TPEA GOOD PRACTICE GUIDE

LESSONS FOR CROSS-BORDER MSP FROM TRANSBOUNDARY PLANNING IN THE EUROPEAN ATLANTIC

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"BUT THE ATLANTIC OCEAN IS SURELY A LIVING THING – furiously and demonstrably so. It is an ocean that moves, impressively and ceaselessly. It generates all kinds of noise – it is forever roaring, thundering, boiling crashing, swelling, lapping. IT IS EASY TO IMAGINE IT TRYING TO draw breath – perhaps not so noticeably out in mid-ocean but where it encounters land, its waters sifting up and down a gravel beach, it mimics *nearly perfectly the steady inspirations and exhalations* of a living creature. It crawls with symbiotic existences, too; unimaginable quantities of monsters, minute and massive alike, churn within its depth in a kind of maritime harmony, *giving to the waters a feeling of vibration*, a kind of suboceanic pulse. And it has a psychology. It has moods: sometimes dour and sullen, on rare occasions cunning and playful; always it is pondering and powerful"

(WINCHESTER, S. (2010) ATLANTIC: A VAST OCEAN OF A MILLION STORIES, HARPER PRESS, LONDON, P 21).

Introduction

This Good Practice Guide is the outcome of a project co-funded by the European Commission (DG Mare) called Transboundary Planning in the European Atlantic (TPEA), which ran from December 2012 to May 2014. The aim of the project was to demonstrate approaches to transboundary maritime spatial planning (MSP) in the European Atlantic region. This is one of a series of projects exploring the opportunities and challenges of carrying out cross-border MSP in Europe's regional seas, making connections with integrated coastal management (ICM).

 TPEA focused on two pilot areas: one involving Portugal and Spain and the other Ireland and the United Kingdom. Despite distinct identities in the region relating to different traditions of planning and stages of MSP implementation, TPEA worked towards a commonly-agreed approach to transboundary MSP and developed principles of cross-border working which it is hoped will be of wider benefit. This guide presents these principles, illustrated with examples from the TPEA project.

Although TPEA ran as a stand-alone exercise, it is recognised that in a live situation transboundary MSP is an integral part of wider MSP processes, and it is expected that the project experience will benefit transboundary MSP initiatives in whatever context they may take place. This guide is intended to assist authorities with responsibility for MSP, agencies and other institutions supporting the implementation of MSP, coastal and marine stakeholders and other parties with an interest in the outcomes of MSP, and the scientific MSP community.

This project was conducted within the European Union during the preparation of EU legislation which will place a requirement on coastal Member States to conduct MSP. TPEA was not tasked with contributing specifically to this process. However, it is hoped that the project experience, and this guide in particular, will be of assistance to Member States in fulfilling their responsibilities under EU and national legislation in regard to cooperating with each other on the planning and management of adjoining waters and coastal zones. It is also intended that this guide will have wider relevance and will contribute to transboundary MSP initiatives globally. We hope that the TPEA Good Practice Guide will demonstrate the potential for

cross-border MSP not just as a means of fulfilling regulatory requirements, but as a valuable contribution to MSP efforts with healthy and sustainable use of the seas and oceans in mind.

THE TPEA PROJECT

What sets transboundary MSP apart from national approaches? What are the added dimensions that need to be considered during the cross-border MSP process? How can ICM be taken into account? What are the barriers to transboundary MSP, and how can these be overcome? How can transboundary MSP be delivered in practice with limited available resources, and how can we be sure of its effectiveness?

To address these questions, TPEA brought together ten governmental and research partners from Ireland, Portugal, Spain and the United Kingdom and expert advisors from the five European Atlantic nations (including France) (see inside back page for details). The project focused on two pilot areas:

• The Portuguese and Spanish partners based their pilot area around the nations' southern national borders: Algarve – Gulf of Cadiz; and

• the Irish and UK partners based their pilot area around Ireland and Northern Ireland's eastern national borders: East Coast – Irish Sea

It should be noted that the remit for the project and the limited resources available did not allow TPEA to develop transboundary plans, nor to implement transboundary planning suggestions. The TPEA Good Practice Guide therefore concentrates on the experiences gained through carrying out key elements of a transboundary MSP process in the context of legal and policy frameworks, participatory approaches and technical considerations. Attention was given to the following stages:

PREPARATION ☛ **ANALYSIS** ☛ **PLANNING** ☛ **EVALUATION**

Importance was also given to the following aspects, which ran alongside the above stages throughout the process:

STAKEHOLDER ENGAGEMENT · **COMMUNICATION** · **DATA**

NORTHERN CONTEXT IR–UK

East Coast – Irish Sea

GEOGRAPHICAL CONTEXT
PILOT AREA

SOUTHERN CONTEXT PT–ES

Algarve – Gulf of Cadiz

GEOGRAPHICAL CONTEXT
PILOT AREA

Communication →
STAKEHOLDER ENGAGEMENT →

PREPARATION ☛ **ANALYSIS** ☛ **PLANNING** ☛ **EVALUATION**
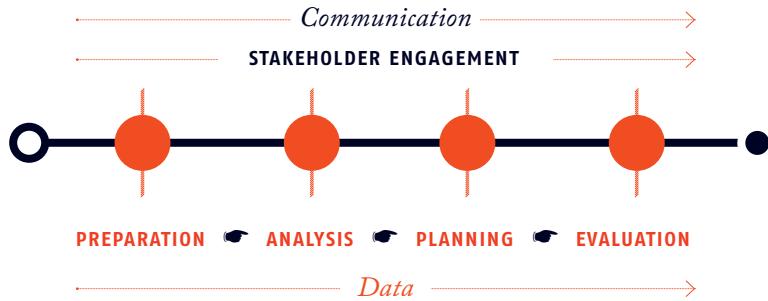
Data →

PREPARATION

This stage of the TPEA project focused on selection of the pilot areas and setting out principles (e.g. for data collection) and strategic objectives. A common system for storing, visualising and managing geographical data was created in order to support the subsequent phases of analysis and planning.

ANALYSIS

Based on available information, the pilot areas were characterised in terms of biophysical features, their continuity across borders and existing infrastructures. Existing uses and activities in the pilot areas were identified and characterised in terms of distribution, intensity and impacts. Current and potential pressures and synergies were also considered. The governance framework was also characterised, and existing transboundary agreements and initiatives were reviewed, together with legal and policy instruments and national/regional priorities for maritime and coastal issues. Relevant information on the pilot areas was then integrated to identify the most likely priority uses and activities.

PLANNING

Following the identification of key issues, specific objectives were developed in accordance with the particular needs of the pilot areas. Different planning options were explored, partly by using scenarios. A set of recommendations was developed for each pilot area accompanied by appropriate guidelines for their implementation.

EVALUATION

A checklist was drawn up for evaluating the TPEA transboundary MSP process. Recommendations were then made for an evaluation of outcomes and impacts at a later planning stage (not covered by TPEA).

The following three themes ran through all four stages of the process and were important considerations from the outset:

STAKEHOLDER ENGAGEMENT

A series of workshops was held in each pilot area as the primary means of stakeholder engagement, with the aim of involving stakeholder groups from both sides of borders in the activities developed by the team. This ensured that their opinions, knowledge and other inputs were included at different stages of the transboundary planning process.

COMMUNICATION

The progress and results of the project were reported more widely via a dedicated website, making key documents and news items publicly available, fact sheets, a web portal and an app were also used.

DATA

Spatial data relating to the pilot areas was gathered to the extent possible, providing information about marine conditions and maritime activities. This was imported to a Geographical Information System which allowed information to be displayed on maps of the two areas, and, for the southern pilot area, was made publicly accessible through a web viewer.

This Good Practice Guide is intended to be a sourcebook, containing suggestions to guide other cross-border planning exercises at certain crucial stages. It is not intended that it should be followed fully in every situation, but that consideration might be given to suggestions as appropriate in different settings. This guidance may be relevant to transboundary MSP exercises which neighbouring jurisdictions embark upon as part of their wider MSP processes, or by way of a special arrangement between themselves. We generally refer here to 'jurisdictions', which could be nations or sub-national states or regions with competency for MSP; transboundary exercises may involve jurisdictions at various levels of governance and from one or more nation. To ensure the Guide is practice-oriented, it is kept as concise as possible. Each section provides a set of suggestions together with illustrative examples from TPEA, drawing on the northern and southern pilot areas and the project experience as a whole.

More information on the project's activities and more detailed project results are available in the other TPEA publications and outputs. Please see inner back page 71 for details.

Checklist

This checklist summarises the main points of the guidance for quick reference by MSP practitioners carrying out a transboundary exercise. It may be a useful preliminary exercise to scan over this list when carrying out transboundary elements of MSP and follow up more detailed guidance as relevant. It is recognised that the resources available for carrying out transboundary elements of MSP, and the extent to which suggestions can be taken up, may be limited and will vary between jurisdictions.
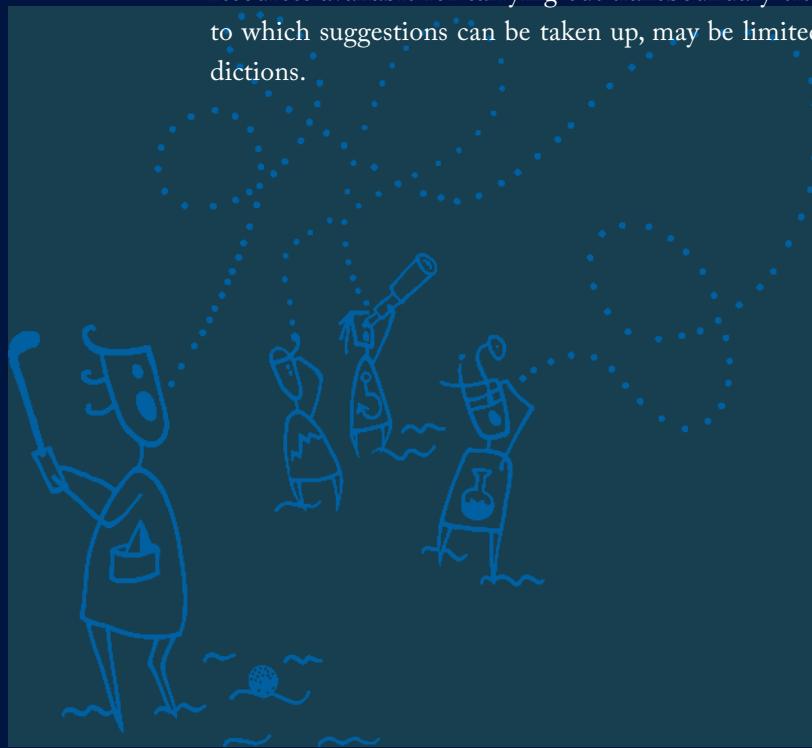
A. Cross-cutting themes

1. COMMUNICATION

✔ Find accepted language(s) of communication

Avoid the risk of misunderstanding and losing contributions by giving careful consideration to language.

✔ Develop horizontal and vertical lines of communication

Transboundary MSP is relevant at various levels of governance and to many sectoral interests, so lines of organisational and geographical communication may be fostered.

✔ Communicate the goals and purpose of the transboundary MSP exercise at an early stage

There should be agreement on, and clear presentation of, the transboundary MSP process from the beginning.

2. STAKEHOLDER ENGAGEMENT

✔ Understand the benefits of comprehensive stakeholder involvement

Stakeholders have a pivotal role in transboundary MSP, as they represent the various user and interest groups active in the planning area, from statutory, regulatory and non-statutory perspectives.

✔ Understand opportunities and constraints for stakeholder involvement

The ability and willingness of stakeholders to become involved in MSP processes may vary and needs to be taken into account.

3. SHARING INFORMATION AND DATA

✔ Plan a common system of information management

In a transboundary MSP process, a common system of information is a vital component, which may include a Geographical Information System (GIS)

B. Preparation

1. MANAGING THE PROCESS

✔ Ensure a representative transboundary partnership and share tasks equitably

Representativeness is important in achieving a cooperative partnership, with all parties assuming clear responsibilities and contributing to cross-border sharing of expertise.

✔ Find effective ways of meeting, and ensure clear structures of working and internal communication

Establishing a pattern of regular contact and working to a clear plan of action is important, making efficient use of resources and communicating information between participants effectively.

✔ Build trust across borders and respect differences

Transboundary MSP depends on building openness and trust between participants, especially across borders, taking into account the different cultural contexts and learning from different approaches and priorities across jurisdictions.

