



Supporting Implementation of **M**aritime Spatial Planning in the **C**eltic Seas

Component 1: Supporting implementation of MSP

Sub-component C1.2.4: Case studies on approaches to MSP

Case Study 3: Planning across borders: Solway Firth Case Study

Deliverable 12: Report on approaches to cross-border cooperation, including stakeholder engagement mechanisms

Sub-component: D12.1: Initial comparison of requirements of, and differences between, primary UK legislation pertinent to marine planning



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Table of Contents

1. Introduction	7
2. Marine Planning	9
2.1 The United Nations Convention on the Law of the Sea (UNCLOS)	9
2.2 EU Requirements	10
2.3 UK Marine Plans	10
2.3.1 Relationship with the Marine Strategy Framework Directive	12
2.4 The Isle of Man	12
2.5 Republic of Ireland	13
2.6 Cross border marine planning and the Solway Firth context	13
3. The Marine and Coastal Access Act 2009 (MCAA)	15
3.1 UK	15
3.2 England	15
3.3 Northern Ireland	17
3.4 Wales	19
3.5 Scotland	20
4. Marine (Scotland) Act 2010 (MSA)	21
4.1 MSA 2010 structure for marine planning	21
5. UK Marine Policy Statement 2011	23
5.1 Scope	23
5.2 Structure	24
6. Scotland's National Marine Plan 2015	25
6.1 Overview for the Scottish National Marine Plan	25
6.2 Scottish Regional Marine Plans	26
7. Analysis of differences in primary legislation relating to marine planning	27
7.1 Policy Hierarchy	27
7.2 Supplementary information on devolved approaches to marine planning	28
7.3 Statements of Public Participation	31
7.4 England	31
7.5 Wales	33
7.6 Northern Ireland	34
7.7 Scotland	35
8. The Solway Firth	38
8.1 The future of marine planning in the Solway Firth	39
9. Other examples of transboundary ecosystems	40
9.1 Carlingford Lough and Lough Foyle	40
9.2 The Severn Estuary	41
9.3 The Dee Estuary	41
10. Conclusion	43
11. References	45

Table of Figures:

Figure 1: SIMCelt project area within the Celtic Seas (OSPAR Region III)	8
Figure 2: UK inshore and offshore regions subject to UK MPS 2011	11
Figure 3: MMO Marine Planning Areas	17
Figure 4: The Northern Ireland zone	18
Figure 5: Welsh National Marine Plan inshore and offshore region	19
Figure 6: Nautical limits around Scotland at 6, 12 and 200 nautical miles (nm)	20
Figure 7: Scottish Marine Regions	22
Figure 8: Marine planning policy flowchart	27
Figure 9: Solway Firth	38
Figure 10: Lough Foyle and Carlingford Lough	40
Figure 11: Severn & Dee Estuaries adjoining MMO marine plan areas	42
Table 1: Similarities and differences of marine planning requirements of UK Administrations	30

Acronyms

CFP: Common Fisheries Policy

CMPP: Clyde Marine Planning Partnership

DAERA: Department of Agriculture, Environment and Rural Affairs (Northern Ireland)

Defra: Department for Environment, Food and Rural Affairs

DG ENV: Directorate-General for the Environment

DG MARE: Directorate-General for Maritime Affairs and Fisheries

EMFF: European Maritime Fisheries Fund

EU: European Union

GES: Good Environmental Status

HLMOS: High Level Marine Objectives

MCAA: Marine and Coastal Access Act 2009

MCZ: Marine Conservation Zone

MEDIN: Marine Environmental and Data Information Network

MHWS: Mean High Water Springs

MLWS: Mean Low Water Springs

MMO: Marine Management Organisation

MPA: Marine Protected Area

MPS: Marine Policy Statement

MSA: Marine (Scotland) Act 2010

MSFD: Marine Strategy Framework Directive

MSP: Marine Spatial Planning Directive

Nm: Nautical miles

OSPAR: Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic

RMP: Regional Marine Plan

SAC: Special Area of Conservation

SFP: Solway Firth Partnership

SIMCelt: Supporting Implementation of Maritime Spatial Planning in the Celtic Seas

SMR: Scottish Marine Region

SNH: Scottish Natural Heritage

SNMP: Scottish National Marine Plan

SPA: Special Protection Area

SSMEI: Scottish Sustainable Marine Environment Initiative

SSSI: Site of Special Scientific Interest

UKMMAS: UK Marine Monitoring and Assessment Strategy

UNCLOS: United Nations Convention on the Law of the Sea

WFD: Water Framework Directive

WNMP: Welsh National Marine Plan

1. Introduction

The UK marine area covers 867,400 km², which is three and a half times the terrestrial extent of the UK.¹ Marine planning aims to achieve the [UK Marine Vision for the Environment](#) and balance the needs for human related marine activities whilst also conserving the environment and natural resources for the use and wellbeing of future generations. In the UK, as elsewhere in Europe, there has been a growing awareness in recent years of the limitations of the sector-by-sector approach to the use of marine resources. A new approach, marine planning (also known as Maritime Spatial Planning), is intended to overcome this situation. Due to the nature of devolved politics in the UK, marine planning adopted in each of the four administrations within the UK² varies from its neighbours. A single water body can, therefore, be subject to two or more pieces of marine planning legislation with different requirements.

The SIMCelt Project (Supporting Implementation of Maritime Spatial Planning in the Celtic Seas) is an EU-funded initiative looking at cross-border and transboundary issues connected to marine planning within a European context. The project is collaboration between Partner organisations in the UK, Ireland and France for analysing potential issues arising from the overlapping jurisdictions and marine planning policies of countries bordering the Celtic Seas (Figure 1). This report on particular marine legislation relevant for marine planning in the Solway Firth is one of a series of documents drafted as part of a case study considering Planning Across Borders as part of the wider SIMCelt project. It is complemented by reports considering *'References to marine and coastal planning within Local Development Plans in the Solway Firth Area'*, *'Sectoral Interactions in the Solway Firth'*, *'Particular cross border issues for the Solway Firth'* and *'Options for the Solway Marine Region in terms of marine planning'*.

In order to test the issues associated with transboundary marine planning within the UK, the Solway Firth will be examined as a SIMCelt case study due to its unique status as a single marine ecosystem straddling the Scottish and English national boundaries. The Solway Firth has a third boundary with Northern Ireland at 12 nautical miles (nm) and another with the waters surrounding the Isle of Man. Each area has different legislation setting the requirements, parameters and objectives of marine planning within its administrative boundaries. Each set of national objectives must not adversely affect the ability of another administration to pursue and achieve their own. As a result, there are multiple challenges in ensuring the achievement of different national objectives for sustainable economic development as well as those from overarching UK policy and EU Directives.

This report considers the situation relating to marine planning in the Solway Firth during the SIMCelt project. It does not address what may happen beyond the lifetime of this initiative.

¹ Russell, 2010, Austin et al. 2011

² England, Scotland, Northern Ireland and Wales

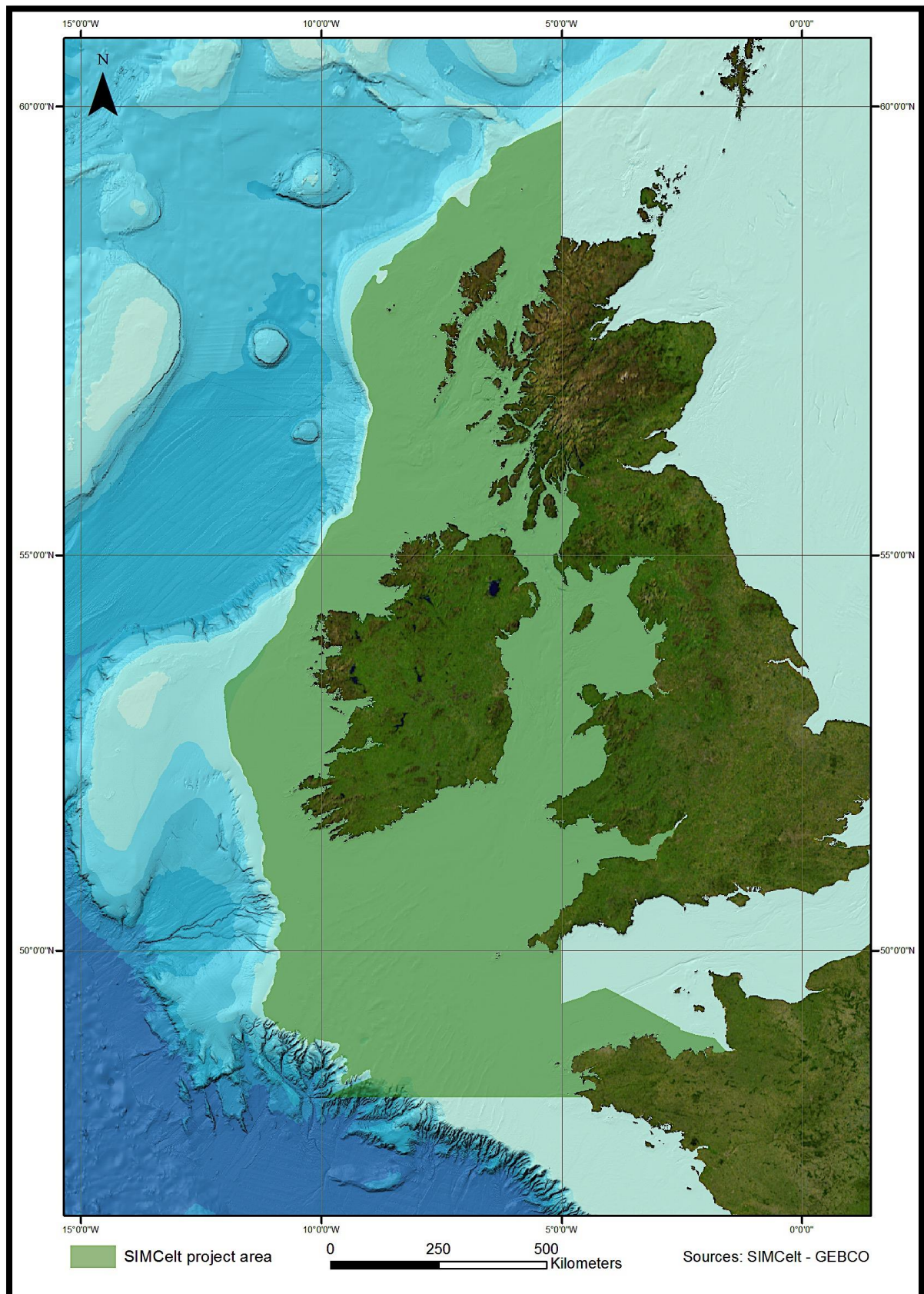


Figure 1: SIMCelt project area within the Celtic Seas (OSPAR Region III)³

³ SHOM (2017)

2. Marine Planning

Marine spatial planning should be anticipatory in nature and is a continually evolving process that considers and ultimately decides where and when most human activities can take place in the marine area. Marine planning on a sector-by-sector basis rarely addresses resulting effects on the marine environment or other human activities;⁴ as a result, a different approach has evolved in recent years. Marine planning interacts with other planning and constraining processes and rises above the sector-by-sector approach that fails to acknowledge the cumulative impacts of many uses made of the marine environment by different maritime actors. However, matters relating to domestic politics, which may not reflect the ecosystems that are the subject of planning policies, can complicate this.

2.1 The United Nations Convention on the Law of the Sea (UNCLOS)

UNCLOS has several provisions that the UK as a signatory must consider during the marine planning process:⁵

- Internal waters landward from Mean Low Water Mark
- Territorial waters 0-12 nm
- Archipelagic waters
- Contiguous zone 12-24 nm permitting coastal state enforcement of customs, taxations, immigration and pollution
- Exclusive Economic Zone (EEZ) 12-200 nm, permitting sole exploitation rights of natural resources. Islands that could not support human/economic life have no EEZ or continental shelf
- Continental shelf (0-200 nm or the natural prolongation of the land territory to the continental margin - whichever is greater) and exclusive rights to living resources attached to the continental shelf but not to living resources inhabiting the water column beyond the EEZ
- Straits used for international navigation
- Traditional freedoms of the High Seas
- Enclosed/semi-enclosed seas/basins – bordering states expected to cooperate in managing living resources, environmental and research policies and activities
- Landlocked states – rights of access to/from the sea, freedom of transit through transit states
- International Seabed Area managed by the International Seabed Authority
- States bound to prevent and control marine pollution
- Marine scientific research subject to consent of the coastal state
- Development and transfer of marine technology

⁴ Ehler and Douvère, 2009

⁵ UNCLOS 1982

These elements must be considered prior to the consenting process for any incoming projects or activities taking place in the marine area as they could affect the proposal(s). In particular, the provisions creating the EEZ and territorial waters are crucial for marine plans to limit their geographic extent and jurisdiction. UNCLOS further validates the need for cross border marine planning in the Celtic Seas as it is a semi-enclosed body of water with multiple bordering states, (UK, France, Ireland and Isle of Man).

2.2 EU Requirements

The timeline of marine planning development within the EU is as follows:

- [Integrated Maritime Policy 2007](#) – recognised that working in policy silos and along sectoral lines was not delivering the overarching goal of a sustainable blue economy so set in place the policies to achieve this, for example relating to enabling ‘Blue Growth’, marine data & knowledge exchange, Maritime Spatial Planning, integrated maritime surveillance and Sea Basin Strategies for the EU’s Regional Seas: the Baltic, Black, Mediterranean, North & Atlantic
- [Marine Strategy Framework Directive 2008](#) – the MSFD is the environmental pillar of the Integrated Maritime Policy: it sets the requirement for ‘Good Environmental Status’ to be met by all EU Member States by 2020
- [Maritime Spatial Planning Directive 2014](#) – Maritime Spatial Planning/marine planning is the recommended approach put in place to overcome piecemeal sectoral development of marine resources and areas; it offers a joined-up approach to consider the spatial location marine activities, the effects they might have on each other and the overall environment, and is intended to help Member States deliver the requirements of the MSFD.

