

Marine Spatial Planning, Brexit and the island of Ireland

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Abstract

Brexit poses major institutional and governance challenges for the island of Ireland, not least in the area of Marine Spatial Planning (MSP) and the cooperative governance and integrated management of shared marine spaces and ecosystems. To date, MSP scholarship has not delved into the complex processes that construct marine borders and has failed to acknowledge how the same border may have different boundary qualities across a range of institutional contexts. Using the case of transboundary marine governance on the island of Ireland, we evaluate recent marine governance innovations in the Republic of Ireland (ROI) and Northern Ireland (NI) to assess if they promote integration. We then illustrate how the boundary characteristics of marine borders are context dependent, with the same border being both hard and soft in differing contexts, and discuss how this may be impacted by Brexit. We argue that the development of integrated marine management is not a priority in these jurisdictions and that the resulting complex, multiple constructions of marine borders has largely been ignored by MSP researchers.¹ We conclude that developing a more nuanced understanding of borders in order to advance integrated marine management is crucial for post-Brexit MSP planning practice and research.

Keywords:

Marine spatial planning, Ireland, Northern Ireland, integration, transboundary.

¹ Whilst this paper is primarily about governance in the context of transboundary integration in MSP and Brexit, we do make reference to ‘management approaches. Here we share Olsen et al.’s (2009) interpretation of governance as being the “formal and informal arrangements, institutions, and mores that structure and influence” the use of ecosystem goods and services; in the context of coastal and marine governance, management approaches will reflect the prevailing governance arrangements (e.g. fragmentary and weak versus robust and inclusive). In relation to in transboundary integration in MSP, we share Morf et al.’s (2019) definition as collaboration and coordination between governmental levels across multiple scales and different types of borders; taking this definition it is clear that Brexit has the potential to substantially impact on transboundary integration on the island of Ireland.

1. Introduction

UK marine governance is highly complex, and its effectiveness is dependent on international laws and multi-level governance mechanisms (i.e. international, European, national, regional and devolved arrangements). Due to its multifaceted, international nature, effective integrated marine governance requires transboundary coordination. Brexit², and the repositioning of the UK as an 'independent' coastal nation, raises urgent questions about how the deeply embedded international aspects of UK marine governance will be facilitated in the future. The difficulties likely to emerge post-Brexit are particularly relevant to Marine Spatial Planning (MSP), which has rapidly become the dominant marine management paradigm worldwide (Jay et al., 2013). In the last decade MSP has been advanced as the “rational organisation of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect the environment and to achieve social and economic objectives in an open and planned way” (Douvere, 2008, p. 766). MSP is, therefore, a comprehensive approach to managing increasing competition for sea space (Peel and Lloyd, 2004; Claydon, 2006; Flannery and Ó Cinnéide, 2012; and Ritchie, 2014) and reduces cumulative pressures exerted on ecosystems (Halpern et al., 2008). Transboundary planning is viewed as a necessary component of effective MSP (Drankier, 2011). Maritime activities, such as shipping and energy transmission, and impacts, for example, plastic pollution and eutrophication, may span national borders (Backer, 2011). The adoption of a transboundary approach to MSP is, therefore, viewed as critical in shared marine areas (Backer, 2011).

In effect, Brexit will reinstate the primacy of territorial borders, with knock-on impacts for nascent MSP arrangements. This issue is particularly significant for the island of Ireland, where the issue of a possible hard land border has received considerable attention while there has been little commentary on Brexit's impact on the island's complex transboundary marine governance arrangements. Calls for transboundary MSP, both in policy and academia, however, underplay the significance and complexity of maritime borders. Transboundary MSP is portrayed as merely needing improved cross-border cooperation and information sharing, resulting in an insufficient understanding of the complex nature of marine borders and rudimentary efforts at developing truly transboundary planning. Not wanting to over-simplify our analysis it is worth noting: ‘Borders are boundaries that can enable or disable, separate or connect, serve as barriers

² The term Brexit refers to the UK's intended withdrawal from the EU following the result of a historic referendum on EU membership in 2016.

and bridges, distinguish between us and others and facilitate or hinder various types of communication' (O'Dowd, 2010, 1035).

We acknowledge that the complexity of marine borders has largely been described in the MSP literature (see Agardy et al, 2011, Backer, 2011, Jay et al 2016, Kidd and Shaw, 2013, and Tafon, 2018); however, gaps exist particularly for those marine borders contested by neighbouring jurisdictions as is the case on the island of Ireland. This failing is rooted in a lack of historical reflexivity within MSP, which has paid insufficient attention to the social, economic, cultural and geopolitical processes which underpin the construction of marine borders. While marine borders may have fixed geographic coordinates, their boundary-ness, the extent to which they create clear governance division between neighbouring states, is not fixed and is constituted differently within a range of cross-border institutions. In this paper, we look at the complexity of marine borders in a specific region and highlight how there may be multiple constructions of borders that need to be considered when developing transboundary MSP.

By adopting an integrated marine management approach, the issues highlighted above can be resolved by (re)connecting/promoting transboundary governance of various marine sectors and institutions. Using a document analysis approach (Bowen, 2009, Flannery et al., 2015a, Kopke and O'Mahony, 2011) for this paper, we set out to explore different types of integrated marine management – sectoral integration, territorial integration, organisation and transboundary integration being instigated through MSP. We assess the two jurisdictions on the island of Ireland; the Republic of Ireland (ROI, a sovereign state comprising over 80% of the island) and Northern Ireland (NI, a devolved administration of the UK), in terms of their efforts to foster these forms of integration within their emergent systems. Focusing on transboundary integration, we then discuss if the MSP systems emerging in both ROI and NI promote transboundary integration. The discussion ends with an overview of the possible issues which may emerge post-Brexit and recommendations are made to advance integrated marine management in that context.

2. Key integrated management concepts

Integrated management has two key dimensions: a vertical dimension; and a horizontal dimension. The vertical dimension focuses integration across different levels of government. The horizontal dimension is concerned with integration across policy domains and areas and

comprises the integration of associated government departmental competencies (Holden, 2012). Furthermore, Kidd and Shaw (2007) outline three core categories of integration: sectoral integration; territorial integration; and, organisational integration. In this section we briefly revisit these categories, building on Kidd and Shaw (2007) and Ritchie and Flannery (2017) by adding a fourth category: transboundary integration.

2.1 Revisiting Integration

Kidd and Shaw (2007) define sectoral integration as the integration of individual sectoral policies with other policy areas. Sectoral management approaches have failed to ensure sustainable management of marine resources as they do not address cumulative impacts (Guerry, 2005). As marine sectors are managed on an individual basis, they place additional impacts on marine ecosystems by eutrophication, pollution and habitat loss. As Curtin and Prellezo (2010) note such impacts are assessed in isolation. The adoption of sectoral integration aims to facilitate more interaction between related governance and policy areas to sectoral management issues (Kidd and Shaw, 2007). Whilst sectoral integration can resolve issues that have come about from the implementation of traditional, sectoral approaches to resource management (Hildebrand and Norrena, 1992), it fails to acknowledge complex relations between diverse policy areas. Sectoral management regimes may address problems within their own specific sector but may not resolve issues across different policy areas or borders.

