



# Marine spatial planning in Scotland. Levelling the playing field?



Glen Smith<sup>\*,1</sup>, Svein Jentoft

Norwegian College of Fishery Science, UiT The Arctic University of Norway, Postboks 6050 Langnes, 9037 Tromsø, Norway

## ARTICLE INFO

### Keywords:

Stakeholder engagement  
Marine spatial planning  
Wicked problems  
Power  
Governance  
Scotland

## ABSTRACT

Marine spatial planning (MSP) is the leading tool for managing human activities at sea. It is designed to assist in decision making for marine resource access and use by considering the actions of those using the resources, interactions between these groups, and their cumulative impact on the natural environment. Being informed by ecosystem based management, MSP recognises that socio-natural systems are complex and that stakeholder and public input are key components of well-informed decision making. Therefore, MSP is rooted in the principles of good governance, including those of participation and transparency. This paper considers MSP processes in Scotland's inshore waters in the context of these good governance principles. The focus is on the institutional arrangements that allow stakeholders and the public to contribute to planning Scotland's seas and coasts. Whilst acknowledging the significant challenges faced by planners, and the work conducted so far, this research suggests that improvements could be made in how – and when – engagement takes place. It appears that at an early stage of introducing MSP in Scotland powerful stakeholders shaped the images, values and principles that guide it, and that including a broader range of actors early on might positively affect the legitimacy and acceptance of MSP in its later stages. The current institutional arrangements do not appear to allow for this. Ultimately, MSP in Scotland is in danger of institutionalising – and thus legitimising – existing power relations between marine resource users, and it does little to level the playing field.

## 1. Introduction

Marine spatial planning (MSP) is a relatively new tool for supporting decisions on the use and non-use of marine space. It considers interactions and conflicts between marine space user groups, socio-economic factors, and the status and vulnerability of the natural environment. MSP has emerged from ecosystem based management (EBM), which “seeks to broaden the scope of traditional resource management so that it considers a wider range of ecological, environmental and human factors in the exploitation of resources” [1: 821]. The early MSP literature made clear that these human factors should include the views of stakeholders [2–6]. This was also a prominent theme in the step-by-step guidelines developed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) [5]. Ideally, stakeholders should come to the table early [7] when the guiding principles, goals and objectives are set (known as ‘front loading’ the process), and be involved regularly along the way to creating, implementing, and monitoring a marine plan [5]. In short, stakeholder engagement should be considered as intrinsic to MSP [2].

These early publications explain how stakeholders can be engaged through the dissemination of information, through workshops, training

sessions, and even making financial resources available for hiring professional negotiators for groups and individuals who might not know how to fully represent their own interests [5]. It was also argued that in accordance with good governance practice the process should be “transparent, open, and inclusive” [2: 789]. Whilst addressing the issue of deciding who stakeholders are, Pomeroy and Douvere (2008) observed that:

“Although stakeholders must be defined broadly in order to capture a wide range of groups and individuals, it is important to note they are also often dangerously simplified, suggesting that interests, experiences, needs and expectations are homogenous among a given group of people. The reality is far more complex, and methods used in stakeholder identification and analysis must accept and reveal this complexity...” [6: 819].

Addressing these differences is key to ensuring that MSP has widely desired outcomes. Stakeholders are often painted with a broad brush and this ignores not only their level of interest in the marine environment at stake, but also their diversity and differential capacities. In reality they might be individuals, businesses, communities, organisations, or take a variety of other forms. The role of the state is also

<sup>\*</sup> Corresponding author.

E-mail address: [glenjamin.too@gmail.com](mailto:glenjamin.too@gmail.com) (G. Smith).

<sup>1</sup> Present address: 31 Ambrose Avenue, Colchester, CO34JY, UK.

important, both as a stakeholder and – in most cases – the ultimate governing authority in MSP. All of these actors “have different ways of knowing the world, different ways of accessing the world and different ways of reasoning and valuing” [8: 207]. Consequently, the task of involving this diverse group is much more difficult than simply enabling stakeholders to participate; they also need to be empowered so that their contribution is meaningful [6].

However, as the theoretical foundation of MSP was being laid, the issue of power was arguably not sufficiently problematized [9]. The power struggles between stakeholders – and those between stakeholders and planning authorities – need to be explicitly addressed before marine space use can be effectively and justly planned. Recent assessments of MSP processes suggest that there is a disparity between these ideals and the reality. A report on case studies from twelve European countries analysed ‘MSP-ing’ (the act of ‘doing’ MSP) and found that the process differs substantially from its underlying theory [10]. For instance, “MSP-ing is often focused on achieving specific sectoral objectives, related to nationally important strategic priorities”, rather than protecting stakeholder interests (Ibid: 256).

With MSP now widely used as a tool for managing human interactions with the marine environment, it is time to re-visit its ideals, and critically assess the way it deals with the heterogeneity of stakeholders and their relative influence in concrete situations, like in the case of Scotland, which is the focus of this paper. A case study like this one is useful for asking ‘how’ or ‘why’ questions about a “contemporary set of events over which the researcher has little or no control” [11: 13]. Case studies carried out in real contexts are also well suited for theory development and learning, as, in addition to providing empirical description, they also provide insights into what the case under investigation is “a case of” [12].

This paper poses two important questions. Firstly, to what extent is the diversity of stakeholders considered in Scottish MSP? And secondly, what is done to address existing power struggles between stakeholders? In doing so the aim is to generate discussion of stakeholder engagement processes in the Scottish MSP system. The paper begins, in Section 2, by outlining the theoretical basis of stakeholder participation in natural resource governance, including the main issues and challenges and how they relate to MSP. The methodology is presented in Section 3 before the MSP system for Scotland is introduced in Section 4. Section 5 then turns to the main issues with stakeholder participation in MSP in Scotland. The paper ends with a discussion of these issues and a conclusion in Sections 6 and 7, respectively.

## 2. Stakeholder engagement: how, why and when?

MSP comes with a broad set of concerns and goals founded on multiple principles related to ecosystem-based management (EBM) and good governance, which suggests a holistic, transdisciplinary approach to planning and decision making [13,14]. MSP also appreciates the complexity of planning and decision-making challenges in the face of inherent risks, such as that marine ecosystem-integrity and functioning are vulnerable to human intervention and resource use. MSP is intended as a deliberative approach to decision making in accordance with principles of “good governance”, including those of participation and transparency [2].

