A COORDINATED AGENDA FOR MARINE, ENVIRONMENT AND RURAL AFFAIRS SCIENCE (CAMERAS) (2011-2016)

SNIFFER
25 Greenside Place
Edinburgh
EH1 3AA

Consultation Questions

Question 1: Do you agree that the two broad categories of 'Local Responses to Global Change' and 'Optimising the Potential of Scotland's Natural Assets' are helpful in providing an overlying structure to the Co-ordinated Agenda?	Yes,
Question 2: Are the descriptions of these set out in Section 3 (and Annex 3) comprehensive?	Yes,
Question 3: Do these cover the major policy challenges where science can contribute as you see them?	Yes, Yes but some issues listed in question 9
Question 4: Are they likely to remain broadly relevant over the longer time horizon (well beyond the 2016 focus of this Coordinated Agenda)?	Yes, It is difficult to say just how enduring these themes will be as other priorities could well take precedence (eg new technologies and energy supply).
Question 5: Do you agree with the description of support for the National Capability Theme set out in Section 3 (and Annex 3)?	Yes,
Question 6: What facilities, resources and data do you think are important for Scotland to maintain?	
Question 7: Are there other resources that Scotland needs to acquire to support future policy development?	No, Rather than new resources per se, there is opportunity to skillfully use existing resources by building on synergies across different research bases, creating partnerships and aligning resources to needs

Question 8: Have we correctly identified the key policy issues and the associated scientific opportunities in Section 3?	Yes, But see question 9
Question 9: Are there additional issues that should be included?	Yes, We are supportive of the headline themes and the policy issues /associated scientific opportunities. Some areas are flagged below which were not so clearly referenced in the document although it is recognised that these may be embedded within more general statements. o Local responses to Global change – this could also usefully include demographics and ageing population, understanding implications of emerging legislation, regulation and protocols – including international; and understanding implications of changing governance structures o Benefits of taking a systems approach to addressing many of these questions o Importance of the role and capacity of the planning system to both influence and absorb a large share of the resultant recommendations that arise from research o Corporate social responsibility and role of business. Understanding the role of public v private sectors o Sustainable communities and community empowerment o Issues relating to human health (in addition to those mentioned on food and health) o Transport and travel behaviours o Marine ecosystems o There are opportunities to address the issues of uncertainty and risk management/ risk communication. o Commitment to a zero-waste Scotland will drive business opportunities for reusing or recycling materials (as referred to under ‘How we improve Scotland’s economic and environmental performance’). However a secondary effect will be a need to create much more sustainable production and

	consumption in Scotland, from eco-design to low resource manufacture, to ongoing upgrade/maintenance before final reuse/recycling etc. This will also require robust life-cycle analysis tools/techniques and perhaps involvement in EU level initiatives on sustainable production/consumption
Question 10: What do you think will be the most important influences on Scotland's future in the Marine, Environment, Rural Affairs and related areas?	Climate change, change to global/Scotland"s economy and political agendas, changing perspectives and behaviour of public.
Question 11: Why do you think these are important?	
Question 12: Are there other scientific opportunities which should be highlighted?	Yes, Areas that could usefully be included in 'Science' include: o Understanding public behaviour, and importantly HOW to influence and change this – including through the private sector as well as government initiatives. o In terms of data – whilst recognising that initiatives Earth Observation Forum covers many of the issues – it is important that common metrics be agreed. o Molecular biological techniques for environmental assessment, monitoring and remediation. This links to Scotland"s strengths in molecular science.
Question 13: What existing areas of Scottish based scientific expertise should be maintained to contribute evidence to key policy issues?	
Question 14: How clear is the relationship between the scientific areas and the key policy issues?	
Question 15: In which areas of science can we continue to make use of expertise supported elsewhere e.g. at the UK, EU and international levels?	

Question 16: In the time frame for CAMERAS (2011-2016) what new emerging areas of science are likely to mature and become available for more general use or application?	
Question 17: Do we have the expertise available to be able to use these new opportunities?	
Question 18: In which areas does Scotland need to be self reliant?	
Question 19: Knowledge Exchange is essential for scientific activity to achieve impact. Do you agree that KE should be an explicit and integral aspect of the delivery of this Coordinated Agenda?	Yes, KE is vital to ensure impact and requires the development of a web of actors in identifying need, reviewing progress and outcomes. There is also opportunity to learn from the success of knowledge exchange processes (perhaps action research here) to understand better ways to ensure that the messages are received (and acted on) by different communities (policy, science, public, business). SNIFFER has a considerable track record in this area and would keen to be a part of and facilitate delivery using knowledge management mechanisms that use creative alliances between stakeholders in these different communities.
Question 20: How can we continue to improve the integration of evidence from a diverse range of sources into forms that are accessible to end users?	See also question 19 Rather than focusing on 'delivery' it is appropriate to consider 'engagement'. This implies involvement of actors from concept stage rather than end of project, thereby shaping the format most suited to end-users needs. The formation of partnerships around cross-sectoral issues, policies and national outcomes will be important.
Question 21: How can we reconcile the requirement for science to be responsive and flexible to short term demands while at the same time ensuring that longer term strategic research continues to progress our knowledge and	The balance can be addressed by ensuring that the planned mix of research-commissioning (via government, research council, european etc) is understood for example through ERFF research mapping exercises and through

understanding?	ongoing dialogue with research commissioners and those with (shorter term) policy needs.
Question 22: How can we ensure that the 2 way flow of knowledge from science to policy and from policy to the academic community is optimised?	Using network of actors referred to in questions 19 and 20. Through the use of intermediaries and (partnership) facilitators to ensure commonality of language and shared understandings.
Question 23: Are there alternative structures/systems or new approaches/organisations that could enhance these flows?	Yes, We noted that whilst science, policy and academic communities are all listed, the document is fairly silent on the need to engage private sector and public/ community interest groups – an aspect which could enhance the robustness of the science and its uptake In addition, whilst the document clearly refers to the range of delivery actors being greater than those funded by Scottish Government, the future delivery framework could also consider international and European networking. For example it could be beneficial to use the outcomes of ERA-NETS and learn from / build on breakthroughs achieved by European networks and collaborations known through these networks including experience of integrated approaches to cross-cutting issues.
Question 24: Are there science delivery models which could provide examples of good practice for Scotland to follow?	Yes, SNIFFER"s approach to working with science and policy community has worked well.
Question 25: We would also welcome any other general comments you may have on any of the issues raised in this document.	CAMERAS is valuable in promoting a more integrated approach between different disciplines and policy areas, encouraging linkages and alignment between agencies and institutes, and placing scientific research in the context of social and economic change. SNIFFER's long experience has repeatedly shown the benefits of inter-organisational research scoping and delivery and hence we strongly support this new strategy.