Turning next to the category of territorial integration, Young (2007) notes that it is based upon the fact that management regimes do not comprehensively cover the bio-geophysical scale of the resource they seeks to manage. Crowder et al. (2006) state that resources are managed by a variety of institutions across governance scales and across territories and borders. We know, for example, that straddling fish stocks are often subject to territorially distinct management regimes and various hierarchical dimensions. To achieve sustainable resource management, territorial integration depends upon integration across governance levels and across territorial border divides (Kidd and Shaw, 2007). This form of integration is concerned with both vertical integration (coherence across governance scales) and horizontal integration (coherence across territories that form part of the same natural system).

As we have seen, sectoral and territorial integration point towards the need for greater integration between parties that may not have cooperated in the past. Focusing on the integration of strategies, programmes and plans, and delivery mechanisms, organisational

integration is a core component of both sectoral and territorial integration (Kidd and Shaw, 2007). Organisational integration performs best where there is some form of central overview mechanism that can facilitate integration (Stead and Meijers, 2009). Adopting organisational integration can address the overlaps and conflicting governance frameworks existing in marine resource management.

2.2 Transboundary integration

Building on the work of Kidd and Shaw's (2007) integrated management framework, we add a fourth category, of transboundary integration. We demonstrate how the diversity of transboundary integrated marine-related institutions (and associated sectors) create differing forms of boundary-ness for the same marine border. Drawing on the work of Mann (2005) we categorise these institutions as being either 'inter-national' or 'trans-national'. Inter-national institutions have the effect of creating hard, sharp borders between neighbouring states and should be considered as being 'border-confirming' contexts. Whereas trans-national institutions, have the effect of dissolving the border and should be considered as 'border transcending' contexts (Mann, 2005). The complex nature of multiple cross-border institutions, each structuring varying forms of boundary-ness for the same border, creates opportunities and challenges for transboundary MSP.

Although there have been numerous EU funded projects on transboundary MSP³, these have focused on increasing international cooperation and communication (Jay et al., 2016), with little attention paid to understanding the multifaceted, complex nature of marine borders and the need for an effective integrated marine governance regime within jurisdictions with shared waters. Specifically, the MSP Directive⁴ requires little more from Member States beyond cooperating to ensure plans are coherent and coordinated. To date, transboundary 'planning' in practice is merely implemented through formal cross-border *consultation* on draft plans and policies, often late in the planning process. Therefore, the MSP approaches developed thus far are ill-equipped to deal comprehensively with pressing transboundary issues and instead undertake transboundary planning in an *ad hoc* or perfunctory manner. Flannery et al (2015b) argue that transboundary MSP efforts need to go beyond obligatory information sharing and

³ BaltSeaPlan (INTERREG IV: Baltic Sea Region Programme 2007-2013), Plan Bothnia (EU DG MARE – European Integrated Maritime Policy 2010-2012), ParISEApate (INTERREG IV: Baltic Sea Region Programme 2007-2013), TPEA (Transboundary Planning in the European Atlantic (EU DG MARE – European Integrated Maritime Policy 2012-2014), SIMCelt (European Maritime & Fisheries Fund 2015-2018).

⁴ MSP Directive 2014/89/EU.

should develop arrangements that enable the development of joint problem solving and collaborative planning. To do this, efforts at instigating transboundary MSP need to be based on an in-depth understanding of existing cross-border institutions, how they may reduce or increase transaction integration, and the role they may play in creating hard and soft marine borders.

The presence of a system of well-developed transboundary institutions can decrease transaction costs associated with transboundary MSP, and smooth the progress of cross-border working (Leibenath et al., 2010). These institutions may be formal or informal networks and can include regional seas institutions, such as the OSPAR Commission⁵ (spanning the North-East Atlantic), and the Wadden Sea Forum (a trilateral cooperation between The Netherlands, Denmark and Germany with a focus on conservation). Sub-national institutions also exist, such as the Severn Estuary Partnership (spanning England and Wales) and the Solway Firth Partnership (spanning England and Scotland). It is important to acknowledge that Severn and Solway are, in an EU sense, just one Member State,⁶ so integration across these ‘borders’ is inherently easier as both are governed by UK legislation. Hence, collaboration across NI and ROI is more challenging in this context. Nevertheless, transboundary institutions may create positive transactional relationships through the context of familiarity, transparency and cooperation. For example, the presence of existing transboundary planning institutions means that key actors will already know one another, have experience in cross-border cooperation, including overcoming barriers, and may have built good working relationships (Leibenath et al, 2010). Conversely, existing institutions may also impose transaction costs or may limit the actions that can be undertaken to address a transboundary issue (Blatter, 2001). For example, actors may have developed antagonistic relationships through institutions seeking to resolve territorial claims, particularly in areas where there is a history of spatial conflict and tension, such as the island of Ireland.

3. Marine governance on the Island of Ireland

The island of Ireland has 32 administrative counties, with the Republic of Ireland having 26 and Northern Ireland having six. Constitutionally, the partition of the island of Ireland into the Irish Free State (subsequently known as the Republic of Ireland) and Northern Ireland in 1921

⁵ OSPAR is the mechanism by which 15 Governments & the EU cooperate to protect the marine environment of the North-East Atlantic.

⁶ Acknowledging that certain legislation also differs between Scotland and England in the Solway.

(through the Government of Ireland Act, 1920) paved the way for the creation of the United Kingdom (UK) which formally united Scotland, England, Wales and Northern Ireland. Northern Ireland and the Republic of Ireland remain separate with their own Parliaments⁷, different institutions and different planning systems with unique instruments regulating planning resulting in distinct legal and policy arrangements. Despite these differences, a number of fundamental elements of each of the planning systems in the jurisdictions remain the same (Sheppard et al, 2017).

The implications of this ‘colourful history’ (Flannery et al, 2015) for MSP on the island are stark, particularly at the two shared marine loughs (or border bays) where the terrestrial borders become maritime. Lough Foyle is located in the North West, and Carlingford Lough to the South East (see Figure 1). The island of Ireland is unique in that no formal maritime boundaries were agreed in international law at the time of partition. Article 1(2) of the Government of Ireland Act 1920 provided that Northern Ireland would consist of six “parliamentary counties”. Counties generally do not include territorial waters. The impact of this was that the territorial waters around Northern Ireland remained, debatably, under the jurisdiction of [then] Southern Ireland. The 1920 Act, however, did not mention territorial waters but as the island was to remain part of the UK that did not warrant huge attention at the time. Understandably, this took on greater significance when the Irish Free State was established and on numerous occasions since then questions as to jurisdiction have been raised in both Ireland and the UK but without any definitive agreement. Ireland retained a Constitutional claim to all waters around the island until the Good Friday Agreement (GFA) in 1998. In the associated referendum, the people of the Republic voted to change Articles 2 and 3 of the Irish Constitution, meaning the claim to the territorial waters around Northern Ireland was stopped. Both the UK and Irish governments continue to claim full jurisdiction of the loughs whilst simultaneously acknowledging their respective positions are disputed by the other party. This raises implementation, enforcement and compliance issues for planning and management of marine developments and conservation.

Despite a series of high-level political discussions over several decades, agreement on the ownership of the two shared marine loughs has been elusive. Whilst there is voluntary

⁷ The UK Government and UK Parliament retain responsibility for reserved and excepted matters. Reserved matters are policy areas that may be devolved to Northern Ireland Assembly in future. Excepted matters, such as international relations, are areas that are never expected to be considered for devolution.

agreement on a median line⁸ in Carlingford Lough, Lough Foyle and its wider catchment area remains highly contested. Various sectoral conflicts that hinge on issues of natural resource ownership and seabed rights have surfaced and intensified in the Foyle region, for socio-economic and political reasons (Campbell, 2015), particularly over the last two decades. Legally both bays are no different but in Carlingford the navigation channel is in the middle, so it appears fairer and is accepted. However, the navigation channel in the Foyle hugs the Donegal coast (in the North West of ROI) and in law it is usually the navigation channel that is the boundary.