Marine plans should address the full range of activities present and planned in the sea areas for which they are developed, including inshore and offshore regions. Plans must consider the historic environment as well as various national and international provisions, such as the [EU Marine Strategy Framework Directive](#), [Water Framework Directive](#), [Common Fisheries Policy](#), [Habitats](#) and [Wild Birds Directive](#). The [EU Framework Directive for Maritime Spatial Planning \(2014/89/EU; MSP Directive\)](#) requires all EU Member States to have marine plans completed for their areas by March 2021 and be subsequently reviewed every ten years.

2.3 UK Marine Plans

Marine planning in the UK is required by overarching legislation, the [Marine & Coastal Access Act 2009](#) and the framework provided by the [UK Marine Policy Statement 2011](#) but is also given effect by primary legislation within each of the Devolved Administrations in Scotland, Wales and Northern Ireland (Figure 2). In some cross border areas, this leads to single ecosystems being covered by multiple pieces of legislation with potentially different requirements for administration and stakeholders involved. The

Solway Firth is one such area and the SIMCelt project has enabled an examination of what this situation means in practice. Its lessons may also be applicable to other cross-border or transboundary areas engaged in marine planning elsewhere. This report considers the UK legislation that sets the context for marine planning and provides the framework for its implementation:

- [The Marine and Coastal Access Act 2009](#), which sets the basis for marine planning in UK offshore waters and English and Welsh territorial waters
- The [Marine \(Scotland\) Act 2010](#), which is the legislative and management framework for Scottish territorial waters
- The [UK Marine Policy Statement 2011](#), which provides the UK framework for preparing marine plans and taking decision in the marine environment
- [The Marine Act \(Northern Ireland\) 2013](#), which is the legislative and management framework for Northern Irish inshore region.

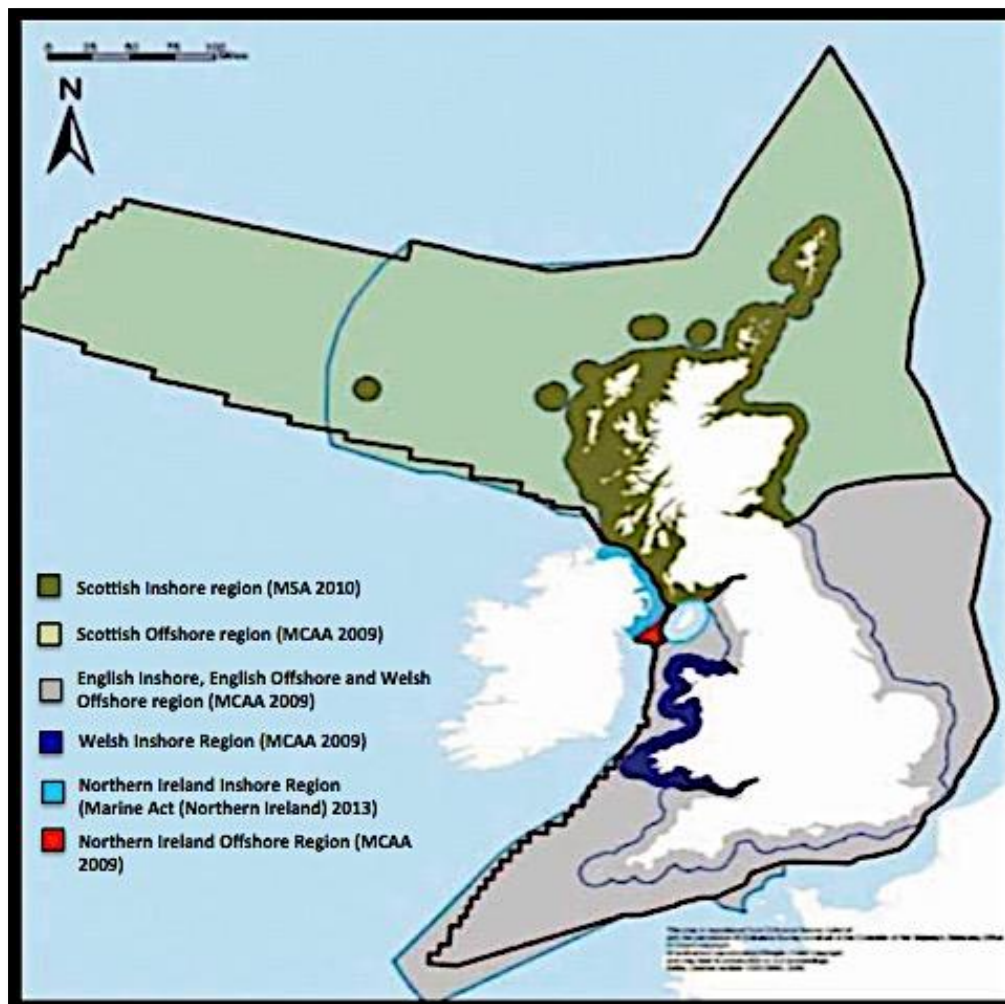


Figure 2: UK inshore and offshore regions subject to UK MPS 2011⁶

⁶ DAERA (2012)

The aforementioned EU policies unanimously mention that the full range of political, social, historic, environmental, economic and physical factors must be considered in the creation and implementation of marine plans. There is a significant overlap in the legislation regarding the definition, purpose, function, and implementation of marine plans. Several principles (precautionary, transparency, ecosystem integrity and integration) are reflected throughout all of the documents. Furthermore, there is commonality on the use and purpose of marine licenses and the activities that they may encompass for the benefit of the marine environment. The responsibility of enforcement is clarified and greater enforcement powers are given for conservation.

The UK and Scottish legislation and policies were in place before the European Commission negotiated a Maritime Spatial Planning Directive with the relevant EU Member States.

The UK Marine and Coastal Access Act, rather than separate Welsh primary legislation underpins marine planning in Wales but [the Well-Being of Future Generations \(Wales\) Act 2015](#) requires primary bodies listed in the Act to place sustainable development at the core of all activities, including marine planning. This will have an impact on how marine planning will be developed and carried out in Wales.

This report will analyse the relevant documents in chronological order to highlight the key points pertinent to marine planning across the UK so that comparisons in policy can be made.

2.3.1 Marine planning and relationship with Marine Strategy Framework Directive

By 2012, the UK defined what “Good Environmental Status” (GES) meant relative to the EU Marine Strategy Framework Directive (MSFD) requirements. Implementation of the MSFD within the UK requires a UK Marine Strategy containing an assessment of the current state of UK seas and a description of GES for UK waters, with associated targets and indicators (Part 1), a description of the UK’s MSFD monitoring systems (Part 2), and a programme of measures to achieve these targets that was to be fully implemented and active by 2016 (Part 3). Major emphasis is also placed on international cooperation, which highlights the significance of a collaborative and cohesive approach to marine planning in the transboundary Solway Firth. Marine planning is a tool that can help with the delivery of the requirements of the Marine Strategy Framework Directive.

2.4 The Isle of Man

Situated west of the Solway Firth and east of Northern Ireland (Figure 1), the Isle of Man is not an EU Member State and so does not have to implement EU Directives. However, the Isle of Man should still be considered under this SIMCelt case study as it borders Irish, Northern Irish, Scottish and English territorial

waters. The Isle of Man is a signatory to the Convention on Biological Diversity, the Ramsar Convention, the Bonn Migratory Species Agreement and a Contracting Party, via the UK, to the OSPAR Convention.

The entirety of the Isle of Man marine area is zoned and a zoning approach for marine planning is in consultation. The Isle of Man Parliament, the Tynwald, approved the Isle of Man Biodiversity Strategy and in 2016 UNESCO Biosphere Isle of Man was created. 10.4% of Manx waters are designated Marine Protected Areas (50% of the inshore 0-3nm zone), primarily for the conservation of scallop stocks, in achievement of the Government's 2020 conservation targets. The Isle of Man Department of Infrastructure is developing new primary marine legislation to streamline the consenting and licensing process for sustainable marine development in Manx waters. The Isle of Man Marine Plan will be the overarching framework to enable management of the Isle of Man territorial sea through a consenting regime, a Manx Marine Environmental Assessment and marine policies. The principles of the Marine Plan are to enable sustainable economic development through an ecosystems approach and joined-up development inclusive of stakeholders in an Irish Sea context with transnational cooperation. The Manx Government published its [Statement of Public Participation](#) in 2012.

2.5 Republic of Ireland

The Department of Housing, Planning, and Local Government is the Competent Authority in Ireland for implementing the MSFD and MSP and will have a marine plan in place by 2021, with the Irish Marine Institute providing scientific and technical advice. In 2012, the high-level policy document '[Harnessing Our Ocean Wealth –An Integrated Marine Plan for Ireland](#)' was published. In 2013, the Competent Authority published '[An Initial Assessment, GES, Targets and Indicators](#)', which set environmental targets and indicators for achieving GES. Currently, work on a National Planning Framework is being finalised. This will become a central planning policy and will promote coordination between marine and terrestrial planning over 20 years. The Republic of Ireland has direct marine boundaries with Scotland, England, Wales and Northern Ireland. The cross-border estuaries are managed by the Loughs Agency for commercial and recreational purposes relating to marine, fisheries and aquaculture matters only. It should be noted however; that there are no legally agreed boundaries between the Republic of Ireland and Northern Ireland in the cross border bays of Loughs Foyle and Carlingford. The Irish Government has to be notified by a neighbouring administration of their intention to undertake marine planning.

2.6 Cross border marine planning and the Solway Firth context

The EU MSP Directive allows Member States to extend marine planning to inshore areas through their own legislation. In the UK, marine planning starts at Mean High Water Springs (MHWS) and terrestrial planning extends to Mean Low Water Springs (MLWS), creating an overlap between two planning systems in the intertidal zone and across the land/sea interface. Some estuaries may, therefore, be

subject to marine planning. Additionally, estuaries can mark administrative boundaries from municipalities to national borders. Therefore, understanding the requirements of planning on either/all sides of estuaries is worthy of consideration and the Solway Firth has been selected as a case study under SIMCelt to identify and test some real-life issues within a real-time marine planning cycle.

The northern part of the Solway Firth is covered by [Scotland's National Marine Plan 2015](#). At a future, as yet unspecified date, a Regional Marine Plan for the area will be prepared under the Scottish marine planning regime. The inshore and offshore areas of the southern half of the Solway will be subject to marine plans prepared by the Marine Management Organisation during the period 2016 – 2021. Pre-dating both is the [Joint Ministerial Marine Planning Statement 2009](#) between the UK and Scottish administrations, which states that each administration will prepare marine plans using the most appropriate method for its marine planning regions, and that they will collaborate to enable joined-up marine planning across borders although legally, there will be two documents. This agreement acknowledges the role of the [Solway Firth Partnership](#), a non-statutory cross-border organisation that works to support a vibrant and sustainable local economy while respecting, protecting and celebrating the distinctive character, heritage and natural features of the local marine and coastal area.

Within this legislative and management framework, this report for the SIMCelt project considers the approaches taken for marine planning affecting the Solway Firth. As a single ecosystem subject to two distinct marine planning jurisdictions, there are transboundary and cross-border issues that need to be considered if planning on both sides of the Solway Firth is to satisfy the procedures and requirements set out by the different pieces of legislation. This report is intended to assist the process of planning across borders by identifying the distinct requirements of each piece of legislation and analysing where synergies exist between the different approaches. It should result in outputs that can be considered by other transboundary estuaries within the SIMCelt project area and elsewhere in Europe.

3. The Marine and Coastal Access Act 2009 (MCAA)

3.1 The United Kingdom

The [Marine and Coastal Access Act 2009](#) (MCAA) is the primary legislation that underpins marine planning in England, Wales, Northern Ireland, and from 12-200 nm around Scotland.

It provides the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas by putting in place a new system for improved management and protection of the UK's marine and coastal environment. The Act sets the parameters that must be adhered to by all UK Marine Plans. For example, marine plans extend inland to the Mean High Water Springs (MHWS) level, overlapping with terrestrial planning boundaries to ensure full coverage of both inshore and offshore areas. Marine plan authorities must notify local planning authorities of the intent to create a marine plan, after which they may be amended or withdrawn. The Act comprises key elements that relate to the whole of the UK as well as some that are specific to English territorial waters.

The UK-wide aspects are:

- The creation of a strategic marine planning system, including the production of a Marine Policy Statement that sets out both short and long-term objectives for the sustainable use of the marine environment by both the UK Government and the devolved Administrations.
- The development of a streamlined marine licensing system to allow a more transparent and consistent approach to the issuing of licences for operations and activities in the marine environment
- Marine nature conservation to be included within marine planning in order to halt the deterioration of the UK's marine biodiversity, promote recovery where possible and provide the legal mechanism for the delivery of current European and international marine conservation commitments
- The creation of the Marine Management Organisation to act as the competent marine planning authority on behalf of the UK Government in English territorial waters and UK offshore waters (for matters that are not devolved).⁷

3.2 England

The Marine and Coastal Access Act 2009 underpins marine planning in English waters and is divided into 11 parts:

Part 1: The Marine Management Organisation, its establishment, transfer of functions, and its exercise of functions and general provisions

Part 2: Exclusive Economic Zone, UK Marine Area and Welsh Zone

⁷ Scotland, Wales and Northern Ireland have their own marine planning authorities for their territorial waters as detailed elsewhere in this report.