✔ Allow for internal discussions and take time to discuss critical issues

Transboundary MSP may require careful attention to detail regarding certain issues, and internal discussions may take place as necessary.

2. GAINING THE PARTICIPATION OF STAKEHOLDERS

✔ Include representative stakeholders for the transboundary area

It is important to bring stakeholders into the process as early as practicable to give them opportunity to interact and share differing perspectives.

3. DEFINING THE TRANSBOUNDARY AREA

✔ Adopt a flexible approach to defining a transboundary area, taking account of all relevant issues

Transboundary MSP areas may be defined in a flexible manner, to take into account relevant considerations, including geography, governance, activities, cross-border effects and stakeholders' views.

✔ Take account of jurisdictional issues within and between nations

Transboundary MSP areas should take into consideration existing borders and other jurisdictional considerations in the wider area.

4. SETTING STRATEGIC OBJECTIVES

✔ Agree strategic objectives to guide the process

Strategic objectives may be agreed at an early stage to guide the transboundary exercise, reflecting the general vision and intentions for the area and the MSP process.

✔ Work within the possibilities of the governance context

It is helpful to ensure that strategic objectives for transboundary MSP take account of relevant legislation, policy and structures.

5. ORGANISING DATA COLLECTION

✔ Identify data needs

Identifying relevant information regarding marine and coastal features and activities is critical to transboundary MSP .

✔ Establish a transboundary data protocol

In developing a common information system, it would be helpful to establish a protocol for data exchange between jurisdictions to improve consistency, harmonisation and standardisation of the information gathered.

C. Analysis

✍ I. UNDERSTANDING GOVERNANCE FRAMEWORKS

✔ **Analyse national legal instruments and compare policy priorities relating to the transboundary area**

Understanding the main legal instruments and policy priorities that are relevant to maritime activities, for each jurisdiction and at a higher transnational level, is an important aspect of transboundary MSP.

✔ **Identify key coastal and maritime issues**

Transboundary MSP may refer to the most significant conditions and activities that are relevant to the jurisdictions concerned.

✔ **Understand transboundary dynamics across the area**

Understanding cross-border interactions and their geographical reach is a key step in transboundary MSP.

✔ **Understand administrative structures and responsibilities for the transboundary area**

Transboundary MSP can benefit from a good understanding of the administrative structures and responsibilities at national and sub-national levels.

✔ **Build on existing mechanisms for cooperation**

Transboundary MSP solutions may build on existing cross-border arrangements for cooperation.

3. CONTINUING STAKEHOLDER ENGAGEMENT

✔ **Maintain flexibility and efficiency in stakeholder engagement**

Appropriate methods of continuing to engage effectively with stakeholders may be used, recognising the multiple demands on time and limited resources.

4. GATHERING AND MANAGING DATA

✔ **Gather data from national and transnational sources as appropriate**

Spatial data may be gathered from various sources and organisations within each jurisdiction.

✔ **Harmonise data from different sources and across borders**

Given that information will be compiled from different sources, including from different jurisdictions, data should be compared before being unified in a single database.

✔ **Set up a common system for the storage, management and analysis of information**

A Geographical Information System (GIS) is an essential tool for storing, visualising and managing geographical data across borders.

D. Planning

1. EXPLORING OPTIONS

✔ **Set specific objectives as appropriate**

More detailed objectives may be established for the transboundary area which can then guide the following steps, reflecting key issues that may be addressed.

✔ **Understand transboundary pressures and opportunities**

Transboundary MSP may lead to a greater understanding of the specific pressures faced and the opportunities presented which could benefit from a shared approach.

✔ **Seek common interests**

Transboundary MSP may enable the definition of common interests between jurisdictions, which may form the focus of future collaboration on specific issues.

✔ **Develop transboundary scenarios**

Transboundary MSP may benefit from the creation of scenarios emphasising different priorities, developed and discussed by participants.

2. MAKING INFORMATION ACCESSIBLE

✔ **Develop a web viewer for spatial data**

Spatial data for the transboundary area may be imported to a web viewer for ease of access by participants and to allow information to be viewed selectively and manipulated.

✔ **Use multiple forms of communication**

A good range of communication tools may be used to make information available as widely as possible.
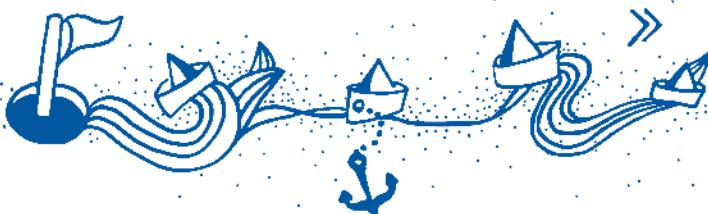
E. Evaluation

1. PREPARING AN EVALUATION PROCESS

✔ **Ensure cost-effectiveness and proportionality**

Evaluation of transboundary MSP should be conducted in a way that is proportionate to the time and resources available.

✔ **Develop an appropriate framework for evaluation**

Evaluation of transboundary MSP should be built into the overall process.

✔ **Draw up suitable evaluation criteria and indicators**

Evaluation of transboundary MSP should be based on tailored criteria and indicators.

2. CARRYING OUT EVALUATION

✔ **Ensure a well-managed evaluation process**

The transboundary MSP process may be regularly reviewed, with agreed periodicity and clear responsibilities assigned.

✔ **Evaluate stakeholder involvement**

Stakeholder involvement and satisfaction with the transboundary MSP process may be continuously reviewed.

common language

STAKEHOLDER ENGAGEMENT

A

sharing information and data

A. Cross-cutting themes

Communication and engagement with all those interested in transboundary MSP at all stages are fundamental. Although good communication is a backbone of any MSP process, it is doubly important in a cross-border context where mutual understanding needs to be achieved across different cultures and where resource constraints may require the cross-border dialogue to run efficiently.

Although it will be for each jurisdiction to assess the optimum methods of communicating and engaging with stakeholders and the public, there are benefits to considering how best to communicate with different audiences at the outset. This applies also to the planning team itself. For all involved, issues such as differences of language, working culture and traditions of participation need to be considered.

This section sets out general issues to consider at the outset. Other, more specific, preparatory steps will follow on; these are set out in the next section. Communication and engagement are closely intertwined, as good stakeholder engagement relies on good communication and vice versa.

I. COMMUNICATION

✔ Find accepted language(s) of communication

Avoid the risk of misunderstanding and losing contributions by giving careful consideration to language.

Language is essential in communication both within the planning team and when working with stakeholders. It is important to ensure that all can take an active part, with respect to spoken and technical languages. In transboundary contexts without a shared language, interpretation may be necessary, or an 'international' language not belonging to any of the jurisdictions may be preferred. One language may predominate in one activity, and another in another, with due regard to equity. Regard may also be had to developing a common understanding of terminology. For example, a term might carry a particular connotation in one setting, but be understood differently elsewhere. Participants may identify potential differences of use and clarify

meanings as necessary. At the beginning of each stakeholder session, it may be advisable to discuss which language(s) will be spoken and which terms still need clarification. Finding a common language of understanding is helped by using plain language where possible, avoiding overly scientific and technical terminology and jargon. It is also helped by using different means of engagement, such as specially devised fact sheets, maps, short reports, and website contributions.

✔ Develop horizontal and vertical lines of communication

Transboundary MSP is relevant at various levels of governance and to many sectoral interests, so lines of organisational and geographical communication may be fostered.
Regular external reporting may be carried out via publicly-available documents, a website and any other media that may be considered useful. Existing networks can be used to communicate information, and new contacts and networks made for the purpose. Clear, easily communicable material that captures the relevance and importance of the planning exercise may be used.

Subject to the time and resources available, a communication plan may be helpful in each of the participating countries. Partners in transboundary MSP may also give consideration to aligning their messages whilst allowing for different cultural preferences in communication styles and forms.

✔ Communicate the goals and purpose of the transboundary MSP exercise at an early stage

There should be agreement on, and clear presentation of, the transboundary MSP process from the beginning.
Not all participants may be familiar with the concept of MSP, so it is helpful to communicate clearly the implications and opportunities associated with MSP, especially at a transboundary level. Early communication of the goals and purpose of a transboundary MSP exercise is key to ensuring that all parties have a good understanding of the scope and relevance of the exercise. For example, agreement on messages about the purpose, approach and schedule of the process will minimise the potential for misinformation and conflicting perceptions and expectations, whilst also identifying any internal inconsistencies that may exist between participants. This approach may also help participants at all levels to engage fully with the process.

Within TPEA, the partners from Ireland and Northern Ireland already had a shared language and were able to use English as a means of communication. Spain and Portugal do not share a common language, and communication in a third language (English) was sometimes a constraining factor as not everyone spoke fluent English. During the stakeholder workshops, both native languages were given priority.

Clarification of terminology was frequently needed, especially when people were not using their first language. Even well-understood terms were sometimes found to have different connotations, such as 'conflict' being taken to mean competition or divisiveness in different contexts.

TPEA undertook communication at a number of levels to ensure awareness of the project across different sectors and jurisdictions. For example, the team communicated updates of progress and actions undertaken to its Advisory Group; project partners used networking at sectoral / industry events and environmental NGO workshops to communicate the project to different audiences; and TPEA communication materials included short two-page 'fact sheets' which succinctly conveyed the key aspects of the project and planning exercises.

2. STAKEHOLDER ENGAGEMENT

✔ Understand the benefits of comprehensive stakeholder involvement

Stakeholders have a pivotal role in transboundary MSP, as they represent the various user and interest groups active in the planning area, from statutory, regulatory and non-statutory perspectives.

Stakeholder involvement is critical in order to achieve broad acceptance, ownership and support for MSP. Their participation is also a source of knowledge that can significantly improve the quality of the planning process at design, implementation, and evaluation phases. This is particularly important in transboundary contexts, as stakeholders can contribute awareness of cross-border issues and work together in developing shared visions. Stakeholder involvement necessitates the inclusion of representatives from multiple sectors and levels of governance, and where appropriate, their counterparts from adjacent jurisdictions. Particular attention may be given to gaining fair representation of the interests and jurisdictions concerned.

✔ Understand opportunities and constraints for stakeholder involvement

The ability and willingness of stakeholders to become involved in MSP processes may vary and needs to be taken into account.

The ability of stakeholders to engage in MSP is influenced by resources available (human and financial), other consultation demands, prioritisation of marine concerns, and the nature of their organisation. Transboundary meetings may be more demanding in terms of travel and effort. To make best use of stakeholder engagement, practitioners should communicate the scope and purpose of stakeholder involvement at each stage of the transboundary process. Stakeholders in turn should feel their input is valued and see the results of their engagement reflected in the process. To ensure the best possible input, flexibility may be built into the programme by using a suite of methods. The engagement process is also framed by relevant legislation on public participation in the states concerned and by European and international conventions and legislation on transboundary cooperation and participation.

Within TPEA, a stakeholder engagement strategy was devised including various methods for sharing and updating information and for discussing and providing progress reports throughout the TPEA project. Three stakeholder workshops took place at key stages of the project, enabling stakeholders to get to know each other, build networks and discuss their views of the transboundary planning area. A dedicated website was set up to keep partners, stakeholders and others with an interest up to date with progress, and a series of fact-sheets were published on selected topics primarily addressing stakeholders.

3. SHARING INFORMATION AND DATA

✔ Plan a common system of information management

In a transboundary MSP process, a common system of information is a vital component, which may include a Geographical Information System (GIS).

Datasets required for transboundary MSP may differ in many ways across jurisdictions, e.g. collection methods, reference systems, and level of detail (hence harmonised datasets have become an important EU policy objective (e.g. EMODNET or EUSEAMAPS)). A transboundary MSP exercise may be the first time that these differences become apparent. It is recognised that the use of GIS must take account of available resources and be subject to cost evaluation; however, a specific and appropriate allocation of resources is advisable.
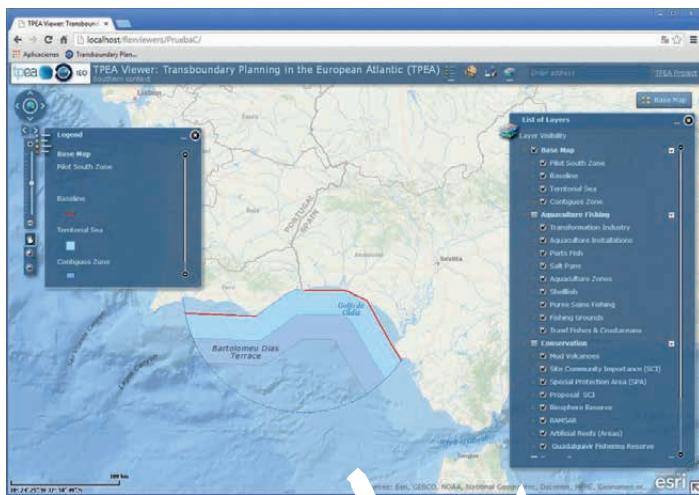
B. Preparation

I. MANAGING THE PROCESS

✔ Ensure a representative transboundary partnership and share tasks equitably

Representativeness is important in achieving a cooperative partnership, with all parties assuming clear responsibilities and contributing to cross-border sharing of expertise.

