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IMPACT ASSESSMENT

Accompanying the document

**PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF
THE COUNCIL**

**establishing a framework for maritime spatial planning and integrated coastal
management**

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Disclaimer

This report commits only the Commission's services involved in its preparation and does not prejudge the final form of any decision to be taken by the Commission.

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INTRODUCTION

1.1. Context and purpose

Exploitation activities within maritime zones and of marine resources are an important field of economic activity in the Union. Several sectors compete for maritime space and resources across marine regions. Conflicts between sea users and demands for sea space are anticipated to increase dramatically in the coming years (in particular due to emerging activities such as offshore renewable energy and aquaculture). Almost half of the Union's population live within 50 kilometres of the sea. This increasing intensity of maritime activities leads to unsustainable use of marine and coastal resources

Good management of our oceans, seas and coastal zones thus becomes increasingly important.

European legislators have adopted ambitious policy initiatives relevant for oceans, seas and coasts to be implemented in the next 10-20 years. These initiatives include Agenda 2020¹, the Marine Strategy Framework Directive², the Renewable Energy Directive³ and the Motorways of the Sea initiative⁴. The EU is expected to adopt a reformed Common Fisheries Policy in 2012.

Limited space and resource availability in marine regions make that the organisation of activities in there face important challenges in different policy areas, including environment, fisheries, maritime transport, off shore energy, etc. Under each of these policies, specific objectives are set, which might cause conflicts of implementation if not dealt with in a co-ordinated way across maritime sub-regions, including co-ordination of land-sea interactions. Currently, those in charge of these mentioned sectoral policy areas often adopt decisions relevant to the management of our seas and oceans independently from each other. Ocean management decisions thus may not only become incoherent with each other, but run the risk of undermining each other. An additional problem is that maritime governance to a large extent remains national although the problems faced by Europe's coastal regions and seas relate to marine regions or sub-regions and involve more than one country. Key transnational topics, such as, a coherent energy policy, transnational cables, safe, a healthy marine and coastal environment, clean and efficient maritime transport and sustainable fisheries and aquaculture depend on connectivity and a more transnational and cross-sectoral approach.

At the time where Europe is going through a severe financial/economic crisis, resource efficiency is more important than ever. Economic growth must be encouraged to safeguard Europe's future through creating new jobs across the maritime sectors and this must happen in phase with major initiatives such as **the Marine Strategy Framework Directive and the Agenda 2020**. There is a need for tools that enable growth by increasing efficiencies and streamlining and facilitating coexistence of multiple activities. The use of smarter maritime and coastal governance tools will most likely enhance resource efficiency and facilitate the implementation of distinct sectoral EU policies by promoting synergies between activities, co-existence of uses, and multiple uses of the same space through shared infrastructures of

¹ COM (2010) 2020, final, 3.3.2010.

² Directive (2008/56/EC), OJ L164, 25.6.2008, pp. 19-40.

³ Directive (2009/28/EC), OJ L14, 5.6.2009, pp. 16-62.

⁴ Decision No. 884/2004/EC of the European Parliament and the Council, OJ L167, 30.4.2004, pp. 1-38.

different sectors. These tools could help reduce or remove obstacles to the efficient use of resources and economic development while attaining the achievement of ecosystem health.

The purpose of this Impact Assessment is to assess the potential for EU action to support an integrated approach to the governance of the European seas and coastal zones as a means to tackle the above challenges. This entails moving from a sectoral approach to a more integrated and coherent governance system across marine regions and sub-regions. The implementation of an ecosystem approach to maritime spatial planning and integrated coastal zone management is fundamental to ensure that development and growth remain sustainable.

The governance tools examined in this impact assessment to implement these objectives are Maritime Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM). The purpose of these tools is to ensure an integrated and comprehensive planning of maritime uses and management of coastal zones. These tools cover specific measures that offer a solution for the identified problems and are assessed under different possible policy options. A summary overview of the effectiveness of possible solutions in relation to the identified problem causes and the extent to which they are covered by the different analysed policy options is given in Annex 1.

It follows up on the Commission's commitment to consider EU action on MSP in conjunction with further work on ICZM⁵.

1.2. Maritime Planning and Coastal Management – what is it about

1.2.1. Maritime planning

Maritime Spatial Planning, hereafter referred to as MSP or maritime planning, is commonly referred to as a public process for analysing and allocating spatial and temporal distribution of human activities in maritime zones to achieve environmental, economic and social objectives. It is a multi-sector tool to facilitate the implementation of the ecosystem approach and to support the reconciliation, in a given maritime region or sub-region, of concurrent human activities in the same area and of maritime activities and their impact on the marine environment without any built-in priority for either type of spatial claim.

MSP as a process serves to include all sectoral policy decision makers who have an interest in the use of sea space in a coherent decision making process on the most efficient and sustainable use of sea space. The ultimate aim of the process is to avoid or reduce the potential for conflicting decisions to arrive at a situation where agreed/binding plans are adopted which identify the utilisation of sea space by different uses.