3.1 Marine Governance in the Republic of Ireland (ROI)

The ROI has a coastline of 3,171 km and consists of 90,000 km² of land and almost 900,000 km² of marine resources (see Fig. 1). In 2016, the ocean economy provided approximately 30,176 full time equivalent jobs, with established marine industries having a turnover of €5.3 billion (Vega and Hynes, 2017). In addition, emerging marine industries encompassing, for example, marine commerce, marine biotechnology and bio-products and marine renewable energy, had a turnover of €383 million and provided employment to 1,945 full-time equivalent jobs in 2016 (Vega and Hynes, 2017). Planning in respect of the marine environment in Ireland is pursued by a variety of government departments and agencies, making it difficult for a holistic, integrated approach to prevail (Flannery and Ó Cinnéide, 2008, O'Hagan and Lewis, 2011). Marine governance is highly sectoral and is divided amongst various government departments as follows: fisheries and aquaculture (Department of Agriculture, Food and the Marine); foreshore activities and implementation of the WFD, MSFD and the MSP Directive (Department of Housing, Planning and Local Government); fossil and renewable energies (Department of Communications, Climate Action and Environment); transport and ports (Department of Transport, Tourism and Sport); and natural heritage including Natura 2000 (Department of Culture, Heritage and the Gaeltacht). In 2009, an inter-departmental Marine Coordination Group (MCG) was established to facilitate cooperation across government departments with marine related functions.

Insert figure 1 near here

⁸ As the navigation channel in Carlingford runs down the middle, a median line allows management authorities to carry out their functions (HOC NIAC, 2018, para. 86). A so-called gentleman's agreement exists in relation to fisheries, also known as the voisinage agreement and referred to as such in the associated Supreme Court case (Barlow and others v. Minister for Agriculture, Food and the Marine, [2016] IESC 62). This is understood to be an informal and legally non-binding agreement between the Republic of Ireland and the UK.

There is a high degree of spatial fragmentation in relation to marine governance in the Republic of Ireland. For example, jurisdiction between central Government departments and local authorities is based on the position of the Mean High Water Mark (MHW). Activities landward of the MHW tend to be managed by the local authorities, which operate primarily at a county level but under the over-arching direction of the DHPLG. Activities seaward of the MHW are regulated primarily through the provisions of the Foreshore Acts, 1933-2011. The 1933 Act (as amended) provides for the granting of foreshore licences and leases. The Foreshore Act, 1933 defines the foreshore as “the bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek, and bay of the sea or of any such river or estuary.” The outer limit of the foreshore is the limit of the Territorial Seas (12 nautical mile (M) limit), confirmed by Section 60(b) of the Maritime Safety Act, 2005. The foreshore is presumed to be State-owned unless valid alternative title is provided, as is the case with some older estate properties where foreshore is privately owned. Beyond the 12M limit, activities in Ireland tend to be governed by specific sectoral legislation, e.g. sea fisheries by sea fisheries legislation. Any rights of the State, beyond the territorial seas, over the seabed and subsoil for the purposes of exploring those areas and exploiting their natural resources is covered by the Continental Shelf Act, 1968. This Act vests the Government with the power to designate, by order, any area of the seabed as an area within which the rights to explore and exploit natural resources may be exercised (Section 2(3)).

To date, the ROI has failed to make full use of integrated management to bridge the management regimes either side of the MHW (O'Hagan and Ballinger, 2010). A draft policy document published in 1997 was never taken forward by Government; it highlighted the complex and sectoral nature of Ireland's legislative and administrative framework in the coastal zone and recommended that integrated coastal zone management (ICZM) be introduced by means of a phased approach (Brady Shipman Martin, 1997) which remains apt today. Recently, there has been a renewed focus on the opportunities provided by Ireland's extensive marine resource and the need to adopt integrated marine management practices if these are to be sustainably realised. The Marine Coordination Group was instrumental in developing “Harnessing Our Ocean Wealth - An Integrated Marine Plan for Ireland (HOOW)” (Government of Ireland, 2012). This Plan has three goals: a thriving maritime economy; achieving healthy ecosystems and, increasing our engagement with the sea. The Plan contains key ‘enabling’ actions for policy, governance and business to facilitate the development of

Ireland's marine potential. The targets of the Plan are to double the value of Ireland's ocean wealth to 2.4% of GDP by 2030 and to increase the turnover from Ireland's ocean economy to exceed €6.4bn by 2020. With respect to governance, HOOW advances several key actions necessary to its vision and goals, including more integrated management, reform of the planning and licensing system and implementation of MSP. In June 2019 review of HOOW (Government of Ireland, 2019) was carried out and it showed that in 2018 Ireland's ocean economy had a turnover of €6.2bn, a direct economic contribution as measured by GVA (gross value added) of €2.2bn or 1.1% GDP. This update shows that Ireland is on course to achieve the 2020 targets.

In January 2013, the then, Department of Environment, Community and Local Government published a consultation document on a "New Planning and Consent Architecture for Development in the Marine Area" (DECLG, 2013a). In October 2013, the general scheme of a new Maritime Area and Foreshore (Amendment) Bill 2013 was published (DECLG, 2013b). This sought to better align the foreshore consenting system with the terrestrial planning system; it also aimed to deliver a coherent mechanism to facilitate and manage marine development activity in the Exclusive Economic Zone (EEZ) and Continental Shelf. To date, the legislation has not been enacted primarily due to the complexities involved in the draft legislation. In July 2019, the General Scheme of the Marine Planning and Development Management Bill was published (DHPLG, 2019) and it is anticipated that it will be enacted in 2020. A consolidated draft Maritime Jurisdiction Bill 2019 was also published (DFAT, 2019).

Separate to the above, the Department of Housing, Planning and Local Government (DHPLG) has commenced work on Ireland's first Marine Spatial Plan to comply with the provisions of the EU MSP Directive, which has been incorporated into Part V of the Planning and Development (Amendment) Act, 2018. Under this, MSP applies to the 'maritime area' defined in the Act as consisting of coastal waters, the foreshore (as defined in the 1933 Act), the territorial seas (as defined in Part 3 of the Sea Fisheries and Maritime Jurisdiction Act, 2006), the Exclusive Economic Zone (to 200 miles) and beyond this to areas of the continental shelf. The legislation allows the Minister to prepare one marine spatial plan for the entire maritime area or different marine spatial plans for different parts of the maritime area. This is known as the 'National Marine Planning Framework', and should align with the National Planning Framework that applies on land.

In December 2017, the Department published ‘Towards a Marine Spatial Plan for Ireland’ explaining how marine planning will be progressed with indicative timelines (DHPLG, 2017). In September 2018, the National Marine Planning Framework Baseline Report was published (DHPLG, 2018) which provides an overview of existing sectoral uses and activities in Ireland’s maritime area, including future opportunities and constraints for each. On 10th June 2019 the draft Marine Planning Policy Statement (MPPS) was launched; this outlined the future development of the MPPS and sets out high level priorities for the enhancement of the MPPS in Ireland. The first national Marine Spatial Plan is expected to be published in Q3 of 2019.