In transboundary contexts, it is important to consider equitable representation of countries, organisations and stakeholders from across the statutory and non-statutory MSP communities in their jurisdictions to ensure full ownership and collaboration. The process should be led by authorities with responsibility for MSP in their jurisdictions, or that are working towards implementation. Transboundary MSP may also benefit from the involvement of scientific organisations, such as universities and research institutes, who can provide expert knowledge, a good understanding of transboundary dynamics, involvement with coastal and maritime networks and experience of stakeholder engagement, and they may own relevant data. Participants may pool their skills, each leading on a certain task, allowing them to learn from each other's expertise, especially across borders. It is also important that tasks are shared equitably between participants and across jurisdictions.

✔ Find effective ways of meeting, and ensure clear structures of working and internal communication

Establishing a pattern of regular contact and working to a clear plan of action is important, making efficient use of resources and communicating information between participants effectively.

It is important to find suitable formats and routines for meetings, including sub-group meetings to deal with specific issues (such as GIS). Effective ways of transboundary communication may be established; teleconferences make efficient use of resources, but cannot always replace face to face meetings, especially in the early phase of establishing working relations. There may be value in social components or site visits. The location of meetings should reflect the transboundary nature of the

exercise, ideally being held in different locations. It may be possible to combine meetings with related events such as stakeholder workshops. Notes of meetings should be circulated for agreement and should record specific action points. It is important to share information openly across the partnership; a common web-based platform or intranet is a good way for sharing documents in a transparent way.

✔ Build trust across borders and respect differences

Transboundary MSP depends on building openness and trust between participants, especially across borders, taking into account the different cultural contexts and learning from different approaches and priorities across jurisdictions.

Trust is an essential element of successful transboundary MSP exercises and should build gradually as participants work together; 'growing together' may take extra time in transboundary contexts where participants may speak different languages and are accustomed to different ways of working. It is also possible that there will be different approaches to planning, reflecting social and economic conditions, cultures and organisational structures. ICM and MSP may be at various stages of implementation between jurisdictions. More subtle differences, such as modes of working and styles of communication, may also emerge. Differences should be recognised, understanding that they can enrich the process rather than be an obstacle and as participants are willing to learn from each other in the development of new approaches and solutions.

✔ Allow for internal discussions and take time to discuss critical issues

Transboundary MSP may require careful attention to detail regarding certain issues, and internal discussions may take place as necessary.

Issues and difficulties may be discussed openly between participants, though internal discussions are also legitimate for resolving matters within particular contexts. A balance may need to be struck between openness and the need to acknowledge internal sensitivities. The results of such discussions can subsequently be made public via agreed statements. Also, certain issues may be left to later discussion.

In TPEA, representativeness was sought at every stage. For example, the Spanish Ministry of Agriculture, Food and Environment worked closely with the Portuguese Directorate General for Marine Policy in supervising the involvement of Spanish and Portuguese participants, including government agencies, stakeholder groups and universities, sharing input and responsibilities across the border. In Portugal, DGPM coordinates MSP policy and has undertaken the first exercise for maritime waters; in Spain, MAGRAMA has oversight for ICM.

TPEA involved official authorities as much as possible. For example, in Northern Ireland, DOE is preparing a marine plan, and in Ireland, the Marine Institute is assisting the Government in working towards MSP policy.

The importance of involving institutions with oversight of MSP and data owners was demonstrated in Spain, where IEO advises government on marine sciences, the sea and its resources and owns data used to compile a GIS for the case study area.

TPEA benefited enormously from the exchange between southern and northern European partners in the Atlantic region. For example, southern partners contributed an advanced approach to data management and representation and northern partners brought in their long-standing experience of stakeholder engagement.

2. GAINING THE PARTICIPATION OF STAKEHOLDERS

✔ Include representative stakeholders for the transboundary area

It is important to bring stakeholders into the process as early as practicable to give them opportunity to interact and share differing perspectives.

Bringing together stakeholders from an early stage provides an opportunity for raising awareness of the intent and scope of transboundary MSP, especially as not all stakeholders are familiar with the concept of MSP and transboundary MSP opens up new horizons. It is also an opportunity to flag emerging issues at the outset, such as overcoming any previous negative interactions between stakeholders. It also allows the planning team to set out the process and introduce the points of contact. It may be valuable to conduct a stakeholder profiling exercise and to utilise existing

contacts and professional and thematic networks in order to identify a good range of appropriate stakeholders.

TPEA partners developed stakeholder contacts to ensure appropriate representation of stakeholders. For example, the northern context was assessed and profiled in terms of its marine management governance and institutional arrangements and key sectors of activity (traditional and emerging) were utilised to further improve stakeholder profiling and mapping.

In the Spanish context, stakeholders had little knowledge of MSP, partly because there is as yet no statutory system of MSP in Spain. The Ministry of Agriculture, Food and Environment organised supplementary workshops at different levels of governance to raise awareness of MSP and gain support for the transboundary exercise with Portugal.

3. DEFINING THE TRANSBOUNDARY AREA

✔ Adopt a flexible approach to defining a transboundary area, taking account of all relevant issues

Transboundary MSP areas may be defined in a flexible manner, to take into account relevant considerations, including geography, governance, activities, cross-border effects and stakeholders' views.

It is helpful to define a transboundary MSP area clearly enough to focus activities such as data gathering and stakeholder engagement activities. However, there is no commonly-agreed legal or official basis for defining an area for transboundary MSP purposes. The area should be decided by the parties involved according to the circumstances of the case. This is likely to take account of things like jurisdictional and administrative boundaries, geographical features, patterns of maritime activities and their cross-border effects, and stakeholder views. Planning areas for other MSP processes (with which the transboundary exercise may be combined) may also be considered. There may also be flexibility to accommodate the variability of transboundary issues.

Consideration may also be given to land-sea interactions with the ecosystem approach in mind, taking into account interchange of materials, energy and organisms and the reliance of maritime activities on land-based infrastructure and services. It may be possible to include terrestrial space within the transboundary area by defining an inland limit, or it may be preferable to take landward considerations into account in a more flexible manner without setting an inland boundary.

### ✔ Take account of jurisdictional issues within and between nations

Transboundary MSP areas should take into consideration existing borders and other jurisdictional considerations in the wider area.

Jurisdictional issues are likely to be of central importance when defining an area for the purpose of transboundary MSP, with reference especially to the United Nations Convention on the Law of the Sea, which defines a range of maritime areas in which coastal states can exercise jurisdiction. Consideration might be given, for example, to:

- the geographical extent of internal, archipelagic and territorial waters;
- the extent of exclusive economic zones, if established;
- the coordinates of international marine borders, if established;
- the outer limits of jurisdictional powers, likely to depend upon the enclosed or open nature of the sea basin;
- sub-national borders and responsibilities in the coastal zone and offshore;
- national / sub-national departmental responsibilities and areas of competence;
- national / sub-national MSP initiatives and planning areas;
- the extent of ICM and river basin management initiatives;
- European and other international marine regions and administrative areas.

One jurisdiction may wish to align the transboundary area partly with existing borders of its own, whilst borders between jurisdictions are likely to determine the central focus of a transboundary area. Where borders have not been agreed, it may be possible, for the purposes of the exercise, to agree theoretical boundaries, or it may be preferable to leave any such boundary undefined.

The transboundary area between Portugal and Spain was initially defined broadly, by drawing a semi-circle of 60 nm radius from the point where the land border meets the sea, considering both maritime space and coastal zone features and the main uses and activities. Mapping the nature of shared resources, cross-border activities and transboundary impacts allowed the identification of areas of common interest between the two countries. This led to a better understanding of the broader context for the transboundary area.

The definition of the transboundary area between Ireland and Northern Ireland took account of a number of jurisdictional issues. The outer boundary of the area was defined by the limits of the EEZs in each jurisdiction, partly because it was not feasible to invite the participation of other Irish Sea jurisdictions. The centre of the area had regard to the terrestrial border between the two jurisdictions and the border between the EEZs. However, there is no agreement on the delimitation of territorial sea between the UK and Ireland. Instead, consideration was given to a Memorandum of Understanding between the two governments setting out coordinates, establishing agreed lines solely for the purposes of renewable energy development in territorial waters. This provided a focus for the centre of the transboundary area.
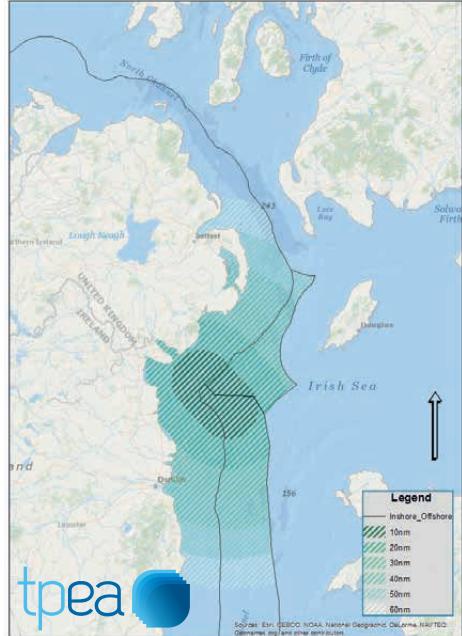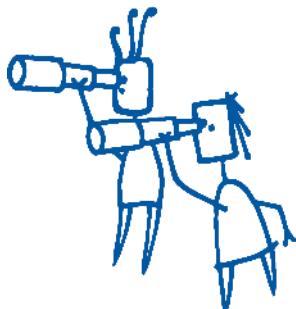
East Coast – Irish Sea

4. SETTING STRATEGIC OBJECTIVES

✔ Agree strategic objectives to guide the process

Strategic objectives may be agreed at an early stage to guide the transboundary exercise, reflecting the general vision and intentions for the area and the MSP process.

It may be helpful to establish broad, strategic objectives in order to guide the transboundary MSP process and assist in its evaluation. These may be few in number, and focus on cooperative means of working. They may be drafted by the main participants, but should take account of the needs and opinions of stakeholders; they may also be amended in the light of stakeholder input. These will lay the foundation for the transboundary MSP exercise and guide the various stages of the process.

✔ Work within the possibilities of the governance context

It is helpful to ensure that strategic objectives for transboundary MSP take account of relevant legislation, policy and structures.

It is important that objectives are politically, administratively and socially acceptable for the jurisdictions concerned. When setting objectives, regard should be had to the overall governance framework, including the administrative structures and priorities for each of the jurisdictions and for the transnational context as a whole. National, European and international legislation may set the terms of what may be expressed in the objectives. A clear understanding of the respective governance frameworks may also lead to an understanding of areas of common interest and may contribute to the development of more specific local objectives.

In TPEA, a set of six strategic objectives was agreed by the project team and presented to stakeholders for their comment. These were based upon the overarching principle of the ecosystem approach and the ten principles of the European Commission's MSP Roadmap. The objectives stressed the need for collaborative working in every stage of the transboundary MSP process. They also reflected the specific requirements of the call for the project and the recommendations of the UNESCO guide on MSP. This set of objectives then helped to frame more specific objectives for these pilot areas.

OVERARCHING PRINCIPLES

The ecosystem approach (MSP Roadmap, para 5)

10 principles of the MSP Roadmap

STRATEGIC OBJECTIVES

PROJECT–WIDE STRATEGIC OBJECTIVES:

- To work collaboratively towards maritime space that is environmentally healthy, socially inclusive and economically productive, with the potential for innovative and sustainable maritime growth.

- To arrive at an agreed understanding of the project's transboundary marine areas.

- To coordinate the collection of data relevant to the planning and monitoring of marine conditions and maritime activities in the transboundary areas, and to develop a shared Geographical Information System to capture, manage, analyse and display marine spatial data.

- To coordinate the understanding of policy positions, governance principles and positions and stakeholder perspectives throughout the transboundary areas.

