

Small Island: Big Marine Challenges Ahead for the Blue Economy

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The island of Ireland, though physically small, faces big institutional challenges in relation to the delivery of a secure and sustainable energy future. Challenges stem from having separate jurisdictions in the North and South of Ireland; each jurisdiction has separate governance regimes with several different government departments controlling functions such as planning and regulation. Marine Spatial Planning (MSP) is now established as an integrated policy-based approach to the regulation, management and protection of the marine environment (Claydon, 2006) is set to play a major part in the European Union's 'blue economy'. With the island of Ireland's prime geographical position in the resource-rich location of North West Europe, and with innovations in wind, water and wave and even algae technologies, MSP will be a vital process to enable renewable technologies to shape the future energy mix and to allow the island to emerge as a renewable energy exporter. The existence of two separate, variegated and fragmented planning traditions (both terrestrial and marine) spanning the Republic of Ireland and Northern Ireland may create a potential barrier to realising the island of Ireland's ability to be a world leader in offshore renewable energy. Indeed, it is possible that the island of Ireland may have missed out on some vital investment opportunities due to the lack of integrated and co-ordinated marine planning.

Challenges

This paper looks at how MSP can be better deployed to address the pressing issues facing the island of Ireland's energy needs. Integration is one of the defining characteristics of MSP. As Claydon (2006) notes, planning has always been about attempting to resolve competing demands for space and use, and with the emphasis on spatial planning, policies being pursued by complementary (and often competitive) organisations, agencies and industries at different geographical scales, marine policies need to be more fully integrated, coordinated and compatible. With respect to the development of MSP within the island of Ireland, two separate planning systems are emerging for the marine environment that is largely out of sync with each other. Research carried out by the ICLRD on integrated territorial development and the management of housing on the all-island basis (Keaveney, 2012), the benefits of an all-island deprivation index (Haase *et al*, 2012), and interjurisdictional river basin management (Walsh, 2012) showed that the integration of environmental and spatial considerations in decision-making is one of the key challenges facing planning and development on the island of Ireland. Now is an opportune time to investigate similar issues in the marine context.

A recent ESPON Territorial Observation (2013: 7), on the potential for land-sea contributions in meeting EU 2020 targets¹, notes the large diversity amongst Europe's seas as a major economic and environmental asset. ESPON argue that unlocking the potential for blue growth will support development in the EU's coastal areas and islands. There will be opportunities, for example, in constructing the supergrid connections between the North Sea to Northern Africa for exporting marine renewable energy, undersea telecommunication infrastructure, oil and gas extraction and pipeline development, energy storage and carbon storage. In addition, with the Northwest Atlantic Region leading in installed exploitation of offshore wind, investment in the maritime sector is making an important contribution to growth, job creation and a sustainable and inclusive Europe.

¹ The Directive 2009/28/EC on renewable energy, implemented by Member States by December 2010, sets ambitious targets for all Member States, such that the EU will reach a 20% share of energy from renewable sources by 2020 (European Commission, 2011).

There have been several high profile energy and marine related cases over the past decade that highlight where a system of integrated MSP could have contributed to the development of the indigenous resource. The Corrib gas pipeline in County Mayo, whilst still raw to some, was a result of a lack of an integrated vision for managing offshore energy sources. Additionally, the proposed Tunnes Plateau offshore wind farm, between County Donegal and County Derry~Londonderry, was dropped due to a disagreement over the ownership of the seabed between the Republic of Ireland and Northern Ireland. This perhaps could have been avoided had an integrated system of MSP been in existence. Attempts at terrestrial integration have been relatively successful on an all-island basis with the formation of the Single Electricity Market (SEM) for natural gas and electricity. Whilst that is a major land bound development, there could be implications in the future for MSP in terms of constructing an offshore interconnected electricity grid to Great Britain and beyond to export renewable resources (ISLES, 2012).

In terms of the future energy agenda there are a number of projects coming to fruition that could benefit from a more integrated marine planning system; between Northern Ireland and the Republic of Ireland and also between land, coastal and marine environments. In the North of Ireland, several projects are in the early stages; for example, the Rathlin Island and Torr Head Strategic Area has been designated as an area that has the potential to deliver 200MW of tidal power, and the First Flight offshore wind farm located 7 nautical miles (nm) from Ardglass, Co. Down and with an expected generating capacity of 600MW. These are mainly projects that have resulted from the production of the Offshore Renewable Energy Strategic Action Plan 2012-2020 (DETINI, 2012) covering only Northern Irish territorial waters (<12nm). Contiguous with the aforementioned First Flight project, in the Republic of Ireland, 22nm off the coast of Dundalk is the proposed Oriel offshore wind farm, with an expected generating capacity of 330MW. Whilst these projects are good news in terms of opening up Ireland's overall potential to be a supplier and exporter of renewable energy, there seems to be an infinite lack of strategic planning on an all-island basis of where and when such projects should take place. The issues highlighted above may be contributing to a potential 'marine problem'. If this is the case, can MSP help?