MSP differs from terrestrial planning, because it operates within three dimensions, addressing activities on the seabed, in the water column and on the surface. It is also different compared to land planning because ocean space is in principle not subject to private ownership. States' rights over ocean space also differ from those exercised over land space, as the former - depending on the maritime zone concerned or maritime activity envisaged - differentiates between sovereignty, sovereign rights and jurisdictional rights. It is the UN Convention of the Law of the Sea (UNCLOS), which regulates, amongst other issues, the rights and duties of the coastal States and third countries in the waters falling under the sovereignty and jurisdiction of the coastal State. A coastal State which carries out MSP in their waters will therefore have to take due account of relevant rights and obligations of third countries according to UNCLOS.

MSP is regularly being promoted by the scientific community as a useful tool to manage the sea space⁶. Although MSP practice is recent (in Europe it has been developed over the last ten

⁵ COM (2010) 771 final

⁶ See for example: Douvere, F. (2008). The importance of marine spatial planning in advancing ecosystem-based sea use management. *Marine Policy* 32(5), pp. 762-771; Taussik, J. (2007). The

years), it is widely accepted as a crucial tool to support sound management of our seas. Work to develop and/or promote MSP is on-going in numerous regional and international bodies such as UNESCO, OECD and Regional Sea Conventions.⁷ A number of States, including EU Member States⁸, have already taken action for the introduction of MSP, and in other countries, its implementation is under preparation⁹. Experiences from those Member States which have introduced MSP processes have been very positive and lead to a better management of their waters and important resource efficiency gains. MSP is implemented in third countries such as the US¹⁰, Canada and Australia.

Example 1: In Germany, comprehensive legislation has been adopted to ensure the implementation of MSP in territorial waters (under the regime of the Länder) and in their Exclusive Economic Zone (under federal competence). This legislation has to a large extent been adopted to allow for the orderly development of renewable energy installations in German waters and to avoid conflicts between this emerging sector and other marine sectors competing for the same ocean space.

Example 2: In the Netherlands, fully fledged MSP has been implemented at national level in order to cope for the management of their busy sea areas. Of particular importance for the Netherlands has been to secure a safe access of maritime transport activities to their ports, such as Rotterdam.

At EU level, MSP was identified as an important tool for integrated sea use management in the Blue Book "An Integrated Maritime Policy for the European Union", of 2007¹¹. Elements for a coherent approach to MSP at EU level were set out in the 2008 Commission Communication "Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU"¹². This Communication proposed a common approach to Maritime Spatial Planning in the EU and elaborated 10 key principles¹³ for good governance.

In 2010, the Commission adopted a second Communication on MSP entitled "Maritime Spatial Planning in the EU – Achievements and future development"¹⁴. One of the main conclusions of this progress report was that there was broad agreement among stakeholders to further develop a common approach on MSP at EU level.

opportunities of spatial planning for integrated coastal zone management. *Marine Policy* 31(5), pp. 611-618.

⁷ Regional Sea Conventions are regional intergovernmental bodies which seek to protect the marine environment. Four Regional Sea Conventions are relevant for European waters, namely the Bucharest Convention (Black Sea), the Barcelona Convention (the Mediterranean Sea), OSPAR (the North-East Atlantic Ocean) and HELCOM (the Baltic Sea). The EU is party to OSPAR and HELCOM and the Barcelona Convention.

⁸ For example Germany, the UK, France and the Netherlands.

⁹ E.g. in Belgium, Sweden, Latvia and Poland.

¹⁰ See Executive Order of President Obama of 19 July 2010 which introduces mechanisms for MSP at Federal level.

¹¹ COM (2007) 575.

¹² COM (2008) 791 final of 25.11.2008.

¹³ For further details see Annex 1.

¹⁴ COM (2010) 771 final of 17.12.2010.

Annex 2b illustrates how MSP could potentially be used to organise maritime space by economic activities in the Baltic Sea (which is not currently the case)¹⁵.

1.2.2. Coastal Management

The purpose of Integrated Coastal Zone Management, hereafter referred to as ICZM or Coastal Management, is to ensure the sustainable exploitation of coastal zones. Coastal zones are commonly understood as the area where sea and land processes interact. These processes are dynamic and include effects of tiding, erosion, sedimentation, deposition, flooding and saltation. It is also the zone where many human activities are concentrated thus serving many important socio-economic functions.

ICZM is a process tool aiming to achieve integrated management of all policy processes affecting the coastal zone. The added value¹⁶ of Integrated Coastal Zone Management is that it addresses the land and the sea simultaneously. Linkages between “dry side” (land) and “wet side” (sea) of the coast are such that the sustainable development of coastal/marine resources requires their co-ordinated management. Existing EU legislation focuses either on the terrestrial side or marine side. In the rare cases where land-sea interaction is considered, not all relevant interactions are addressed¹⁷.