- To come to a shared understanding of competing interests, pressures and opportunities and explore options for future configurations of sustainable sea use throughout the transboundary areas.

- To find joint approaches to integrating MSP with ICZM initiatives and, where appropriate, terrestrial planning within transboundary contexts.

SPECIFIC OBJECTIVES
North

SPECIFIC OBJECTIVES
South

5. ORGANISING DATA COLLECTION

✔ Identify data needs

Identifying relevant information regarding marine and coastal features and activities is critical to transboundary MSP.

The amount of information that could be compiled for a transboundary area is enormous; it is important to select the most relevant data. This should be identified and agreed amongst the participants and ideally be based upon an accepted typology

which sets out the parameters for data collection and identifies data sets of mutual concern and interest. Information on the spatial extent of these features may be collected. It is also important to define the temporal framework of the information, covering not only the present, but also past and future trends where possible. Similarly, information on the socio-economic importance of activities should be gathered. Stakeholders may be invited to participate actively to help ensure that no relevant information is omitted. Data needs may have to be updated as the process evolves.

TPEA began by compiling a detailed list of the information to be collected from each country (see TPEA Pilot Areas Report for details). This included information on administrative and legal boundaries, marine and coastal space (including habitat and seabed information), and information on human uses and activities. Special importance was given to transboundary characteristics, features, activities or uses of in both the southern and the northern pilot areas. This list was discussed, amended and completed with stakeholder suggestions during the initial stakeholder workshops.
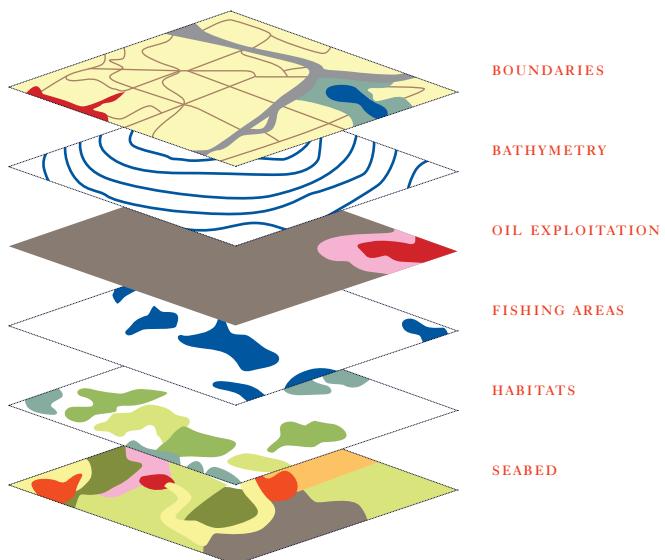
BOUNDARIES

BATHYMETRY

OIL EXPLOITATION

FISHING AREAS

HABITATS

SEABED

✔ Establish a transboundary data protocol

In developing a common information system, it would be helpful to establish a protocol for data exchange between jurisdictions to improve consistency, harmonisation and standardisation of the information gathered.

The information compiled would benefit from being harmonised as much as possible between the jurisdictions. Within the EU, Member States should use, wherever possible, systems and mechanisms such as the INSPIRE Directive. It is valuable to establish a protocol for collecting information for the transboundary area, including items such as:

- The selection of standard formats of exchange of information;

- unique geodetic reference system for all information from different jurisdictions;

- A unique coordinate system for storing information in the geodatabase;

- Specifying work scales;

- Requirements about data quality to ensure consistency in the information system;

- Rules to facilitate the topological consistency of information;

- Criteria and process to harmonise attributes in similar layers for the whole transboundary area; and

- Metadata for corresponding geographic data.

For the TPEA project, the following standardisation of geographic data was used:

- The reference system choice was ETRS89, the European Terrestrial Reference System 1989 which is based on the GRS80 ellipsoid. Geodetic DATUM ETRS89 is the standard reference system recommended by the European Environment Agency as the common coordinate reference system for data storage;

- The Geographic Coordinate System was determined as the most appropriate;

- The scales used ranged from 1 : 1,000 to 1 : 50,000;

- To guarantee the highest quality of information, the following data attributes were considered: integrity, consistency, validity, accuracy, relevance and vintage;

- Topological rules were defined depending on each layer;

- Formats for information exchange were defined as shapefile or file geodatabase for vector data and GeoTiff or GRID ESRI for raster data; and

- Metadata was generated in accordance with the INSPIRE Directive;

HARMONIZE DATA

ANALIZE + COMPARE PRIORITIES

BUILD ON EXISTING COOPERATIONS

ESTABLISH TRANSBOUNDRY DATA-PROTOCOL

C. Analysis

## I. UNDERSTANDING GOVERNANCE FRAMEWORKS

✔ Analyse national legal instruments and compare policy priorities relating to the transboundary area

Understanding the main legal instruments and policy priorities that are relevant to maritime activities, for each jurisdiction and at a higher transnational level, is an important aspect of transboundary MSP.

Transboundary MSP takes place within the context of international legislation and agreements (arising, for example, from the United Nations Convention on the Law of the Sea, regional conventions such as OSPAR and EU Directives, such as in relation to good environmental status or habitat protection). In many cases, national instruments reflect international measures and may be common to the jurisdictions involved. Instruments may also reflect national priorities and administrative characteristics in relation to MSP and ICM. It is helpful to carry out an analysis of relevant legal instruments in each jurisdiction and to summarise main points of importance to the transboundary area. However, the regulation of coastal and marine activities is complex, such as the licensing of coastal uses and activities, and it would not be practical to set out all information in detail. A comparison of national legal instruments may highlight differences, but also identify commonalities upon which to build a joint approach.

It may also be helpful to identify policy issues, such as strategic objectives, priorities and targets, in relation to such things as port development or aquaculture. Issues may relate to national strategies and priorities or may be shared. It should be possible to compare priorities, identifying synergies between jurisdictions and any differences that limit a joint approach. This can point towards the need for more detailed discussion on key issues. For example, there may be shared targets that could drive particular developments such as offshore renewable energy or aquaculture, or there may be differing environmental objectives, impacting on how cross-border resources might be managed. This exercise may indicate future trends for the area.

National Ocean Strategy

National Strategy for ICZM

SP&PT Fleet's Agreement

Marine Strategy Framework Directive

Water Framework Directive

Maritime Strategy for the Atlantic Ocean Area

OSPAR convention

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SPAIN   PORTUGAL

EEZ

24 NM

12 NM
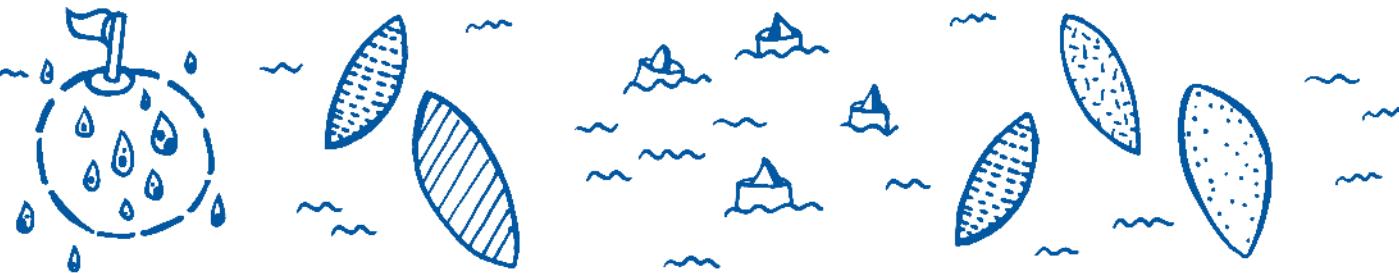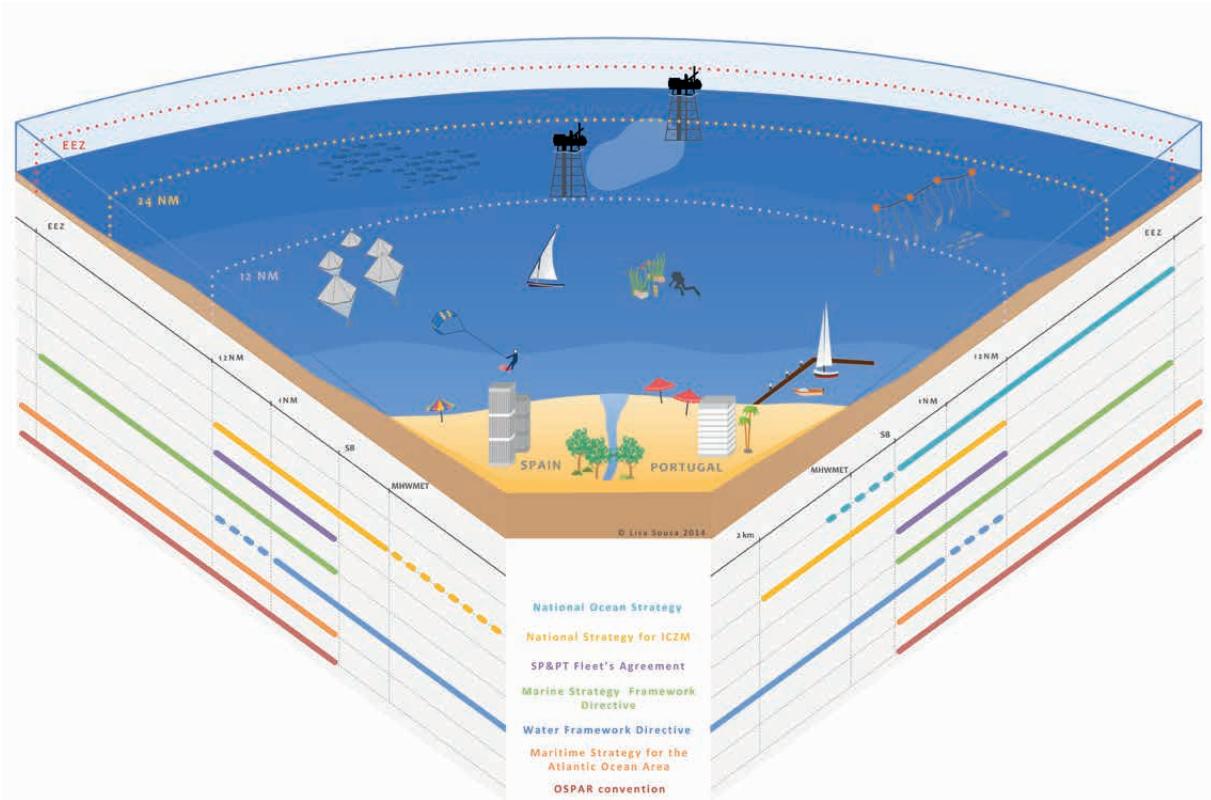
2. ANALYSING THE TRANSBOUNDARY AREA

✔ Identify key coastal and maritime issues

Transboundary MSP may refer to the most significant conditions and activities that are relevant to the jurisdictions concerned.

There is likely to be a wide range of environmental conditions, existing activities and potential for future use in any given context. Transboundary MSP should focus on issues of key relevance to the jurisdictions concerned. This may be a resource or activity which straddles a border, or there may be environmental or geographical features that would benefit from a cooperative approach. There may be areas of socio-economic opportunity that could be considered in the process, or it may be decided to encapsulate activities such as fishing grounds or shipping routes that stretch across a border region. In some contexts, certain land-sea interactions may be regarded as important, and transboundary considerations may extend inland, to deal, for example, with land-based sources of pollution. Following an initial analysis, it may be possible to define an area of common interest, where there is greatest potential for developing a shared approach to management and development.

