Marine Policy 43 (2014) 13–20

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol

Training for marine planners: Present and future needs

Gillian Glegg *

Centre for Marine and Coastal Policy Research, Marine Institute, Plymouth University, Drake Circus, Plymouth PL4 8AA, UK

ARTICLE INFO

Available online 16 April 2013

Keywords:
Marine planning
Marine management
Training
Education

ABSTRACT

Marine planning presents considerable new challenges and opportunities for those responsible for managing the marine environment. In the UK, the Marine and Coastal Access Act (2009) provides a statutory framework for marine planning and has created a new administration responsible for its implementation. If marine planning is to be effective and achieve its stated goals it will require a pool of trained individuals who will be responsible for or will participate in marine planning. Based on data gathered during the development and delivery of an intensive professional course and a masters level programme, this paper explores the key elements of education and training required by marine planners. These include a knowledge of planning processes and national and international laws and conventions; an understanding of how marine plans can integrate with existing terrestrial and coastal plans and other management requirements; and an understanding of the marine and maritime environment, including the human activities and natural features. It concludes with a discussion of the different roles individuals may play in the planning process and thus their different training needs.

1. Introduction

Marine spatial planning is a key building block for the implementation of the EU Integrated Maritime Strategy. This represents a fundamental shift in the international commitment to strategic marine management across Europe. If it is to be effective, and to achieve its stated goals, it will require the participation of a wide range of organisations and individuals, many of whom are not necessarily trained to the standards required. Thus, there is a need to build the expertise in marine planning across the marine and coastal community, including planners, statutory authorities, interest groups and individuals, and to do this a range of training options will need to be provided.

In the UK, the Marine and Coastal Access Act (MCAA) [1] legitimised the statutory framework for marine planning, which includes the creation of a new administration, the Marine Management Organisation (MMO). The MMO is tasked with the delivery of the Act in England and comparable bodies are responsible in Scotland, Wales and Northern Ireland. Many marine focussed organisations in England are waiting with interest to see how marine planning will be implemented and the manner in which they may contribute.

Marine planning is being introduced from almost a zero baseline, in the way land planning was not. In the UK, land planning was formalised in the 1940s and was built on a system which had existed for many years [2]. While this has not always operated smoothly, improvements have been basically incremental, in line with developing national policy and guidance to the responsible authorities [3]. Management structures for land planning exist within the local authorities and at a regional and national level. Furthermore, clear regulations, including a management framework, appropriate lines of authority, and relevant professional bodies, are available for those involved in the delivery of strategic land planning processes.

In contrast, there are only modest foundations in the UK on which to base future planning and management of its marine areas. The need for marine planning can clearly be seen but the approach planning communities should use is much less obvious [4]. The institutions, laws and management tools available are being significantly overhauled and modified as new ways are sought to manage UK coastal areas. This represents a motivating, and somewhat daunting, challenge for those likely to be involved in marine planning processes, either as the 'plan developer' or as a stakeholder who might be asking questions such as "What form will plans take?", "How can I get involved?" and "How will this fit with the existing management processes?"

While some elements of marine planning may be considered to be an extension of the integrated coastal zone management (ICZM) process, there are at least two key points which make formal marine planning distinctly different. ICZM seeks to weave relevant sectoral interests into a single multi-disciplinary approach, thereby understanding the manner in which the various human activities might be accommodated without detriment to the system. It is non-statutory and very often results from

* Tel.: +44 1752 584728; fax: +44 1752 686101.
E-mail address: gglegg@plymouth.ac.uk

0308-597X/$ - see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.marpol.2013.03.011

voluntary initiatives. In contrast, marine planning is a statutory process that is strongly allied to the recognised discipline of planning on land, with its requirement for a strategic overview, clear regulatory structure and developed management infrastructure. One of the key aims is to manage the licensing of new developments. However, it is not clear how these key functions can, or will be, transferred from the terrestrial to the marine environment, or whether an alternative approach could be developed. Secondly, marine planning is in 'uncharted waters', away from the easily recognisable structures of management which exist on land and with a markedly different stakeholder community. While the direct users, such as fishermen and those developing offshore energy infrastructure, are obvious stakeholders, those with an indirect interest, such as walkers, wildlife watchers or leisure craft owners, may be much more difficult to engage and there is no clear line of democratic responsibility.