The sea strongly affects the land and intertidal areas such as through pollution from tanker bilge washings or destruction from storm flooding and wave action. The “natural defences” of the coastline - beaches, mangroves and coral reefs are very important to protecting shorelines and coastal villages.

ICZM (similarly to MSP) is designed to “join up” all the different policies which have an effect on coastal regions by ensuring that coastal planning activities or development decisions are taken in an integrated fashion, rather than on a sectoral basis. Furthermore, it can complement coastal management and protection in areas where no EU legislation exists, e.g. on coastal erosion, adaptation to climate change and promotion of green infrastructure. ICZM covers the full cycle of problem identification, information collection, planning, decision making, management and monitoring of implementation. It uses participation of all stakeholders to assess the common goals in a given coastal area, and to develop action towards meeting them. Cross-border co-operation is crucial for the integrated management of coastal zones.

Several case studies have demonstrated that ICZM can be both environmentally and economically beneficial.

Example 1: In Rotterdam the integrated, long term *ROM Rijnmond* programme (1993-2010), has brought together local stakeholders and led to an increase in throughput of goods, and to significant pollution reduction. The extension of the harbour went hand in hand with environmental restoration projects and the creation of a Marine Nature Reserve which resulted in improved quality of air, water and soil (e.g. reduction of cadmium concentration and noise pollution).¹⁸

Example 2: The cross-border ICZM project for the German/Polish border region of the Szczecin Lagoon (1995-2004) developed a joint future vision for the Szczecin Lagoon

¹⁵ Illustration originates from the WWF brochure “Become a Maritime Spatialist within 10 Minutes, and was developed within the BaltSeaPlan project, see www.baltseaplan.eu.

¹⁶ FAO (1994) Corporate Document Repository, ‘integrated management of coastal zones’, ID 59975.

¹⁷ E.g., the Water Framework Directive (2000/60/EC) introduces a holistic water management for inland, transitional and coastal waters. However, no considerations of sediment management or coastal erosion are included which are amongst the most dynamic processes in this land water interactions.

¹⁸ <http://www.coastalcooperation.net/part-I/1-2-2-f.pdf>.

Region, defined strategic goals for sustainable development and identified possible measures. The project failed due to national inconsistencies and different perceptions of ICZM¹⁹.

Due to the increasing activities in near and offshore areas, the implementation of ICZM increasingly involves the marine area. Like MSP, ICZM is applied in many countries worldwide, through legislation and/or programmes²⁰.

In 2002, the Council and the European Parliament adopted a Recommendation on ICZM²¹ defining the principles of sound coastal planning and management and including the need for sound and shared knowledge, a long term and adaptive approach, a cross sector perspective, involvement of stakeholders and taking into account terrestrial and marine components of the coastal zone.

The ICZM Protocol to the Barcelona Convention²², entered into force in March 2011. This protocol makes ICZM compulsory for coastal Member States in the Mediterranean.

1.2.3. Towards a better integration of maritime planning and coastal management

MSP and ICZM are linked concepts because they both address the use of coastal and maritime space and the management of human activities. They have both been identified as integrated management tools under the Integrated Maritime Policy of the EU (Bluebook 2007). Their objectives are to ensure a more integrated decision making process and coherence between potentially competing sector policies. They are both multi-sector oriented and aim to achieve economic, social and environmental goals. They also rely on very similar key principles such as stakeholder involvement, transparency, the ambition to implement the ecosystem approach and decision-making based on good data and information. Despite these similarities and although there are strong connections between them at the land-sea interface, the two concepts have to a great extent been developed separately. In Member State there is a tendency to implement either MSP or ICZM, or to implement them separately. In Northern Europe MSP is more frequent, while in Southern Europe there are more ICZM- type processes.

Applied jointly MSP and ICZM improve sea-land interface planning and management. This is particularly relevant for offshore wind which necessitates closely linked and co-ordinated planning and management activities both at sea and land (e.g. the construction of offshore wind farms has an impact on the coast and requires the connection of the grid from the sea to the land part). Management decisions taken on land affect maritime activities, and vice-versa. Ensuring a joint approach to MSP and ICZM is a logical next step. The need to ensure a more joint up approach between MSP and ICZM at EU level was highlighted during the public consultation and a number of Member States have expressed support for it.

But there are also distinctions between the concepts which should be kept in mind: MSP focuses exclusively on the management of human uses of maritime space, ICZM goes beyond human uses. The geographical scope is also different: ICZM covers the intensively used coastal land and coastal waters. The geographical scope of MSP is larger and applies to all marine waters which are subject to conflicting uses, however, it does not cover coastal land use²³. The maritime areas of the Member States are different from land areas in that no

¹⁹ <http://ec.europa.eu/ourcoast/index.cfm?menuID=6&articleID=200>.