In TPEA, the Spanish and Portuguese partners gathered data from the broader region with a view to determining the issues of most relevance to the transboundary area, such as nature conservation and protected areas encompassing land and sea areas, archaeological sites, the characterisation of marine natural resources, economic activities, and other information related to coastal line that can influence the activity in maritime area, as numbers of tourist beds, beaches, ports and marinas.
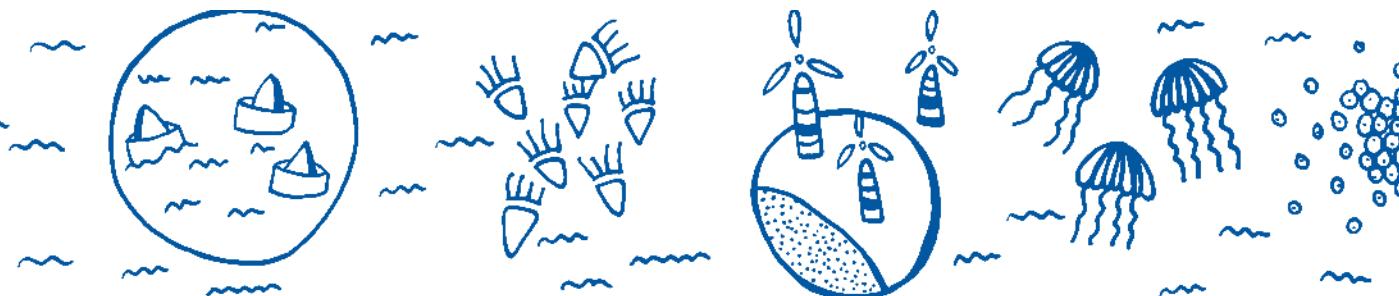
✔ Understand transboundary dynamics across the area

Understanding cross-border interactions and their geographical reach is a key step in transboundary MSP.

Maritime activities often have consequences beyond borders. Also, transboundary dynamics tend to be graded and multi-scalar and vary in their reach according to different environmental conditions and maritime activities. There may also be long-distance influences from beyond the planning area. It may be possible to reflect these dynamics in the analysis of the area. For example, degrees of transboundary influence can be indicated by zones of varying transboundary importance, with borders that are less determinate, and symbols might be used to suggest wider dynamics. Transboundary MSP areas might thus be regarded as 'soft spaces' where the focus of attention gradually diminishes away from one or several central areas.

In TPEA, the graded nature of transboundary effects and activities was shown on the map for the northern pilot area by using hatching to illustrate diminishing importance with distance from the central area. This was not intended to demonstrate measured degrees of intensity, but to indicate in a representative way the different degrees of transboundary interest and influence. Longer-distance influence was also suggested by the use of arrows from outside the transboundary area.
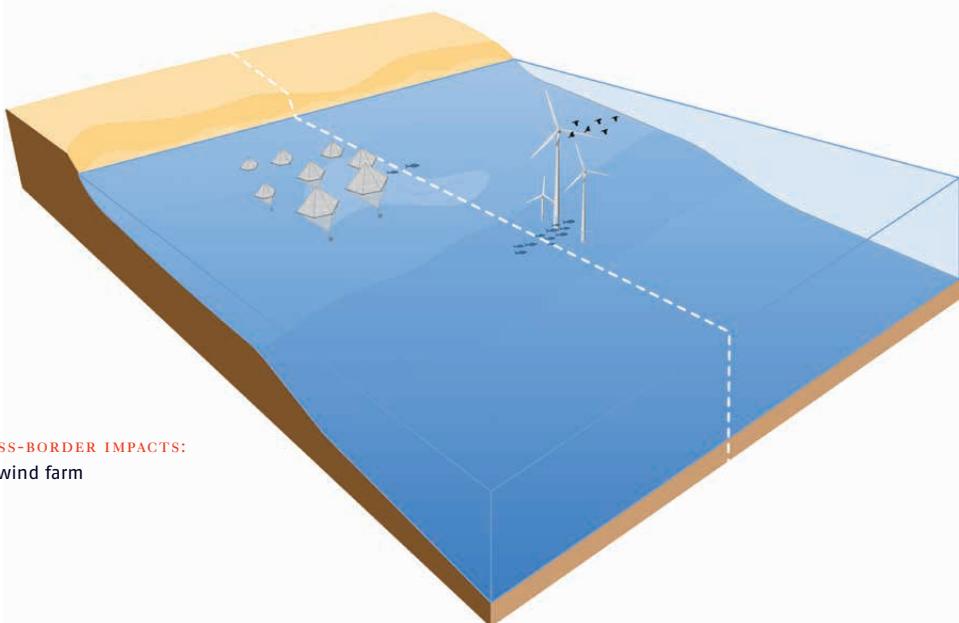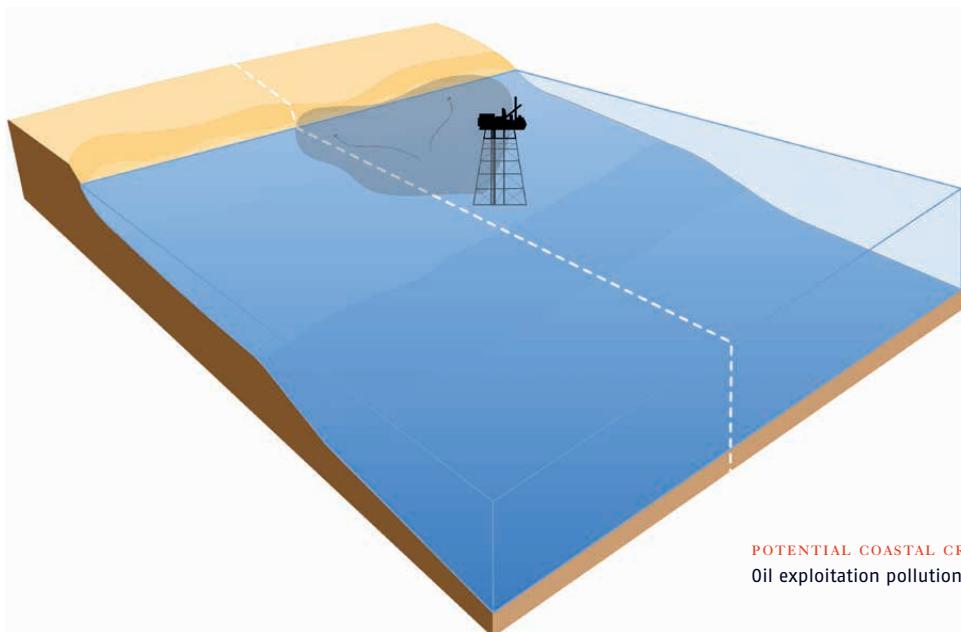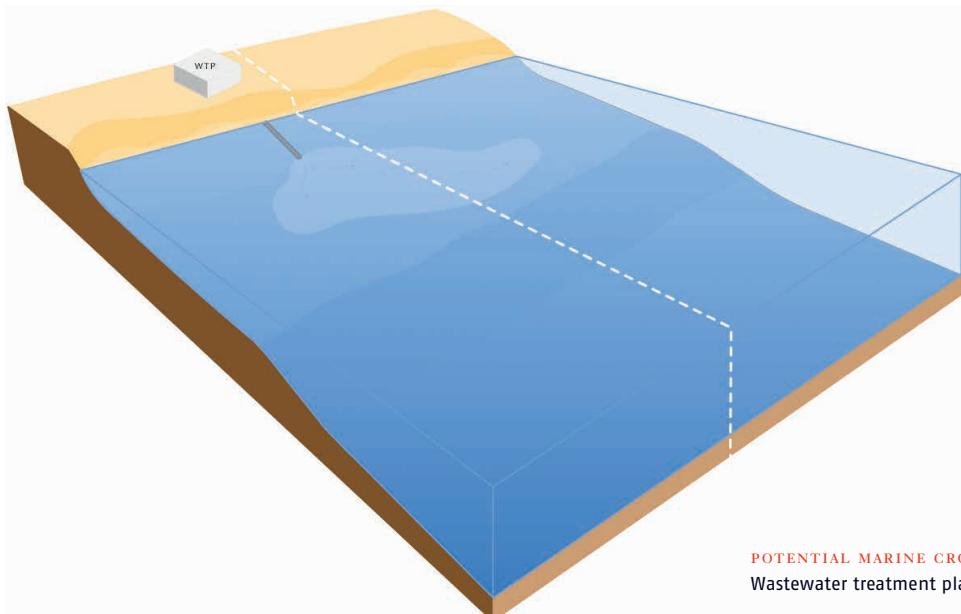
POTENTIAL MARINE CROSS-BORDER IMPACTS:
Aquaculture and offshore wind farm

POTENTIAL MARINE CROSS-BORDER IMPACTS:
Wastewater treatment plant

POTENTIAL COASTAL CROSS-BORDER IMPACTS:
Oil exploitation pollution episode

C. Analysis 41

✔ Understand administrative structures and responsibilities
for the transboundary area

Transboundary MSP can benefit from a good understanding of the administrative structures and responsibilities at national and sub-national levels.

It is likely that the political and administrative structures that relate to the governance of the transboundary area will vary between the jurisdictions concerned. In order to connect the most appropriate arms of government across jurisdictions, it is important to understand these structures, divisions of responsibilities within each jurisdiction, and the similarities and differences involved. For example, sub-national responsibilities will be important in nations with federal structures, but not in more unified states. The municipal level may be significant in some contexts, possibly with transboundary structures at a local scale, but not necessarily elsewhere. Sectoral responsibilities for coastal and marine affairs, such as licensing, may be divided between different governmental departments, but not in the same manner from one jurisdiction to the next. It is also useful to understand frameworks of consultation in each territory and possibilities for stakeholder involvement.

The potentially large number of organisations involved may be a challenge to understanding the procedures required for coastal and maritime activities. However, attention may be given to mechanisms for communication and consultation, with a view to finding the optimum connections across jurisdictions.

In TPEA, the analysis of the governance frameworks in Portugal and Spain revealed significant differences. In Spain there is a regional model with varying degrees of autonomy between regions, with responsibilities distributed between the State and the Autonomous Regions (on land, but not at sea). In Portugal the model is centralised (except in the autonomous regions of Madeira and Azores), with a concentration of decision-making powers at the central level, relying on decentralised services at regional level or local authorities for various operational aspects.

	Directorate General of Marine Policy	Directorate General for Natural Resources, Safety and Maritime Services	Regional Directorates for Agriculture and Fisheries	Institute for Nature Conservation and Forestrz	Portuguese Institute for Ocean and Atmosphere	IInsprecorate General of the Ministry of Environment, Spatial planning and Energy and the Ministry of Agriculture and the Sea	Directorate General of Energy and Geology	Portuguese Environment Agency	Commissions for Regional Coordination and Development	Authority for Food and Economic Security	...
FISHERIES	O	L O E	L	L O				L E		E	
AQUACULTURE	O	L O E	L	L O	O			L E	E	E	
MARINE BIOTECHNOLOGY		L O E		O E		O E		L E	E		
MARINE MINERAL RESOURCES				L O			L E	L E			
ENERGY RESOURCES				L O		O E	L E	L E			
PORTS, TRANSPORTS AND LOGISTICS	O	L O E		L O		O E		L E		E	
INFRASTRUCTURES	O			L O		O E		L E			
TOURISM, SPORTS AND LEISURE	O	L O E		L O E		O E		L E	E	E	
SCIENTIFIC RESEARCH		L O E		O E	L	O E		L E	E		
NATURE CONSERVATION	O	L O E		O E		O E		L E	E		
UNDERWATER CULTURAL HERITAGE	O			O E				L E			

Legend:
- L — Licensing
- O — opinion
- E — Enforcement
- B O — Binding opinion

POLICY ANALYSIS TABLE: Northern Pilot Study Area, East Coast/Irish Sea (extracts)

POLICY DOCUMENT	GOVERNANCE LEVEL	SCOPE OF POLICY	RESPONSIBLE BODY	NATURE OF DOCUMENT	TIME HORIZON
	Regional, national, sub-national, municipal etc.	Sector, spatial, integrative etc.	Government, NGO, industry etc.	Statutory, voluntary etc.	
UK Marine Policy Statement	National	Maritime Spatial Planning	National Government and regional administrations	Statutory	Ongoing
Harnessing Our Ocean Wealth	National	Integrated Planning	Government of Ireland	Non-Statutory / Policy	2012
National Ports Policy (Ireland)	National	Sectoral – Ports and Transport	Department of Transport, Tourism and Sport	Non-Statutory / Policy	2013
...	...	...	...	...	...

MAIN TOPICS RELEVANT TO THE PILOT AREA	SPECIFIC PROVISIONS
	Objectives, targets, spatial allocations etc.
– Setting the national framework for preparing Marine Plans and taking decisions affecting the marine environment. – Outlining the benefits of cross-border cooperation and coordination between the jurisdictions including sharing of data and consultation in order to fully realise the potential efforts of any marine spatial plan	– Strategic national document providing the framework for preparing Marine Plans and setting out the policy context for key current and emerging activities applicable in the study area e.g. fisheries, renewable energy
Integrated Marine Planning	– Aims to double the value of Ireland's ocean wealth to 2.4% of GDP by 2030 and increase the turnover from the ocean economy to exceed €6.4billion by 2020; – The need for close North/South cooperation in Ireland and collaboration with Atlantic neighbours and international partners is emphasised; – The Government is committed to working with the UK Government, under the auspices of the British Irish Council, and with the European Commission and Member States in the context of the North Sea Offshore Grid Initiative.
Port development	– The port governance model in Ireland is broadly in line with that elsewhere in Europe. This model is one of publicly controlled port authorities with high levels of private-sector involvement in the provision of infrastructure and services. – The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services in light of the long-term international trend in ports and shipping which is towards increased consolidation of resources in order to achieve optimum efficiencies of scale.
...	...