Part 3: Marine planning, the UK MPS, delegation, implementation and effect of marine plans. Monitoring and reporting and general provisions

Part 4: Marine licensing including exemptions and special cases, enforcement and delegation

Part 5: Nature Conservation and MCZ designation, byelaws for protection (England), Orders for protection (Wales), details for hearings, offences and penalties

Part 6: Management of inshore fisheries, establishment of the IFCA, abolition of Local Fisheries Committees, description of the powers of Welsh Ministers in relation to fisheries in Wales

Part 7: Fisheries, the Sea Fish (Conservation) Act 1967, the Sea Fisheries (Shellfish) Act 1967, migratory and freshwater fish and obsolete fisheries enactments

Part 8: Enforcement including officers, common, licensing and fisheries enforcement powers, common enforcement provisions and supplementary guidance

Part 9: Coastal Access, implementation of the coastal access duty and liabilities, general and Powers of National Assembly for Wales

Part 10: Miscellaneous – Natural England, Countryside Council for Wales, works detrimental to navigation and the Harbours Act 1964

Part 11: Supplementary provisions

The Act allows for the formation of the Marine Management Organisation (MMO), which is a non-Departmental Public Body acting on behalf of the UK Government (Defra) as a marine planner and legislating public authority body for the English marine environment. The Act details the [delegation and function](#) of the MMO in relation to the creation of marine plans for English waters and also sets in place new arrangements for fisheries management, marine enforcement measures and coastal access. The MMO divided England's marine planning area into eleven inshore and offshore areas (Figure 3), allowing for a phased rollout of marine planning around the country. Where there is no marine plan yet in place, the UK Marine Policy Statement 2011 sets the direction for decisions that affect the marine areas for all public bodies. The Marine and Coastal Access Act also provides for the creation of a new type of protected area for the English seas and coast, Marine Conservation Zones (MCZs), which are of national importance.

The East Inshore and Offshore Plans, adopted in 2014, are active and will be assessed by the MMO in 2017 to determine if a review and amendments are required. The South Plans are to be adopted in 2017, whilst the four remaining areas (North West, North East, South West, and South East) are being simultaneously developed in the period 2016-21.

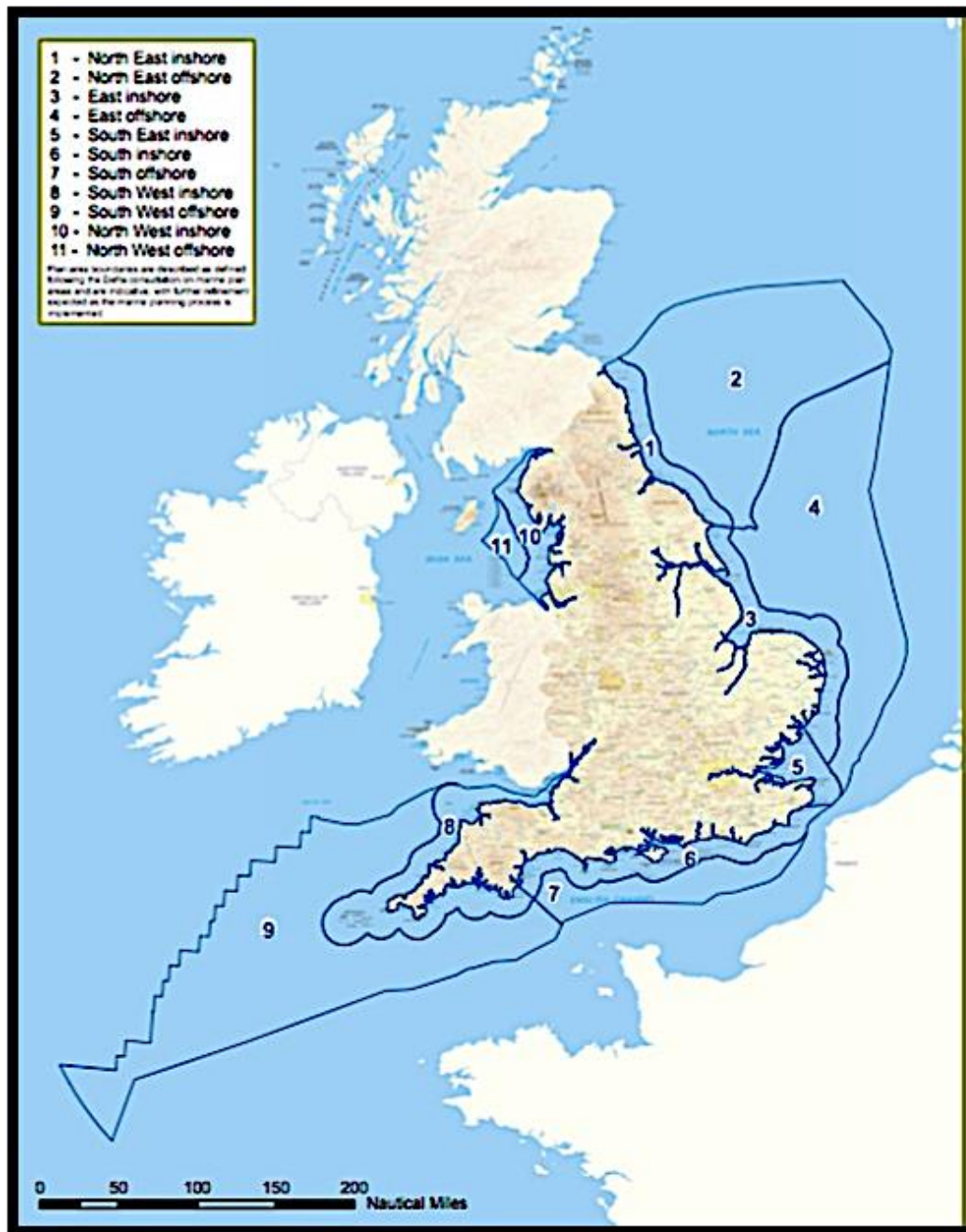


Figure 3: Eleven English marine plan areas established by the Marine Management Organisation

3.3 Northern Ireland

The Marine & Coastal Access Act 2009 and the [Marine Act \(Northern Ireland\) 2013](#) appointed Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) as Northern Ireland's Marine Plan Authority. DAERA is responsible for sea fisheries, aquaculture, fish health, inland fisheries, marine historic environment, marine licensing, marine planning, monitoring (including Water Framework Directive and Marine Strategy Framework Directive) as well as environmental protection and nature conservation.

The Marine Plan for Northern Ireland is made up of two plans, one for the inshore region under the Marine Act (Northern Ireland) 2013 and one for the offshore region under the MCAA 2009. The Marine Plan will combine the plans for both the inshore and offshore regions into one document and will be collectively known as the Marine Plan for Northern Ireland. The draft Plan is expected to go to public consultation in early 2018. The Marine Act (Northern Ireland) 2013 Act provides for marine plans, licensing and protection in relation to the Northern Ireland inshore region (Figure 4).

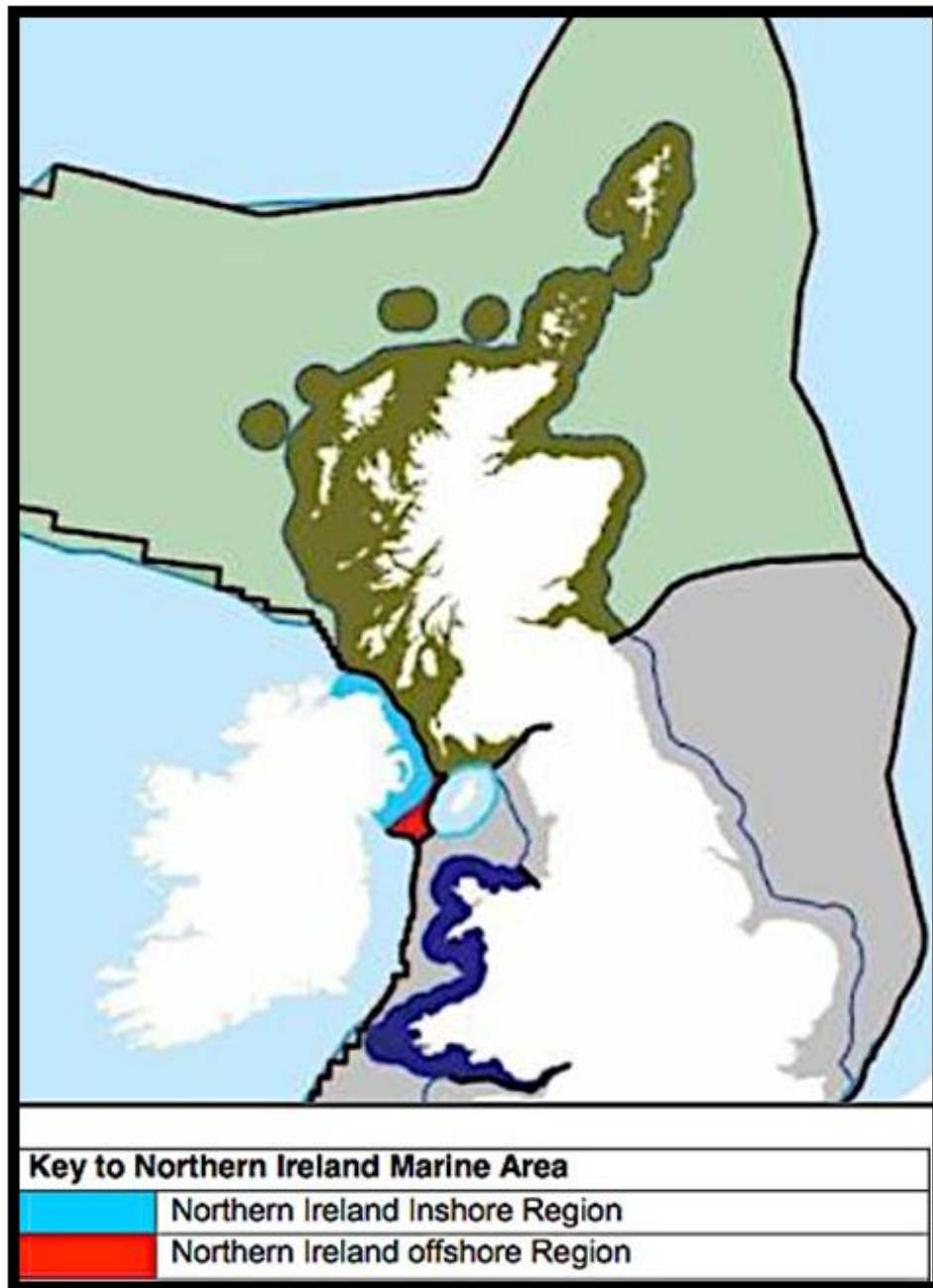


Figure 4: The Northern Ireland zone comprises the sea adjacent to Northern Ireland and an area of the Irish Sea west and south of the Isle of Man Sea⁸

⁸ Marine Act (Northern Ireland) 2013

The [Marine Act \(Northern Ireland\) 2013](#) is divided into five Parts:

Part 1: Preliminary text, including sustainable development and coordination of functions in the Northern Ireland inshore region

Part 2: Marine plans, decisions affected by marine plans, monitoring, reporting and interpreting plans

Part 3: Marine protection through Marine Conservation Zones, duties, byelaws, offences, enforcement and penalties

Part 4: Marine licensing: generating stations

Part 5: Supplementary including regulations, interpretation and commencement etc.

The UK Government is responsible for much of the decision making in offshore waters beyond 12 nm around Northern Ireland. UK Government Departments also exercise responsibilities in Northern Ireland's marine area including defence, oil and gas exploration and production, shipping, licensing and permitting regimes and European and international relations. In addition, the Crown Estate has a role as the seabed and subsurface manager and leasing authority in UK Territorial Waters off the Northern Ireland coast and over half the intertidal area. The [Northern Ireland Regional Development Strategy 2035](#) includes considerations for coastal waters and safeguards against distinctive habitat loss. The Strategic Planning Policy 2014 replaces the existing suite of planning policy documents and highlights terrestrial planning connections to the UK MPS 2011.

3.4 Wales

The MCAA 2009 amendment to the [Government of Wales Act 2006](#) created the Welsh Zone and established Welsh Ministers as the responsible Welsh Marine Planning Authority for inshore and offshore waters, although the Secretary of State must agree all offshore plans and any inshore plans that cover reserved matters such as telecommunications or energy. Following the MCAA 2009 and the MPS 2011 (Section 4.2), the Welsh National Marine Plan (WNMP) is in the process of being developed and is being guided by the Well-being of Future Generations (Wales) Act 2015 which sets the context for sustainable development in Wales (Figure 5), along with other domestic legislation such as the Environment Act 2016 and the Wales Act 2017, both of which address matters relating to marine planning. The WNMP must be compatible with the [Wales Spatial Plan \(2008\)](#) and the [National Development Framework for Wales \(2015\)](#). A draft of the WNMP was published in December 2017 and for a period of formal consultation.

The WNMP intends that by 2036, Welsh seas are clean, healthy, safe, productive and biologically diverse, and that this will be achieved through several key visions:

- An ecosystem based approach will be used
- Wellbeing will be improved through access to and enjoyment of the marine environment

- Blue growth will create more jobs and wealth; and, will help coastal communities become more resilient, prosperous and equitable with a vibrant culture
- A strong contribution will be made to energy security and climate change emissions targets through responsible deployment of low carbon technologies.