In terms of transboundary marine planning and potential implications of Brexit, the Baseline Report acknowledges that there is a need for “ongoing engagement across all the marine planning jurisdictions of Ireland and the United Kingdom” and accordingly a new group bringing together senior policy and planning officials from the six marine planning administrations of Ireland, Northern Ireland, England, Scotland, Wales and the Isle of Man was created; the group meets every 6 months and ensures that members are up to date with MSP issues of mutual concern. The document states that this is “not in any way linked to Brexit discussions” but attests that the group “will provide a standing mechanism for transboundary engagement” (DHPLG, 2018). The Baseline Report also recognises the on-going disputed jurisdictional issues in Loughs Foyle and Carlingford.

Following the UK’s departure from the EU (at the time of writing, scheduled for 31st October 2019), the unresolved maritime boundaries in Carlingford Lough and Lough Foyle will assume a new geopolitical significance. They will no longer simply represent a disputed socio-political boundary; they will be elevated to the status of a frontier between an EU and a non-EU territory, an unprecedented situation on the island. This reality has grave and uncertain implications for marine governance not solely in the border areas but also for the entire island of Ireland.

3.2 Northern Ireland Marine Governance

Northern Ireland is considerably smaller than the Republic of Ireland, with a coastline of 650 km², and 13,360 km² of land and only 511 km² of marine resources. The Northern Ireland business turnover directly generated by the marine industry is around £200m (€223m) (CEBR, 2017). In terms of direct employment, maritime services supported approximately 8,900 jobs.

The maritime service industry makes a notable contribution of 2.2% of Northern Ireland's GDP.

Like ROI a number of government departments and agencies pursue planning in respect of the marine environment. Marine governance is, therefore, highly sectoral and divided across several departments. Responsibility for planning (land use planning, and consequently marine planning) has changed substantially since 2015 with the Review of Public Administration and reform of the land use planning system, which was enabled by the Planning (Northern Ireland) Act 2011. The effect of this legislation was to devise a more streamlined, efficient and effective planning system for Northern Ireland. The biggest change was a reduction in the number of local authorities from 26 to 11; the decentralization of planning powers to local authorities; and additional responsibility for the preparation of local development plans and development schemes. Prior to 1st April 2015, planning was a centralized activity within the then Department of Environment's (DOE) 'Planning Service' Agency. In parallel, the number of government departments was reduced from 12 to 9 following the Departments (NI) Act 2016. Again, similar to the effects of planning reform in terms of securing efficiency gains, these institutional and organisational changes represented a process of rationalising government functions and staff numbers. The table below shows an abridged version of the changes.

* Insert Table 1 near here *

The Northern Ireland marine area comprises of the 'inshore' and 'offshore' regions as defined at s.322 of the Marine and Coastal Access Act 2009 (c.23) (DOE, 2012). Northern Ireland's inshore waters begin at the Mean High Water Mark and end at the 12M territorial limit, with the offshore region being from 12M to 40M. Currently in the Marine Act (Northern Ireland) 2013, the small offshore region of Northern Ireland lies under the auspices of the Crown Estate and, therefore, anything beyond 12M is controlled by the UK Government through the Marine Management Organisation (MMO). The inshore region is the area of sea within the seaward limit of the territorial sea of the UK adjacent to Northern Ireland. The foreshore is defined within the Limitation (Northern Ireland) Order 1989 (section 2(2)) as 'the bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek and bay of the sea or any such river or estuary'.

In a similar vein to the ROI, in order to bridge the regimes to either side of the MHW, NI had an increased interest in developing integrated marine management in Northern Ireland and developed ‘An integrated Coastal Zone Management Strategy for Northern Ireland, 2006-2026’ (DOE, 2006). The non-statutory strategy outlined a series of discrete actions with associated timetable and responsible organisations, and was structured around four themes: sustainable communities; safeguarding the environment; monitoring the economy; and, mechanisms for integration. However, because of its non-statutory status it had little effect in practice and was never fully implemented.

With regards to implementation of the MSP Directive, Northern Ireland is further ahead of the ROI. In Northern Ireland, under the UK Marine and Coastal Access Act 2009 and the Marine (Northern Ireland) Act 2013 DAERA was appointed as the competent Marine Authority to prepare Marine Plans. Developed within the framework of the UK Marine Policy Statement (2011), the draft Marine Plan was published at the end of April 2018. DAERA are responding to the public consultation in a bid to avoid a public inquiry; however, there is growing uncertainty about the next steps for the implementation of the Marine Plan as Northern Ireland has been without a functioning government since January 2017. The Northern Ireland Civil Service has been running day-to-day affairs, but they cannot take significant decisions, such as adopting and implementing draft plans, in the absence of Ministers.⁹ Whilst some powers are delegated to the Department by the current Secretary of State these do not extend to DAERA in respect of the plan, due to its cross-departmental nature.

3.3 The Marine Plan(s) approach to transboundary integration

There is little appreciation of the complex border arrangements and management issues that surround the shared Loughs. In ROI’s Baseline Report, objective 11 is states that it will “Consult and coordinate with Member States and 3rd Country Authorities on transboundary issues of shared concern, as necessary” (pg.101, 2018). Similarly, in the draft Northern Ireland Marine Plan there is a very short section which states that “Transboundary co-operation and co-ordination has also taken place with the Republic of Ireland and the Isle of Man” (para.23, pg.18, 2018). The language used throughout these documents is perfunctory and based on information sharing, a poor form of integration. This approach meets what is required by EU legislation without addressing the complex nature of sharing marine spaces with ill-defined

⁹ Buick (Colin) Application (ARC 21) [2018] NIQB 43

borders, about to be made more complex by Brexit. In relation to the language about the shared loughs, it is difficult to find direct references to the loughs in the Baseline Report other than in relation to a table of Public Bodies with Marine Responsibilities (at Annex A) mentioning the Loughs Agency.¹⁰ In the draft Northern Ireland Marine Plan, the shared loughs are mentioned three times in relation to aquaculture, oysters, and dredging, Neither document makes a specific reference as to how these shared waters are to be planned. Even the physical lines on the maps of each jurisdiction's maritime boundaries stop in the water; these lines represent historical, administrative and institutional problems and compound legal ambiguities. Furthermore, these two cross-border areas represent the meeting point of two different planning systems, multiple terrestrial plans, with separate planning policies, separate legislation, different timescales and spatial scales, and potentially different marine plans. It is clear that the current institutional and governance arrangements for both the ROI and NI are examples of border confirming, international relations.

4. Wider views of transboundary integration related to MSP

With the unique governance arrangements, marine governance on the island of Ireland affords us the opportunity to explore alternative transboundary arrangements. These help to highlight the variegated forms of maritime boundaries that need to be addressed by emerging MSP systems, and foreground the challenges that will arise post-Brexit. The Good Friday Agreement¹¹ (GFA) created a number of cross-border institutions which are relevant to transboundary MSP: the North South Ministerial Council¹² (NSMC); and the British Irish Council¹³ (BIC); the Loughs Agency; and Waterways Ireland¹⁴. Although not all are strictly marine-focused, these bodies have cooperated on relevant issues in the past, such as WFD implementation (see also Creamer et al 2012). The first two institutions are examples of inter-

¹⁰ The Foyle, Carlingford and Irish Lights Commission (FCILC) was established under the GFA 1998. With respect to marine functions, the North South Implementation Body of most relevance is the Foyle, Carlingford and Irish Lights Commission. This consists of two agencies: the Loughs Agency; and the Lights Agency. The Loughs Agency has responsibility for the regulation of certain policy areas in Lough Foyle and Carlingford Lough, the border bays separating the two jurisdictions. The role of the Loughs Agency is to place environmental issues at the heart of international, national and local decision-making. Specific functions of the Loughs Agency include the promotion of development in Lough Foyle and Carlingford Lough for commercial and recreational purposes in respect of marine, fishery and aquaculture matters (Flannery et al., 2015a)

¹¹ Formally known as The Belfast Agreement.