The Marine Problem

As Peel and Lloyd (2004) noted, the changing marine environment represents a considerable contemporary challenge to society and government. It is central to human survival; it covers 72% of the earth and supports 50% of the world's species (McIntyre, 2010). Evidence suggests that the seas are, spatially, becoming more crowded (Smith *et al*, 2012). With more innovations in renewable energy installations, there are bigger turbines, and aquaculture and mariculture, tankers can all operate further offshore; and shipping lanes are more congested, needing larger and wider safety and turning zones. Cumulatively with species depletion, habitat deterioration and large-scale pollution, all of these human induced activities have resulted in increased stress and serious degradation on the marine resource (Ritchie and Ellis, 2010). Additionally, as noted by Smith *et al* (2012), existing sectoral management frameworks are described as fragmented and sectoral. Add in a complex mix of ownership, associated common and private property rights, and a range of somewhat outdated customary, statutory rules and regulations (Peel and Lloyd, 2004), a more robust and sustainable approach to marine resource management is urgently needed (McLeod and Leslie, 2009).

The emergence of MSP over the past decade was perhaps viewed as the solution to these 'marine problems'. Developing Peel and Lloyd's (2004) concept of the 'marine problem', Ritchie and Ellis (2010: 703) characterised it as a two-folded concept. On the one hand it can be framed purely as a bio-physical problem due to the intensification and competition for sea space. Yet it can also be derived as a result of an institutional problem, with the lack of integration between regulation and a failure to mediate competing interests. It is clear that there is not just one factor that can contribute to the notion of a marine problem, but as Peel and Lloyd (2004) stress, it should be understood as one that is 'socially constructed' rather than an objective reality. As Ritchie and Ellis (2010) point out, the MSP process, in whatever form it takes, will have to address and resolve different and potentially incompatible views of intervention within the marine environment. This point has been overlooked when thinking about MSP within the island of Ireland. This may have major consequences for the model of MSP that emerges. It is important to look at what has been happening in terms of policy development and drivers from the EU and national levels.

Policy Development in the EU

In the European context, the objectives of MSP are stated as economic development for the blue economy, facilitating cross-border cooperation, coordination of maritime administration to balance the diversity of maritime activities, and environmental protection. Several EU states are embracing the concept with emphasis being placed on supporting marine economies in line with the EU Integrated Maritime Policy 2007 ('The Blue Book for Maritime Policy') and the Maritime Strategy Framework Directive (MSFD) (2008/56/EC)². This requires Member States to achieve Good Environmental Status in Europe's seas by 2020, and strengthens the need for transnational working. More recently, on 13th March 2013 the Commission proposed a Directive establishing a framework for a maritime spatial planning and integrated coastal management (2013/0074). If enacted, it will establish a common, legally binding, European framework for MSP and Integrated Coastal Management (ICM) in EU Member States. It will ensure that the growth of maritime and coastal activities and the use of resources at sea and on coasts remain sustainable. The expectation would be that Member States would have 18 months to transpose the Directive into their national legislation, to establish a competent body to carry out MSP, and to deliver marine plans after that.

Whilst the essence of the Directive is around blue growth, there could be benefits and opportunities for the island of Ireland. It would allow for the exchange of best practice, it would provide 'clout' for delivering ICM, which has problematically never had a statutory basis, and it will allow for greater joined up thinking around land-sea integration. Due to the focus of MSP on ensuring integration and cross-border cooperation, perhaps this legislation might make an impact in the shared bordering waters of Northern Ireland and the Republic of Ireland. The Directive states that it will ensure effective trans-boundary cooperation between Member States taking measures for MSP and ICM, and to ensure the coherence of these measures and avoid divergent processes. Within the island of Ireland context, this is the marine problem; MSP operating within divergent processes. The Northern Irish system has been steadily making progress to establish a formalised MSP process, whilst the Republic of Ireland has not progressed to this stage yet, but their system is advancing. With the obligation to comply, it will be interesting to look at how both jurisdictions will develop and implement

² The MSFD was transposed into national UK legislation in the form of the *Marine Strategy Regulations 2010*.

their own models of MSP and if they will align to allow for a sharing of best practice and integration at the land-sea and, also crucially, at the shared borders between Northern Ireland and the Republic of Ireland.