²⁰ E.g. 1972 Coastal Zone Management Act of the US, 2003 National Cooperative Approach to Integrated Coastal Zone Management in Australia etc.

²¹ Recommendation (2002/413/EC), OJ L48, 6.6.2002, p.24.

²² Council (2009/89/EC), OJ L344 2 2009; <http://ec.europa.eu/environment/iczm/barcelona.htm>; the Protocol covers the coastal zone up to the external limits of the territorial sea of the Parties.

²³ For MSP, this Impact Assessment only concerns processes carried out in marine waters which are actually under the jurisdiction and sovereignty of EU Member States.

specific sea ownership exists. Use management therefore depends essentially on usage rights which in turn depend on cross-border linkages.

In conclusion, there are strong arguments to examine the benefits of a joint approach on MSP and ICZM at EU level and integrate both process tools into a streamlined maritime planning and coastal management process. DG MARE and DG ENV, therefore, decided to join forces in evaluating the need for developing and integrating MSP and ICZM further within the EU. The added value of addressing MSP and ICZM jointly in one legal initiative was confirmed in the stakeholder consultation.

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

2.1. Identification

The objective of this Impact Assessment is to provide an analysis of the options for EU action to enhance coherent planning and management of marine waters and coastal zones. The agenda planning reference is 2011/ENV/013 and 2011/MARE/017.

This Impact Assessment aims to:

- Analyse the need for EU action;
- Determine the most suitable delivery instrument for this action.

2.2. Organisation and timing

An Impact Assessment Steering Group (IASG) was created in November 2010 when it met for the first time. DG MARE and DG ENV organised four meetings of the steering group in total between November 2010 and October 2011. The Secretariat-General, the Legal Service, DG AGRI, ENTR, EMPL, MOVE, ENER, CLIMA, RTD, REGIO, EEAS, ELARG, and JRC have been invited to participate in the steering group.

Final consultation of the IASG was carried out through electronic means in early November 2011.

2.3. Incorporating comments from the Impact Assessment Board

A report was sent to the Impact Assessment Board on 16 November 2011.

In its opinion of 16 December 2011²⁴, the IAB recommended (1) to better present the nature and the scope of the problems, (2) to better demonstrate the need for and value added of EU action, (3) to design and present options that relate more clearly to the identified problems, (4) to improve the assessment of impacts and (5) to better present the monitoring and evaluation arrangements. These recommendations have been taken into account in the final version of this impact assessment report.

A revised version was submitted on 20 March 2012 which took into account the comments from the Impact Assessment Board in the following way:

1. Apart from a slight revision of the introduction, the policy instruments of ICZM and MSP are presented in more depth including through concrete examples. The specific nature of maritime planning as opposed to land planning is outlined. Links and synergies between MSP and ICZM are further elaborated.
2. The request to clearly state the concrete nature and scope of the problems was only partially complied with because of the absence of reliable data on the scope of spatial conflicts in European seas. Illustrative examples such as Belgian spatial claims in the North Sea and cross-border co-operation in the Baltic coastal zone, and figures on the expected expansion of offshore wind farms were added to underline current trends. To

²⁴ Ares (2011)1372659 of 16 December 2011.

better highlight the problems related to coastal zones, relevant figures on population distribution are added and the vulnerable features of coastal zones are outlined.

3. The presentation of the problems and their drivers was restructured and referred to a general overarching problem which is broken down in six concrete problems. The lack of available information systems or the incompatibility between various data sets is now well described as one of the underlying problems.
4. An overview table that links the effectiveness of possible solutions to resolve the problem drivers and the extent to which they are covered by the different policy options is added in Annex 1.
5. Illustrations to better exemplify MSP and ICZM concepts were added. An additional table illustrating conflicts between sea uses was added in Annex 4.
6. The reasoning behind the legal basis for EU action on MSP and ICZM and the synergy effects of an integrated application of MSP and ICZM tools was expanded. The legal basis for EU action is clarified. The need for and value added of EU action is illustrated through references e.g. to the experiences of the Interreg project BaltSeaPlan.
7. The request to present the policy options in a more neutral way and less biased towards the preferred option was addressed by restructuring the whole policy option part into three main groups of policy options. The separate cross-cutting option on availability of data and information was presented in more detail.
8. The methodology used for the analysis of impacts was explained more substantially through referencing the qualitative and quantitative approaches that were used and explicitly taking into account the limits imposed by the lack of available data and constraints of monetary assessment frameworks. Justification for combining the analysis of qualitative economic, social and environmental impacts for all policy options was included. An example underlying the expected positive benefit-cost ratio of ICZM implementation was added. In Annex 6 the methodology to quantify ICZM implementation costs was further elaborated. The fact that fully representative calculations for the administrative costs of different policy options are impossible due to the absence of EU wide data on the matter was clarified.
9. On monitoring and evaluation arrangements, this section was expanded to clarify the intention to propose "light" provisions on monitoring measures which are in line with achieving the optimal mix between administrative burden and regulatory effectiveness.