MSP should, therefore, not be seen as a technical fix for “tame” problems, but an interactive governance process aimed at problems that are intractable, or “wicked” [15,16]. Problems have been described as wicked “when they are difficult to define and delineate from other and bigger problems and when they are not solved once and for all but tend to reappear” [16: 553]. Additionally, it might not be clear when a wicked problem has been solved and it might have no right or wrong solutions [Ibid.]. The term has been used frequently to describe natural resource management scenarios [17–20]. In keeping with this perspective, and with its roots in EBM, MSP recognises the complexity of socio-natural systems and that there are many different stakeholders,

with values and interests that might contradict one another. For example, capture fisheries and fish farming may be at odds with each other. Likewise, offshore wind farms may limit the use of both, and might hamper boat transport, and all of these activities might individually or collectively affect the natural environment. Such resource management problems fit the description of being wicked due to their complexity, and also the difficulty in determining whether it is indeed the human intervention, such as through MSP, that has caused any noted improvement in the situation (i.e. the cause and effect relationship, or ‘attribution problem’ [21]).

As a “good governance” principle, stakeholder participation adds a normative prescription to MSP in line with classical ideas of democracy. The prescription is that people have a right to be heard when the decisions being made concern them [22]. As well as allocating marine space for certain uses, MSP works from the assumption that planning can help alleviate stakeholder conflicts, thus turning an otherwise zero-sum game into one that can mutually benefit all groups. Involving stakeholders in the planning and the decision-making process should, therefore, be facilitated and institutionalised, and should not necessarily be subjected to a cost-benefit analysis. Participation may be time consuming, but may also reduce transaction costs at some later stage in the process, as when the plan is being implemented [16,23]. For instance, it is expected that stakeholders would be inclined to respect the spatial boundaries set aside for them. It also broadens the knowledge-base: stakeholders have relevant experiences and contextual insights that may inform the planning process. Therefore, stakeholder participation has both functional and inherent value: it may produce better outcomes, but is also a matter of principle.

This paper considers stakeholder interaction from the perspective of Kooiman’s three “orders of governance” [24]. “Meta-order” governance relates to the images, values and principles that guide MSP. One cannot assume that stakeholders are in agreement about what these images, values and principles are and should be, even within one stakeholder group. The “second order” regards institutional arrangements that allow MSP to take place. These are rules, rights, laws, roles, procedures and organisations that govern the planning process by providing the settings for interactions that occur between stakeholders at the “first order”. The first order refers to “wherever people and their organisations interact in order to solve societal problems and create new opportunities” (Ibid: 7). First order governance denotes the daily decisions and actions of planning.

Notably, stakeholder participation in MSP is relevant at all three governance orders, but in different ways. Most crucially, stakeholders should engage in the deliberation of principles, problem definitions, and the setting of goals at the meta-order. Stakeholders also have a role at the second order, i.e. in decisions regarding the formation of MSP institutions and the determination of mandates. Finally, they may be involved in the daily decision making that is carried out by planning agencies, but perhaps more in a monitoring role. Stakeholders thus find themselves both at the giving and receiving end of the MSP process. At the meta-order, MSP frames problems and establishes guiding principles to start with, and lead by. The next question at the second order, is what institutions are best suited to facilitate a planning process where stakeholder participation is effective, representative and socially just? Who are the stakeholders and how should they be represented? Should participation be direct or indirect? And who decides on these matters? Ultimately, who plans the planning?

Power is activated at all three orders. Power counts when images and values frame problems and principles, and when stakeholders argue about them. For example, Smith (2015) [25] posits that power relations and processes affect the acceptance of MSP. Power is also involved when institutions are created. Foucault argued that institutions are both the outcome and instrument of power [26]. Power operates at the first order when people interact strategically and pragmatically, i.e. when rules are implemented. Importantly, power is both within and outside MSP; it is present and active prior, during and after

the planning. It is to be expected that stakeholders may already be engaged in power games when MSP is introduced, and those games may continue within the MSP process. Whether and how MSP may alter such power-relations and games is an interesting research question.

Mitchell, Agle and Wood [27] categorise stakeholders according to their ‘salience’ as judged by the power they have, the urgency of their needs, and the legitimacy of their concerns. The salience of a “definitive” stakeholder is high as all three attributes are deemed to be present, two are present in a moderately salient, or “expectant”, stakeholder, whereas in a “latent” stakeholder exhibits only one of the attributes. This categorisation provides guidance to the planning of representation and participation; in the example used this is for management in business. Following the logic, one would expect the definitive stakeholder to be fully represented and active, the expectant to be an observer, whereas the latent would be outside and perhaps knocking on the door. However, the key attribute in affecting decision-making processes is power. In fact, Mitchell, Agle and Wood [27] describe stakeholders with power and urgent needs as “dangerous” (p. 874). Powerful actors can also lie dormant, becoming actively involved in management when it suits them or their needs increase. Such situations will have a bearing on MSP proceedings, where it is likely that some stakeholders have more resources with which to secure their stakes. Without a nuanced stakeholder concept, like that of Mitchell et al., MSP risks entrenching power imbalances to begin with, and therefore create a stakeholder “tyranny” by suppressing minority voices and interests, which Cooke and Kothari [28] warned against [see also 29]. What it would actually take to minimise power imbalances in concrete contexts is also a matter to be explored, from the first step onwards, as a bad start may be hard to correct, both at later stages and at lower governing orders.

### 3. Methodology

This paper, which considers stakeholder interaction within MSP in Scotland, is based on research conducted between 2013 and 2016. It is informed by extensive literature research into MSP theory, design and practice, and aims to contribute to our understanding of MSP and ways to improve it in terms of good governance, using Scottish MSP as a case in point. The theoretical basis was supplemented by extensive reviews of official marine policy and planning documents for the UK and Scotland, including consultation responses, draft plans and press releases from key organisations, such as Marine Scotland and the Crown Estate. The research also included extensive interviews with representatives from the organisations listed below, and site visits, which occurred in three clusters in 2013, 2014 and 2015. The first of these was aimed at becoming familiar with the situation ‘on the ground’ by focusing specifically on the case of the Pentland Firth and Orkney Waters non-statutory pilot plan (further details on this follow below in Section 4). During the research phase this plan was still being compiled and two public consultation events on the plan in Kirkwall and Thurso in July 2014 helped inform the plan making process. Participatory and non-participatory observation at these events gave a detailed impression of how the public is engaged during the formation of marine spatial plans in Scotland. The level of researcher participation varied from from passive, to moderate and active [30], depending on the subject matter. This is because a researcher must remain aware of his or her influence over proceedings. There was ample opportunity at these events to conduct impromptu, informal interviews with attendees.

In addition, a total of twenty-one formal, semi-structured interviews were conducted with a broad range of organisations including The Crown Estate, The Highland Council, The Orkney Islands Council, the Orkney Fishermen’s Society, the European Marine Energy Centre, Marine Scotland, the Marine Scotland Licensing and Operations Team, the Moray Firth Coastal Partnership, Community Land Scotland, The Development Trust Association, The University of Edinburgh, Heriot Watt University, The Cairngorms National Park Authority, The East

Neuk Estates, the Community of Arran Seabed Trust, the Knoydart Foundation, and the Scottish Parliament. All interviews were recorded and some sections transcribed.