✔ Build on existing mechanisms for cooperation

Transboundary MSP solutions may build on existing cross-border arrangements for cooperation.

Neighbouring jurisdictions may already have various statements and mechanisms for cooperation in matters of common interest. These may relate specifically to coastal and marine affairs, such as tourism or fisheries, or wider territorial issues, such as water resources management. Jurisdictions may have cooperated on projects of common interest, possibly using European funding. Cross-border institutions may have been established to carry forward cooperative ventures. Transboundary MSP should build on these experiences as much as possible, benefiting from relations of trust and cooperation that are already developing, and thus contributing to wider processes of cross-border governance. For example, it may be possible to involve cross-border representatives or organisations in the planning process. This is likely to increase the effectiveness of transboundary MSP, and may also introduce resource efficiencies into the process.

In Spain and Portugal the 1998 Albufeira Convention sets the framework for joint protection and sustainable use of surface and ground waters in river basins including the Guadiana River, which forms the countries' southern terrestrial border. This establishes cooperation mechanisms including exchange of information, consultation and adoption of necessary measures.

Northern Ireland and Ireland have engaged in a series of cross-border initiatives since the 1998 Belfast Agreement, such as the establishment of a number of official all-Ireland bodies with cross-border responsibilities. For example, the Loughs Agency exercises a statutory remit for conservation, protection and development across the Foyle and Carlingford catchments. Its objectives include development of fisheries and aquaculture, conservation and protection of inland fisheries, and sustainable development of marine tourism within the two sea loughs representatives took part in the TPEA stakeholder workshops.

3. CONTINUING STAKEHOLDER ENGAGEMENT

✔ Maintain flexibility and efficiency in stakeholder engagement

Appropriate methods of continuing to engage effectively with stakeholders may be used, recognising the multiple demands on time and limited resources.

Practitioners should be flexible and accommodating subject to time and resources to facilitate the continuing involvement of stakeholders. Up-to-date information and the tasks expected of them should be explained in easy to understand formats, supported, for example, by fact sheets, maps, website content, or draft texts. Stakeholders will vary in the manner in which they can be involved, ranging from direct workshop input to commenting on published outputs, especially given the cross-border communication involved. A suite of methods may therefore be used to involve them.

In TPEA, a series of workshops were organised in the southern and northern pilot areas to engage directly with stakeholders, the first of which was early in the process. This gave all interested parties an opportunity to comment on the implications of transboundary MSP for their region and/or sector. It also allowed them to indicate their preferred methods for stakeholder engagement within the process. Stakeholders also contributed to identifying appropriate boundaries to the transboundary planning areas.

Because not all stakeholders were able to attend the workshops, they were also given the opportunity to provide input in other ways, including a questionnaire and further invitations to comment. TPEA partners ensured that the "door always remained open" for stakeholder involvement.

'Activity sheets' were produced for stakeholders showing different sectoral developments across the border. These contained maps and descriptive text for key sectors of maritime activity and interest. These sheets were used during workshops to discuss pressures and opportunities in the pilot areas. Southern stakeholders also had the opportunity to interact with the TPEA web viewer exploring options and solutions.

4. GATHERING AND MANAGING DATA

✔ Gather data from national and transnational sources as appropriate

Spatial data may be gathered from various sources and organisations within each jurisdiction.

Data relevant to the transboundary area may be gathered from a wide range of sources. This is a potentially time-consuming process, and should take account of the resources available for obtaining data from national and transnational organisations as appropriate. Much of this data may be provided by public organisations. However, not all bodies have a dedicated data policy, which may complicate data gathering; the different administrative organisation between jurisdictions may also complicate obtaining correct sources of data. These issues may to be taken into account when establishing a timeline for transboundary MSP. In the EU, the INSPIRE Directive aims to create a spatial data infrastructure, which is facilitating access to and acquisition of environmental and other spatial information provided by public sector organisations.

MARINE MANAGEMENT ORGANISATION (UK) Mapping UK Shipping Density and Routes from AIS
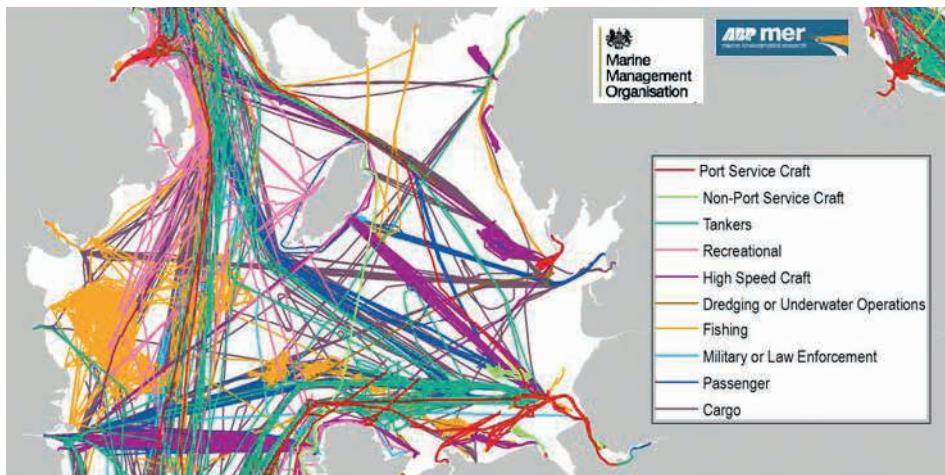
AIS data published under Open Government Licence. Reproduction with permission of the MCA and MMO.
Contains UKHO Law of the Sea data © Crown copyright and database right.
MMO (2014). Mapping UK Shipping Density and Routes from AIS. A report produced for the Marine Management Organisation, pp 35. MMO Project No: 1066. ISBN: 978–1–90–94–52–26–8

✔ Harmonise data from different sources and across borders

Given that information will be compiled from different sources, including from different jurisdictions, data should be compared before being unified in a single database.

Datasets required for transboundary MSP may differ in many ways across adjacent jurisdictions, e.g. collection methods, reference systems, quality, spatial scales, time-frames, or attributes. This may be due to things such as different purposes for which data was collected, or different methods of measuring or handling data, (even within the ranges allowed within wider protocols). In order to harmonise this data, consideration of a model which sets out principles and standards for data collection may be helpful. Although some data heterogeneity will remain, this will facilitate the harmonisation of data into a single shared database, ensuring that information loss is kept to a minimum and effort and cost are reduced. The collection of metadata to common standards, e.g. INSPIRE metadata standards, will greatly enhance the robustness and longevity of the database.

Harmonisation of spatial data may be a labour-intensive process, especially when carried out for the first time. However, the benefits are considerable, especially as patterns and trends are revealed at a greater scale. During harmonisation, it is helpful to document the ways in which datasets vary (e.g. one is collected every two years and another every three years). This document can be distributed to the appropriate authorities and could assist the co-ordination of future data collection, which may generate benefits even beyond the ambit of MSP.

Through the TPEA stakeholder engagement process, many stakeholders saw their datasets combined with those for the adjacent jurisdiction for the first time. The benefits of harmonising data and of co-ordinating subsequent data collections became immediately apparent. Stakeholders were generally keen to ensure that the TPEA team had the most up-to-date data from their sector and made a valuable contribution to signposting or providing alternative datasets

Gas wells,
monobuoys,
cables and
pipelines
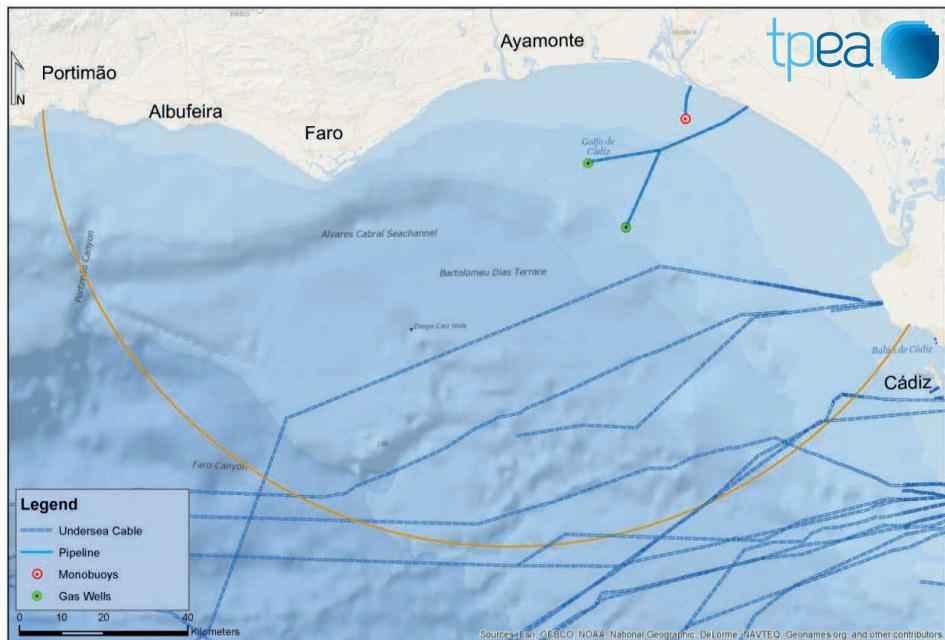
Biodiversity and
nature conservation
features

EU SeaMap 2011
Habitat Map

Data Sources - EMODNET EU SeaMap 2011, UKHO

Information contained here has been derived from EUSeaMap Consortium webGIS data (www.jncc.gov.uk/page-5040) which is made available under the pilot project for the European Marine Observation Data Network (EMODnet), funded by the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE).

The Data Owner and EUSeaMap consortium accept no liability for the use of this data or for any further analysis or interpretation of the data.

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Energy

Legend

🏭	Power Stations
○	Wells_UK
T	SeaGen Tidal Generator
	NI Future Renewable Resource-Wind
	NI Future Renewable Resource-Wave
	NI Future Renewable Resource-Wind
	Geophysical Survey Area_First Flight Wind Ltd
	Licensed Wind Research
○	Wells_ROI
	Arklow_Windfarm_ROI
	Exploration Licence_ROI
	Continguous_Zone_NI
	NI-ROI Border
	6nm_Fishery_Limit
	Territorial_Sea_Limit
	UK_International_Boundaries
	PilotZone_10nm
	PilotZone_20nm
	PilotZone_30nm
	PilotZone_40nm
	PilotZone_50nm
	PilotZone_60nm

0 5 10   20 Kilometers

Data Sources - CMRC, DCENR, DECC, DETI, First Flight Wind,
Marine Institute, Oceanwise Ltd., Sea Generation Ltd. & UKHO.

✔ Set up a common system for the storage, management and analysis of information

A Geographical Information System (GIS) is an essential tool for storing, visualising and managing geographical data across borders.

One of the best ways to capture, manage, analyse and display geographic data is through a Geographical Information System (GIS). A GIS integrates hardware, software, and data, and can capture the three-dimensional aspects of marine data as well as temporal aspects, such as how oceanographic processes or human activities change throughout the year. In transboundary MSP, which usually compiles a large amount of geographic information, a GIS can be a powerful tool in the management and treatment of this information. It allows exchange of information between countries, combination of information layers and visualization of possible spatial conflicts. A GIS can therefore be the basis for a common system of information developed within transboundary projects, representing the spatial extent, time and frequency of maritime activities, as well as the distribution and conditions.

In TPEA, the data management practices included:

- *Documentation of data management: written evidence of all changes made to the data and copies of all database drafts were kept;*

- *Maintenance of the database: the database was regularly cleaned and updated, with all changes recorded;*

- *Metadata Collection: metadata was collected, compiled or created at the same time as the geographic information was collected; and*

- *Data management was as INSPIRE-compliant as possible. The TPEA data model can be found in the Conceptual Framework Report, available at www.tpeamaritime.eu.*

D. Planning

I. EXPLORING OPTIONS

✔ **Set specific objectives as appropriate**

More detailed objectives may be established for the transboundary area which can then guide the following steps, reflecting key issues that may be addressed.

