CONSULTATION QUESTIONS

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

The strategic priorities do remain relevant. However, by far the most important one is "Supporting innovation and the economy" and this priority should be given greater importance and prominence. If this priority is achieved then all the others to do with scientific excellence, resilience impact and collaboration must also have been achieved. Innovation and the economy can only be supported by world class R&D of relevance to economic needs which in turn is only achieved through science which is resilient, excellent, and collaborative in nature.

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

These principles are nearly correct. The message heading the principles that the science base should have an outward facing focus on the needs of end users is lost in the stated enabling principles. This focus on the needs of end users should also be in the enabling principles. If it is not, there is a danger that the science will stray onto academic territory where research for academic curiosity alone is more important.

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

The specific policy outcomes listed under the three high-level research themes are excellent and to be welcomed.

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

The themes add little to the structuring of the work. It is confusing and difficult to understand the relationship between the strategic priorities, enabling principles and research themes. One set of guiding principles or themes is sufficient. What is important is getting the supporting research for the high level outcomes correct. This should be the focus of the strategy.

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?

According to the Office of National Statistics, businesses in the UK spent £17107m on R&D compared to £9689m by Government. Forming closer

links between MRPs and HEIs will not be as important as links between MRPs and businesses which have a major interest in the application of science results. Priority must be given to forming these links that are presently poor and do not include the whole supply chain. For example the Scotch Whisky Industry is the major user of cereals particularly barley and wheat in Scotland and should have better links with MRPs and HEIs.

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?

There is an opportunity for Scotland to become the world leader in barley research. The entire Scotch Whisky Industry (which by law must keep spirit production in Scotland) is entirely dependent on the supply of new high yielding barley varieties. Allied to this the malting industry and primary produces are largely Scotland based (88% of all malting barley is grown in Scotland). The future security, resilience, and sustainability of the Scotch Whisky Industry, Malting Industry, Cereal Farmers and all the allied suppliers in Scotland depend on a supply of new barley varieties. For instance the threats of climate change and lack of genetic knowledge by plant breeders are already apparent. There should be a CoE dedicated to cereals particularly barley in Scotland that will underpin the growth, jobs and future success of this cluster of Industries central to the Scottish rural economy.

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?

Yes, in general agreement; new mechanisms on engaging Industry should be explored and implemented. Importantly, The Strategic Research Programme Board should have some transparent mechanism either through membership of the Board or sub-groups where key business sectors dependant on the Scottish rural economy and are end users of the science are consulted on the science priorities.

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

There are specialist technology transfer companies throughout the UK whom should be engaged. The Scotch Whisky Research Institute is a research and technology organisation (RTO) set up by the distilling industry to facilitate technology transfer into companies and to bridge the gap between research and application. Their knowledge of both the research needs and how research findings can be applied to the distilling industry should be used to help guide RESAS priorities.

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

Purpose and value is not sufficiently clear

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

No views

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?

No views

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?

None

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

No suggestions

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

This is not an important priority

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

While the research results are readily available they are often in a form that makes it difficult to apply. The advances outlined in a particular piece of work should include the mechanism and the groups and businesses that have an opportunity to apply or use the results in their operations. For example the Scotch Whisky Industry can and does influence the take up of cereal innovation through its cereal specification which is communicated to MRPs, plant breeders and the supply chain. This provides 'market pull' which necessitates the uptake of research outputs. This model should be used more by end users of the science outputs.

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

The current approach is excellent at monitoring the direction and performance of the research portfolio. Where it is lacking is to check and measure if end users are using the research outcomes and, importantly, how the research portfolio is contributing to the high level outcomes desired in the Research Strategy. An assessment should be made of the various projects in the strategic programme as to which of the higher level outcomes they contribute to, how this will be achieved and if, indeed, the project did succeed in this. This will require consultation and engagement with the stakeholders in the rural economy such as the Scotch Whisky Industry.

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

The Scotch Whisky Research Institute (SWRI) is the Research and Technology Organisation (RTO) for the distilled drinks industry. While we cover all major categories of distilled drinks our major focus is on Scotch Whisky. The SWRI is a membership organisation and we cover over 90% of the industry. Our role is to act as a technology transfer organisation ensuring that our member companies have the required technical and scientific information that ensures the long term sustainability of their operations and products. We work in partnership with a large group of R&D providers both nationally and internationally including universities, government laboratories and departments and in Scotland we work with such groups as The James Hutton Institute, FSAS, SRUC and SEPA. Importantly, we work closely and in partnership with the Scotch Whisky Association (SWA) and this response to the Research Strategy has been prepared after consultation with both our member companies and the SWA.

The Scotch Whisky Industry is going through a period of prolonged expansion and investment in people, whisky stocks and production plant. The industry invests over £1 billion every year across its Scottish supply chain and demand for our products is rising. In 2012 the industry used 1.2 million tonnes of cereals (48% malted barley and 52% wheat or maize) and 88% of malted barley used was from Scottish sources. In turn this gives rise to around 629,000 tonnes of moist by by-product that was made available for animal feed. The research needs of the industry have increased with this growth and long term issues of raw material supply, risk management, continuity of supply and product all require scientific input. At its core Scotch whisky production relies on a vibrant Scottish rural environment and economy we are pleased to contribute to this consultation.

Overall we would like to see the research strategy concentrating on delivering the high level outcomes. While we see merit and support all the outcomes listed in the strategy of particular importance is the research designed to achieve ‘a profitable and sustainable food and drink industry’ and ‘food security and sustainable intensification’. To be successful the research should be outward facing to the ultimate end user and the strategy should facilitate co-operation and mutual understanding between business users and the main research providers. By concentrating on outcomes that focus on the needs of the ultimate end user of the research rather than intermediaries in the supply chain all members of the supply chain will benefit.

The most important strategic priority is for the strategy to support the economy and innovation. Successful innovation can only be achieved if it supports the economic success of the business or enterprise involved. In turn innovation rests on scientific excellence, resilience, collaboration and, obviously, impact. The strategy should include ways of measuring the impact and take up of research and should monitor how successful it has been in seeing the research results achieve the desired outcomes. Emphasis should be given into forming links between the MRP’s and businesses that have a major interest in the application of the science. The Scotch whisky industry which is a major consumer of Scottish cereals should have much better links between the MRP’s and HEI’s.

One of the aims of the Strategy should be to make Scotland the word leader in Barley research. Scotch whisky production plus the allied sectors of malting and animal feeds is dependent on the supply of barley. This is under long term threat from climate change and lessening genetic variability in malting varieties during a period of growing demand. There is an opportunity to build on the expertise already in the Scottish MRP's to build a centre which will lead the word in barley and allied cereal research. This would provide the basic research base in genetics, genomics etc. as well as career opportunities for top flight cereal scientists. Information would be fed into the base of the supply chain via plant breeders and, importantly, by being in close co-operation with end users for example distillers, they would provide the commercial pull to ensure the science results are both relevant and used by the whole supply chain. There is an increasing need for such a centre which only the MRP's and HEI's can provide.

Please find attached annex E as requested

Gordon M. Steele

Director of Research

The Scotch Whisky Research Institute