### 4. Marine spatial planning in Scotland

As outlined above, MSP is designed to guide decision making on the use and non-use of marine resources in areas where competition for these is high, available space is limited, and marine ecosystems are vulnerable. Scotland serves as a good example of this conundrum. This paper focuses on MSP for Scotland’s inshore waters, defined as the area up to 12 nautical miles from the Mean Spring High Waters (MSHW). A large range of actors access and use this area. Uses include, but are not limited to, fishing, aquaculture, shipping, tourism, and, more recently, marine renewable energy generation, especially from waves and tides.

In order to cope with the increased pressure on inshore marine ecosystems and resources, and also in accordance with the EU Directive 2014/89/EU, the Scottish Government is implementing MSP. This process began a decade ago when the Advisory Group on Marine and Coastal Strategy (AGMACS – now disbanded) concluded in a report that “[t]here should be a system of Marine Spatial Planning ... [with] ... a statutory basis, though potentially with a variable control” [31]. Similar conclusions were made across the UK, and marine planning featured in the High Level Marine Objectives released jointly in 2009 by the UK Government, the Northern Ireland Executive, the Scottish Government, and the Welsh Assembly. In 2011 the UK Marine Policy Statement established a specific framework for preparing marine plans and taking decisions that affect the marine environment [32].

The Marine (Scotland) Act 2010 gave the Scottish Government unprecedented powers to plan its seas, except for some reserved functions, such as defence, which are legislated by the UK Government.<sup>2</sup> The same Act stipulates that Scottish Ministers must prepare a National Marine Plan (NMP). Such a plan was finalised in March 2015, and sets the national objectives for managing Scotland’s seas. The plan follows the high level policy context and common vision of the UK Administrations as set out in the UK Marine Policy Statement and sets the broad aim of having “clean, healthy, safe, productive, and biologically diverse oceans and seas” [33: 4].

The NMP shall be implemented at a regional level through twelve Scottish Marine Regions (SMRs). Within each SMR Scottish Ministers have the right – but not the duty – under the Marine (Scotland) Act 2010 to appoint a ‘delegate’ made up of members who bring in relevant expertise, skills and knowledge of marine planning in the region [34]. These delegated groups shall be responsible for drafting local marine plans based on the needs, pressures and opportunities in the region. They are commonly referred to as Marine Planning Partnerships (MPPs). Aside from the initial process of creating the NMP, to which we return below in Section 5.1, the MPPs are the principal mechanism for stakeholder engagement in Scottish MSP. At the time of writing the only complete MPP is that for the Clyde area in the south west of Scotland, known as the Clyde MPP, or CMPP. More details on the creation of MPPs follow below in Section 5.2.

The first regional marine plan to test procedures under the Marine (Scotland) Act 2010 was completed in March 2016 for the Pentland Firth and Orkney Waters (PFOW). This is Scotland’s third marine spatial plan overall, having been preceded by the Shetland Marine Spatial Plan (now in its fourth edition: the Shetland Islands Marine Spatial Plan 2015) and the Clyde Marine Spatial Plan 2010. The PFOW region is in the northeast of Scotland and includes the islands of Orkney and part of the mainland coast (see Fig. 1 below). However, the plan will eventually be divided to cover the two regions of Orkney and the North Coast. There is potential to harness an estimated 1.6 GW of marine

<sup>2</sup> Offshore waters from 12 to 200 miles are legislated under both the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009.

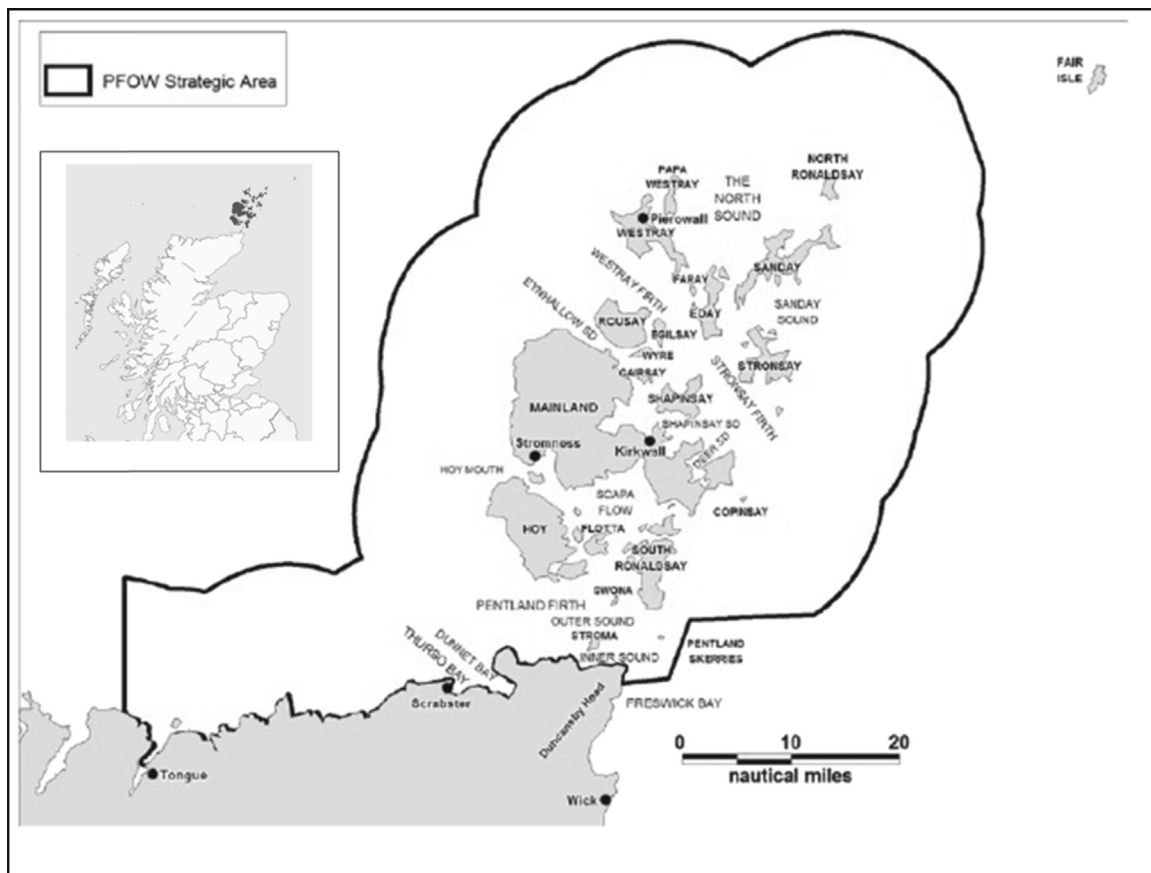


Fig. 1. Map showing the location of Orkney and the PFOW strategic planning area to 12 nautical miles. Adapted from Smith (2015) [19].

renewable energy in the area from waves and tidal flows [35]. These developments will impact upon current maritime activities and – most likely – the natural environment, and so it was seen as necessary to plan. At this stage the PFOW is a pilot plan and categorised as non-statuatory supplementary guidance for marine planning and decision making. All of the regions will initially have this status, and at present only the Shetland Islands Marine Spatial Plan 2015 has been made statutory.