In its opinion on the revised version of 30 April 2012, the IAB noted that the report had been improved following its initial recommendations and provided further recommendations to strengthen some issues that relate to (1) the added value of EU action, (2) better presentation of the measures under the different policy options and (3) providing more detail on the underpinning of the impact analysis.

These recommendations were addressed in the following way:

1. More prominence was given to shortcomings of the current situation and areas where Member State action is insufficient. A new section 3.4.3 "Examples of identified shortcomings" was added that contains a list of most prominent shortcomings of current action by Member States. Furthermore, the baseline scenario (point 3.4) was strengthened in order to give a clearer and more detailed explanation of the extent to which no or non-binding EU action will maintain fragmentation and encourage a pick-and-choose approach.

2. Revisions were made throughout the text and in order to further underline the need for legislative EU action. In particular, deliberations on the added value were split from those on subsidiarity and proportionality and transferred into a separate paragraph to underline their fundamental importance. This paragraph motivates more solidly the EU added value and includes a few illustrative examples.
3. As for the better presentation of the concrete measures under the different policy options, especially for option 3 (Directive/Regulation), the concrete obligations and measures are described in more detail. Moreover, further explanation was added of the impacts of the other options, notably by elaborating on their effectiveness. This now should provide for a better understanding of the preferred option.
4. The request to strengthen the impact analysis and presentation of underlying evidence could only be complied with partly, because of the absence of reliable data. The explanation of lack of evidence, and the assumptions on which conclusions are based, was reinforced.
5. As regards the distinction between environmental, economic and social impacts, a clear differentiation is made for each policy option. The section on economic impacts already contained differentiated assessments for the different policy options. The comparison of the options in the table under point 7.1 is now more detailed.
6. Regarding the request to streamline annexes and the main text, the number of annexes was reduced with regard to their necessity for this Impact Assessment.
7. Also concerning shortening and streamlining, tables and figures were moved from the main text into the annexes and some tables were deleted completely.

2.4. Consultation and expertise

On 23 March 2011, DG MARE and DG ENV launched a joint public web-based consultation on MSP and ICZM, in support of the present Impact Assessment. This consultation ended on 20 May 2011. A total of 225 contributions were received, among which 109 responses on behalf of organisations. The overall result of this consultation was as follows:

- Confirmation that conflicts of the use of sea space is becoming more frequent and will continue in the future.
- Confirmation of the usefulness of implementing MSP in European waters and overall support of the work towards a common approach within the EU.
- Confirmation that the work so far towards implementing a common approach was appropriate and relevant, in particular the establishment of 10 key principles for MSP in the roadmap Communication of 2008.
- No clear answer to the question if a legally binding or a non-binding option for MSP in the EU would be the preferred option; stakeholders emphasized that any initiative would need to be coherent with other legal instruments such as the Marine Strategy Framework Directive and the Renewable Energy Directive. They also referred to subsidiarity concerns, but acknowledged the need for a common framework. Several stakeholders emphasized that such a common framework should not be over-prescriptive, but relatively simple and leave flexibility to Member States to implement MSP in accordance with the particularities of each region and/or administrative set-up.

- Consideration that EU action on cross-border issues on MSP would be particularly useful.
- Confirmation of the benefits and the added-value of EU action on ICZM. There is still important potential to improve on the full implementation of ICZM principles.
- Sustainable development remains an important objective, with institutional co-ordination, coherent planning of land and sea part of coastal zone, and integration across interests (social, economic and environmental) forming the core tenets of ICZM.
- There is scope to strengthen the basis of EU ICZM policy up to a binding but flexible legislative framework²⁵. The support to ICZM through studies, projects, research is considered important as well.
- Confirmation of the need to ensure a strong link between ICZM and MSP.

A public hearing on ICZM was organised on 30 May 2011²⁶ that highlighted the need to consider the differences in coastal contexts and the linkages between ICZM and MSP. The lack of legal push was mentioned as an important barrier to progress ICZM. Mere support to *ad-hoc* projects would not be enough to advance ICZM, although financial support *per se* was valued. Spatial planning was said to be important, but should not solely focus on spatial conflict resolution.

The consultation has shown that the business community, in particular sectors involved in cross-border investments at sea - like transnational grids - is very favourable towards a European approach to MSP and ICZM, since such processes are expected to reduce their operative costs and facilitate the development of their activity. Others express reservations mostly related to concerns for over-regulation, emphasising that national authorities already have a burdensome task to implement existing policy initiatives. The reaction of the NGO Community has been mixed: some have been positive because of positive effects on nature conservation, others were more sceptical due to concerns that co-operation with other sectors could slow down the implementation of initiatives of their interest. The reactions from Member States representatives have been mixed, and depend on the content of the future action. A key concern for Member States is subsidiarity and fears that planning and management competences would be transferred to EU authorities.