Capacity building for ICZM was introduced in many geographical regions following the Rio Declaration in 1992 and the requirement for the higher education sector to engage in this process was identified very early [5,6]. Training for ICZM within the EU was extensively reviewed within the SPICOSA (Science Policy Integration for Coastal Systems Assessment) EU FP6 project (2007–2011). A key finding of SPICOSA was that because ICZM was novel in many of the geographic areas in which the systems approach to coastal management was applied, there was a need to train both those professionals responsible for managing coastal regions and also those involved in the process as stakeholders [7]. It concluded that academics and practitioners perceived the education and training needs of coastal managers differently but all agreed that an interdisciplinary understanding of coastal systems would provide the best starting point for management [8]. On the basis of this, curricula suitable for tertiary and professional education were developed within SPICOSA (see Ref. [9]), facilitating prompt transfer of research results into education in a variety of appropriate forms.

Thus, the requirement for advanced training of key individuals, who will be responsible for or involved in the marine planning process, is paramount. This paper considers the training requirements and identifies the key elements, with a particular focus on the need for continuing professional development, as perceived by those involved in marine industries. This approach provides the basis for training and research activities at the postgraduate level. Thus, this paper identifies the professional groups most likely to be involved in marine planning, explores the key elements of training and research required for specific groups and considers the format of training for marine planning and marine planners both presently and in the future.

2. Data gathering

Data for this research was gathered during the development of a specialist course in marine planning. Initially, working with local authorities, coastal land owners and NGOs, a survey of the requirements for marine planning was undertaken using a questionnaire and through detailed semi-structured interviews. The questionnaire, completed by 44 individuals, included over 20 questions concerning the training needs for marine planners, such as the topics to be covered, delivery format and general demographics. The questionnaire, of 15 min duration, was distributed on-line using a large coastal interest database (>5000 individuals) and so the response rate was very low but the self-selected respondents covered a range of relevant organisations as shown in Table 1. Eleven semi-structured interviews were also undertaken with selected individuals who were chosen to represent the range of organisations likely to be involved in marine planning processes including for example, English Heritage, the Environment Agency, local authorities and the Marine Conservation Society. The specific individuals were identified through personal contacts although the interviewees were not generally known to the interviewer. These interviews were conducted face to face, took about an hour to complete and provided detailed information on the requirements the various organisations considered essential.

Table 1
Function of organisations represented by questionnaire respondents, interviewees and course participants.

Organisational function	Questionnaire respondents ($n=44$)	Interviewees ($n=11$)	Short course participants ($n=46$)
National policy		1	3
National marine management	3		5
Government advisory body	3	2	6
Land/seabed owner		2	11
Local authority—land planning	2	1	6
Local authority—coastal officer	9	1	2
Commercial consultancy	8		5
Scientific research	10		2
Marine NGO		1	3
Industrial sector			
Fisheries	4	1	
Tourism	1	1	
Ports		1	
Power			2
Defence			1
Other[a]	4		

[a] Some responses to the questionnaire were difficult to categorise, e.g. director.

Finally, data was collected from participants on three iterations of a specialist course in marine planning for continuing professional development delivered at Plymouth University. Following each iteration, the attendees were asked to complete a participant perception questionnaire on all aspects of the course including content, delivery style and activities. In total, over 100 marine professionals from the UK have had an opportunity to contribute to this study and, as can be seen in Table 1, they represent the range of organisations likely to be involved in marine planning although perhaps not those individuals, such as recreational craft owners or walkers, who do not belong to a professional body.

Development of the training materials has been an iterative process, since the information gathered in one stage of the course has informed the version of the course delivered in the subsequent year. Therefore the discussion of the results presented below is summative and illustrates the systematic development of a coherent course, rather than reporting on each element in turn.

3. Audience: Who is in need of training?

In order to identify the individuals who will require training in marine planning, it is necessary to discover those professionals who will be involved in the process of designing and implementing marine plans. While these individuals will vary from place to place, even within the UK, good practice demands it should be an inclusive process requiring professionals from throughout the marine community to participate at an appropriate level. Three different groups of participants are envisaged in the planning process:

(a) the planners who will be responsible for creating the plans;
(b) those with a mainly statutory responsibility to participate in the planning process; and