## 5. Stakeholder engagement in Scottish MSP

Under these institutional arrangements for MSP in Scotland, the first stakeholder engagement occurred between 2010 and 2014, and focused on the development of the national marine plan itself (meta – and second orders). The next round, which has not happened yet, shall involve the MPPs creating regional plans (second – and first orders). The third stakeholder engagement opportunity will be through the use of plans to guide the decision-making process and consultations on individual development plans (first order). Now in 2017, almost two years since the NMP was published, most of the MPPs have not been formed yet. Research conducted here highlighted some possible reasons for this delay, and found that there were problems with the consultation processes for creating the NMP and the MPPs. We begin here by considering the former of these two.

### 5.1. Preparing the national marine plan

There were several occasions for stakeholder engagement during the preparation of the NMP: an initial ‘joint workshop’ to establish the plan’s scope, content and objectives; pre-consultation on the draft; and consultation on the draft. The whole process was overseen by Marine Scotland, which is a Directorate of the Scottish Government and is

responsible for the integrated management of Scotland’s seas. During such consultations the Marine (Scotland) Act 2010 mandates Marine Scotland to release a Statement of Public Participation (SPP), outlining how stakeholder and public engagement and cross-boundary working are ensured. According to the SPP “Marine Scotland, and the Scottish Government as a whole, is committed to:

- “involving all relevant stakeholders and members of the public in the development of policies that will impact upon them.
- arrangements for participation are inclusive, clear and transparent
- communication is provided through a range of formats and jargon free
- all representations are fully considered.”

[36: 1]

These commitments are reminiscent of the guidelines set out in early MSP literature. A couple of noteworthy points stand out in this mandated list. The first is the issue of providing ‘jargon free’ communication through a range of formats. Marine spatial planning deals with complex issues, especially at the national level. The range of maritime industries, conservation priorities and natural elements of the marine environment is huge, as are the data sets that accompany them. The general dissemination of information to the public – and the way it is presented – by Marine Scotland is commendable related to this ambition. For example, in 2011 Marine Scotland published their Marine Atlas, which is “an assessment of the condition of Scotland’s seas, based on scientific evidence from data and analysis, supported by expert judgment” and “provides baseline information from which the national marine plan will be developed.” [37] The data is now accessible through the National Marine Plan interactive (NMPI) where it is continuously updated. In addition, a hard copy of the atlas was sent to all schools in the country and additional educational resources were made



available to teachers. In 2014 the atlas won the “Ebook Flowable – Reference/Academic” category at the annual Digital Book Awards [38]. This atlas has given a huge number of people fresh insights into Scotland’s seas and inspired discussions at all levels. It is still a significant step up from here to conducting informed debates on marine policy and a national marine plan, but generating interest is a crucial platform for meaningful engagement.

The fact that ‘all relevant stakeholders’ and ‘all representations’ should be involved is also important. However, the timing of this involvement is key. The stakeholder engagement for the NMP began with a single ‘joint workshop’, which was held on 29 April 2010, and had two purposes. The first was to consult with stakeholders from all sectors in Scotland on whether the UK Marine Policy Statement met their requirements. The second was to obtain their suggestions for key objectives for the NMP. Representatives from the following sectors were present: Aquaculture Fish, Aquaculture Shellfish, Ports and Harbours, Renewables, Conservation, Oil & Gas, Ministry of Defence, Leisure and Recreation, Local Authorities, Historical Assets, Commercial Sea Fisheries, Tourism, Shipping.

This set-up resembles a cross-sectoral approach, and not a ‘public process’ that it was originally intended to be [5], given that local communities were absent. The sectors listed above have been staking their claims to marine resources for decades (for centuries in the case of sea fisheries), and power relations between them have been established, tried, tested and re-established countless times. The images and values that framed the objectives for Scottish MSP were largely set before this workshop in the UK High Level Marine Objectives, which formed the basis of the UK Marine Policy Statement. These high level marine objectives are primarily concerned with encouraging growth in maritime industries. They begin with ensuring that: “[i]nfrastructure is in place to support and promote safe, profitable and efficient marine businesses”, and “[t]he marine environment and its resources are used to maximise sustainable activity, prosperity and opportunities for all, now and in the future” [32: 11]. The majority of attendees at the NMP workshop have economic interests in decisions on the use of marine space and an interest in keeping these objectives high on the list. These interests are not necessarily in harmony with those of coastal communities, which did not partake.

The absence of public debate at this stage of NMP formation is reflected in early versions of the plan. The pre-consultation draft, for example, states that the NMP must set out policies for the sustainable development of Scotland’s seas; policies on nature conservation and marine protected areas (MPAs); economic, social and ecosystem objectives, and how to mitigate and adapt to climate change; assessments of the condition of Scotland’s seas; and information on other appropriate policies. The document also states “the sustainable economic development aspects of the plan focus primarily on the vision for individual sectors and are a necessary first step towards developing an integrated plan” [39: 10]. Aside from the mention of ‘social objectives’ these statements seem to lack the public dimension that is so central to the legitimacy and acceptance of MSP. In closely following the High Level Marine Objectives the final version of the NMP also links a ‘just society’ mostly to the public appreciation of a diverse marine environment, equitable access to the coasts and seas, and the benefits of a strong maritime economy [33: 128]. The importance to MSP of public input was absent in this interpretation of a just society.

The plan was not subjected to wider scrutiny until a national consultation held between 25th July and 13th November 2013, three years after the initial workshop outlined above. Marine Scotland embarked on a 16-week tour of the country to gather input from people in about thirty locations. In each location ‘drop-in’ sessions and presentations by Marine Scotland took place. The consultation also invited written responses, and a total of 124 were received: 16 from individuals and 108 from organisations. There were notable concerns that the NMP focused too heavily “on economic uses of the environment and not enough on the marine environment, climate change or biodiversity” [40: 2]. This

might be as a result of the strong industrial representation whilst setting NMP objectives. Some respondents also addressed directly the issue of engagement under marine spatial planning. Points of contention included how “effective consultation” will be judged; the importance of user-friendly, relevant, and engaging consultation; stakeholders being unable to contribute due to a lack of resources and capacity; and how “all interested stakeholders” will be defined [Ibid: 47,48].