The report of the public consultation and a more detailed summary of the results of the stakeholder consultation are available in Annexes 9 and 10.

The Commission has regularly consulted stakeholders on their view on MSP and ICZM, in addition to the consultation carried out for this impact assessment. Information on this, as well as studies and preparatory actions are summarised in Annex 3.

It should also be noted that in its report "Resilient People, Resilient Planet: A Future Worth Choosing"²⁷, launched on 30 January 2012, the High-level Panel on Global Sustainability of the United Nations recommends the establishment of regional oceans and coastal management frameworks in order to support sustainable marine and coastal ecosystems²⁸.

²⁵ 72% fully agree or agree to the statement that an EU binding legislative framework would provide a better basis for ICZM implementation in the long-term and in cross-border contexts.

²⁶ EC (2011). *Public Hearing on Integrated Coastal Zone Management 30 May 2011 – Hearing Report*. http://ec.europa.eu/environment/iczm/pdf/ICZM_Hearing_Report_20110530.pdf.

²⁷ Report of the United Nations Secretary-General's High-level Panel on Global Sustainability. 'Resilient People, Resilient Planet: A Future Worth Choosing', 30 January 2012; www.un.org/gsp;

²⁸ "Recommendation 18: Governments should commit to the establishment of regional oceans and coastal management frameworks in major marine ecosystems, including through: (a) Enhanced co-operation in oceans and coastal management involving relevant stakeholders; (b) Marine and coastal planning by

3. PROBLEM DEFINITION

3.1. What is the issue or problem that may require action?

Marine waters and coastal zones are subject to intense and increasing use for economic activities. The demand for space and competition and conflicts between uses in marine regions and sub-regions are expected to increase rapidly in the future²⁹. Traditional activities such as fisheries, shipping, dredging and oil exploitation have expanded rapidly over the past decades. New uses (such as tourism, mineral extraction, or recently wind energy and offshore marine aquaculture), have started to claim their own sea space³⁰. Crucial decisions on maritime spatial use will be made over the next few years. A study done for the Belgian part of the North Sea shows that the total claim for ocean space is almost three times as high as the space that is available. Similar experiences in other countries confirm this.³¹

Compared to inland areas, coastal zones are affected by more intense land-use and higher urbanisation rates as almost half of the EU's population lives within the 50 kilometres of the sea. These zones increasingly suffer from ecosystem degradation which also has negative social and economic consequences. Climate change impacts such as sea level rise will further increase the exposure to risks for assets, population and biodiversity and the need for adaptation measures which should be planned and executed in an integrated framework.

Annex 2a illustrates the potential for competition/conflicts of uses in unplanned space (here: the Baltic Sea).

The intense and increased use of coastal and maritime areas, the close interactions between land and sea based activities and the lack of clearly defined property rights for coastal and marine waters has led to the general problem of competition **for maritime and coastal space and inefficient use of resources**. This overarching problem can be broken down into five more concrete problems in maritime and coastal areas such as conflicting claims on maritime and coastal space (problem 1), leading not only to inefficient and unbalanced use of maritime and coastal space (problems 2 and 3) and suboptimal exploitation of economic potentials (problem 4), but also to insufficient adaptation to climate risks and degradation of marine and coastal environment (problem 5).

It should be noted that the problems and their underlying causes (presented below in 3.2) were very similar or closely interconnected between MSP and ICZM which was one of the reasons which led to merging the two initiatives and integrate both tools into an overarching maritime planning and coastal management process.

As requested by the Impact Assessment Board, these five concrete problems are analysed in more detail including the illustration of these problems by examples:

Problem 1: Conflicting claims on maritime space

The rapid increase in the use of the maritime space has led to increased conflicts between competing uses, such as sand extraction, cables, pipelines, wind parks, fishing activities and shipping routes, although in some cases there can also be synergies between them. The most

countries in regional areas, taking into account the specific needs, ecosystems and users in their area and supported by solid funding mechanisms to develop and implement these plans; (c) Building the capacity of marine managers, policymakers and scientists in developing countries, especially small island developing countries and other coastal States; (d) Enhanced monitoring and surveillance systems."

²⁹ See table on potential conflicts in Annex 4.

³⁰ Policy Research Corporation (2010). *Study on the economic effects of Maritime Spatial Planning*.

