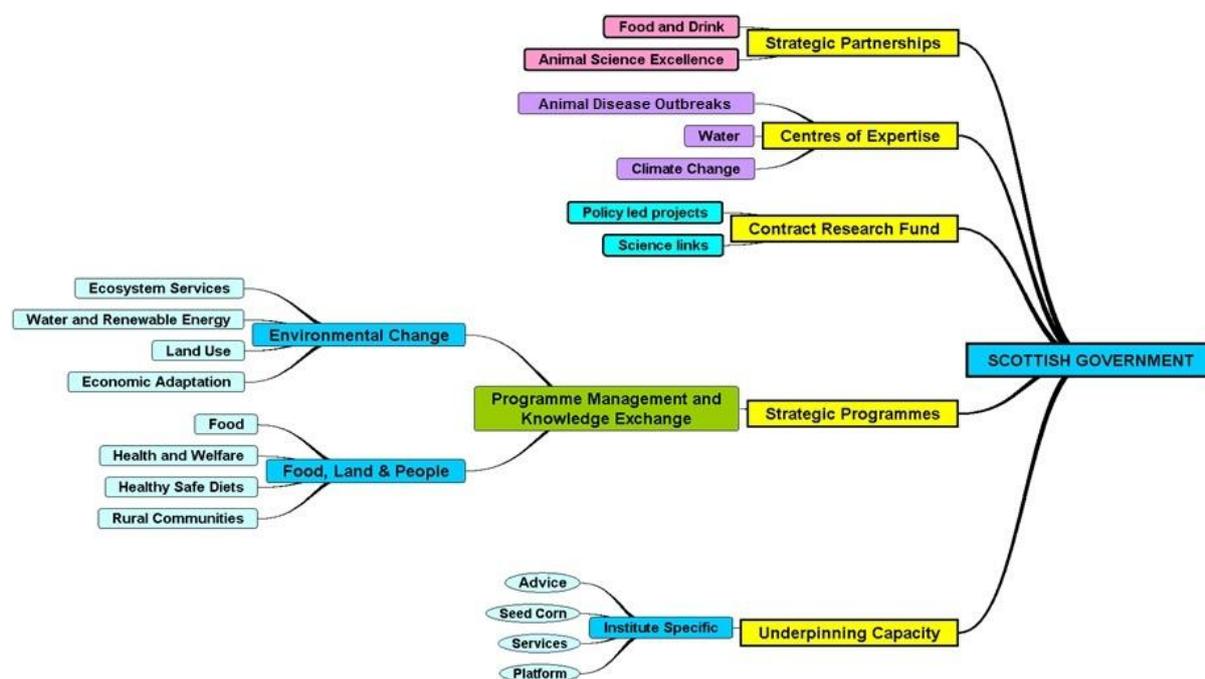
This consultation, and all other Scottish Government consultation exercises, can be viewed online on the consultation web pages of the Scottish Government website at <http://www.scotland.gov.uk/Consultations>.

The Scottish Government has an email alert system for consultations, <http://register.scotland.gov.uk>. This system allows stakeholder individuals and organisations to register and receive a weekly email containing details of all new consultations (including web links). It complements, but in no way replaces SG distribution lists, and is designed to allow stakeholders to keep up to date with all SG consultation activity, and therefore be alerted at the earliest opportunity to those of most interest. We would encourage you to register.

## **11.6 Comments and complaints**

If you have any comments about how this consultation exercise has been conducted, please send them to Chris Rich at [chris.rich@scotland.gsi.gov.uk](mailto:chris.rich@scotland.gsi.gov.uk)

## Annex A - Structure of the 2011-2016 portfolio



	£ M		£ M
<b>Strategic Programme</b>		<b>Strategic Partnerships</b>	
Programme Management and KE	0.5	Food and Drink	1.9
Environmental Change	12.1	Animal Science Excellence	1.4
Food, Land and People	19.4		
Underpinning Capacity	9.7	<b>Contract Research Fund</b>	5.0
<b>Centres Of Expertise</b>			
Water	1.0		
Animal Disease	1.9		
Climate Change	3.9	TOTAL	56.8

## Annex B – Key characteristics of the portfolio

Initiative	Characteristics	Key participants	Outputs
Research Themes	Longer term strategic research	MRPs	New knowledge underpinning the parts of the portfolio focused on delivery
Centres of Expertise	<ul style="list-style-type: none"> <li>• Responds to request for short term advice;</li> <li>• Can commission short term research;</li> <li>• Includes 'in house' longer term research projects.</li> </ul>	MRPs and Scottish Universities	Support for SG policy divisions and CAMERAS partners.
Strategic Partnerships	<ul style="list-style-type: none"> <li>• Medium term research of special relevance to key business sectors</li> </ul>	MRPs and Scottish Universities	Fosters links to key business sectors, e.g. through interfaces such as Scotland Food and Drink.
Underpinning Capacity	<ul style="list-style-type: none"> <li>• Institute specific funding</li> </ul>	MRPs	Source of advice for the SG; maintenance of key resources for the wider scientific community; support for institutional sustainability.
Contract Research Fund	Short term policy led research requirements	Procured competitively through open competition	Outputs from projects directly support SG policy development.
	Strategic collaborations with other research funders	UK Research Councils, Defra, Technology Strategy Board etc.	Outputs help maintain the vigour, capacity and capability of the Scottish science base.

## **Annex C –Role, Remit and Membership of the Strategic Research Programme Board**

**Role:** The Strategic Research Programme Board will be the highest level body within the Scottish Government and will be ultimately accountable for the strategic research budget.