Following on from the analysis of the transboundary area, it may be helpful to establish more specific objectives to focus the subsequent transboundary planning process more sharply. These should align with the strategic objectives, but enable key issues to be highlighted at a more detailed and localised level. Specific objectives may relate to particular environmental concerns or sectoral interests which have been provisionally identified as needing cross-border attention. Stakeholder involvement may be valuable in setting these objectives, and data collection and analysis of policy priorities will also contribute. Specific objectives should be SMART, i.e. Specific, Measurable, Achievable, Relevant and Time-Bound. Specific objectives can also be helpful for a later-stage evaluation process.

TPEA SPECIFIC OBJECTIVES:

Southern pilot area

☞ 1. To support the establishment of a comprehensive transboundary stake-holder engagement and communication plan

☞ 2. To promote integration of land / sea planning and licensing regimes

☞ 3. To encourage collection and exchange of data

☞ 4. To promote development of coastal and marine infrastructure to support local marine leisure and tourism

Northern pilot area

☞ 1. Ensure complementarity of uses and cross-border activities.

☞ 2. Ensure the coherence of the strategic options for the development of the maritime economy from each member state.

☞ 3. Promote the establishment of management common objectives for shared resources.

☞ 4. Promote the clarification of procedures on cross-border activities and impacts.

☞ 5. Contribute for the implementation of a common information platform (share interest).

✔ Understand transboundary pressures and opportunities

Transboundary MSP may lead to a greater understanding of the specific pressures faced and the opportunities presented which could benefit from a shared approach.

Having brought together data on the transboundary area, an understanding of the governance framework and initial stakeholder input, it should be possible to synthesise this material into an overall understanding of the area's pressures and opportunities. Pressures may relate, for example, to environmental problems across part or the whole of the area, or activities that affect the resources of the area. The causes of pressures may lie within one or more of the jurisdictions concerned; addressing them may require joint action. These may come to light from the mapped data and from stakeholder input. Opportunities could relate to the pressures identified, as there may be opportunities to resolve issues through joint action, or may be linked to new targets, such as the development of certain sectors or habitat protection. Opportunities may arise from synergies identified, such as between policies, in terms of cooperation between bodies and institutions, or the potential for co-use of marine space.

Legend

| Symbol	Label
▨	Aquaculture
▭	NI_MCZ Areas of Search
○	Wells_UK
T	SeaGen Tidal Generator
▨	Licensed Wind Research
▨	NI Future Renewable Resource-Wave
▨	NI Future Renewable Resource-Wind
▭	ROI Current Exploration Licence
○	Wells_ROI
⊁	Arklow_Windfarm_ROI
▨	Dive Clubs
▨	Windsurfing Schools
▲	Sailing Clubs
▨	Surf Clubs
▨	Bathing Waters
▨	Important Bird Areas
★	ROI_Biosphere_Reserve
▨	Special_Protected_Area
▨	Special_Area_Conservation
▨	ROI_Natural_Heritage_Areas
▨	ROI_Natural_Heritage_Areas_Proposed
▨	ROI_National_Park
▨	NI ISCZ_Final_Recommendations
▨	NI_Marine_Conservation_Zone
▨	NI_Area_Outstanding_Natural_Beauty
—	Pipelines
—	SubmarineCables

NI - 2011 Fishing Density

Value
High : 35.6507
Low : 0

ROI - Fishing Effort 2005-9

Value
High : 10528.3
Low : 0

0 5 10 20 Kilometers

Data Sources - reproduced with thanks to AFBI, BIM, CMRC, Crown Estate, DARD, DCENR, DECC, DETI, DoE Marine, First Flight Wind Ltd., Irish Sailing Association, JNCC, Kingfisher Information Service, Marine Institute, NIEA, NPWS, Oceanwise Ltd., Sea Generation Ltd. & UKHO.

tpea

NORTHERN PILOT AREA

Energy
Recreation
Conservation
Aquaculture
and Fishing
(indicative)

✔ Seek common interests

Transboundary MSP may enable the definition of common interests between jurisdictions, which may form the focus of future collaboration on specific issues.

In addition to identifying transboundary pressures and opportunities, it may be helpful to agree on common interests which can form the focus of planning solutions, such as shared resources (e.g. fisheries, gas reserves), cross-border activities (e.g. shipping) or cross-border impacts (e.g. marine pollution). It may be possible to work towards institutional mechanisms for addressing these interests, understanding that this may imply sharing of responsibilities. Identifying common interests will depend on careful consideration of the governance framework, such as international and national legal instruments which may determine to what extent the areas of interest can be governed in a shared manner, and the administrative structures within each jurisdiction, which may suggest the most appropriate level of cooperation.

gas
reservoir
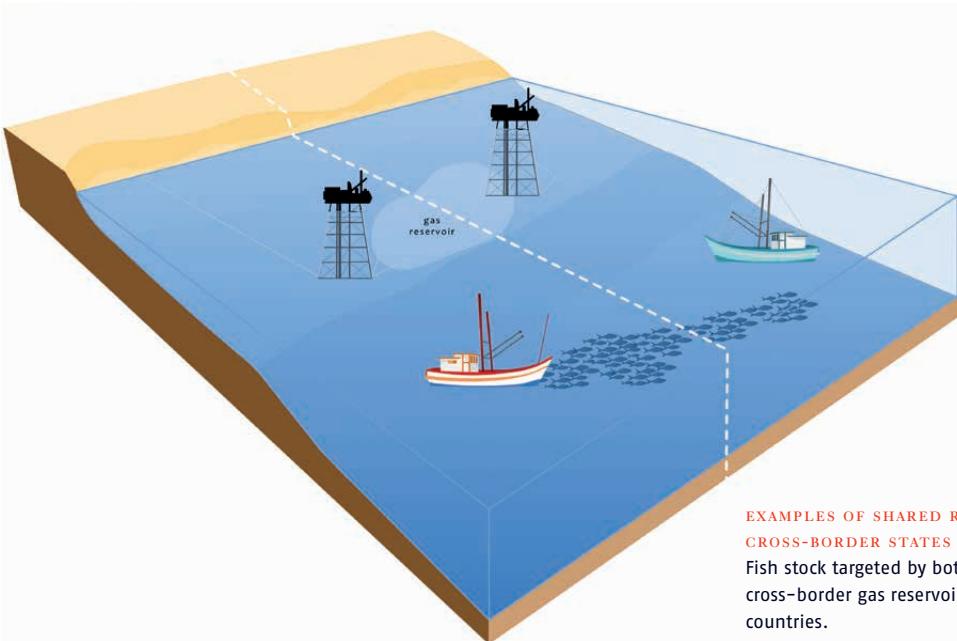
EXAMPLES OF SHARED RESOURCES AMONG CROSS-BORDER STATES
Fish stock targeted by both fishing fleets and cross–border gas reservoir exploited by both countries.
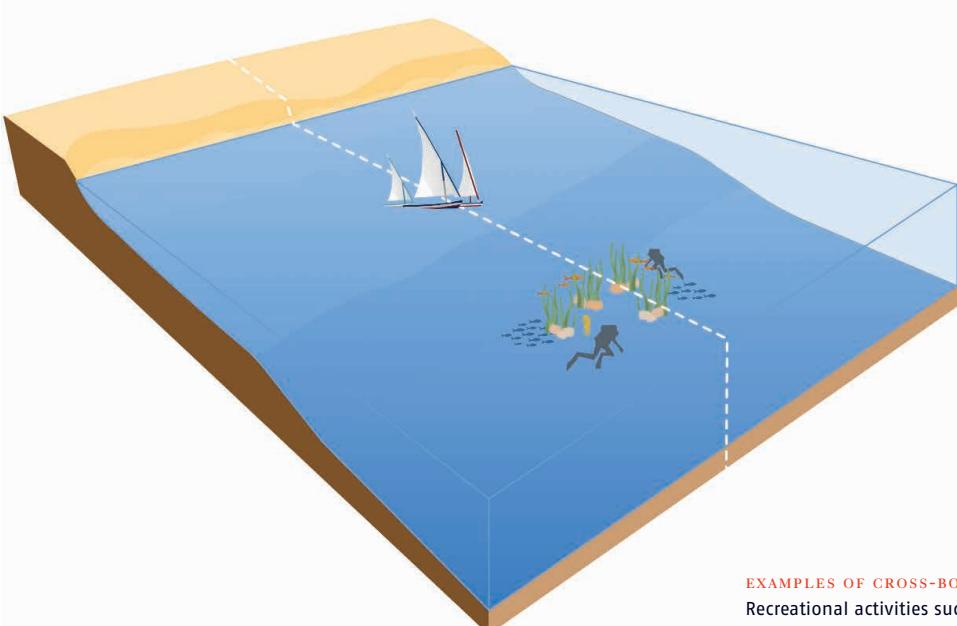
EXAMPLES OF CROSS-BORDER ACTIVITIES:
Recreational activities such as diving and navigation.

✔ Develop transboundary scenarios

Transboundary MSP may benefit from the creation of scenarios emphasising different priorities, developed and discussed by participants.

One helpful method for exploring options is to create scenarios based upon current conditions and possible directions of development. They may be created and explored by participants including stakeholders, so that they reflect a range of interests. A number of scenarios can be drawn up, emphasising different policy priorities. They do not all have to be achievable, and may not all be desirable, but they should reflect distinct possibilities. One or more preferred scenarios can be taken as the basis for planning decisions. It is helpful to give a distinctive name to the scenarios, to highlight the differences between them.

Scenarios can promote dialogue, helping to work towards consensus and develop synergies across borders. Participants could focus, for example, on:

• Independent processes: jurisdictions implement their MSP process in isolation from each other;

• Transboundary harmonisation: jurisdictions exchange information about their process with each other and seek to coordinate their outcomes; and

• Transboundary collaboration: jurisdictions work together throughout a planning process, identifying common objectives and promoting synergies.

In TPEA, one pressure identified by the Spanish and Portuguese participants related to potential threats to an important nature conservation habitat (submarine structures produced by leaking gases (mud volcanoes), including the proposed marine protected area of the Volcanes de Fango del Golfo de Càdiz). They also identified a number of shared opportunities including joint management and a shared approach to activities such as aquaculture, nature conservation and tourism. Based on these opportunities, stakeholders suggested specific approaches, such as implementing and managing common touristic maritime routes. Maps and "activity sheets" produced from the GIS system played an important role in promoting an integrated approach to the transboundary area.

The Portuguese and Spanish participants developed scenarios based upon available information. These took into account coastal and marine tourism and aquaculture as the most relevant shared resources and cross-border uses. The scenarios explored two situations: a) an integrated approach with a common vision, promoting synergies and cooperation between the nations; b) independent approaches, without any cooperation or integration between the nations.

SCHEMATIC REPRESENTATION OF SCENARIO 1: Common interests/commitments for aquaculture

LEGEND

COASTAL ZONE

TRANSFORMATION INDUSTRY

AQUACULTURE

AQUACULTURE

FISHING AGREEMENT 7NM (ARTISANAL FISHING)

FISHING AGREEMENT 15NM

BIVALVES ZONE
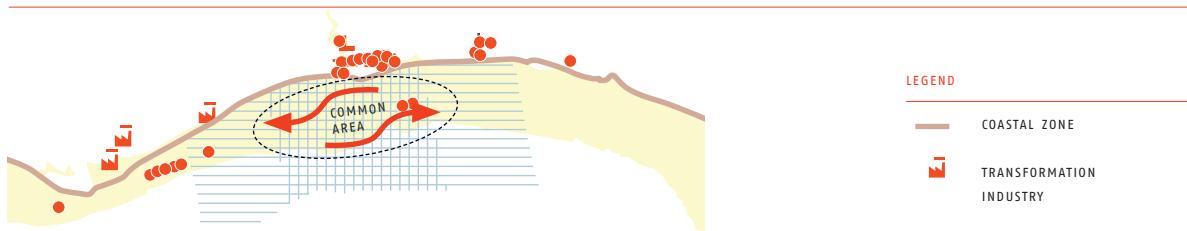
SCHEMATIC REPRESENTATION OF SCENARIO 2: Differing interests for aquaculture
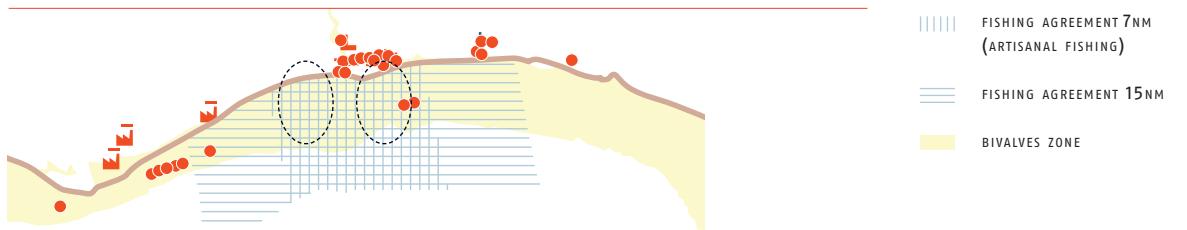
2. MAKING INFORMATION ACCESSIBLE

✔ Develop a web viewer for spatial data

Spatial data for the transboundary area may be imported to a web viewer for ease of access by participants and to allow information to be viewed selectively and manipulated.