³¹ Douvere, E., Ehler, C. (2007). *The Need for a Common Vocabulary for Marine Spatial Planning in Ecosystem-Based Management*.

frequent examples of conflicts between sea uses occur in shallow marine waters of heavily used sea areas such as the North Sea and the Baltic Sea where for example fishing activities compete with Natura 2000 designations and sand and gravel extraction sites. In the Mediterranean, such as in Greece, tourism (e.g. bathing water use) often competes with other economic activities close to the coastline, such as aquaculture. The most significant driver among new emerging activities is the rapidly expanding renewable energy sector following the implementation of the 2009 Renewable Energy Directive³² which requires EU Member States to produce a pre-agreed proportion of energy consumption from renewable sources by 2020. According to the European Wind Energy Association (EWEA), 4 GW has already been installed in European waters by the end of 2011, making Europe world leader in offshore wind. EWEA expects this capacity to grow tenfold by 2020, achieving 40 GW. By 2030 this should grow by an additional 110 GW, for a total of 150 GW.³³ 60 % of the offshore wind capacity should be situated in the North Sea basin and around 20 % in the Atlantic Ocean. The offshore wind energy sector is already competing with many other sectors (such as fishing and nature conservation).³⁴ Offshore wind installations are also competing with the maritime transport sector, in particular around the British Isles, which leads to longer transport routes³⁵. The Maritime transport³⁶ and the dredging³⁷ sectors have themselves been growing rapidly despite the financial crisis. For maritime transport especially, activity is intensifying and ports are expanding. The latest development is the building of an 18.000 TEU container vessel for a European shipping company – this is 50% larger than the largest current vessel. Ports and shipping lanes will have to accommodate this as well as the continuing increase in maritime transport (14% in 2010). Offshore transshipment facilities are part of this discussion. In intensively used sea areas, the cross-border nature of shipping lanes calls for intensive and upstream coordination of planning activities to avoid conflicts with these shipping lanes. At the same time, the need to plan and organise any changes to shipping lanes through international coordination in the IMO requires a good understanding by all involved Member States and stakeholders. Shipping companies also spend financial resources fighting unplanned decisions, lose time due to inefficient changes in shipping routes, and are often uncertain about the timing of infrastructure developments.

³² Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJ, L 140, 5.6 2009, pp. 63-87.

³³ EWEA (n.d.) Maritime Spatial Planning: supporting offshore wind and grid development.

³⁴ In its 2008 Communication on offshore wind energy, the Commission anticipated that offshore wind can and must make a substantial contribution to meeting the EU's energy policy objectives through a very significant increase. This increase was expected to be in the order of 30-40 times by 2020 and 100 times by 2030 compared to the installed capacity in 2008. The European Wind Energy Association expects a ten-fold increase by 2020 of offshore wind energy capacity across the EU and calls for a binding framework to manage the use of sea space. A significant proportion of this can be expected to be at sea; Scotland expects growth in employment figures in the offshore wind sector to be 4000% between 2010 and 2020. EWEA (2009). *Pure Power – Wind energy targets for 2020 and 2030*. http://www.ewea.org/fileadmin/ewea_documents/documents/publications/reports/Pure_Power_Full_Report.pdf.

³⁵ BIMCO refers to the impact on shipping of the development of wind farms in the vicinity of busy shipping lanes or on traditional shipping routes (BIMCO contribution to the consultation on MSP and ICZM, sent on 19 May 2011), para. 55.

³⁶ Maritime transport has been growing at an average of 8.5% per year. The cruise sector is growing despite the economic crisis: the ECC reports a trebling of EU cruise passenger numbers between 1999 and 2009.

³⁷ The European Dredging Association (EUDA) reports a 150% increase in EU turnover in the period 2000-2008³⁷. See further www.european-dredging.eu.

Stakeholders' views collected in the consultation of April/May 2011 confirmed competition for space as a major issue in the context of the economic use of marine regions around Europe.

Sectors with less growth potential indicate serious concerns with regard to the encroachment of fixed and mobile uses, as well as expansion of the legally required environment protection areas: in the North Sea³⁸, maritime transport and fishing sector have indicated that some of them could lead to € 160 million losses in the short term. Most of this development takes place in limited space and increasingly needs to be managed.

Problem 2: Inefficient use of maritime space

The lack of co-ordination between different sectoral decision makers during the process of granting the use of sea space has led to situations where activities are dispersed and larger areas of the sea space than necessary are occupied. This experience was made in Germany where the territorial waters already are fully utilised. At EU level, Ministers for Spatial Planning stressed, on 19 May 2011 ""Economic activities such as energy production and transport [at sea] are increasing rapidly [...] there is a need to solve user conflicts and balance various interests".³⁹

Inefficient use of sea space can also be quite costly. The study⁴⁰ on the economic benefits of MSP carried out at the initiative of the European Commission demonstrates, taking examples from the North Sea, that an innocuous event as the inefficient displacement of a ferry route can lead to significant and avoidable costs.

The Interreg project Baltseaplan⁴¹ promotes the concept of spatial efficiency. The concept of spatial efficiency means that sea space shall be used sparingly, that uses should be concentrated as much as possible to keep other areas free, and that co-uses, synergies and multiple spatial use should be promoted. The most common example of co-use is the one of off shore wind installations and aquaculture installations, which could co-exist in the same area and make use of similar infrastructures.