¹² The Irish Government is represented by the Minister, or the Minister of State, responsible for that sector, and the Northern Ireland Executive is represented by two Ministers nominated by the First Minister and deputy First Minister on a cross-community basis, one normally being the Minister with responsibility for that sector.

¹³ BIC's members consist of the British and Irish Governments, the devolved administrations of Northern Ireland, Scotland and Wales, and Jersey, Guernsey and the Isle of Man.

¹⁴ Waterways Ireland manages, maintains, develops and promotes over 1000km inland navigable waterways principally for recreational purposes.

national, border confirming relations, while the latter two are examples of trans-national, border transforming relations.

The role of the NSMC is to develop consultation, cooperation and action within the island of Ireland on high-level strategic policies of mutual interest to both jurisdictions. There are 12 sectoral policy areas for cooperation, however, environment is one area where there is no cooperation. Whilst the NSMC serves a particular transboundary role, it is a consultative and communicative role on specific areas within a specific territorial remit. We classified it as an inter-national border arrangement, wherein the potential for discussions on marine governance are beyond the parameters of its function. The BIC also operates in a transboundary context, with a wide range of actors, but is also border confirming in its nature as it is a formal institution with clearly demarcated national limits and distinct and prescriptive roles and functions.

In relation to the trans-national examples, mentioned above, we find them to be less formal in their formation. Whilst they all have specific roles and functions, they seem to work within more permeable, fluid borders with a clearer transnational orientation and ethos. Established in 1999, the Loughs Agency is responsible for the promotion of development for commercial and recreational purposes in respect of marine, fishery and aquaculture matters. In addition to the loughs, the Agency manages over 3,600 km of rivers and has an overall remit of an area extending 12 miles out to sea from Lough Foyle. It has a specific remit in terms of the conservation, protection, development, management and licensing of fisheries and aquaculture in both Loughs. The Agency is co-sponsored by two government departments, DAERA in the North and DCCA¹⁵ in the Republic. We see this as potentially indicative of the long-term commitment to the Agency. The Loughs Agency model of transboundary governance incorporates an Advisory Forum made up of over 50 stakeholder groups from the voluntary, commercial and tourism sectors¹⁶; it also has a Board that consists of political parties on both sides of the border which strives to ensure that the stakeholders have a consistent voice regarding policies and research implemented through the Agency (Nuttall, 2016).

The Loughs Agency, is perhaps the institution that, in theory, holds the key to facilitating joint learning and meaningful cross-border working in relation to a 'trans-national' context.

¹⁵ Department of Communications, Climate Action and Environment.

¹⁶ Areas of interest include shellfish, draft netmen, drift netmen, anglers, fishery owners, tourism, waste-water, industry, local government, ports and harbours, environmentalists, forestry and agriculture.

Innovatively two pieces of legislation¹⁷ were introduced providing a new regulatory system for aquaculture in Lough Foyle. The aim was to allow the Agency to grant licences across the whole Lough, rather than developers going to the corresponding geographical institutional sponsor.¹⁸ However, whilst the legislation was drafted over a decade ago, the reality is that this enabling legislation has not yet commenced due to the ongoing dispute relating to ownership of the Loughs and the unresolved boundary issues. The Agency has thus been unable to fulfil their remit in terms of issuing aquaculture licenses and currently lack powers to regulate the industry. Consequently, the Pacific oyster industry in Lough Foyle has capitalised on this political deadlock, becoming a contentious sector characterised by a rapid expansion of unlicensed and unregulated oyster trestles from ‘*approximately 2500 in 2010 to 45,000- 50,000 in 2018*’ on the Inishowen coastline (HOC NIAC, 2018).

The contentious, always-political nature of inter-jurisdictional cooperation on the island will no-doubt provide challenges for MSP within these areas. The potential demands of a joint approach would be difficult to implement. The Loughs Agency is constrained because it is awaiting enabling legislation or some form of Management Agreement from both governments. The immediate emphasis could be placed on the need to produce a strategic marine plan¹⁹, whilst there is less emphasis on the operational aspects. Whilst there is no plan in place, or indeed, definitive plans for one in the future, this area could be defined as a ‘soft space’ defined by Walsh et al. (2012) as being ‘the result of a deliberate strategy, constructed by governing actors to represent a geographical area in a particular way that lies outside of the political-administrative boundaries and internal territorial divisions of the nation state’. Even though there is no strategy currently, by the Loughs Agency, or by another mechanism, it is

¹⁷ The Foyle and Carlingford Fisheries (Northern Ireland) Order 2007 and the Foyle and Carlingford Fisheries Act, 2007 (ROI) provided a new regulatory system for aquaculture in the Foyle and Carlingford areas and for the transfer of existing licensing powers in the Foyle and Carlingford areas from the two sponsoring government Departments (Department of Agriculture and Rural Development in NI and Department of Communications, Marine and Natural Resources in ROI) to the FCILC (Flannery et al. 2015b).

¹⁸ Ibid.

¹⁹ Though different from a MSP, a Marine Protected Area (MPA) management plan will be one output of a new Interreg (European Regional Development Fund) research project. MarPAMM is an environment project to develop tools for monitoring and managing a number of protected coastal marine environments in Ireland, Northern Ireland and Western Scotland. It will be completed by 31 March 2022. It is a cross-border project because many marine species and habitats do not abide by administrative borders. To manage mobile species and border areas requires cooperation. Working closely with stakeholders and partner projects such as COMPASS and SeaMonitor, the project will culminate in the development of six comprehensive MPA management plans. The EASME EMFF-funded SIMAtlantic project, which includes both DAERA [NI] and DHPLG [ROI] is also working on guidance for transboundary planning in the Loughs.

clear that the Loughs have fallen into a ‘no-man’s land’ area. If we follow Walsh et al.’s definition, we could advocate for less formal North-South cooperation on MSP rather than solely relying on the formal transboundary consultation mechanisms mandated legally (see also Walsh in this issue). In order to move away from the less formal approaches, it will be necessary to adopt a spatial planning approach since it can perform, or can seek to perform, a meta-governance function, whereby the boundaries may remain blurred, or ‘soft’.

5. Discussion

The governance innovations analysed above indicate that developing an integrated approach to marine governance is not a priority in either jurisdiction. Innovations that have the potential to deliver integrated marine management are developed and shelved, or are implemented and subsequently undermined. For example, an ICZM strategy was developed for the Republic of Ireland but never implemented. ICZM²⁰ represents a participative process which supports the sustainable use of coastal resources, and places emphasis on integrated approaches over sectoral-based practices, in order to better facilitate co-ordinated working and improve understanding of how coastal resources can be used in a sustainable manner (see O’Mahony et al. (2014) and references therein).

Furthermore, while the HOOW initiative promised further integration, the *Marine Planning and Development Management Bill 2019* is likely to disperse consenting and licensing responsibilities amongst An Bord Pleanála²¹, Local Authorities and two central government departments, with aquaculture and fisheries omitted entirely. While the proposed Bill may foster greater territorial integration in relation land and sea planning, it may need to go further to have positive impacts on integrated marine governance.