### **Remit:**

- The Board will provide oversight and be responsible for giving direction, when required, to different elements of the research portfolio.
- The Board will ensure coordination of the different elements of the research portfolio.
- The Board will receive reports on performance and delivery from each of the different elements of the strategic research portfolio.
- The Board will make decisions to resolve issues that impact on delivery.

### **Membership:**

- Chair – Dr Bob McIntosh, Director for Environment and Forestry, Scottish Government
- Prof Tim Benton, UK Champion for Global Food Security (University of Leeds)
- Prof Louise Heathwaite, Chief Scientific Adviser for Rural Affairs and the Environment, Scottish Government
- Jeremy Phillipson, Deputy Director, RELU (University of Newcastle)
- Dr Jonathan Pryce, Director for Agriculture, Food and Rural Communities, Scottish Government
- Kenny Richmond, Economics Director, Scottish Enterprise
- Susan Davies, Head of RESAS, Deputy Director, Scottish Government

**Secretariat:** RESAS

## **Annex D - Consultation questions**

Question 1: Do the 2011-2016 strategic priorities remain robust and relevant for the period 2016-2021?

Question 2: Do these 'enabling principles' set the right context or should additional principles be adopted?

Question 3: Are the high level outcomes sufficiently clear, if not, what changes would you propose?

Question 4: Are the three broad themes identified an appropriate way of structuring our work? If not, what alternatives should be considered?

Question 5: How can the SG maximise the benefits of on-going investment in the MRPs to build and benefit from connectivity with the wider science base?

Question 6: What are your views of the performance and operation of the CoEs to date, are there any additional areas that would benefit from such support?

Question 7: Do you agree with the SG's proposal to end support for SPs and to explore alternative mechanisms to strengthen engagement between its investment in research and the business sectors it aims to support?

Question 8: Do you have any proposals for how the research portfolio can better link to the business community to deliver the desired outcome?

Question 9: Is the purpose and value of underpinning capacity sufficiently clear, if not how can it be improved?

Question 10: Do you have any views regarding the performance and use of the Contract Research Fund including how it could be improved?

Question 11: Could the overall delivery model be further simplified in a way which still enables SG to meet its strategic priorities for the portfolio, if so how?

Question 12: Do you have specific suggestions as to how the RESAS research strategy can contribute to the delivery of the objectives of the CAMERAS partnership?

Question 13: Do you have any suggestions for developing the partnership with other research funders?

Question 14: Do you have any particular suggestions as to how greater engagement with the HEI sector might be achieved?

Question 15: Are the research outputs from the RESAS portfolio of research readily accessible or can this be further improved, if so how?

Question 16: Is the current performance management approach fit for purpose or can it be improved, if so how?

## Annex E - Respondent Information Form and Consultation Questionnaire



### Rural Affairs and Environment Consultation on the Research Strategy for 2016-2021

#### RESPONDENT INFORMATION FORM

**Please Note** this form **must** be returned with your response to ensure that we handle your response appropriately

#### 1. Name/Organisation

Organisation Name

Title Mr  Ms  Mrs  Miss  Dr  Please tick as appropriate

Surname

Forename

#### 2. Postal Address

<input type="text"/>		
Postcode	Phone	Email

#### 3. Permissions - I am responding as...

Individual / Group/Organisation

Please tick as appropriate

(a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?

**Please tick as appropriate**

Yes  No

(b) Where confidentiality is not requested, we will make your responses available to the public on the following basis

(c) The name and address of your organisation **will be** made available to the public (in the Scottish Government library and/or on the Scottish Government web site).

Are you content for your **response** to be made available?

**Please tick ONE of the following boxes**

**Please tick as appropriate**

Yes  No

Yes, make my response, name and address all available

**or**

Yes, make my response available, but not my name and address

**or**

Yes, make my response and name available, but not my address

**(d)** We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

**Please tick as appropriate**

Yes

No

## CONSULTATION QUESTIONS

**Question 1: Do the 2011-2016 strategic priorities remain robust and relevant for the period 2016-2021?**

Comments

**Question 2: Do these 'enabling principles' set the right context or should additional principles be adopted?**

Comments

**Question 3: Are the high level outcomes sufficiently clear, if not, what changes would you propose?**

Comments

**Question 4: Are the three broad themes identified an appropriate way of structuring our work? If not, what alternatives should be considered?**

Comments

**Question 5: How can the SG maximise the benefits of on-going investment in the MRPs to build and benefit from connectivity with the wider science base?**

Comments

**Question 6: What are your views of the performance and operation of the CoEs to date, are there any additional areas that would benefit from such support?**

Comments

**Question 7: Do you agree with the SG's proposal to end support for SPs and to explore alternative mechanisms to strengthen engagement between its investment in research and the business sectors it aims to support?**

Comments

**Question 8: Do you have any proposals for how the research portfolio can better link to the business community to deliver the desired outcome?**

Comments

**Question 9: Is the purpose and value of underpinning capacity sufficiently clear, if not how can it be improved?**

Comments

**Question 10: Do you have any views regarding the performance and use of the Contract Research Fund including how it could be improved?**

Comments

**Question 11: Could the overall delivery model be further simplified in a way which still enables SG to meet its strategic priorities for the portfolio, if so how?**

Comments

**Question 12: Do you have specific suggestions as to how the RESAS research strategy can contribute to the delivery of the objectives of the CAMERAS partnership?**

Comments

**Question 13: Do you have any suggestions for developing the partnership with other research funders?**

Comments

**Question 14: Do you have any particular suggestions as to how greater engagement with the HEI sector might be achieved?**

Comments

**Question 15: Are the research outputs from the RESAS portfolio of research readily accessible or can this be further improved, if so how?**

Comments

**Question 16: Is the current performance management approach fit for purpose or can it be improved, if so how?**

Comments



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