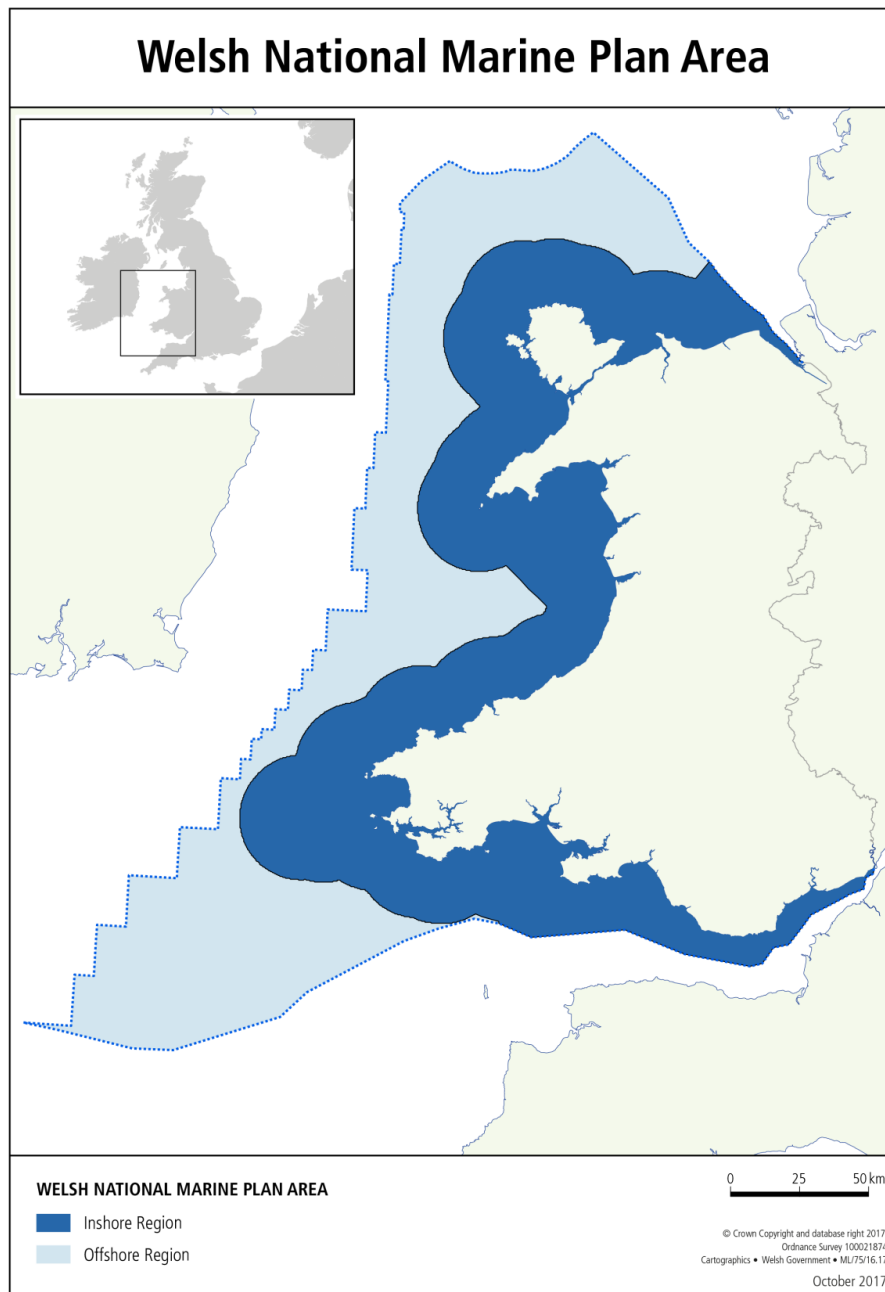


Figure 5: Welsh National Marine Plan inshore and offshore regions⁹

⁹ Welsh Government (2017)

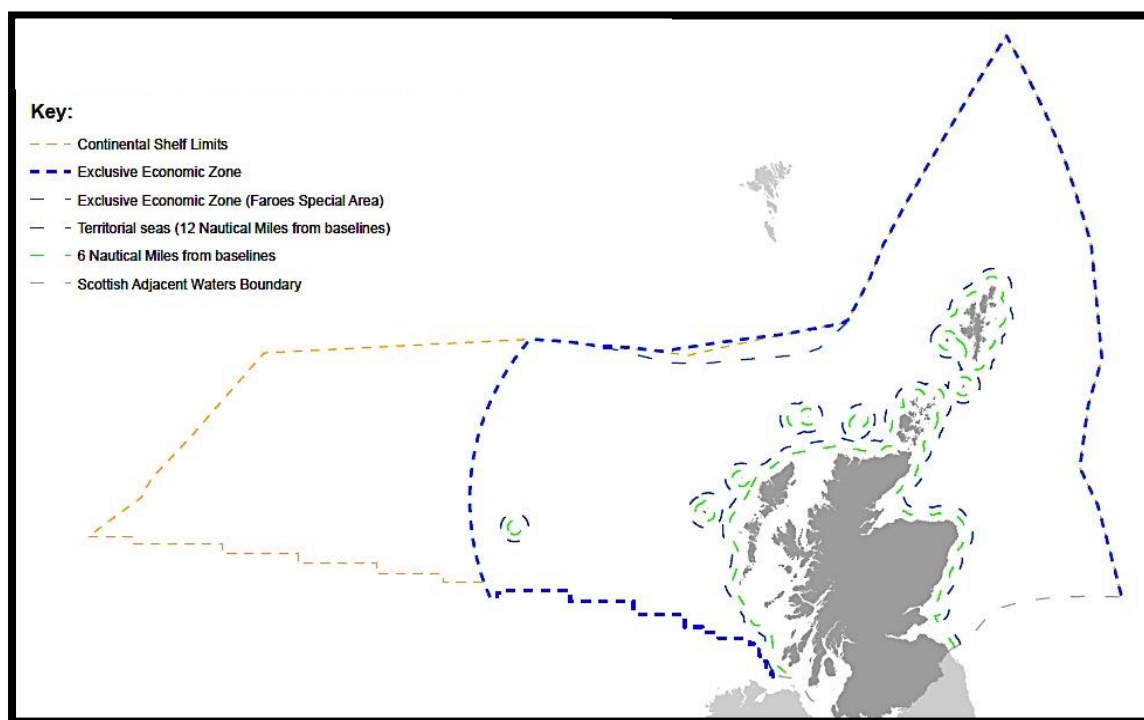
4. Marine (Scotland) Act 2010

Scottish territorial waters were devolved to the Scottish Parliament under the Scotland Act 2000. The UK Parliament legislates for Scotland's offshore waters although certain matters have been executive devolved to Scottish Ministers. Marine Planning in Scotland's inshore waters is governed by the Marine (Scotland) Act 2010 and in its offshore waters by the UK MCAA 2009 (Figure 6).

The [Marine \(Scotland\) Act 2010](#) (MSA 2010) legislates for all marine-related activities out to 12 nm except for those activities reserved by the UK Government (shipping, telecommunications, oil and gas).¹⁰ It provides the policy framework for marine planning, licensing and other aspects of marine resource management in Scotland and, together with the MCAA 2009, sets the context for the Scottish National Marine Plan.

The Scottish and UK Governments agreed that a marine plan for the Scottish inshore and offshore areas would be published in one document, referred to as the Scottish National Marine Plan. It would be subject to sign-off on reserved matters by the UK Secretary of State for the Environment. The first Scottish National Marine Plan was published in March 2015.

Figure 6: Nautical limits around Scotland at 6, 12 and 200 nm¹¹



¹⁰ Scottish Government (2009)

¹¹ Marine Scotland (2014)

The Marine (Scotland) Act created Marine Scotland, which is the Directorate of the Scottish Government with responsibility for marine planning, marine environmental protection, licensing, sea fisheries, salmon and recreational fisheries, aquaculture and compliance. Marine Scotland is the marine planning authority for Scotland.

The Act is divided into nine parts:

Part 1: Defines the Scottish marine area and the 'Sea'

Part 2: General duties regarding sustainable development, mitigation of and adaptation to climate change

Part 3: Marine planning, including the requirement for national marine plans and regional marine plans, conformity of plans to existing documents as well as amendment and withdrawal processes

Part 4: Marine licensing including licensable activities and requirements for licenses, the application process, exemptions, enforcement, offences, appeals, civil sanctions and delegations

Part 5: Marine protection and enhancement including creating Marine Protected Areas, marine conservation orders, general duties, management schemes and reports to Parliament

Part 6: Conservation of seals, licensing, protection and authorisations to enter land

Part 7: Common enforcement powers relating to licensing and marine protection

Part 8: Sea fisheries including extensions to the Sea Fish (Conservation) Act 1967

Part 9: General provisions.

4.1 Marine (Scotland) Act 2010 structure for marine planning

The MSA 2010 sets out the legal framework in which to implement and make use of a NMP and, in due course, Regional Marine Plans in Scotland. Within the SNMP, objectives are required to address:

- Economic, social and marine environment requirements and issues
- Mitigation and adaptation to climate change
- An assessment of present conditions and significant pressures to the area.

Under the MSA 2010, periodical reporting on the effectiveness and progress of marine plans must take place at successive intervals of no more than five years to evaluate performance-monitoring data and key indicators. The first review of the implementation of the Scottish National Marine Plan was completed by Marine Scotland in March 2018.

Provision is made for Regional Marine Plans to complement the SNMP 2015 and to allow for greater consideration of particularly relevant issues at the sub-national level. The MSA 2010 gives Scottish Ministers powers to delegate the responsibility for regional marine planning to Marine Planning Partnerships, which will be set up to develop Regional Marine Plans. Regional marine boundaries have

been created by secondary legislation (the [Scottish Marine Regions Order, 2015](#)), which was created by exercising powers conferred by Section 5(5) of the MSA. The marine regions are: Solway, Clyde, Argyll, West Highlands, Outer Hebrides, North Coast, Orkney Isles, Shetland Isles, Moray Coast, North East and the Forth and Tay (Figure 7). Clyde and Shetland have been established as pilot Marine Planning Partnerships and given direction from Scottish Ministers; in 2017, the Orkney Islands were identified as the third area chosen by Scottish Ministers to develop a Regional Marine Plan.

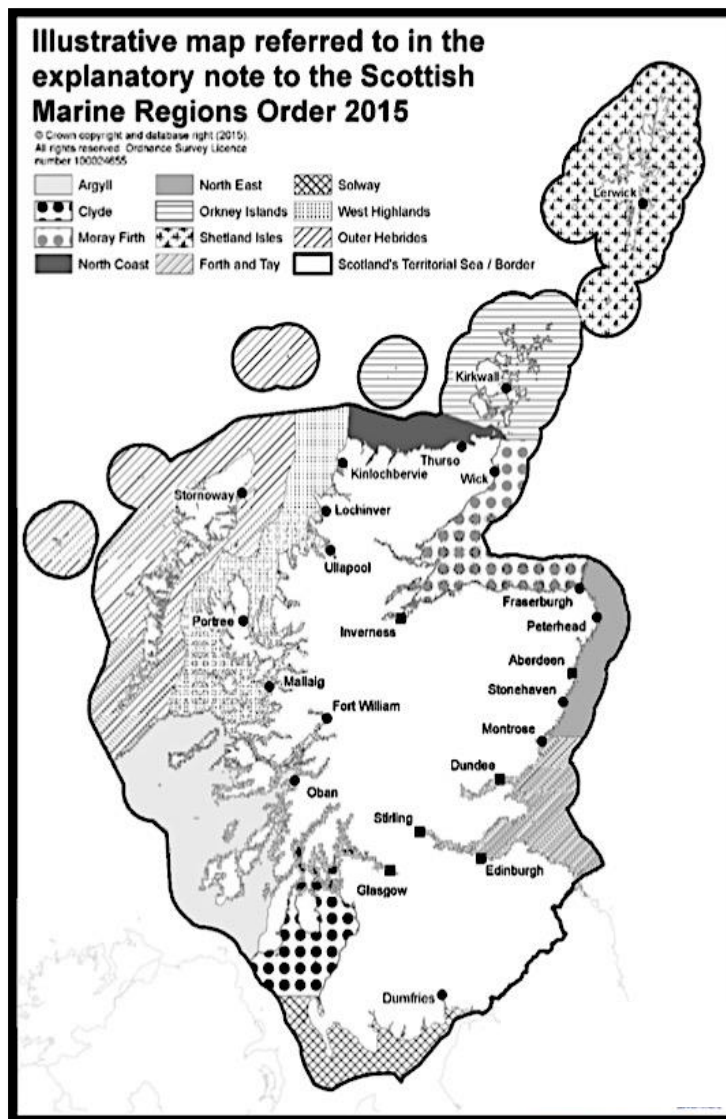


Figure 7: Scottish marine regions as described in the Scottish Marine Regions Order 2015¹²

¹² Scottish Government (2015)

5. UK Marine Policy Statement 2011

The [UK Marine Policy Statement 2011](#) (MPS 2011) provides the framework for preparing Marine Plans and taking decisions relating to the marine environment in UK waters. It is to be used by all public authorities (unless indicated otherwise) for implementing marine planning across the UK. It was not intended to abolish existing regulatory regimes and legislation, including the requirements of domestic and EU legislation, but rather provide a consistent foundation for their continued operation and enhancement. The MPS facilitates and supports the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the High Level Marine Objectives (HLMOs) and thereby:

- Promote sustainable economic development
- Enable the UK's move towards a low-carbon economy in order to mitigate the causes of climate change and ocean acidification and adapt to their effects
- Ensure a sustainable marine environment, which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets
- Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.

The HLMOs are not specific to any particular government department, specific marine uses or marine conservation. The HLMOs for UK seas can be summarised as:

- Creating a strong, healthy and just society
- Remaining within environmental limits
- Promoting good governance
- Responsible use of sound science.

5.1 Scope

The MCAA 2009 requires all public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area to do so in accordance with the MPS 2011 unless relevant considerations indicate otherwise. Once adopted, Marine Plans will have the same effect on authorisation or enforcement decisions in the UK marine area as the MPS, including the requirements and conditions attached to authorisations and the enforcement action that will be taken to ensure compliance. The MPS 2011 will be considered for amendment when the Secretary of State and Devolved Authorities deem that a review is appropriate. The MPS 2011 provides certainty for planning authorities and supports the use of the [UK Marine Monitoring and Assessment Strategy](#) (UKMMAS) to collaborate and assemble evidence regarding progression towards the High Level Marine Objectives (HLMOs).¹³ The

¹³ DEFRA (2009)

UKMMAS was formed in 2005, with over 40 members, to begin the first integrated assessment of UK seas. The community provides monitoring for the implementation of the MSFD by collaborating with the [Marine Environment Data and Information Network](#), the UK Marine and Coastal Resource Atlas and the MERMAN database.