The commitment in the SPP to “inclusive, clear and transparent” arrangements for participation is also worthy of scrutiny. Public consultation processes in Scotland have been criticised in the past for not being truly engaging, amounting to little more than mere “talking shops” [41: 256] and causing “consultation fatigue” [35: 290]. The presentations held by Marine Scotland during the national consultation are quite typical of the techniques that this organisation uses. In an informal interview held with a resident of Inverness who was involved with the Moray Firth Partnership, the modus operandi of Marine Scotland at these consultations was described as “bear pit tactics” whereby participants are in an enclosed situation with high walls and limited freedom of movement. Apparently, Marine Scotland “needs to have its ten minutes on stage” so as to remain in its “comfort zone”. Such sentiments were not uncommon among attendees at consultation events attended during this research.

## 5.2. Creating marine planning partnerships (MPPs)

As mentioned above, Scotland’s National Marine Plan will be implemented at regional level through marine planning partnerships (MPPs). This is the second main forum for stakeholder engagement where local stakeholders and planners, with scientific support, develop plans tailored to their coastal and inshore region. Each MPP sets its own membership criteria and decides on the selection process. For the example of the Clyde MPP mentioned previously membership shall be open to “any corporate body which is a Public Body with coastal and marine duties in the Firth of Clyde or an organisation with relevant statutory duties or where the corporate body represents a national body, including non-governmental organisations, with relevant marine and coastal interests where ‘corporate body’ is defined as a person, association, or group of persons legally incorporated” [42: clause 7b]. Other potential members are any corporate body or person which or who, in the view of members, can provide significant additional relevant skills or expertise in delivering the objectives of the association at a Clyde-wide level and which cannot be secured by the association by other means.” [42: clause 7c]. In accordance with the Marine (Scotland) Act 2010, MPPs will receive only limited powers, with Scottish Ministers deciding whether to a) publish a statement of public participation, b) revise a statement of public participation, c) publish a consultation draft [of a plan], and d) publish a regional marine plan or any amendment of such a plan [43: 7]. Licensing and consenting powers – without which no developments can go ahead – will also remain central with the Marine Scotland Licensing and Operations Team.

In addition to the retention of centralised powers, there has been some confusion over the make-up and role of MPPs since they were announced in the Marine (Scotland) Act 2010.<sup>3</sup> When asked to elaborate on MPPs in an interview that was conducted in April 2013, by which time the decision to create MPPs was three years old, one planner working with the Scottish Government on a regional plan emphasised the massive challenges in setting up the partnerships, with the main one being a lack of human and financial resources. There had been no real development in deciding how the MPPs would operate and who would be permitted to participate. The complexity of MSP demands the attention of highly trained and well-funded teams, and it was unclear where these resources would come from. It should also be noted that a possible contributing factor to the delay in creating MPPs in some areas

<sup>3</sup> These are named ‘delegates’ in the Act but are now consistently referred to as MPPs.

is a lack of enthusiasm from local councils, especially where the pressures on marine space and resources is deemed not to be as great and MSP, therefore, not a priority. This appears valid given the challenge of finding sufficient human and financial resources necessary to plan marine spaces, but it does not go far in explaining the confusion over MPPs.

The written responses to the consultation on the National Marine Plan referred to above suggest that this confusion is fairly widespread. Question 3 of the consultation asked: “Does the NMP appropriately guide development of regional marine planning? What, if any, further guidance is required for regional marine planners in terms of implementation and how to interpret the NMP?” Many respondents pointed to a lack of clarity on MPPs when answering this question. Common concerns included “gaps” in how the NMP describes the implementation of regional marine planning, including the “make-up” of MPPs. Some claimed it was “not sufficiently apparent” how the MPPs will be organised and “what remit and responsibilities will be involved”. Further concerns related to how MPPs will be “resourced or timescales within which they will be forwarded”. There was also an insistence that local communities and NGOs must have a “real say and a vote” within MPPs (selection of responses taken from The Scottish Government website). [44]

It is also worth noting that the PFOW pilot marine spatial plan was not drafted by an official MPP, which at the time of writing still had not been set up in this region, but instead by a ‘Working Group’ comprised of three members from Marine Scotland, the Orkney Islands Council and the Highlands Council, with support from an ‘Advisory Group’. Creating the pilot plan is an impressive achievement by the Working Group, as is reflected in their receiving the award for Excellence in Plan Making 2017 [45], and the model will help inform the creation of MPPs in other Scottish Marine Regions. However, there is a notable difference between this group supported by public consultations, and a full MPP with broad stakeholder representation as defined, for example, by the membership criteria for the Clyde MPP described above. As such, the PFOW case only provides limited insights into how MPPs will be constituted and how they will operate.

### 5.3. Planning the planning

A further concern is that while the MSP system is being designed, developments can continue to go ahead in coastal and inshore areas. This was true for the harnessing of tidal flow and wave energy in the Pentland Firth and Orkney Waters (PFOW) area. One respondent claimed in an interview “the cart had bolted before the horse” (25/04/2013). This refers to the decision by the Crown Estate in 2010 to begin leasing areas of the inshore seabed for energy companies to anchor and test their devices.<sup>4</sup> Local fishers were not informed of this decision until after the fact [25,35] and were understandably aggravated by it. MSP is intended to help prevent and/or resolve such conflicts by facilitating the involvement of stakeholders in decision-making. In this case it appears, however, that existing development priorities in one of Europe’s most promising sites for marine renewable energy development were not prepared to wait to be planned.

The first step in producing this pilot plan was to prepare a ‘Planning Issues and Options’ paper. This paper sets out the known local issues and what options exist for tackling them. One planner said of preparing this paper that a concern was “how to approach businesses without getting bogged down in conflict or choosing between them” and that it was decided that “this was not the forum for it” (30/04/2013). These businesses, which are local stakeholders, would be consulted at a later stage. Such statements expose common value judgements that precede the engagement with stakeholders. The conflicts between businesses were omitted from early drafting processes. However, it can be argued

that stakeholders, including local businesses, are best placed to draft the list of issues and options for a region, not only comment upon a completed draft.

So far, in this paper, we have considered the stakeholder engagement processes for the creation of the NMP and setting up the MPPs. In creating the NMP relevant and accessible information was made widely available. The main points of contention were that the most powerful maritime industries seemed to dominate proceedings and that NMP objectives can be traced directly to the High Level Marine Objectives for the UK Marine Policy Statement. Some of the consultation responses expressed concerns that resulting objectives were primarily concerned with economic outcomes. There is little to suggest that MSP will alleviate conflicts between users of marine space if the same sectoral priorities are allowed to take priority. As for the MPPs, there is still some confusion as to their role and make-up, and progress towards setting them up has been slow. Decision-making powers remain in the hands of Scottish Ministers and there is some concern that the voices of local communities might be excluded. These problems lead us to consider the very early phases of planning: essentially who plans the planning? Value judgements made at an early stage and imposed on stakeholders can have a significant bearing on the rest of the planning process.

