



Priority Knowledge Gaps for Marine Planning in Scotland – Jan 2016

These knowledge gaps were identified through a series of workshops hosted by the Marine Planning and Governance Forum since it was convened in January 2013. This list aims to bring together the MASTS community to address priority questions, with the appropriate range of disciplines, in order to apply for research funding calls. Since marine planning is an emerging process in Scotland, many of these questions require close collaboration between policy makers, MSP practitioners, stakeholders and the academic community as some of the details (such as governance arrangements) are not yet known and will be determined by planning authorities. These questions will be reviewed and adapted frequently.

1. Evaluation and Monitoring of Scotland's National Marine Plan (NMP) and Regional Marine Plans (RMP)

- a) How do we monitor, evaluate and adapt plan performance? What criteria and principles are appropriate?
- b) How can monitoring and evaluation programmes be designed to be informative, enable consultation, and adaptation?

2. Governance

- a) To what degree does applying the ecosystem approach add value to MSP?
- b) How do the governance arrangements between central planning authorities and the Marine Planning Partnerships (MPPs), relate to managing activities through planning and decision making (licensing / consenting)?
- c) How do we integrate marine and terrestrial planning? What are the lessons to be learned from terrestrial planning?
- d) How will governance be integrated across jurisdictional boundaries? What are the lessons from Regional Basin Management Plans?
- e) How does regional marine planning inform subsequent policy-setting and sectoral planning?

3. Plan Implementation

- a) How do we accommodate unknowns in planning, e.g. the effects of climate change on the environment and activities, uncertainties in planning?
- b) How are Regional Marine Planning Partnerships (MPPs) being defined? What are the key differences in structure and approach across the Scottish Marine Regions?
- c) What are the regional skill requirements and capacity (human, technical, financial) for marine planning across the different regions?
- d) How can planning effectively integrate non-licensable activities (i.e. fisheries, recreation, tourism, shipping)?



4. Cumulative Impact Assessment

- a) What ecological and social thresholds are appropriate to define maximum limits of development within marine regions? What are the 'evidence' requirements for this?
- b) How does planning support cumulative assessment across jurisdictional boundaries (including, between regions, internationally, and terrestrial planning)?
- c) What are the available methods and models of appraising different options (e.g. cost/benefit analysis) and how can these be used in a marine planning context?
- d) Are there common drivers for cumulative assessment across different legislative drivers, e.g. MSFD, MSP Directive, EIA Directive, Habitats Directive, SEA Directive, etc.? Are there synergies / overlaps that can be integrated to enable greater efficiency in achieving overarching objectives?
- e) How do we develop a common approach to assessment, to enable comparative assessment of multiple industries, activities, and values? What are the current inconsistencies between sectors, regulatory regimes, etc.?
- f) Are there useful approaches to CIA in other countries that can enable knowledge sharing across the UK, the EU and the North Atlantic?

5. Managing Conflicts and Exploring Co-location of Different Activities

- a) How is the interaction between different sea users explored (e.g. sectoral interaction matrices), managed and mediated? What are the lessons learned from existing marine planning or local and strategic planning in the management of conflict / exploring overlaps?
- b) Does relating to the ecosystem approach give an appropriate driver for optimisation of use, through focus on maximising the delivery of ecosystem services from a specific area? How do we relate current planning to ecosystem services?
- c) What are the regulatory, planning and licensing, challenges associated with co-location? How can these be addressed to align and support co-location and multiple use sites?
- d) How could the interaction of activities be monitored, are there indicators which represent service delivery? When would co-location be assessed as 'unsuccessful'? Can approaches to conflict resolution and co-location be evaluated before and after plan implementation?
- e) What are the views and perceptions of industry and stakeholder representatives on conflict and co-location of multiple industries?
- f) What is the experience of provision of shared services through multiple use sites?



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- g) What are the financial and legal challenges associated with co-location? What are the business models that would help manage the risk involved and enable industry buy-in?

6. Community and Social Dynamics

- a) Developing approaches to community engagement, sharing best practice and information across sectors and regions. What do we mean by “inform”, “consult” and “engage”? How/when/what do we want from stakeholders (e.g. Government, local authorities, communities, sectors, scientists)?
- b) What is the role of communities in local governance, planning and management? How are bottom-up approaches applied in Scotland? What is international best practice on this?
- c) How do we improve citizen knowledge, marine literacy and knowledge management to empower communities to engage with marine planning and the ecosystem approach (services / values, etc.)?
- d) What is the existing evidence base for the development of citizen knowledge? (Systematic literature review, looking at other fields e.g. health policy).
- e) What is the potential role of citizen science to support ecosystem-based marine planning (Examples from other areas, such as the Isle of Arran)?
- f) What are the advantages / disadvantages of different approaches to delivering community benefits / compensation arrangements in relation to marine activities?