5.2 Structure

Chapter 1 addresses the role of the Marine Policy Statement within the context of wider planning regimes and states the commitment of the UK Administrations to the coordination of marine planning across administrative boundaries, in particular to developing joint plans for the Solway Firth, Severn and Dee estuaries. Coordination between countries sharing the same regional seas was recognised as being needed, particularly through data sharing and consultation, facilitated under the UKMMAS and its associated [committees](#). Section 1.3 describes that marine plans will coincide and interact with existing terrestrial plans; meaning consistency and evidence sharing are essential. For example, large-scale port developments or offshore energy installations, with both land and sea components, must consider terrestrial policy. Nationally significant infrastructure projects in England and Wales will also need to be considered under the [Planning Act 2008](#)

Chapter 2 outlines the high-level approach to marine planning and general principles associated with it. It describes the vision for high level marine planning to create a framework for detailed policy and spatial guidance on use of the area to achieve the UK vision for the marine environment. The framework also sets out the environmental, social and economic considerations that need to be taken into account in marine planning.

Chapter 3 sets out policy objectives for key activities in the marine area, including that Marine Plans must consider the network of MPAs, defence and national security, energy and infrastructure development, ports and shipping, marine aggregates, dredging and disposal, fisheries, aquaculture, surface water and waste water management, tourism and recreation.

6. Scotland's National Marine Plan 2015

[Scotland's National Marine Plan 2015](#) (SNMP 2015) covers Scottish inshore waters out to 12 nm and offshore waters (12-200 nm) in a single document. Evidence to support the policies within the Plan comes from [Scotland's Marine Atlas \(2011\)](#) and it is compatible with the requirements of the EU Directive on Maritime Spatial Planning. The SNMP 2015 is required to be compatible with the MPS 2011 and any other existing marine plans that may interact with it, such as the English inshore and offshore marine plans for the North West and North East, the Northern Irish Marine Plan and Isle of Man marine planning provisions.

6.1 Overview for the Scottish National Marine Plan

The Marine (Scotland) Act 2010 requires that marine plans set economic, social and marine ecosystem objectives and objectives relating to the mitigation of, and adaptation to, climate change. Marine plans must also state policies for, and in connection with, the sustainable development of area to which the Plan applies. The SNMP 2015 adopts the Descriptors of Good Environmental Status, set out in the Marine Strategy Framework Directive, and the UK High Level Marine Objectives (HMLOs) as its Strategic Objectives, maintaining a vision consistent with the rest of the UK.

The presumption in favour of sustainable development and use is presented as the overarching general planning principle in the SNMP. The SNMP sets out General Planning Policies, which are considered necessary to achieve sustainable development and use. Sectoral Policies have been set out underneath these principles and have been outlined in anticipation for the development of the Regional Marine Plans. The Sectoral Policies address issues for marine planning not covered in the General Policies and outline how marine activities and industries in Scotland are expected to develop. The key planning issues considered for each sector are:

- Supporting economically productive activities
- Interactions with other users
- Living within environmental limits
- Climate change.

Sectoral Policies within the Scottish National Marine Plan that are relevant to the Solway Firth marine planning area include those relating to: Sea Fisheries, Aquaculture, Wild Salmon and diadromous Fish, Offshore Wind and Marine Renewable Energy, Recreation and Tourism, Shipping, Ports, Harbours and Ferries, Submarine Cables and Defence.

6.2 Scottish Regional Marine Plans

Marine planning in Scotland is designed to operate at the international, national and regional levels. Marine Planning Partnerships will develop Regional Marine Plans, covering areas out to 12 nm, which will add local detail to the more strategic policies outlined in the National Marine Plan.

Regional Marine Plans should consider local strategic objectives for both marine and terrestrial resources and Regional Locational Guidance regarding an area's challenges and opportunities. They should address any arising issues by:

- Assessing the condition of the region against a range of environmental indicators
- Summarising the significant pressures and impact of human activity
- Keeping under review the physical, environmental, social, cultural and economic characteristics of the region; the purposes for which it is used; its communication, energy and transport systems; and the living resources which it supports
- Setting economic, social, marine ecosystem and climate change objectives
- Stating the contribution of MPAs and other designated areas to the protection and enhancement of the region
- Stating policies for sustainable development of the region
- Developing a Statement of Public Participation and carrying out consultation.

Regional Marine Plans are, therefore, expected to be more detailed than the National Marine Plan. Research should be focussed on understanding the current limits of local ecosystems as part of assessing the environmental condition of the region and Statements of Public Participation will be drafted to set out how public engagement and stakeholder consultations on proposals will be undertaken. Regional policies must explain how future climate change adaptation has been taken into account.

7. Analysis of differences in primary legislation relating to marine planning

7.1 Policy Hierarchy

As a Member State, UK marine planning must align with overarching EU Directives, such as the Marine Strategy Framework Directive, Water Framework Directive, Habitats Directive, Common Fisheries Policy, Birds and Habitats Directives and MSP Directive, which cover UK inshore and offshore waters, where appropriate. The UN Convention on the Law of the Sea (UNCLOS) does not explicitly reference MSP but it does set the rights and obligations of contracting parties in different maritime jurisdictional zones, which marine planning would have to comply with. Although it does not back or stipulate marine planning as a management technique, various Acts have been drafted with the UNCLOS provisions in mind. Each piece of legislation analysed here holds a slightly different position in the policy hierarchy (Figure 8).

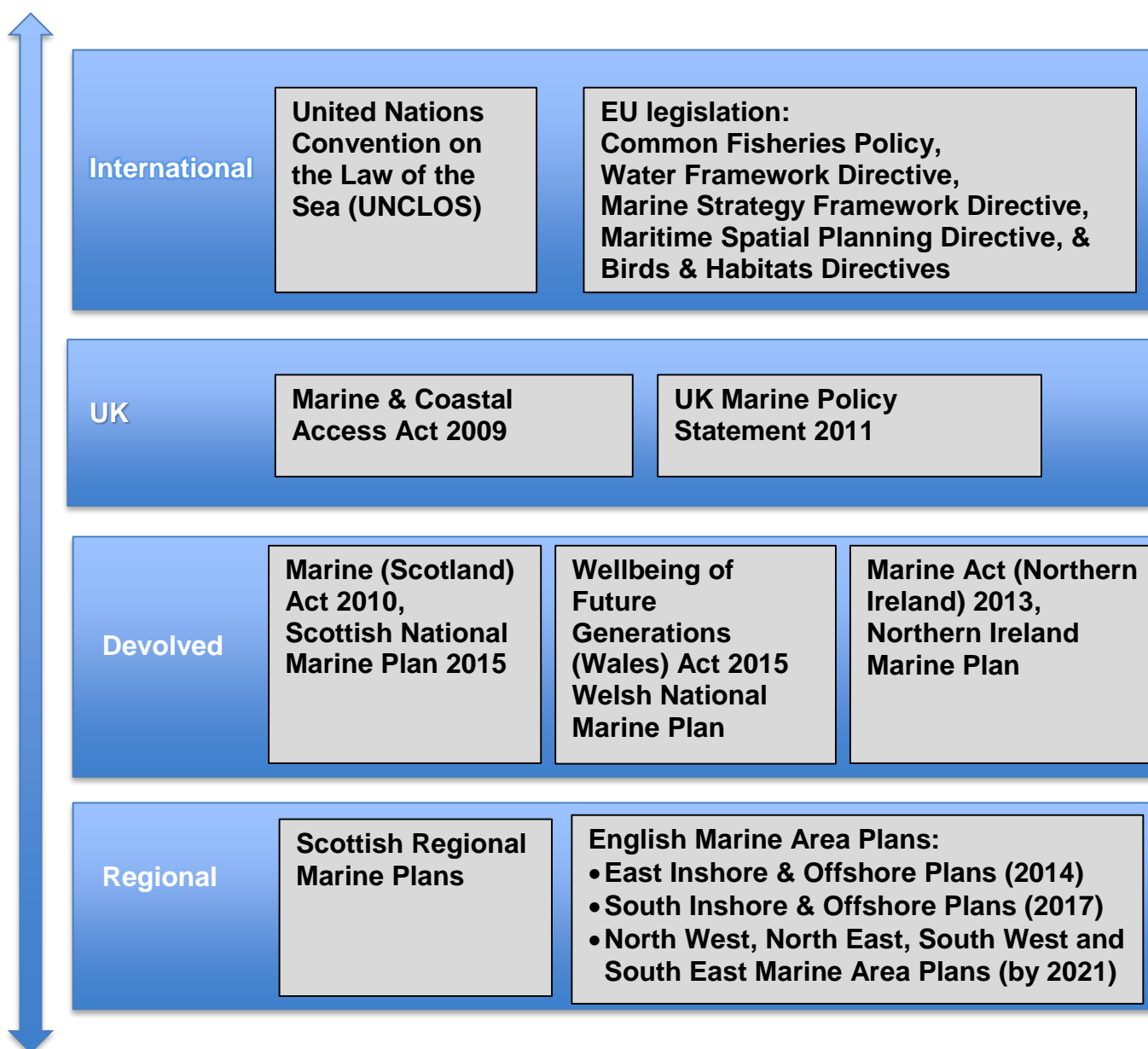


Figure 8: Marine planning policy flowchart

The Marine and Coastal Access Act 2009 required the drafting of the UK Marine Policy Statement 2011, which created the framework and high-level context for marine planning systems implemented across the UK. The MPS 2011 was published jointly by all UK administrations in March 2011 and presents a high-level approach to marine planning, developed in a forward-thinking manner. It provides a common vision for clean, healthy, productive and biologically diverse seas and incorporates methods for conducting the planning process and guiding other related policies. Public authorities, including those in the Devolved Administrations, are required to undertake future decisions regarding new and amended Marine Acts in accordance with the MPS. Authorisation or enforcement decisions must also follow the MPS 2011. For example, England's Regional Marine Plans, Scotland's NMP 2015, the WNMP and the Marine Plan for Northern Ireland must be compatible with the MPS 2011.

The high-level nature of the Marine Policy Statement provides a strong policy context to achieve the common vision for the UK. It does not provide detailed guidance on all UK maritime activities but it does identify those activities likely to have a higher level of priority in marine planning, such as those following domestic and international legislation, cross-border planning and the potential cumulative effects of activities on marine and coastal resources. The MPS focuses on considering the potential benefits and adverse effects in marine planning as well as listing principles upon which decisions should be based, for example, good practice and design or avoiding or mitigating against any potential negative effects.

7.2 Supplementary information on devolved approaches to marine planning

The MCAA 2009 sets the context for marine planning at the UK level but does not stipulate how it is to be done, merely that each Devolved Administration in the UK is required to undertake an adapted, spatially-specific approach to marine planning for its area of interest. The Marine Management Organisation performs that function for English waters.

English, Welsh and Northern Irish Plans all stem from the MCAA 2009, whilst the Scottish Marine Plans at the national and regional level are based upon Scottish primary legislation, the Marine (Scotland) Act 2010. The relevant Acts also provide for the establishment of marine licensing duties and marine conservation efforts as part of the planning approach, with the establishment of Marine Conservation Zones in England, Wales and Northern Ireland and Marine Protected Areas in Scotland.

Scottish, Welsh and Northern Ireland marine planning authorities are a core part of their respective Devolved Administrations whereas the English MMO is a non-Departmental Public Body and at arms-length from the UK Government. National coverage was prioritised in Scotland with regional plans in development to add spatial specificity and detail. In England, national coverage for marine planning will arise from a series of Regional Plans developed over time.

The Scottish Regional Marine Plans must be compatible with both the SNMP 2015 and the MPS 2011. Regional Plans should derive general and specific policy from the SNMP that is sensitive to the local area's circumstances. The Marine (Scotland) Act requires that Scottish Public Authority Bodies must take decisions relating to marine and coastal interest in accordance with the policies within the SNMP 2015.

Wales and Northern Ireland are also pursuing the national approach, although with detail at sub-national level yet to be clarified. The Administrations also have differences in emphasis; for example, Scotland has prioritised sustainable economic development and sustainable development is covered in the preliminary part of the (Northern Ireland) 2013. The Welsh Plan is uniquely being guided by the [Wellbeing of Future Generations \(Wales\) Act 2015](#), which sets a precedent for sustainable development of the blue economy.

The UK Administrations have different approaches to planning but Table 1 demonstrates considerable similarities across policy areas. England and Scotland have stated in the Joint Statement 2009 that they are committed to working together but will create their own separate plans for their relevant areas. The case of cross-border marine planning in the Solway Firth will prove the effectiveness of this commitment.

Neither Wales nor Northern Ireland has created an equivalent Joint Ministerial Statement on cross-border collaboration, similar to the one between England and Scotland, but there is mention of collaboration with neighbouring jurisdictions. For example, Northern Ireland specifically mentions neighbouring plan authorities within its Statement of Public Participation. Northern Ireland also has no direct mention of climate change provisions (adaptation or mitigation) in its Marine Act (Northern Ireland) 2013; however, one of the main objectives of the forthcoming draft Plan will be to contribute towards climate change mitigation and adaptation. There will also be a core policy on climate change.

Table 1: Similarities and differences of marine planning requirements of UK Administrations

Requirement	England	Northern Ireland	Wales	Scotland
Maritime Spatial Planning	✓	✓	✓	✓
Regional planning	✓	?	?	✓
Assessment	Marine Information System	Northern Ireland Marine Mapviewer in development	Marine Planning Evidence Portal	Scotland's Marine Atlas, Shetland and Clyde Assessments
Statement of Public Participation	✓	✓	✓	✓
Status	East Plans 2014, South Plans expected 2017, NW, NE, SE, SW expected by 2021	Draft public consultation expected 2017	Draft consultation	SNMP 2015, Shetland RMP 2015, Clyde given Direction
Evaluation	East Plans review 2017, six-yearly progress report on English marine planning system to Defra by 2021	TBC	TBC	SNMP review by March 2018
Coastal Access	✓	✓	✓	✓
Commitments to marine and terrestrial planning considerations/interactions	2011 Localism Act, National Policy Planning Framework 2012, 2013 England Coastal Concordat, Planning Advisory Services Soundness Checklist for Local Plans	Regional Development Strategy 2035, Strategic Planning Policy Statement 2014	Technical Advice Note 14 1998, Wales Spatial Plan 2008, Planning Policy for Wales 2016, Planning Advisory Services Soundness Checklist for Local Plans	Scottish Planning Policy 2010, National Planning Framework 3 2014, Circular 1-the Relationship Between Statutory Land Use Planning System and Marine Planning and Licensing 2015.
Climate Change	✓	✓	✓	✓
Conservation of seals	✗	?	?	✓

7.3 Statements of Public Participation

The Marine Management Organisation published [Statements of Public Participation \(SPP\) for each of its Marine Plan areas](#), to set out how and when they would engage with stakeholders. The publication of a SPP is required by the Marine and Coastal Access Act and formally commences the process of producing Marine Plans for the Inshore and Offshore Areas.