## 6. Discussion

The very process of thorough stakeholder participation and deliberation, while often time consuming and costly, could result in outcomes that more accurately reflect the complexity of the local situation. Therefore, “the subjectivity that stakeholders bring to the process needs to be valued for its enrichment of debate” [46: 711]. These authors would probably argue that “getting bogged down” in the details and working through time-consuming deliberations with many stakeholders is precisely what is required at this early stage, thus disagreeing with the notion that is a necessarily a negative thing. If MPPs are indeed going to develop into a truly representative and meaningful mechanism for local input into plan development, then Marine Scotland – and the Scottish Government more generally – need to take seriously the concepts of enriching the debate, and ‘front loading’ the engagement process.

The membership criteria set by the Clyde MPP allows a broad range of stakeholders to join the partnership. Maritime industries are well represented, as are nature and historical asset conservation bodies, and local authorities. A few of points worth noticing are that firstly; the wording for MPP membership criteria makes it clear that new members must bring skills and expertise that cannot be *secured by the association by other means*, as quoted above. This is an open-ended caveat that could be used to exclude a variety of types of bodies or individuals who are legitimate but not necessarily the ‘definitive’ stakeholders that Mitchell et al. (1997) refer to [27]. Secondly, as with the process of creating the NMP, membership is restricted to those with specific marine and coastal interests. Whether this is broad enough to include interested community groups is an open question. However, the emphasis on relevant skills and expertise makes this a doubtful prospect. The authority to determine who is a relevant stakeholder is a powerful one.

What would enrich the debate in MPPs? What if the drafting of regional plans by MPPs were a more public process, inclusive of local community interests? The consultations on the ‘Planning Issues and Options’ paper give us a good indication. Although the paper had already been drafted, local residents were given the opportunity in two consultations to speak openly, and the resulting debate was as varied and fruitful as Ritchie and Ellis [46] might have hoped. As is perhaps to be expected, the role and interests of local communities were a concern among attendees, with some demanding to know “how are communities supposed to use the marine spatial plan?” and claiming, “with more autonomy we can control the situation better”. One participant

<sup>4</sup> The Crown Estate administers the inshore seabed on behalf of the UK Government.

had brought along a large book of coastal photography to demonstrate the natural beauty that stood to be affected by putting renewable energy devices in the sea. There was a suggestion that “bureaucracy creates an exclusive world and smokescreens”, and another that “streamlining the planning process [an intended goal of MSP] helps the Crown Estate increase revenue more quickly”. A particularly poignant observation made about MSP was that “a lot is missed by sticking to measurables.” (Observations made at the public consultation events in Kirkwall and Thurso).

The story and sentiment in both consultation events centred on local culture and heritage. The technical and scientific language upon which MSP is based was only beginning to emerge and was lifted largely from the document itself, and from the press releases of key actors such as Marine Scotland, municipal government and the Crown Estate. Whilst this vocabulary is important for the acceptance and development of a MSP mentality [25], the local priorities focused on community and preserving well-being, traditions and livelihoods. Were the attendees given the opportunity to set the ‘Planning Issues and Options’ themselves, then the tone of the document might have reflected the sentiments expressed in the meetings. The priorities might not have been to streamline the planning process and speed up the deployment of marine renewable devices (one planner admitted, “the plan initially set out to deal with renewable energy” – 30/04/2017). A marine plan developed through a true public process would have taken longer, and might have looked very different. The pilot plan for the Pentland Firth and Orkney Waters has now been published, and of its 216 pages, only three deal specifically with “the well-being, quality of life and amenity of coastal communities” [47: 55–57]. This section might have received more attention. The finding of Jones et al. (2016), referred to initially in this paper – that MSP tends to prioritise sectoral interests at the expense of participatory processes – thus finds support in the Scottish case.

MSP aims to solve problems that are ‘wicked’ because they are complex, persistent, politically charged and hard to define in a way that stakeholders would necessarily agree on. In attempting to solve these problems, it draws on input from stakeholders. The added bonus of doing so is improved legitimacy and – most likely – increased compliance with the decisions made [23]. Stakeholder engagement is essential but not without challenges. Given the diversity and power-differentials among stakeholders, how does MSP level the playing field? The observations of this research suggest that more could have been done to achieve this in the Scottish case.

Crucially, as argued above, stakeholder engagement has functional and inherent value. The inherent value is acknowledged in the Scottish system, such as with the legal requirement for Marine Scotland to release a Statement of Public Participation. Such a statement demonstrates the country’s commitment to democratic principles in MSP. What is questionable, however, is to what extent the process maximises the functional value of engaging stakeholders. This is largely a question of timing: of who is engaged when. The first opportunity for stakeholder engagement occurred through consultation on the National Marine Plan. The fact that it was done in a single joint workshop whilst completing the UK Marine Policy Statement demonstrates an efficient use of time, but suggests that there is no significant change in approach to stakeholder engagement under MSP relative to the way the High Level Marine Objectives and the Marine Policy Statement for the whole of the UK were devised. The stakeholders involved in the workshop would rank as ‘definitive stakeholders’ according to the categorisation by Mitchell, Agle and Wood [27]. These actors have urgent needs, legitimate concerns and, crucially, power.

There is little here to suggest that MSP is a new approach to managing Scotland’s seas and deciding who governs. In fact, these power imbalances between key stakeholders appear more determined by current maritime industry objectives, which are dominated by growth in the marine renewable energy industry. The main concern is that there are stakeholders in Scotland’s inshore waters with urgent needs and legitimate concerns, but with little power. Fishers are a good

example here, especially in the afore-mentioned prioritisation of locating marine renewable energy infrastructures in the PFOW case. These have no existing statutory powers to effect marine planning (or indeed fisheries management) and the new system of MSP does very little to rectify this. Therefore, power dynamics between stakeholders remain either unaffected, or tip in the balance of industries targeted by blue growth priorities.

In addition to this, further research might help understand where members of the public fit into this categorisation for marine planning. This might include considering the social and cultural impacts of large-scale marine renewable energy development in relatively small communities, and/or concerns about the marine environment. If these concerns are left marginalised, there might be an impact on the level of confidence in institutional arrangements for MSP. As expressed in the NMP consultation feedback, communities and NGOs are likely to demand that their concerns are viewed as legitimate and urgent, but by the time the system has been designed, they will only be regarded as expectant or latent stakeholders at best. If these differences are not accounted for, MSP is likely to suffer from lack of support, and then incur transactions cost at a later stage. MSP is fundamentally about affecting the behaviour of people relative to each other and to the environment. It will, however, be most effective in doing this if it is perceived to be an inclusive and just process.