In Northern Ireland, efforts aimed at achieving integration are complicated, to some extent, due to issues relating to devolution of competencies from the UK Government to the Northern Ireland Assembly. In addition, power-sharing between unionist and nationalist politicians in Northern Ireland collapsed in January 2017 ending more than a decade of joint-rule. Despite

²⁰ Other concepts such as Integrated Coastal management (ICM), Integrated Coastal Area Management (ICAM) (Hénoque and Denis, 2001); share key features with ICZM in that they are participative, holistic in nature, and support sustainability; therefore, it is appropriate to use these terms interchangeably (Creel et al, 1998).

²¹ An Bord Pleanála is the national planning authority, dealing with planning appeals, other appeals, referrals, local authority and infrastructural projects, and the compulsory acquisition of land as mandated under the Planning and Development Acts, 2000–2018.

Northern Ireland being without a functioning government, the Democratic Unionist Party (DUP) has been in coalition with the UK's Conservative party since June 2017. The future of the Loughs and the wider governance of the entire island are embedded in a turbulent geopolitical environment where political institutions in Northern Ireland are at a stalemate and wider constitutional issues associated with the UK's plans to leave the EU add multiple layers of ambiguity to an already volatile *status quo*.

Despite the introduction of MSP in Northern Ireland, marine governance competencies remain fragmented amongst many entities. The development of a marine plan for Northern Ireland should, however, be considered a major step towards territorial integration. The implementation of the ICZM strategy for Northern Ireland could also be considered a step towards territorial integration if it had not collapsed between development and implementation. The development and implementation of a marine plan in future may, however, revive the ICZM process.

It is clear, that despite recent governance innovations, marine governance in both jurisdictions remains disjointed, sectoral and fragmented. Policy innovations and marine governance functions remain dispersed amongst many entities in both jurisdictions. The negative effects of this fragmentation is somewhat ameliorated by both governments developing inter-departmental marine groups to foster greater organisational integration. For example, in the ROI, this group is chaired by the Minister for Agriculture, Food and Marine, even though that department has relatively few marine governance competencies and MSP falls under the aegis of the DHPLG. In Northern Ireland, the former DOENI lead the corresponding inter-departmental group, and it is unclear if this group still exists. Due to the current situation, all government departments in Northern Ireland are being run by Permanent Secretaries, hence it is highly unlikely that there is any activity. For these inter-departmental groups to foster organisational integration, it will be important to ensure other departments engage with this process in a meaningful manner (Hughes and Pincetl, 2014) and that there is no path dependency in regulation or other constraints that could constrict the implementation of their outputs (Kirk et al, 2007).

With the implementation of MSP anticipated by 2021 in both the Republic of Ireland and Northern Ireland, there are a number of steps the governments should take to ensure that it delivers integrated marine management. For both jurisdictions the experience of ICZM to date

strongly supports the case for the development of MSP policy *and* enabling legislation. Ideally, in the Republic of Ireland a department dedicated to *all* marine matters should be established to coordinate the integrated management of the marine environment and to oversee the implementation of MSP. This new department would assume all marine related functions and would fulfil the current government's commitment to merge these responsibilities. We would recommend that the inter-departmental MSP group should be more formalised to act as a coordinating authority, if they cannot be the central 'marine department'. The *Marine Planning and Development Management Bill 2019* should enable the creation of a single point of contact for each usage function where all the required licences and consents can be arranged. Greater integration, however, between the new MSP system and the terrestrial planning system would be facilitated by the development of ICZM plans.

We note that the existing inter-national bodies are useful, and serve a purpose of high-level policy coordination. However, the existing trans-national organisations go beyond communication and coordination, and reformat governance²², so that the border, or lack of one, is less significant. We argue that the second form of relations is needed for effective MSP, but this and the border issue is absent from emerging MSP systems.

Finally, in Northern Ireland, we recommend that future iterations of the marine planning process should explore the possibility of assigning more marine competencies to DAERA's Marine Division. However, in the short term, a functioning Stormont Executive is the most pressing matter, and in relation to MSP this will enable the draft 2018 Marine Plan to be adopted.

We know that MSP is intended to bring clarity, transparency and accountability to marine governance (*inter alia*) and so we may say that any progress made on any of these aspects will help with the associated institutional framework. However, that is still only institutional stability for the respective 'territory' rather than the marine regions, as a whole. Complexity for the regions, may be reduced if there was a strong coherency (in the form of a plan for the areas) but with Brexit and different governing legislation that might not be possible.

6. Post-Brexit Marine Governance

²² Even through the creation of new governing legislation.

Brexit will reinstate the primacy of territorial borders, with knock-on impacts for both international and devolved governance arrangements. Much has focused on the potential for a 'hard' land border on the island of Ireland. Brexit will also, however, alter international cooperation in the area of marine governance which has proved to be particularly contentious in the Loughs in terms of regulation of aquaculture and reconstitution of marine borders. Whatever format Brexit will take, it is likely to fundamentally alter the format of these existing governance regimes and relationships, particularly the Loughs Agency, which has the potential to be a good vehicle for effective transnational MSP in Carlingford and Foyle if the unresolved footprint of the past can somehow be resolved at a political level.

We need to understand Brexit and the re-inter-nationalisation of these border arrangements. Will the GFA institutions still exist? How does MSP recognise the different boundary-ness of these borders? Will they potentially be reformatted mid-plan implementation? There are still many unknowns at this crucial time. Borders, as governance mechanisms, define action “in terms of ‘inside’, ‘outside’, ‘cross’, and ‘liminal’ and configure possible connections among actors, actions, and events” (Jessop, 2016 p.10). The term 'transboundary MSP' is, therefore, too simplistic and often masks the nuanced and context-dependent nature of marine borders. We argue that we need to conceptualise transboundary relationships in terms of two distinct processes, one inter-nationalising, the other trans-nationalising. By developing a more nuanced understanding of these relationships, and the role they play in constituting marine borders, we can begin to explore forms of trans-boundary MSP that goes beyond mere coordination and communication. This will be particularly important post-Brexit, which we view as a process which will inherently inter-nationalise the UK's marine borders, possibly undoing much productive work undertaken in creating trans-national marine governance, particularly on the island of Ireland.

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References

Agardy, T., Sciara, G.N, and Christie, P., 2011. Mind the gap: Addressing the shortcomings of marine protected areas through large scale marine spatial planning. *Marine Policy*, 35(2), 226-232.

Backer, H., 2011. Transboundary maritime spatial planning: a Baltic Sea perspective. *Journal of coastal conservation*, 15(2), 279-289.

Blatter, J., 2001. Lessons from Lake Constance: ideas, institutions, and advocacy coalitions. In: H.M. Ingram and J. Blatter, eds. *Reflections on Water: New Approaches to Transboundary Conflicts and Cooperation*, Cambridge, MA, USA: MIT Press; 89-122.

Bowen, G., 2009. Document Analysis as a Qualitative Research Method, *Qualitative Research Journal*, 9(2), 27-40.

Brady Shipman Martin, 1997. *Coastal Zone Management a Draft Policy for Ireland - Discussion Document*. Prepared on behalf of Department of Environment and Local Government, Department of the Marine and Natural Resources, and Department of Arts, Heritage, Gaeltacht and the Islands. Dublin, Ireland: Government of Ireland.