In Scotland, as required by the MSA 2010, a Statement of Public Participation was published for the National Marine Plan. It included a participation schedule and proposed timetable of engagement with interested sectors listed for public workshops. At a regional level in Scotland, the Shetland Isles Marine Planning Partnership has organised stakeholder participation through its Marine Spatial Plan Advisory Group, Policy Development Sub Group and Spatial Analysis Working Group. The [Clyde Marine Planning Partnership's Statement of Public Participation](#) was published in 2017.

The [Welsh SPP](#) allows for consultation with the public on the Statement itself and also during the preparation of the Plan. Responding participants to the Welsh SPP wanted greater early engagement in the marine planning process and reaffirmed the need to consider the land-sea interface. The consultation feedback of the Statement found:

- Support for a National Plan with spatial priorities
- Uncertainty regarding the level of subnational planning that may be needed
- The need for early engagement in the marine planning process
- The need to consider the land-sea interface and linking marine planning with the MSFD.

The Northern Ireland Marine Plan authority published a [Statement of Public Participation](#) (SPP), which set out how and when to involve and engage 'interested persons' including:

- Statutory partners and other Government Departments and Agencies
- District Councils
- Devolved Administrations and neighbouring Governments
- Key sector and industry representative groups
- Non-government organisations
- Other interested parties, such as communities, schools and special interest groups

Fishing, renewable energy, shipping, migrating birds, habitat protection and climate change are listed as possible cross-border issues that may require a coordinated approach.

7.4 England

The MCAA 2009 allows England to create 11 inshore and offshore Marine Plan Areas that will eventually provide national marine planning coverage for English waters. It also details the duties of public bodies in responding to marine plans in terms of their participation in the marine planning process. As part of this, high importance is given to stakeholder engagement in the identification of issues and possible solutions. Marine planners and their relevant authorities have a duty to advertise the continuing marine planning process and promote community engagement.

All English marine plan areas are scheduled to have a marine plan by 2021, coinciding with the March 2021 deadline for the EU Directive on Maritime Spatial Planning (2014/89/EU; MSP Directive). Marine plans are expected to last for 20 years with subsequent three-year reporting periods to allow for any amendments in line with adaptive management. For each marine plan published, there is also a Sustainability Appraisal produced which delivers the requirements of the [Strategic Environmental Assessment Directive](#) for marine plans and programmes. The Sustainability Appraisal appraises the social, economic and environmental impacts of the marine plans to ensure that sustainable development is at the core of the plan-making process. [MMO Marine plan areas](#) are as follows:

- East inshore and offshore
- South East inshore
- South inshore and offshore
- South West inshore and offshore
- North East inshore and offshore
- North West inshore and offshore*

*The North West will now have one Plan document containing two Plans (inshore and offshore areas) after requests to merge plans and have a single process for this area to reduce the burden on stakeholders and decision makers.

After a period of development and consultation, plans for the [East Offshore and East Inshore Marine Areas](#) were published in 2014. The South Inshore and South Offshore areas were the third and fourth areas in England to be selected for marine planning and the South Marine Plans were adopted during 2017. Marine Plans for the remaining English marine planning areas are being developed simultaneously between 2016-2021. The disadvantage of staggered implementation is that the English marine area will not have full marine plan coverage until 2021. The MMO will have to ensure that the inshore and offshore Plans fulfil the requirements of the relevant legislation and are compatible with each other to allow for a cohesive and comprehensive approach.

7.5 Wales

Similar to Northern Ireland, Wales has adopted a strategic national approach to marine planning. The Welsh National Marine Plan (WNMP) Draft has 17 Plan Objectives to develop and achieve:

1. Sustainable development
2. Long-term employment
3. Renewable energy
4. Managing multiple use activities
5. Sustainable and resilient communities
6. Safe, and accessible coast, seas and their resources
7. Promote stewardship of heritage assets, protected landscapes and seascape characteristics
8. Climate change adaptation and mitigation
9. Good Environmental Status and Good Ecological Status
10. Protect marine biodiversity
11. Healthy and resilient marine ecosystems
12. Integrated decision-making
13. Better understanding of unique characteristics and future opportunities of the Welsh Marine Area
14. Increase engagement
15. Ecosystems approach to management
16. Development of a shared marine evidence base
17. Risk-based adaptive approach, using the precautionary principle.

A public consultation took place in early 2018. Ministers welcomed supporting representation to be submitted through the online [Marine Planning Evidence Portal](#) for the WNMP. The preparation of the inshore and offshore plan will be managed and led by the Department of the Environment and Countryside, and will cover all Welsh waters. The UK Government must approve any offshore plans that are created for the Welsh offshore area.

The creation of the Welsh National Marine Plan will be completed by Welsh Ministers taking into account the requirements of a suite of domestic Welsh legislation, such as the Well-being of Future Generations (Wales) Act 2015, the Environment Act 2016 (marine licensing provisions) and the Wales Act 2017 (marine nature conservation). Other authorities overlapping the marine and coastal area include National Parks, and those involved with River Basin Management, Shoreline Management and Flood Risk Management as well as any other plans prepared by a public or local authority in connection with the management or use of the sea or the coast. The Welsh Assembly Government and Natural Resources Wales have created regional stakeholder projects so that marine plans can identify the most suitable sites for new Marine Conservation Zones.

A Sustainability Appraisal and a Strategic Environmental Assessment of the WNMP will also identify any areas where an adverse effect on environmental aspects may be determined, so that any necessary mitigation measures can be considered and adopted. Throughout the Plan's creation, marine planning needed to remain linked with targets set by the MSFD as well as clearly defining the resources needed to establish marine planning.

Wales aims to publish plans within the same timeframe as the MMO, i.e. before 2021, but stakeholder consultation highlighted the remaining uncertainty regarding the level of subnational planning that may be needed. This needs to be determined before the WNMP is sent for publication so that an accurate level of spatial specificity is detailed.

7.6 Northern Ireland

The [Marine Act \(Northern Ireland\) 2013](#) sets the context for a strategic national approach out to 12 Nm in tandem with regional marine planning. As with Wales, the MCAA 2009 provides the legislative context for planning in the Northern Irish offshore area. Part 1 of the Act covers sustainable development as a priority for Northern Ireland, whereas Part 2 covers marine planning, associated byelaws and partially fulfilling the conservation aspect of the MCAA 2009 pertaining to the creation, consultation, management, reporting and enforcement of Marine Conservation Zones. The Act also met Northern Ireland's requirements for Strategic Environmental Assessment and Sustainability Appraisals in relation to marine planning.

The MCAA 2009 and the Marine Act (Northern Ireland) 2013 set the context for marine plans for the Northern Irish inshore and offshore areas to be developed simultaneously as two separate plans published in a single document. A Sustainability Appraisal has been undertaken on the draft Marine Plan and public consultation is anticipated to take place in 2018. Once published, the Plan will be adopted by DAERA, operating as the Marine Planning Authority.

The Marine Act amends the [Nature Conservation and Amenity Lands \(Northern Ireland\) Order 1985](#) as the designation of new marine nature reserves is now reserved by the new powers to create Marine Conservation Zones (MCZs). The amendment simplified legislation and any Marine Nature Reserves automatically became a MCZ after the Act was published, contributing to the protected area network required by the MCAA 2009.

There are jurisdictional coverage issues around Loughs Carlingford and Foyle.¹⁴ The development of the Republic of Ireland's Maritime Spatial Plan (2018-2021) may offer an opportunity to address these.

¹⁴ Cave (2012)

An Interdepartmental Marine Co-ordination Group has responsibility for cross-Departmental co-ordination and collaboration although the effectiveness of this approach has been questioned in consultation⁹. Marine planning, licensing, enforcement and conservation are not the sole responsibilities of the Department, unlike the MMO or Marine Scotland, which could lead to a conflict of interests or stretched resources.

7.7 Scotland

Scotland has a different approach to England by prioritising the development of Scotland's strategic National Marine Plan 2015, and then creating Regional Marine Plans at a later date to ensure detailed coverage. The NMP 2015 was published in March 2015 and the Scottish Government then developed secondary legislation, the [Scottish Marine Regions Order 2015](#), to set the boundaries for sub-national marine planning. Scottish Regional Marine Plans extend to the 12 nm limit, i.e. the extent of Scottish territorial waters. Offshore waters, i.e. beyond 12 nm, are covered by the National Marine Plan

Unlike elsewhere in the UK, Scotland had a history of pilot projects in marine planning on which to draw upon when considering their approach to new legislation. The [Scottish Sustainable Marine Environment Initiative](#) (SSMEI) ran between 2006-10 and tested possible approaches to marine planning at a localised level in four areas, each with very different physical and economic characteristics. Marine planning was tested in the Clyde, around Shetland and in the Sound of Mull. Additionally, a further project was run in Eyemouth, centred on fisheries and the development of dive tourism as a focus for local investment. A key lesson from the SSMEI approach was that individual marine planning projects needed a larger context in which to operate. This influenced the clear strategy of an overarching national marine plan augmented with regional plans, which Scotland pursued from the start.

The SNMP 2015 focuses on four key issues for marine planning (economic productivity, user interactions, living within environmental limits and climate change). There is a presumption in favour of sustainable marine development with a core set of General Policies and Sectoral Policies identified to provide a clear, overarching framework for decision-making in the marine environment. Spatial guidance for marine and coastal developments as well as informed stakeholder consultation is promoted here. A greater understanding of biodiversity, climate change effects and the effectiveness of management policies were required for enhanced marine planning in the near future. The benefits to this approach included a strategic focus for the whole country to adhere to, with minimal confusion in legislation.

Unlike the Marine Management Organisation in England, which will prepare inshore and offshore Marine Plans that will eventually lead to comprehensive coverage of the English marine area but will not publish

a National Plan, Scottish Ministers have delegated the powers for marine planning at a regional level to Marine Planning Partnerships. These Partnerships are set up for this specific purpose and will operate in compliance with the SNMP 2015. The Partnerships will be established with their own objectives to fulfil the requirements of the Marine (Scotland) Act 2010 (MSA) and create the separate Regional Plans that will deliver the policies set out in the SNMP 2015. The Regional Plans are expected to incorporate Sustainability Appraisals and Strategic Environmental Assessment in order to fulfil EU Directive requirements and to consider how cumulative impacts should be taken into account. In 2016, the Clyde and Shetland areas became the first two Scottish Marine Regions (SMRs), primarily as a result of the experience gained under the SSMEI pilot. The other SMRs will be rolled out in due course, as circumstances and finances permit.

The [Shetland Fisheries Training Centre Trust](#) and the [Shetland Islands Council](#) are tasked with creating the Shetland Regional Marine Plan through a [Direction](#) from the Scottish Ministers, given in March 2016. The Shetland Marine Planning Partnership has three years to deliver a Regional Marine Plan for their area. It will use the fourth edition of the [Shetland Marine Spatial Plan](#), originally created under the Shetland SSMEI pilot, which had already been voluntarily adopted by the Council in 2015 as the basis for its marine management with a special consideration of aquaculture opportunities.

The Clyde Marine Planning Partnership (CMPP) was founded in February 2016 after the existing Firth of Clyde Forum concluded its activities as a non-statutory organisation set up to promote Integrated Coastal Management. The Core objectives of the CMPP are to:

- Achieve integrated, sustainable and coordinated planning and management of the Clyde Marine Region's environmental, economic and community resource
- Undertake projects, activities and further research in order to implement the statutory regional marine plan
- Use the ecosystem approach to develop and implement marine planning and Integrated Coastal Management initiatives

The Clyde Marine Planning Partnership received its [Direction](#) from Scottish Ministers in March 2017. The Regional Marine Plans for Shetland and Clyde must be published within three years of their Direction being given. The experience of these first two Planning Partnerships will provide guidance for the creation of Regional Plans in other areas.

The MSA 2010 requires a periodic review of the SNMP 2015 every five years, whereas the overarching MCAA 2009 requires updates every six years. This means that in areas where the Scottish marine

planning system abuts another UK administration's area, for example, the Solway Firth, reviews of the marine plans covering the geographic area may be carried out according to different timescales.

The NMP 2015 sets strategic objectives and national priorities for the Scottish marine area and will ensure international and EU targets are achieved. The Joint Ministerial Statement on Marine Planning 2009, published in partnership by England and Scotland, details a commitment to a collaborative approach to joined-up cross border planning. The aim was to have linked stakeholder consultation between Scotland and the UK authorities but how this will work in reality has yet to be tested. Legally, there will still be two marine plans active but there should be seamless marine planning across the Scotland/England borders.

The Scottish Government took the opportunity presented by the process of developing the MSA 2010 to also update other existing marine-related legislation and make it fit-for-purpose. An example was the introduction of new protections afforded to Scotland's seal populations to meet international responsibilities. This replaced a previously complex seal licensing system with a simplified licensing system to cover all sectors. It is now an offence to kill, injure, molest or take a seal without proper authorisation and licensing.