It may be helpful to use a web viewer as a means of making GIS data easily accessible, especially where there is a large quantity of information, allowing users to select the information which is of greatest significance. The web viewer should be designed with consideration to the likely users and what information and functionality will be most helpful to them. In the transboundary context, special regard may be given to

the needs of users from different jurisdictions, possibly making available different language options and describing features in the manner that is most appropriate for the jurisdictions concerned. The viewer should be easy to use, as not all users will have previous GIS knowledge. Appropriate symbols should be chosen to represent different features, and the viewer should be capable of displaying the maximum amount of information at one time. It is advisable to include some common functionalities, such as enable and disable information layers and navigate using zoom and pan functions. Other interactive functionalities facilitating stakeholder interaction may be included, such as the facility to draw on and comment on the map.

✔ Use multiple forms of communication

A good range of communication tools may be used to make information available as widely as possible.

Communicating the TMSP process and its results to the wider public can make use of various communication channels and tools. Both traditional and new forms of communication may be used. A dedicated website is a useful platform for updates and material for download, including reports, fact sheets, and workshop reports. Documents can also be directly distributed through relevant electronic lists and networks. Social media and mobile devices may be useful for providing short updates or regular newsfeeds and encouraging the public to become engaged. A web portal is a good way of displaying map-based information, ideally including an interactive component. Apps created for a mobile device can make the results widely available, such as in the following ways:

- Text: retrieval of reports on the findings of the transboundary MSP process, allowing navigation through and selection of text;

- Graphics: providing further relevant information, such as images, maps, charts, tables; and

- Map viewers: allowing the user to navigate through layers of cartographic information and select the ones of most interest at the required level of detail.

Given the plethora of communication forms available, their use needs to be carefully considered in the light of the time and resources available. Partners in transboundary MSP may also need to ensure their messages are aligned whilst allowing for

different cultural preferences in communication styles and forms. For example, social networks may be a dynamic platform for stakeholder engagement.

The information included in the TPEA web viewer focuses on transboundary information. Users can display administrative boundaries, features of the physical environment, as well as a range of human activities such as fishing, aquaculture, energy resources, conservation, tourism, and ports and infra-structures. The TPEA web viewer also allows stakeholders to interact with the data, such as print options for different templates and drawings, the possibility to create texts and figures, or or saving files that can later be used to work on. Images and comments can also be shared directly with other stakeholders and planners, allowing stakeholders to pose questions and interact with the transboundary MSP process at all times.

TPEA Southern Area is a mobile application focused on the southern pilot area located in the Gulf of Cadiz. Supported by the services published on the TPEA Web Viewer, but adapted to a small and tactile screen format, the App allows navigation along the cartographic viewfinders with only one finger. In addition, the App contains an analytical tool which allows users to select an existing use in the area and look for other uses with which it could have spatial conflicts

TPEA SOUTHERN AREA: A mobile application focused on the southern pilot area located in the Gulf of Cadiz
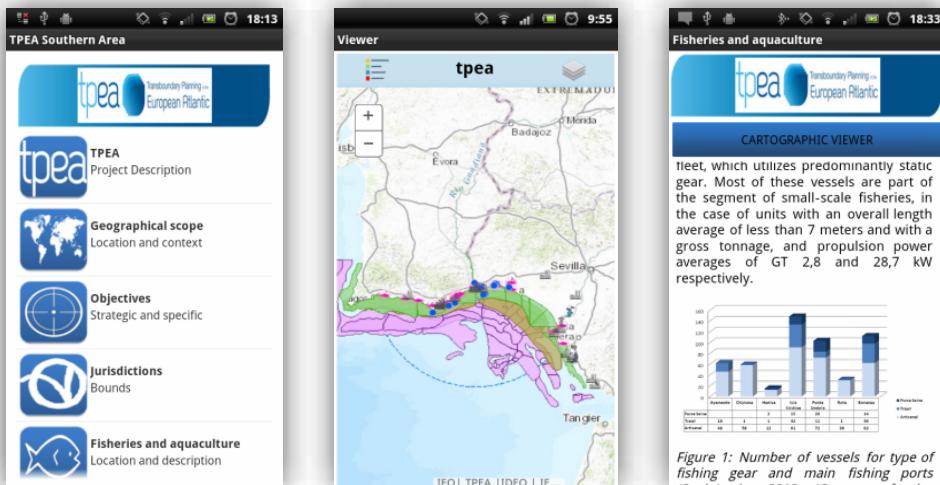
E. Evaluation

I. PREPARING AN EVALUATION PROCESS

✔ Ensure cost-effectiveness and proportionality

Evaluation of transboundary MSP should be conducted in a way that is proportionate to the time and resources available.

It is necessary to consider sufficient financial resources for conducting an evaluation of an acceptable quality. Cost-effectiveness and proportionality are therefore important considerations. Transboundary MSP evaluation should not duplicate national MSP evaluation and should be factored into any MSP evaluation processes already taking place. Evaluation design should clearly focus on the specific aspects that play a role in the transboundary exercise. Periodic evaluation processes may be required.

✔ Develop an appropriate framework for evaluation

Evaluation of transboundary MSP should be built into the overall process.

Evaluation will depend on the scope of the transboundary planning exercise itself, its timescale and the outputs it is seeking to achieve. Some evaluation programmes may comprise evaluation of context, process, output and outcomes, whilst others might evaluate just one aspect of transboundary MSP (such as data quality, cooperation or stakeholder involvement). Rather than relying on a standardised evaluation programme, evaluation design should be tailored to each case. This requires agreement of the parties involved. The clearer the objectives and desired outcomes of the transboundary MSP exercise, the easier it is to develop appropriate evaluation criteria. For example, if evaluation is concerned with the transboundary planning process, what are the objectives the planning process is seeking to achieve? Performance-related objectives could also be evaluated, such as stakeholder involvement or the influence of transboundary MSP on other strategies or policies.

✔ Draw up suitable evaluation criteria and indicators

Evaluation of transboundary MSP should be based on tailored criteria and indicators.

A list of evaluation criteria should be drawn up covering a range of institutional and spatial issues that emerge as important. The specific list will depend on the trans-

boundary case in question, but could cover aspects such as the legal and administrative framework, institutional capacity, delineation of the planning area, formulation of strategic and specific objectives, area characteristics, cross-border relevance of marine issues, planning documents, stakeholder involvement, data quality, communication, implementation, achievement of objectives and so on. Each criterion should ideally be matched by suitable indicators. Criteria and indicators may be determined collaboratively by the participants. Indicators can be tested and refined to ensure their sensitivity, ease of use and relevance. The design of criteria and indicators is thus an iterative approach, and both can be refined as more experience with MSP is gathered and better information becomes available.

A comprehensive evaluation framework should ideally consist of the following elements:

1. *Evaluation of the plan-making process*

2. *Evaluation of plan contents*

3. *Evaluation of plan implementation*

4. *Evaluation of plan outcomes and impact*

5. *Process for communicating results*

Given the main TPEA objective (to develop recommendations for a transboundary approach to MSP in two pilot areas), TPEA developed an evaluation framework which mostly focused on evaluating the transboundary elements of the plan-making process. The guiding question was "What is required of the transboundary MSP process to ensure it meets accepted quality standards?

A list of criteria was then drawn up designed to evaluate the transboundary MSP process in the two pilot areas. Each criterion was supported by several descriptive indicators. These were field-tested in the pilot areas and subsequently refined.
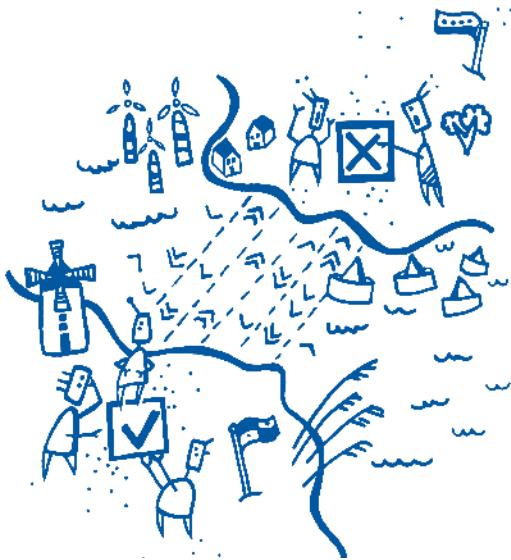
2. CARRYING OUT EVALUATION

✔ Ensure a well-managed evaluation process

The transboundary MSP process may be regularly reviewed, with agreed periodicity and clear responsibilities assigned.

Process evaluation is an essential element in ensuring the effectiveness of MSP including transboundary MSP. During the early stages of transboundary MSP, routines for collaboration and cooperation are still being established, so more frequent evaluation may be useful to ensure mistakes are quickly corrected. Evaluation may also contribute to generating trust as it requires openness by all parties concerned and willingness to address any weaknesses. Once planning documents have been drawn up, partners can revise the periodicity for process evaluation, in particular if processes of collaboration and cooperation have become well established. Evaluation of the transboundary MSP process may best be carried out by those most closely involved in it. It is suggested that one authority or institution in each of the partner countries concerned should have responsibility for managing the evaluation process within its own jurisdiction and for collating and distributing the results.

✔ Evaluate stakeholder involvement

Stakeholder involvement and satisfaction with the transboundary MSP process may be continuously reviewed.

Ongoing evaluation of stakeholder involvement may be particularly useful in the early stages of the transboundary MSP process in order to ensure their level of involvement is appropriate and delivers the results envisaged. Later, evaluation is important to ensure stakeholders are willing to stay involved, feel their contribution is relevant and heard, and do not feel "fatigued" by the process.

TPEA presented the criteria and indicators in the form of indicative quality checklists for transboundary MSP (see TPEA Evaluation Report). Their aim was to highlight aspects already well covered by the transboundary process, as well as gaps and unresolved issues. The indicative checklist for transboundary MSP processes focuses on the transboundary planning process, covering preparatory steps, definition and analysis of the transboundary area, planning and communication. The indicative checklist for transboundary MSP implementation, outcomes and impacts proposes criteria for evaluating MSP contents and implementation at a future point in time. Partners then tested the checklists in both pilot areas by carrying out a self-assessment of the transboundary MSP process. National coordinators for the four jurisdictions concerned took the lead in this, consulting with the other parties in their respective jurisdictions as appropriate. They then liaised with each other in order to agree the evaluation findings for their respective pilot area.

In TPEA, stakeholders had the opportunity to evaluate their involvement within the transboundary MSP process. Workshops were evaluated by means of a questionnaire survey after each workshop, which checked the degree of satisfaction of stakeholders with the events, their level of involvement and information provided, and the organisation of the event and the facilitators (see TPEA workshop reports on www.tpeamaritime.eu). Satisfaction with the overall TPEA experience and outcome was also surveyed. The information obtained proved helpful for improving the design and involvement in subsequent workshops.
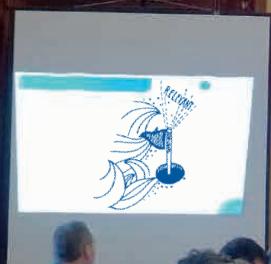
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Transboundary Planning in the European Atlantic (TPEA) was co-funded by DG MARE in 2012–2014 to develop a commonly-agreed approach to cross-border MSP in the European Atlantic region. Bringing together ten governmental and research partners from Ireland, Portugal, Spain and the UK and external advisors from the region, it examined critical elements of the transboundary planning process in the context of legal and policy frameworks, participatory approaches and technical considerations. This Guide summarises lessons learned, and is intended to contribute to cross-border MSP in Europe and beyond.

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