Campbell, L., 2015. Catchment identity, connections and water governance in the contested landscapes in north-west Ireland. In: É.Ó. Ciardha and G. Vojvoda, eds. *Politics of identity in post-conflict States: the Bosnian and Irish experience*. New York, USA: Routledge, 171- 190.

CEBR, 2017. *The Economic Contribution of the UK Maritime Economy*. London: Centre for Economic and Business Research.

Claydon, J., 2004. Viewpoint: Marine Spatial planning: A New Opportunity for Planners. *The Town Planning Review*, 77(2), i-vi.

Creel, J.B., Santos, C.L., Mc Cann, J., Islas, C.M., Carranza, J., Rubinoff, P., Goddard, T., Robadue, D. and Hale, L., 1998. Participatory Coastal and Marine Management in Quintana Roo, Mexico. In: *Proceedings of International Tropical Marine Ecosystem Management*

Symposium (ITMEMS). Townsville, Queensland, Australia: Great Barrier Reef Marine Park Authority, 163-171.

Crowder, L.B., Osherenko, G., Young, O.R., Airame, S., Norse, E.A. Baron, N., Day, J.C., Douvère, F., Ehler, C.N., Halpern, B.S., Langdon, S.J., McLeod, K.L., Ogden, J.C., Peach, R.E., Rosenburg, A.A. and Wilson, J.A., 2006. Resolving mismatches in U.S. ocean governance, *Science*, 313, 617-618.

Curtin, R. and Prezello, R., 2010. Understanding marine ecosystem based management: a literature review. *Marine Policy*, 34, 821-830.

Department of Agriculture, Environment and Rural Affairs, 2018. *Draft Marine Plan for Northern Ireland*, Belfast, DAERA. Available from: <https://www.daerani.gov.uk/sites/default/files/consultations/daera/Marine%20Plan%20for%20NI%20final%2016%2004%2018.PDF> [Accessed 29 October 2018].

Department of Environment, Community and Local Government (DECLG), 2013a. *A New Planning and Consent Architecture for Development in the Marine Area: Consultation Document*. Dublin: DECLG. 19pp.

Department of Environment, Community and Local Government (DECLG), 2013b. *General Scheme of Maritime Area and Foreshore (Amendment) Bill 2013*. Dublin: DECLG. 125pp.

Department of Foreign Affairs and Trade (DFAT), 2019. *General Scheme of the Maritime Jurisdiction Bill 2019*. Dublin: DFAT. Available from: <https://www.dfa.ie/media/dfa/ourrolepolicies/internationallaw/lawofthesea/General-Scheme-Schedules.pdf> [Accessed 29 July 2019].

Department of Housing, Planning and Local Government (DHPLG), 2019. *General Scheme of the Marine Planning and Development Management Bill*. Dublin: DHPLG. Available from: <https://www.housing.gov.ie/planning/legislation/other/marine-planning-and-development-management-bill-general-scheme> [Accessed 26 July 2019].

Department of Housing, Planning and Local Government (DHPLG), 2018. *National Marine Planning Framework Baseline Report*. Dublin: DHPLG. Available from: https://www.housing.gov.ie/sites/default/files/publications/files/national_marine_planning_framework_baseline_report.pdf [Accessed 29 October 2018].

Department of Housing, Planning and Local Government (DHPLG), 2017. *Towards a Marine Spatial Plan for Ireland – A roadmap for the development for Ireland’s Marine Spatial Plan*. Dublin: DHPLG. Available from: <https://www.housing.gov.ie/planning/marine-spatial-planning/marine-strategy/towards-marine-spatial-plan-ireland-roadmap> [Accessed 29 October 2018].

Department of Regional Development, 2012. *Regional Development Strategy 2035*. Belfast: DRD. Available from: <https://www.planningni.gov.uk/index/policy/rds2035.pdf> [Accessed 29 May 2019].

Department of the Environment, 2006. *Towards an Integrated Coastal Zone Management Strategy for Northern Ireland*. Belfast, DOENI. Available from: <https://www.daera-ni.gov.uk/publications/towards-integrated-coastal-zone-management-strategy-northern-ireland-2006-2026> [Accessed 29 May 2019].

Douvere, F., 2008. The importance of marine spatial planning in advancing ecosystem based sea use management. *Marine Policy*, 32, 762-771.

Drankier, P., 2012. Embedding maritime spatial planning in national legal frameworks. *Journal of Environmental Policy and Planning*, 14(1), 7-27.

Flannery, W. and Ó Cinnéide, M., 2008. Marine Spatial Planning from the perspective of a small seaside community in Ireland, *Marine Policy*, 32(6), 980-987.

Flannery, W. and Ó Cinnéide, M., 2012. Stakeholder participation in marine spatial planning: Lessons from the Channel Islands National Marine Sanctuary. *Society & Natural Resources*, 25(8), 727-742.

Flannery, W., Lynch, K. and Ó Cinnéide, M., 2015a, Consideration of coastal risk in the Irish spatial planning process. *Land Use Policy*, 43,161-169.

Flannery, W., O'Hagan, A.M., O'Mahony, C., Ritchie, H. and Twomey, S., 2015b. Evaluating Conditions for Transboundary Marine Spatial Planning: Challenges and opportunities on the Island of Ireland. *Marine Policy*, 51, 86-95.

Government of Ireland, 2012. *Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland*. Dublin: Government of Ireland. Available from: <https://www.ouroceanwealth.ie/sites/default/files/sites/default/files/Publications/2012/HarnessingOurOceanWealthReport.pdf> [Accessed 29 October 2018].

Government of Ireland, 2018. *Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland, Review of Progress 2018*. Galway: Marine Institute. Available from: <https://www.ouroceanwealth.ie/news/harnessing-our-ocean-wealth-review-progress-2018> [Accessed 2 September 2019].

Guerry, A.D., 2005. Icarus and Daedalus: conceptual and tactical lessons for marine ecosystem-based management. *Frontiers in Ecology and the Environment*, 3, 202-211.

Halpern, B.S., Walbridge, S., Selkoe, K.A., Kappel, C.V., Micheli, F., D'Agrosa, C., Bruno, J.F., Casey, K.S., Ebert, C., Fox, H.E. and Fujita, R., 2008. A global map of human impact on marine ecosystems. *Science*, 319(5865), 948-952.

Henocque, Y. and Denis, J., 2001. *A Methodological Guide: Steps and Tools Towards Integrated Coastal Area Management*. Paris: UNESCO, IOC Manuals and Guides No. 42.

Hildebrand, L. and Norrena, E., 1992. Approaches and progress towards integrated coastal zone management, *Marine Pollution Bulletin*, 25(1-4), 94-97.

Holden, M., 2012. Is integrated planning any more than the sum of its parts? Considerations for planning sustainable cities. *Journal of Planning Education and Research*, 32, 305-318.

House of Commons Northern Ireland Affairs Committee, 2018. *Brexit and Northern Ireland: Fisheries*. Fourth Report of Session 2017-19. London, UK: House of Commons. HC 878.

Available from:
<https://publications.parliament.uk/pa/cm201719/cmselect/cmniaf/878/878.pdf> [Accessed 18 October 2018].

Hughes, S. and Pincetl, S., 2014. Evaluating collaborative institutions in context: the case of regional water management in Southern California. *Environment and Planning C: Politics and Space*, 32(1), 20-38.

Jay, S., Alves, F.L., O'Mahony, C., Gomez, M., Rooney, A., Almodovar, M., Gee, K., Suarez de Vivero, J.L., Gonçalves, J.M., Da Luz Fernandes, M. and Tello, O., 2016. Transboundary dimensions of marine spatial planning: Fostering inter-jurisdictional relations and governance. *Marine Policy*, 65, 85-96.