This also indicates that when analysing the impact of MSP one must consider the question of a “step zero” [48]. It is particularly in this very initial step that the meta-order governing occurs, i.e. where the images, values and principles for MSP are decided. There is a strong case for this design stage to be subjected to wider public participation because there is a sizeable difference between asking, for example, “these are the current and emerging sectors accessing and using marine resources, how do we manage their activities?” and “what vision do we have, as a region or community, of the future of our seas and coasts?” Greater public involvement at step zero would quite likely have slowed the process down, but would have perhaps yielded a broader debate and more widely accepted outcomes, thus saving time and effort at a later stage.

This point was indeed acknowledged in the ‘lessons learned’ report following the creation of the PFOW pilot plan [49]. There was an expressed desire to reach beyond the “usual suspects” during the engagement process (such as developers, Non-Governmental Organisations, government agencies etc.) and perhaps conduct polls on the streets to establish a fuller range of key issues [Ibid: 49]. However, as is often the case with these activities, time and resources were restricting factors. Marine Scotland has a difficult task to carry out when consulting on wicked problems, however, it would do well to take on board suggestions for how to improve its conduct so as not to risk alienating certain actors. Openness to criticism can only lead to improvement in its consultation techniques.

The ‘orders’ of governing for MSP in Scotland are closely related. In a top-down system where central government retains the real decision-making powers, the meta-order can go a long way to determining the institutional design (second-order) and consequently the day-to-day governing actions (first order). In such a scenario the three orders evolve hierarchically. This means that enriching the debate through public participation is not likely to be possible at later stages, at least not in a way that will greatly affect the final plan. The Marine Planning Partnerships (MPP) make up the institutional framework for the implementation of the NMP in the eleven Scottish Marine Regions. However, confusion still remains as to the exact make-up and role of these MPPs. It is still unclear, for example, which existing institutions will be amalgamated with the MPPs. This leaves some actors uncertain of their future role, such as with the Moray Firth Partnership. Judging by some NMP consultation responses, the general public were equally confused about the details of the MPPs. The reason is that at this stage MPPs appear to be primarily a government instrument for top-down marine planning implementation, rather than for a bottom-up



investigation of marine management challenges and possible solutions, or for public and stakeholder engagement and knowledge integration.

Power is involved when institutions like MPPs are created and, and the power of institutions is likely to reproduce and even increase the imbalances that exist at the initial stage. The MPPs facilitate, formalise, and by implication legitimise stakeholder involvement. But they also facilitate, formalise, and by implication legitimise the influence of the most powerful stakeholders. Pre-existing power relations and struggles have thus been built into the institutional design. A good example of this is that prior to the formation of the marine plan, space was designated to the marine renewable energy sector in the Pentland Firth and Orkney Waters. When the MPP for the region is created with the energy sector as a member, the sector will be further legitimised and empowered. In a way this case undermines the worth of the new second order of governing institution, and possibly of the marine spatial planning system itself.

## 7. Conclusion

This paper suggests that more consideration be given to the apparent strong link between the three orders of governing, and the role of power. This is especially important in light of claims made that MSP tends to be top-down and driven by opportunities for blue growth. Top-down governance is not just about who is making the decisions and how they are implemented, but also about how the system is designed and works, and who this benefits. In this situation, levelling the playing field becomes both in itself an urgent and legitimate concern, not just from the perspective of the individual stakeholder, but the system of MSP as a whole, which aspires to principles of good governance, including social justice. Ideally, for instance, meta-order decisions would be deliberated inclusively among definitive, expectant and latent stakeholders alike, and then implemented at a lower order. Meta-values, norms and principles should be reasoned and not be rushed.

Even in regards to the more easily identifiable stakeholders, MSP should work to address existing power relations between stakeholders, more so than is attempted in the Scottish case. If not, MSP might work to entrench and exacerbate certain power-relationships and hierarchies. MSP is a new management framework being introduced at the highest level by the European Union and by member states, including the UK. Therefore, decisions made within it will carry significant authority, especially when the system becomes statutory in these states. MSP is more than a technical management fix. Rather, it is a complex process, which must live up to standard criteria of good governance. It must also engage with power-relations and struggles in a way that secures social justice. This paper suggests that although Scotland appears to be moving in the right direction with MSP, it has a way to go within MSP before this idea is realised. But experiences in Shetland, Clyde and the PFOW areas should contribute to this learning process. From these examples we might learn how the playing field could be levelled in a way that allows also expectant and latent stakeholders to make meaningful contributions to decision making.

## Acknowledgements

Funding for this research was provided through employment at the Norwegian College of Fishery Science at UiT The Arctic University of Norway. The authors would like to thank colleagues at the institute for feedback on a previous draft of this manuscript. Thanks go also to the interview respondents for their time and cooperation.

## References

- [1] R. Curtin, R. Prellezo, Understanding marine ecosystem based management: a literature review, *Mar. Policy* 34 (5) (2010) 821–830.
- [2] P.M. Gilliland, D. Laffoley, Key elements and steps in the process of developing ecosystem-based marine spatial planning, *Mar. Policy* 32 (5) (2008) 787–796.