Marine planning is especially relevant for Scotland's key growth sectors including oil, gas, renewables, fisheries, aquaculture and tourism. In total, the NMP 2015 has 21 general planning principles aligning with the HLMOs.¹⁵ The primary general principle places an emphasis on ecosystems and sustainable development is a core focus of the NMP 2015. The secondary general planning principle covers economic growth, whilst the tertiary principle focuses on social benefits. The remaining 19 principles cover other key Scottish maritime growth sectors. Once all of Scottish marine regions are established, Scotland will similarly benefit from region-specific marine plans that England is currently in the process of creating. This causes an issue when dealing with area-specific needs in regards to unique coastal characteristics and activities. Nonetheless, the SNMP 2015 has broadly covered key activities expected to take place in inshore and offshore waters and sets guidance on what should and should not be considered in both Regional and National Marine Plans.

¹⁵ DEFRA (2009)

8. The Solway Firth

The Solway Firth is a single ecosystem at the boundary between Scotland and England that is subject to two pieces of primary legislation covering its geographic extent and as such, is a case study for the SIMCelt Project (Figure 9). To the north of the Scotland/England border, the Marine (Scotland) Act 2010 and the Scottish National Marine Plan 2015 apply, as well as the development of a subsequent regional marine plan for the Solway Scottish Marine Region. To the south, the middle of the Firth is the northern limit of the English Marine Management Organisation's North-West Marine Planning Area. The Scottish Marine Region for the Solway is defined under the [Scottish Marine Regions Order 2015](#), and is bounded to the east, south-east, south-west and west by the limits of the Scottish marine area.¹⁶

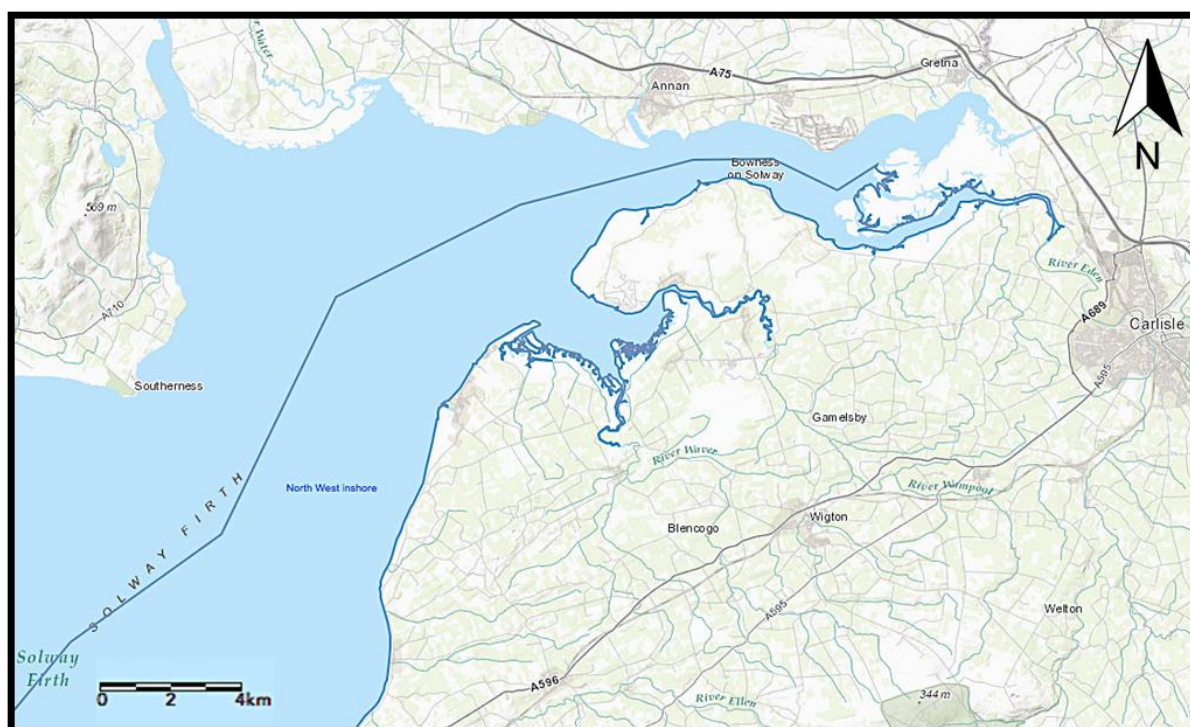


Figure 9: Location of the Solway Firth with the dark blue lines indicating the boundary between the North West Inshore Plan and the Scottish National Marine Plan ¹⁷

The Solway makes an interesting case study for cross border marine planning as the UK MPS 2011 requires that the UK administrations are committed to the co-ordination of marine planning across administrative boundaries. This coordination and cooperation has been evidenced as a priority requirement of their respective legislation.

As part of its stakeholder engagement process, the MMO held workshops in the north west of England in summer 2016 as a first attempt to gather evidence and identify area-specific issues for inclusion within

¹⁶ Full coordinates available, see Scottish Marine Regions Order 2015

¹⁷ MMO (2016)

the North West Inshore and Offshore Plans. Further workshops in early 2017 fed back the results of the initial information-gathering process and encouraged local marine stakeholders to provide comments on possible policy responses identified for the northwest. A third round of stakeholder engagement started in early 2018.

During the workshops held for the North West marine plans, the importance of the cross border nature of the Solway was conveyed to the MMO by the stakeholders involved. They are used to operating in a pan-Estuary environment, albeit reflecting the legislative and administrative regimes on either side of the Scotland/England border.

As the marine planning process continues, the MMO northwest plans will analyse Solway-specific issues, with targeted engagement around alternatives and options to develop a more specific vision for the NW plan area. This follows the approach taken by the MMO for the East and South Marine Plan Areas. The MMO has expressed interest in continuing to utilise the Solway Firth Partnership and its experience of cross-border stakeholder engagement during the northwest regional marine planning process, for example, through facilitating pan-Solway workshops.

8.1 The future of marine planning in the Solway Firth

Although the Marine Management Organisation is developing its Marine Plans for the North West Inshore and Offshore areas, parts of which cover the south of the Solway Firth, there is no indication of when regional marine planning for the Scottish side may be introduced or when a Regional Marine Planning Partnership may be formed. Northern Ireland's marine planning situation remains under development, with a Draft Marine Plan for public consultation expected when domestic political conditions allow. The Isle of Man Marine Plan is also under development, with its Statement of Public Participation published, although the Manx Government's priority remains focused on introducing new primary marine legislation to streamline the consent and licensing process for sustainable marine development. Cumulatively, this leads to uncertainty as to when the entirety of the Solway Firth ecosystem will be covered by marine plans at a regional scale.

Stakeholder engagement is going to be disjointed on either side of the Scotland/England border as it is unknown if a Scottish Regional Marine Plan will be in place by the time the MMO Northwest Plans are adopted (scheduled for 2021). Although published prior to details on the nature of Scottish and English marine planning, the Joint Ministerial Agreement 2009 has created a foundation of useful undertakings. However, in reality, the timing of marine planning is out of alignment. As both Scotland and England progress with regional marine planning, updates on data acquisition and developing policy objectives should be shared with adjoining marine planning authorities, where possible. In an ecosystem that does

not respect geographic boundaries, keeping lines of communication open and active would be to mutual benefit.

The cross-border Solway Firth Partnership (SFP) will be a crucial body in keeping Solway Firth stakeholders updated and supported on both Scottish and English regional marine planning approaches to avoid stakeholder fatigue. As a local coastal partnership based in Dumfries, the Partnership has estuary-wide interests and good working relationships with stakeholders established over a number of years. SFP has already worked with the Marine Management Organisation to facilitate the involvement of interested stakeholders and organisations that should have a say in the development of plans on both sides of the Firth. This makes SFP a key trusted point of contact on both the English and Scottish sides of the Solway for the public or private sector to raise any issues or concerns regarding marine planning. These concerns can then be raised to the relevant marine planning authority on the Scottish or English sides. As the MMO develops a specific vision for the North West plan area during 2018, it is envisaged that the SFP will be a crucial neutral facilitator, representing willingness for an ecosystems-based approach to planning.

9. Other examples of transboundary ecosystems

Carlingford Lough, Lough Foyle and the Severn and Dee estuaries are other examples of single ecosystems with multiple administrations having jurisdiction in their inshore and offshore zones. Amongst these four estuaries, England, Northern Ireland, Wales, the Isle of Man and the Republic of Ireland are all involved, in different combinations. The marine planning authorities of all four UK administrations, the Republic of Ireland and the Isle of Man will be involved in the offshore areas that encompass the Irish Sea. Across the wider Celtic Seas, France and England share a border.

9.1 Loughs Carlingford and Foyle

Lough Foyle is the estuary of the River Foyle, whilst Carlingford Lough is a sea inlet and both form part of the border between Northern Ireland and Republic of Ireland (Figure 10). Ramsar sites for their Irish Red Book Data species including: allis, shad, smelt and sea lamprey. Lough Foyle is also classified for being a good representation of a wetland habitat. Carlingford holds SSSI and SPA status with extensive mudflats and saltmarsh and small rock/shingle islands towards the mouth of the estuary. In Northern Ireland, the Northern Ireland Marine Plan will apply once it is adopted, whilst the Republic has no specific marine planning system in place as yet.

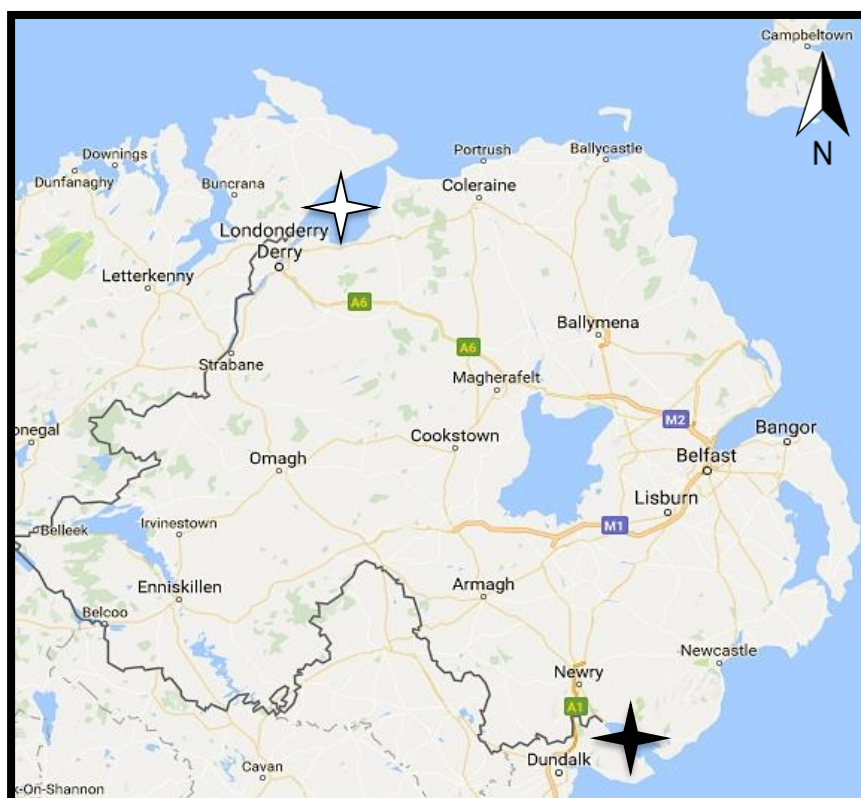


Figure 10: Lough Foyle (white star) and Carlingford Lough (black star) ¹⁸

¹⁸ Google Maps (2017)

Fisheries, aquaculture, tourism and other marine resources are managed by the cross-border Loughs Agency between the UK Government and Republic of Ireland. The Agency identified key challenges to a cross border estuary include ensuring a joined-up approach towards science and enforcement across the border, and safeguarding open lines of communication between a diverse range of stakeholders.¹⁹ The Agency also notes that as Northern Ireland and the Republic of Ireland implement EU Directives in different ways or at different times, potential situations can arise where Directives are enforced by primary legislation on one side of the border but not the other. This can create difficulties in the monitoring of GES indicators, particularly as methods of data recording can differ between administrations, for example in seal population evaluation. This can then create confusion for stakeholders.

9.2 The Severn Estuary

The Severn Estuary forms part of the English South West Inshore Marine Plan. The marine plan and terrestrial plans deliberately overlap by 220 km² to ensure compatibility between MMO and English local authority plans (Figure 11). The Severn Estuary Partnership is an independent estuary-wide initiative that works with both local and national stakeholders in promoting a sustainable approach to the planning, management, and development of the estuary for all who live and work in and around the Severn Estuary now, and for future generations.²⁰ The Wales and England cross-border marine planning workshop 2016 identified key issues for discussion and was facilitated by the Severn Estuary Partnership. Both authorities explored the role of liaising and cooperative work on evidence gathering for cross border areas such as the Severn and the Dee.²¹ There are SACs in every cross-border area where the MMO's plan area boundaries interact with devolved administrations.²² The MMO also gave feedback on the Draft Welsh National Marine Plan.

9.3 The Dee Estuary

The Dee Estuary's [European Marine Site](#) eastern boundaries are formed under the Wales National Marine Plan, but it also forms the southern limit of the English North West Inshore Plan (Figure 11). The Dee sits for the most part in Welsh waters but its upper reaches are within England. The Estuary forms a natural boundary between England and Wales and also contains a designated Ramsar site and Special Protection Area and Special Area of Conservation (SACs). Natural England and Natural Resources Wales have jurisdiction over this area's protected features. The Dee no longer has a dedicated Estuary Partnership but a Dee Estuary Strategy was published in 2000 with the aim of promoting sustainable development

¹⁹ Celtic Seas Partnership (2016)

²⁰ Severn Estuary Partnership (2016)

²¹ Welsh Government and Marine Management Organisation (2016)

²² MMO (2010)

and better communication between user groups. The Severn Estuary Partnership indicated the future potential to host a similar workshop with the Welsh Government and MMO for the Dee Estuary, although information and lessons learned from the Severn would be applied to the Dee.