Jay, S., Flannery, W., Vince, J., Liu, W., Xue, J. G., Matczak, M., Zaucha, J., Holger Janssen, H., Van Tatenhove, J., and Dean, H., 2013. International Progress in Marine Spatial Planning. *Ocean Yearbook*, 27, 171-212.

Jessop, B., 2016. Territory, Politics, Governance and Multispatial Metagovernance, *Territory, Politics, Governance*, 4(1), 8-32.

Kidd, S. and Shaw, D., 2007. Integrated water resource management and institutional integration: realising the potential of spatial planning in England. *Geographical Journal*, 173, 312-329.

Kidd, S. and Shaw, D., 2013. Reconceptualising territoriality and spatial planning: insights from the sea. *Planning Theory and Practice*, 14(2), 180-197.

Kirk, E., Reeves, A., and Blackstock, K., 2007. Path Dependency and the Implementation of Environmental Regulation. *Environment and Planning C: Politics and Space*, 25(2), 250-268.

Kopke, K. and O'Mahony, C., 2011. Preparedness of Key coastal and Marine sectors in Ireland to adapt to climate change. *Marine Policy*, 35(6), 800- 809.

Leibenath, M., Blum, A., and Stutzriemer, S., 2010. Transboundary cooperation in establishing ecological networks: The case of Germany's external borders. *Journal of Landscape and Urban Planning*, 94, 84-93.

Mann, M., 2005. *The Dark side of Democracy: Explaining Ethnic Cleansing*. Cambridge, UK: Cambridge University Press.

Morf, A., Moodie, J., Gee, K., Giacometti, A., Kull, M., Piwowarczyk, J., Schiele, K., Zaucha, J., Kellecioglu, I., Luttmann, A. and Strand, H., 2019. Towards sustainability of marine governance: Challenges and enablers for stakeholder integration in transboundary marine spatial planning in the Baltic Sea. *Ocean & Coastal Management*, 177, 200-212.

Northern Ireland Office, 1998. *The Belfast Agreement*. Belfast, NIO. Available from: <https://www.gov.uk/government/publications/the-belfast-agreement> [Accessed 29 October 2018].

O'Dowd, L., 2010. From a 'borderless world' to a 'world of borders': 'bringing history back in'. *Environment and Planning D: Society and Space*, 28(6), 1031-1050.

O'Hagan, A.M. and Ballinger, R., 2010. Implementing Integrated Coastal Zone Management in a national policy vacuum: local case studies from Ireland. *Ocean and Coastal Management*, 53(12), 750-759.

O'Hagan, A.M. and Lewis, A.W., 2011. The existing law and policy framework for ocean energy development in Ireland. *Marine Policy*, 35(6), 772-783.

Olsen, S.B.; Page, G.G. and Ochoa, E., 2009. *The Analysis of Governance Responses to Ecosystem Change: A Handbook for Assembling a Baseline*. LOICZ Reports and Studies No. 34. Geesthacht, Germany: GKSS Research Center.

O'Mahony, C., Kopke, K., Twomey, S., O'Hagan, A.M., Farrell, E. and Gault, J., 2014. *Integrated Coastal Zone Management in Ireland - Meeting Water Framework Directive and Marine Strategy Framework Directive targets for Ireland's transitional and coastal waters*

through implementation of Integrated Coastal Zone Management. Report prepared under contract for Sustainable Water Network (SWAN). Dublin: SWAN Ireland. 119 pp.

Peel, D. and Lloyd, M.G., 2004. The Social Reconstruction of the Marine Environment: Towards Marine Spatial Planning, *The Town Planning Review*, 75(3), 359-378.

Ritchie, H. and Flannery, W., 2017. Advancing Integrated marine spatial planning in Northern Ireland. In: S. McKay and M. Murray, eds. *Planning Law and Practice in Northern Ireland*. London: Routledge, 177-190.

Ritchie, H., 2014. Understanding emerging discourses of Marine Spatial Planning in the UK. *Land Use Policy*, 38, 666-675.

Sheppard, A., Peel, D., Ritchie, H., and Berry, S., 2017. *The Essential Guide to Planning Law: decision making and practice in the UK*. Bristol: Policy Press.

Stead, D. and Meijers, E., 2009. Spatial planning and policy integration: concepts, facilitators and inhibitors. *Planning Theory and Practice*, 10, 317-332.

Tafon, R., 2018. Taking power to sea: towards a post-structuralist discourse theoretical critique of marine spatial planning. *Environment and Planning C: Politics Space*, 36(2), 1-16.

Vega, A. and Hynes, S., 2017. *Ireland's Ocean Economy*. Galway, Ireland: SEMRU, NUI Galway. Available from: <https://www.ouroceanwealth.ie/publications/irelands-ocean-economy-semru-nui-galway-0> [Accessed 27 September 2018].

Walsh, C., Jacuniak-Suda, M., Knieling, J. and Othengrafen, F., 2012. Soft spaces in spatial planning and governance: Theoretical reflections and definitional issues. Paper presented at “*Networked regions and cities in times of fragmentation: Developing smart, sustainable and inclusive places*”, the Regional Studies Association European Conference, 13-16 May 2012, The Netherlands, Delft.

Young, O. R., Osherenko, G., Ekstrom, J., Crowder, L. B., Ogden, J., Wilson, J. A., Day, J. C., Douvère, F., Ehler, C.N., McLeod, K.L., Halpren, B.S. and Peach, R., 2007. Solving the crisis in ocean governance: place-based management of marine ecosystems. *Environment*, 49, 20-32.

Table 1: Changes in Government Departments affecting Marine Governance in Northern Ireland

Old Department [pre-2015] and responsibilities	New Department	Core marine responsibilities	Old Department [pre 2015] and responsibilities	New Department	Core marine responsibilities
<p>Department of Environment (DoE) (environmental powers)</p> <p>Department of Agriculture and Rural Affairs (DARD) (all powers)</p> <p>Department of Culture Arts and Leisure (DCAL) (inland fishery powers)</p>	<p>Department of Agriculture, Environment and Rural Affairs (DAERA)</p>	<p>6 core marine powers:</p> <ol style="list-style-type: none"> 1. Marine: Marine Plan Production, MSFD implementation, marine licensing, marine planning (UK Marine Policy Statement), marine monitoring, Shellfish Protection 2. Pollution: water incidents 3. Water: RBM and WFD implementation 4. Marine Conservation: MCZs, Natura 2000, MPAs, RAMSAR, Shipwreck, Harbour Porpoise 5. Fisheries: sea fisheries, aquaculture, licensing, quota, land management 6. Angling: salmon, eels and fish farms 	<p>Department of Rural Development (DRD) (all powers)</p> <p>DoE (strategic planning powers and Roads Service)</p> <p>DARD (Rivers Agency Powers-flood defences)</p> <p>DCAL (inland waterway powers)</p>	<p>Department for Infrastructure (DfI)</p>	<ol style="list-style-type: none"> 1. Strategic planning powers and infrastructure delivery 2. Delivery of Regional Development Strategy for Northern Ireland (2030) (it is strategic guidance to be taken account of in marine plans and is a material consideration in planning application and appeals) 3. Infrastructure powers (eg. Road/ Rail repairs due to coastal erosion)

Figure 1: Map highlighting the two Transboundary Loughs and recognised boundaries