Policy Development in the UK

In 2009 the arrival of new legislation for MSP in the UK marked a milestone in environmental regulation covering the country's territorial and offshore waters (0-200nm) (Ritchie and Ellis, 2010). The UK introduced its own legislation for MSP and a new system of marine management through the Marine and Coastal Access Act 2009 (MCAA). This Act introduced a Marine Policy Statement which aims to facilitate the formulation of marine plans, by providing provisions for changing licensing and for the designation of Marine Conservation Zones (MCZs). Following the MCAA, the Marine Management Organisation was established in England. One of its delegated responsibilities is to prepare marine plans for the English inshore and offshore waters, and to deal with marine licensing, and marine conservation. They have nearly completed the first marine plan for the East Inshore and East Offshore areas in England from Flamborough Head to Felixstowe. Scotland introduced its own legislation though the Marine (Scotland) Act 2010 and a Directorate called Marine Scotland was set up and is responsible for the integrated management of Scotland's seas. They have produced a Marine Plan for offshore wind in Scottish Waters and are working on developing national and regional marine plans. The Welsh Government is also developing its own approach to MSP, based on the guidance in the UK Marine Policy Statement, and they plan to have their own marine plans in place by 2015.

Policy Development in Northern Ireland

Historically, within Northern Ireland, the regulation of marine activities has been dealt with sectorally and on a fragmented basis across thirteen government departments (from both the Northern Ireland Executive and Westminster). This is due to the nature of the devolution settlement for Northern Ireland and the complex mix of devolved and non-devolved functions.

The Northern Ireland Executive was granted approval for Northern Ireland to participate in the UK MCAA with plans to introduce its own legislation. Only Northern Ireland's small *offshore* area is covered by the UK legislation and duties of the Marine Management Organisation; this is the area from 12nm to roughly about 40nm and is located towards the Southeast of Northern Ireland's waters³. Northern Ireland has been steadily progressing on MSP and a Marine Plan for its inshore territorial waters. On 17th September, 2013 *The Marine Act (Northern Ireland)* received Royal Assent, and sought to build upon the provisions of the MCCA. Similarly to that legislation, its purpose is to progress nature conservation through the designation of MCZs, to prepare Marine Plans for all, or part, of the Northern Ireland inshore region and to provide further provisions for streamlining licensing, particularly in relation to certain electricity works (Cave, 2012) in preparation for offshore installations. The Department of Environment (DOE) released a draft Marine Position paper in April 2012 which provided an overview of existing marine policies and the legislative

³ This small area has some devolved powers to Westminster.

framework in Northern Ireland and, importantly, it provided the policy context in which a Northern Ireland Marine Plan will be developed.

Currently, MSP is being led by a small Marine Plan Team in DOE who have been appointed as the marine authority responsible for policy and decision-making. The DOE Marine Plan Team is preparing a marine plan under Article 51 of the *Marine and Coastal Access Act 2009* and Article 4 of the *Marine Act (Northern Ireland) 2013*. During February and March 2012, the DOE notified relevant authorities of its intention to commence work on the Northern Ireland Marine Plan, and as part of this process, the Marine Plan Team published a Statement of Public Participation which was developed with the aid of key stakeholder views from a seminar where topics of discussion included effective stakeholder engagement, what should be included in the plan, and evidence for plan-making.

Policy Development in the Republic of Ireland

In the Republic of Ireland, like Northern Ireland, the regulation of marine activities has been historically fragmented. As yet there is no single national policy explicitly for MSP. There are some provisions in the *Planning and Development Act 2000* that addresses development on the foreshore. In December 2012, reforms were made to the *Foreshore Act 1933* which consolidated and revised several pieces of legislation and statutory instruments. This legislation defines the outer limits of the foreshore and defines the power of the Minster for the Environment, Community and Local Government to provide licenses and leases for certain marine activities. New legislation is expected in the form of a *Foreshore and Marine Area Development Bill*, which would modernise the current foreshore consenting regime. Again, similar to Northern Ireland, marine functions lie across five different government departments. In the Programme for Government Commitments (Department of the Taoiseach, 2013), the marine sector is mentioned in relation to providing an efficient licensing and leasing process, streamlining the planning and regulatory processes and developing integrated and coastal planning processes.