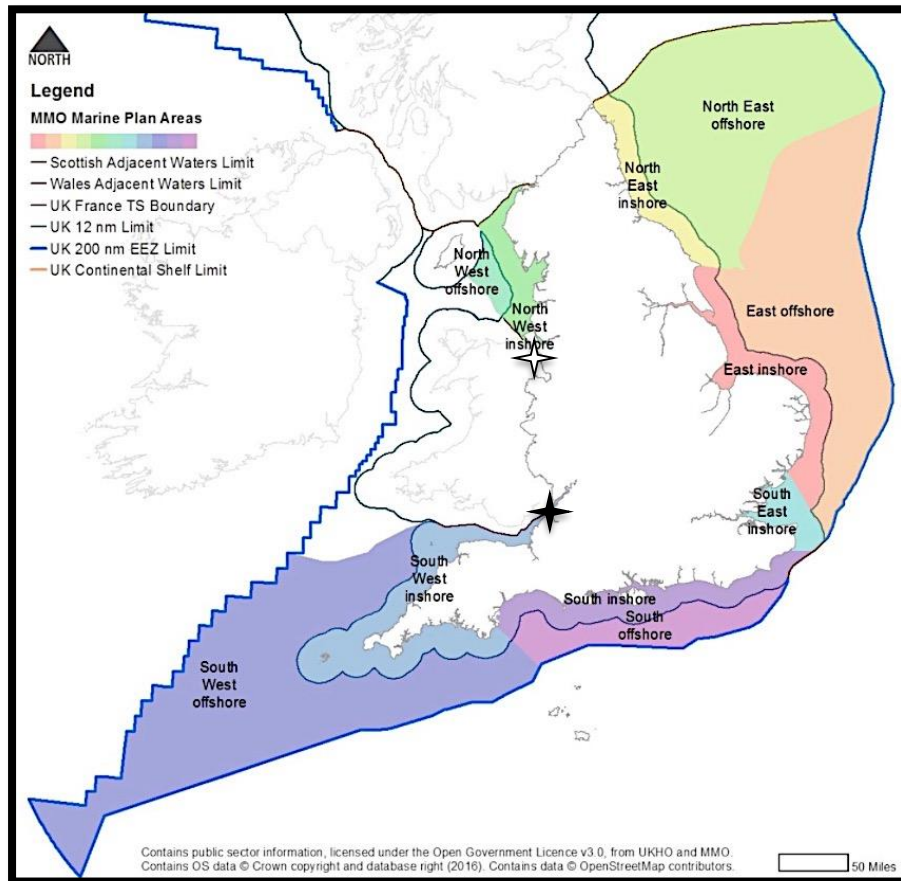


Figure 11: Dee (white star) and Severn (black star) Estuaries adjoining MMO marine plan areas²³

MMO inshore and offshore Marine Plans will cover both the Severn Estuary and the Dee Estuary by 2021 whilst the UK MPS 2011 and the MCAA 2009 fundamentally guide both areas. The present infancy of Welsh marine planning may in the near future lead to complications such as uncertainty over plan timescales and methods of approach. Large-scale marine infrastructure projects such as the Swansea tidal lagoon and potential proposals for Cardiff may have cross-border impacts. Similarly to the Solway Firth Partnership, the Severn Estuary Partnership will be critical in mediating cross-border issues.

²³ UNESCO (2016)

10. Conclusion

Within the UK, there is evidence of a national legislative and policy framework that sets the context for an ecosystem-based approach to marine planning, which has been adopted in the interest of sustainably developing and managing UK marine and coastal resources. Although each piece of national legislation is focused slightly differently and has some different requirements, the different Marine Acts identify target objectives for economic, social, climate change and marine ecosystem objectives.

The UK Acts all reflect and support the Marine Policy Statement 2011 and , by so doing, they

- Promote sustainable economic development
- Enable the UK's move towards a low-carbon economy, in order to mitigate the effects of climate change and ocean acidification and adapt to their consequences
- Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets
- Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.

Taken together, the legislation establishes an approach to marine planning regions that reflects national specificities but requires cooperation and coordination across boundaries to responsibly and sustainably licence and manage activities in the UK marine area. It also allows for review and revision of the processes, if required. The “precautionary approach” and “evidence-based approach” are all subjective and open to interpretation by each jurisdiction, which may create unbalanced requirements for each devolved authority. Additionally, not all the development, implementation and review periods are scheduled for the same timescales, which may also lead to difficulties as cross-border ecosystems are subject to different planning requirements at different times.

There are several current and future challenges arising from the different policies analysed here. Integration of planning across boundaries between management areas is clearly a key issue. Any conflicts arising between different policy objectives need to be resolved to facilitate an effective ecosystem-based approach to marine planning. The limited available evidence of possible differences in approach between marine planning regimes, or the importance given to different issues on either side of a boundary, may affect decisions in marine planning at the time they were made and may have on-going impacts, particularly for the first few years of Marine Plan implementation. Habitat and species distribution, data quality and resolution and the uncertainty around cumulative effects of activities are all areas where additional data gathering is required but will take time to collect and feed into the marine planning decision-making process.

Viewed as a single marine ecosystem, the Solway Firth will be subject to coverage by multiple marine plans. The Scottish National Marine Plan 2015 governs the Solway Firth on the Scottish side, whilst the English side and the offshore border with Northern Ireland currently defer to the MPS 2011; until such time that the English North West Plans and Marine Plan for Northern Ireland are published. This creates a discrepancy between national and regional coverage between England, Scotland, and Northern Ireland and there is a possibility that the Solway Firth may not be fully covered by marine plans until 2021.

This report has focused primarily on legislative aspects relating to marine planning but each marine plan area will have its own evidence base and online map viewer. Marine Scotland has the [National Marine Plan interactive](#) (NMPi), [Marine Scotland Data](#) and [Marine Scotland Information](#). England has the [Marine Planning Evidence Base](#) and [Marine Information System](#). Wales has the [Wales Marine Planning Portal](#). The Northern Irish equivalent will be created in due time. There are also other UK evidence bases such as [The Marine and Environmental Data Information Network \(MEDIN\)](#). Securing connectivity between different systems, will be key to delivering a joined-up approach to marine planning in cross-border areas.

Although there is a UK-wide legislative and policy context that sets the parameters for marine planning, the nature of devolution creates timescales and mechanisms that reflect administration-level priorities, rather than those affecting an ecosystem as a whole. A more flexible approach to management of cross-border marine planning areas is, therefore, required, as ecosystems do not follow geographical or jurisdictional boundaries. Initiatives such as the Joint Ministerial Statement 2009 between Scotland and England and the cross border marine planning workshop between the Welsh Government and the Marine Management Organisation provide the promise of an aligned approach to cross border planning. However, this cooperation and engagement between Administrations with a shared ecosystem, such as the Solway Firth, must continue in the realities of an ever-changing environmental and political climate.

11. References

- Austen M.C., Malcolm S.J., Frost M., Hattam C., Mangi S., Stentford G., Benjamins S., Burrows M., Butenschön M., Duck C., Johns D., Merino G., Mieszkowska N., Miles A., Mitchell I., Smyth T., 2011. Marine section in: The UK National Ecosystem Assessment Technical Report. UK National Ecosystem Assessment. UNEP-WCMC, Cambridge, pp. 459–498.
- Cave S. 2012. Research and Information Service Bill Paper. Northern Ireland Marine Bill. Northern Ireland Assembly 30th April 2012.
- Common Fisheries Policy (Amended). 2013. Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0022:0061:EN:PDF> (Accessed: 23.08.16).
- DAERA. 2012. Consultation on draft Northern Ireland Marine Position Paper. Department of Agriculture, Environment and Rural Affairs.
- DEFRA. 2009. Our seas-a shared resource. High Level Marine Objectives. Department for Environment, Food and Rural Affairs. London.
- Ehler C., and Douvère F. 2009. *Marine Spatial Planning: a step-by-step approach toward ecosystem-based management*. Intergovernmental Oceanographic Commission, IOC Manual and Guides No. 53, ICAM Dossier No. 6. UNESCO: Paris. 97 p.
- Habitats Directive 1992. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN> (Accessed: 23.08.16).
- Marine Strategy Framework Directive 2008. Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008. Establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0056&from=en> (Accessed: 23.08.16).
- Water Framework Directive 2000. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Available at: http://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF (Accessed: 23.08.16).
- Wild Birds Directive 2009. Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN> (Accessed: 23.08.16).
- Google Maps. 2017. Lough Foyle. Available at: https://www.google.co.uk/maps?client=safari&rls=en&q=lough+foyle&oe=UTF-8&gfe_rd=cr&um=1&ie=UTF-8&sa=X&ved=0ahUKewi6_5-2tv7SAhUqDcAKHXm9BDwQ_AUICCGB (Accessed: 30.03.2017).
- Government of Ireland. 2012. Harnessing Our Ocean Wealth: An Integrated Marine Plan for Northern Ireland. Inter-Departmental Marine Coordination Group. Available at: <http://oar.marine.ie/handle/10793/810> (Accessed: 29.03.17).
- Government of Wales Act 2006. Welsh Assembly. Available at: http://www.legislation.gov.uk/ukpga/2006/32/pdfs/ukpga_20060032_en.pdf . (Accessed: 21.08.16).
- JNCC. 2009. Joint Nature Conservation Committee assessment of Marine & Coastal Access Act 2009: <http://jncc.defra.gov.uk/page-5230>.

- Joint Ministerial Statement on Marine Planning. 2009. Joint Statement by Huw Irranca-Davies MP, Minister for the Marine and Natural Environment, and Richard Lochhead MSP, Cabinet Secretary for Rural Affairs and the Environment. Marine planning in areas bordering England and Scotland.
- Marine and Coastal Access Act 2009. HM Government. Part 3, Marine Planning pp. 29-49.
- Marine and Coastal Access Act. Delegation of functions relating to marine plans (2009). HM Government. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312292/delegation.pdf (Accessed: 23.08.16).
- Marine Management Organisation (MMO). 2010. Decision on first marine plan areas. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312364/east_selection.pdf (Accessed: 24.08.16).
- Marine Management Organisation (MMO). 2014. Marine Plan Areas in England. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/325688/marine_plan_areas.pdf (Accessed: 23.08.16).
- Marine Management Organisation (MMO). 2016. Marine Information System. Dee and Severn Estuaries.
- Marine Management Organisation (MMO). 2016. Marine Planning. Statement of Public Participation Guidance. Marine Management Organisation. 14th July 2016. Available at: <https://www.gov.uk/government/publications/marine-planning-statement-of-public-participation/marine-planning-statement-of-public-participation>. (Accessed: 22.08.16).
- Marine Scotland. 2014. The National Marine Plan Area. Available at: <http://www.gov.scot/Publications/2014/12/3409/1> (Accessed: 22.10.17).
- Northern Ireland Assembly. 2012. Northern Ireland Marine Bill (2012). Available at: <http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2012/environment/11012.pdf>. (Accessed: 22.08.16).
- Northern Ireland Assembly. 2013. Marine Act (Northern Ireland) 2013. Available at: <http://www.legislation.gov.uk/ni/2013/10/contents> (Accessed: 21.08.16). September 2013.
- Northern Ireland Marine Plan Statement of Public Participation. Department of the Environment. Available at: <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/marine-statement-public-participation.pdf> (Accessed: 22.08.16).
- Nuttall, G. 2016. Celtic Seas Partnership. Encouraging effective marine management and decision making across borders. Lessons and recommendations from the Celtic Seas.
- Planning Act 2008. HM Government. Available at: http://www.legislation.gov.uk/ukpga/2008/29/pdfs/ukpga_20080029_en.pdf (Accessed: 23.08.16).
- Russell M. 2010. Marine Aggregates: A Sea Change for the Marine Aggregate Sector - Challenges and opportunities going forward. *Quarry Management*, 37(12), p.28.
- Scottish Government. 2009. Scotland's First Marine Bill. (2009).
- Scottish Government. 2010. The Marine (Scotland) Act 2010. Part 3, Marine Planning pp. 5-19.
- Scottish Government. 2015. Planning Scotland's Seas. The relationship between the statutory land use planning system and marine planning and licensing. Planning Circular 1/2015.
- Scottish Government. 2011. Scotland's Marine Atlas. Information for the National Marine Plan. 191 pp.
- Scottish Government. 2015 a. The Scottish Marine Regions Order Bill (2015). Available at: http://www.legislation.gov.uk/ssi/2015/193/pdfs/ssi_20150193_en.pdf (Accessed: 22.08.16).
- Scottish Government. 2015 b. Scotland's National Marine Plan: A Single Framework for Managing Our Seas.

- SEP. 2016. Severn Estuary Partnership homepage. Available at:
<http://www.severnestuarypartnership.org.uk> (Accessed: 30.01.16).
- SHOM. 2017. Service Hydrographique et Océanographique de la Marine. SIMCelt study area map.
Statement of Public Participation for the Welsh National Marine Plan. 2014. Welsh Government. 13th
June 2014. Number: WG22133. Available at: <http://gov.wales/docs/drah/consultation/140623-statement-public-participation-welsh-marine-plan-en.pdf>. (Accessed: 22.08.16).
- The Marine Act Quick Guide. July 2014. Welsh Government. Available at:
<http://www.assembly.wales/Research%20Documents/The%20Marine%20Act%20-%20Quick%20guide-25052011-216661/qg11-0012-English.pdf> .
- The Marine Policy Statement. 2011. HM Government, Northern Ireland Executive, Scottish Government, Welsh Assembly Government March 2011. London: The Stationery Office.
- UN. 1982. United Nations Convention on the Law of the Sea.
- UNESCO. 2016. English marine plan areas. Available at: <http://msp.ioc-unesco.org/world-applications/europe/uk/england/> (Accessed: 19.04.17).
- Welsh Government and Marine Management Organisation. 2016. Wales and England Cross-border Marine Planning Workshop Norwegian Church, Cardiff 15th March 2016.
- Welsh Government. 2015. Well-being of Future Generations (Wales) Act 2015. Available at:
<http://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en>
(Accessed: 21.08.16).
- Welsh Government. 2015. Welsh National Marine Plan. First Draft. Available at:
<http://gov.wales/docs/drah/publications/151130-welsh-national-marine-plan-initial-draft-november-2015-en.pdf> . (Accessed: 22.08.16).