- [3] F. Douvère, The importance of marine spatial planning in advancing ecosystem-based sea use management, *Mar. Policy* 32 (5) (2008) 762–771.
- [4] F. Douvère, C.N. Ehler, New perspectives on sea use management: initial findings from European experience with marine spatial planning, *J. Environ. Manag.* 90 (1) (2009) 77–88.
- [5] C. Ehler, F. Douvère, I.O. Commission, Marine spatial planning: a step-by-step approach toward ecosystem-based management, UNESCO (2009).
- [6] R. Pomeroy, F. Douvère, The engagement of stakeholders in the marine spatial planning process, *Mar. Policy* 32 (5) (2008) 816–822.
- [7] M. Gopnik, C. Fieseler, L. Cantral, K. McClellan, L. Pendleton, L. Crowder, Coming to the table: early stakeholder engagement in marine spatial planning, *Mar. Policy* 36 (5) (2012) 1139–1149.
- [8] A. Kumar, R. Paddison, Trust and collaborative planning theory: the case of the Scottish planning system, *Int. Plan. Stud.* 5 (2) (2000) 205–223.
- [9] S. Jentoft, Small-scale fisheries within maritime spatial planning: knowledge integration and power, *J. Environ. Policy Plan.* (2017) 1–13.
- [10] P.J. Jones, L. Lieberknecht, W. Qiu, Marine spatial planning in reality: introduction to case studies and discussion of findings, *Mar. Policy* (2016).
- [11] R.K. Yin, *Case Study Research: Design and Methods*, SAGE Publications, 2009.
- [12] B. Flyvbjerg, Five misunderstandings about case-study research, *Qual. Inq.* 12 (2) (2006) 219–245.
- [13] G. Scarff, C. Fitzsimmons, T. Gray, The new mode of marine planning in the UK: aspirations and challenges, *Mar. Policy* 51 (2015) 96–102.
- [14] W. Flannery, M.Ó. Cinnéide, Marine spatial planning from the perspective of a small seaside community in Ireland, *Mar. Policy* 32 (6) (2008) 980–987.
- [15] H.W. Rittel, M.M. Webber, Dilemmas in a general theory of planning, *Policy Sci.* 4 (2) (1973) 155–169.
- [16] S. Jentoft, R. Chuenpagdee, Fisheries and coastal governance as a wicked problem, *Mar. Policy* 33 (4) (2009) 553–560.
- [17] L. Mee, Between the devil and the deep blue sea: the coastal zone in an Era of globalisation, *Estuar., Coast. Shelf Sci.* 96 (2012) 1–8.
- [18] F. Berkes, Implementing ecosystem-based management: evolution or revolution? *Fish. Fish.* 13 (4) (2012) 465–476.
- [19] R. DeFries, H. Nagendra, Ecosystem management as a wicked problem, *Science* 356 (6335) (2017) 265–270.
- [20] K.K. Davies, K.T. Fisher, M.E. Dickson, S.F. Thrush, R. Le Heron, Improving ecosystem service frameworks to address wicked problems, *Ecol. Soc.* 20 (2) (2015) 37.
- [21] G. Carneiro, Evaluation of marine spatial planning, *Mar. Policy* 37 (2013) 214–229.
- [22] R.A. Dahl, *Democracy and its Critics*, Yale University Press, 1989.
- [23] S. Birnbaum, Environmental Co-governance, Legitimacy, and the quest for compliance: when and why is Stakeholder participation desirable? *J. Environ. Policy Plan.* (2016).
- [24] J. Kooiman, *Governing as governance*, Sage, 2003.
- [25] G. Smith, Creating the spaces, filling them up. marine spatial planning in the Pentland Firth and Orkney waters, *Ocean Coast. Manag.* 116 (2015) 132–142.
- [26] M. Bevir, Foucault, power, and institutions, *Political Stud.* 47 (2) (1999) 345–359.
- [27] R.K. Mitchell, B.R. Agle, D.J. Wood, Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts, *Acad. Manag. Rev.* 22 (4) (1997) 853–886.
- [28] B. Cooke, U. Kothari, *The Case for Participation as Tyranny*, Zed Books, 2001.
- [29] R.S. Gregory, The troubling logic of inclusivity in environmental consultations, *Sci., Technol., Human. Values* 42 (1) (2017) 144–165.
- [30] J.P. Spradley, *Participant Observation*, Waveland Press, 1980.
- [31] The Scottish Government, AGMACS Rep.: Summ. Recomm. (2007), <<http://www.gov.scot/Publications/2007/03/08103826/8>> (Last)(Accessed July 2014).
- [32] H.M. Government, UK Marine Policy Statement, <[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/182486/ourseas-2009update.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182486/ourseas-2009update.pdf)>. Last (Accessed 8 February 2017), 2011.
- [33] Marine Scotland, Scotland's National Marine Plan., <<http://www.gov.scot/Resource/0046/00465865.pdf>>. Last (Accessed 10 February 2017).
- [34] A.D. Hull, Managing Competition for Marine Space Using the Tools of Planning in the UK, *Plan. Pract. Res.* 28 (5) (2013) 503–526.
- [35] K.R. Johnson, S.A. Kerr, J.C. Side, The Pentland Firth and Orkney waters and Scotland—planning Europe's Atlantic gateway, *Mar. Policy* (2015).
- [36] Marine Scotland, Statement of Public Participation for consultation on Scotland's National Marine Plan, 2014a. <<http://www.gov.scot/Topics/marine/seamanagement/national/spp>>. (Accessed 9 February 2017).
- [37] Scotland's Marine Atlas - Information for the National Marine Plan., <<http://www.gov.scot/Topics/marine/science/atlas>> Last (Accessed 10 February 2017).
- [38] Marine Atlas wins in New York: <<https://blogs.gov.scot/marine-scotland/2014/01/21/marine-atlas-wins-in-new-york/>> Last (Accessed 10 February 2017).
- [39] Marine Scotland 2011. Scotland's National Marine Plan Pre-consultation Draft, 2011. <<http://www.gov.scot/resource/doc/346796/0115349.pdf>>. (Accessed 10 February 2017).
- [40] Marine Scotland 2014b. Planning Scotland's Seas: Scotland's National Marine Plan. Consultation Response Analysis Report. <<http://www.gov.scot/Publications/2014/04/7284/downloads-res448880>> (Accessed 8 February 2017).
- [41] M. Laffin, J. Little, M. Carley, Partnership and statutory local governance in a devolved Scotland, *Int. J. Public Sect. Manag.* 19 (3) (2006) 250–260.
- [42] Clyde Marine Planning Partnership Constitution 2016, <<http://www.gov.scot/Topics/marine/seamanagement/regional/partnerships/Clyde>> (Accessed 8 February 2017).
- [43] Marine (Scotland) Act., <[http://www.legislation.gov.uk/asp/2010/5/pdfs/asp\\_20100005\\_en.pdf](http://www.legislation.gov.uk/asp/2010/5/pdfs/asp_20100005_en.pdf)> Last (accessed 9 February 2017).
- [44] Planning Scotland's Seas – Scotland's National Marine Plan Consultation Draft - Responses, <<http://www.gov.scot/Publications/2013/12/2681/downloads>> Last



- (accessed 13 May 2017).
- [45] Royal Town Planning Institute (RTPI) Awards for Planning Excellence 2017. <[http://www.rtpi.org.uk/media/2397976/rtpi\\_awards\\_for\\_planning\\_excellence\\_2017\\_digital\\_brochure\\_darya.compressed.pdf](http://www.rtpi.org.uk/media/2397976/rtpi_awards_for_planning_excellence_2017_digital_brochure_darya.compressed.pdf)>. (Accessed 22 June 2017).
- [46] H. Ritchie, G. Ellis, A system that works for the sea? Exploring Stakeholder Engagement in Marine Spatial Planning, *J. Environ. Plan. Manag.* 53 (6) (2010) 701–723.
- [47] Marine Scotland, Pilot Pentland Firth and Orkney Waters Marine Spatial Plan, 2016. <<http://www.gov.scot/Resource/0049/00497299.pdf>>. (Accessed 10 February 2017).
- [48] R. Chuenpagdee, S. Jentoft, Step zero for fisheries co-management: what precedes implementation, *Mar. Policy* 31 (6) (2007) 657–668.
- [49] Marine Scotland, Pilot Pentland Firth and Orkney Waters Marine Spatial Plan. Lessons Learned, 2016b. <<http://www.gov.scot/Publications/2016/03/8213>>. (Accessed 13 May 2017).