Positively, an Inter-Departmental Marine Coordination Group was established and in July 2012 the Group prepared 'Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland'. This now serves as a roadmap for the Irish Government's vision for ocean wealth as a key element of economic recovery and sustainable growth; and is to be supported by coherent policy, planning and regulation and managed in an integrated manner. Whilst the document is positive in its concerted efforts to move towards MSP, the document is light touch in terms of it being an all-island action plan. In terms of North-South cooperation, it is noted that collaboration is 'traditionally strong' and that 'close cooperation' is needed to bring about economic returns and benefits (pp.45). However, under Key Action 38 an example of fostering a North-South approach to enable the marine sector is noted as developing an all-island energy strategy. Similar to Northern Ireland, a draft Strategic Environmental Assessment (SEA) has been prepared for an Offshore Renewable Energy Development Plan (Department of Communications, Energy and Natural Resources, 2010) and the North Donegal coast is highlighted as being suitable for wind, wave and tidal devices. It seems at odds though that there needs to be two separate documents for this exercise, that potentially could have been done on an all-island basis; especially given that they were completed in the same manner and by the same consultants.

Critical Issues

Although there is positive 'talk' towards cooperating on a North-South basis, and realising the need for an integrated marine planning system for the island of Ireland, it is still very much operated in a divided way. The North are progressing with their plans and policies and aligning with the UK, and whilst the Republic of Ireland may be using the language of 'all-Ireland', the roadmap can be said to be 'light touch' due to the small amount of actions and cooperation that are actually 'all-island' in nature. In the Republic of Ireland, it is stated that co-operation with the North should continue but there is no mention of what is happening in the North, or even any reference to the bordering, shared, areas of Carlingford Lough or Lough Foyle. Even with the different planning traditions of both jurisdictions, with the North operating (for now) under a highly centralised discretionary planning system and the Republic having a decentralised plan-led zoning approach, there is no sense of an all-island approach approximating an actual action plan.

The Irish *National Spatial Strategy 2002-2020* demonstrates ambitions for terrestrial spatial planning for areas of infrastructure such as energy and communication, and it acknowledges the importance of the *Regional Development Strategy (RDS) for Northern Ireland*, yet it lacks sufficient force given its non-statutory status and that it is mostly focused on the South. The potential for joint marine-based development through MSP was ignited through the cross-border consultation document '*Framework for Collaboration on the Spatial Strategies on the island of Ireland*' (Department for Regional Development and Department of the Environment, Community & Local Government, 2011)⁴. This consultation acknowledged the experience of cooperation with the North South Interconnectors and the SEM and how these are contributing to a more stable and secure energy distribution system for the island as a whole. It also noted that MSP could lead to 'good cooperation regarding wind, wave and tidal stream developments in both Irish and UK territorial waters' which in turn 'could lead to mutual economic benefits' (pp.17). These strategies and consultations read very well, but where is the forward planning, where are the actual projects, the timelines so that Ireland, both North and South, can begin to reap these mutual benefits?

Perhaps lessons can be learnt from the recent Scottish consultation on the Third National Planning Framework (Scottish Government, 2013) that brings together Government's programmes and initiatives in providing a clear vision and a suite of national developments. Scotland's thinking seems to be advanced and whilst Scotland is not made up of two separate planning systems, it has immense diverse space with very rural and very urban geographies and resources. And it is in this context with Scotland's ambition and drive to focus on being 'a low carbon place' that makes it an attractive comparison. The 'Blue Seas-Green Energy' offshore wind plan (Marine Scotland, 2011) identifies offshore developments and is complementary to the National Renewables Infrastructure Plan. Scotland is further innovating in developments that could be easily adopted for the island of Ireland, such as the establishment of a Marine Energy Park like they have created for the Pentland Firth and Orkney Waters. For the island of Ireland that could be along the North Coast between Co. Donegal and Co. Londonderry, or the East Coast along the Co. Down and Co. Louth coastlines. Instead of investing in separate wind farms in the respective jurisdictions, it perhaps could make more sense to adopt the Scottish approach in identifying and prioritising the infrastructure required to support offshore renewable energy projects.

⁴ In June 2013, this consultation document was finally adopted by the Northern Ireland Executive. It is now published under the title *Framework for Cooperation - Spatial Strategies for Northern Ireland and the Republic of Ireland*. The document is available to download from both the DoECLG and DRD websites.

There is much more research to be done in investigating the potential for a more cohesive approach to MSP on an all-island basis. Whilst it should be acknowledged that it is unlikely that there would ever be a single marine planning system or a marine authority for the island of Ireland, there should be more opportunities for cooperation for an all-island marine energy plan, beyond statutory consultations, so that the island of Ireland can deliver a secure and sustainable energy future for the blue economy.

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