The public consultation⁴² has showed that stakeholders are favourable to more efficient use of the sea space, which can lead to more sparing use of sea space and economic efficiency gains through enhanced co-operation between sectors.

Problem 3: Unbalanced use of coastal space

In the public consultation more than 60% of respondents "disagree" or "somewhat disagree" that currently "a balance is sought between stakeholders needs, including the environment, for new coastal development". Even more disagreement is noted regarding the integration of long-term interests and the co-ordination of infrastructure and building plans⁴³. Although variations in land-use changes are observed between coastal regions, a common feature is an increase in built-up areas (artificial surfaces) by more than 20% over the past two decades in EU coastal regions⁴⁴ outpacing the growth of coastal population density⁴⁵. Fragmentation and

³⁸ Produktschap Vis (2004). Fishing on a postage stamp, See further http://www.pvis.nl/fileadmin/user_upload/pvis/Documenten/Fishing_on_a_square_inch.pdf.

³⁹ Territorial Agenda of the European Union 2020 – informal meeting of Ministers responsible for Spatial Planning and Territorial Development, 19/5/2011.

⁴⁰ [Study on economic benefits of Maritime Spatial Planning, April 2010](#).

⁴¹ Final report from January 2012 can be found at www.baltseaplan.eu.

⁴² See chapter 2.

⁴³ EC (2011). *Public Consultation "Possible Way Forward for MSP and ICZM in the EU"*.

http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf.

⁴⁴ EC (2007). *Sustainable Use of Water Resources in Coastal Areas*, DG Environment News Alert Service.

built up land is likely to increase by over 20% across the EU coastal areas⁴⁶. Diffuse sprawl and continuous linear urbanisation along the coast, as contrasted to compact development, are particularly noticeable: 40% of the Mediterranean shoreline is already built-up and by 2025 this could be 50%⁴⁷.

Europe's sea **ports** play an important role in the EU economy and provide significant direct and indirect employment in coastal regions and serve as the key gateways to the EU transport network.⁴⁸ Options for expansion of port infrastructure in existing locations are often limited, due to already dense use of coastal space. Port authorities are increasingly aware that appropriate embedding of ports development in line with the local environmental and coastal communities is a necessary condition for stable, sustainable development⁴⁹.

Environmental protection laws already address some of the imbalances. However, some important aspects are not covered (explicitly) by EU legislation, such as coastal erosion, sediment management, coastal adaptation to climate change or green infrastructure and are therefore not sufficiently considered in an appropriate way when planning the use of coastal areas. In order to do such planning in an appropriate way there is an emerging need to co-ordinate land-sea interactions of human activities in marine regions and sub-regions across sectors.

Problem 4: Suboptimal exploitation of economic potential

Uncertainties and lack of predictability on appropriate access to the marine space has led to a suboptimal business climate for investors with potential job losses. Business investors have throughout the consultation process stated that industry needs transparency, stability, predictability⁵⁰. Unnecessary additional costs for economic operators and administrations (e.g. licensing, administrative and legal costs, increased costs for investments further offshore due to poor planning) are related to the need for repeated search for similar information – some operators confirm that the same asset (research vessel) executes the same research tasks related to a particular sea area several times due to uncoordinated requests from different operators and/or administrations. Purely national approaches cause unnecessary transaction costs for economic operators and administrations for all sea use activities that have cross-border relevance⁵¹. This is in particular true for trans-national companies seeking to invest in

⁴⁵ EEA (2006). *The Changing Faces of Europe's Coastal Areas*, Report no. 10/2006.

⁴⁶ JRC (2011) Report.

⁴⁷ UNEP/MAP -Plan Bleu (2009). *State of the Environment and Development in the Mediterranean – 2009*. http://www.planbleu.org/publications/SoED2009_EN.pdf.

⁴⁸ The proposed TEN-T guidelines⁴⁸ further promote the strategic importance of ports. This will further stimulate maritime transport and short sea shipping, which are able to offer alternatives to road-transport and alleviate congestion and pollution in coastal zones⁴⁸. See further COM (2011)650/2 http://ec.europa.eu/transport/infrastructure/connecting/revision-t_en.htm and the White Paper: Roadmap to a Single European Transport Area, COM (2011) 144 final; Staff working document SEC (2011) 391 final, http://ec.europa.eu/transport/strategies/2011_white_paper_en.htm.

⁴⁹ See ECO-Ports initiative <http://www.ecoport.com/about>, Societal Integration Award by the European Sea Ports Organisation (ESPO).

http://www.espo.be/index.php?option=com_content&view=article&id=77&Itemid=81; innovative projects such as TIDE (Interreg) <http://www.tide-project.eu/>, SuPorts.

<http://www.seinemaritime.net/suports/>, DredgeDikes <http://www.dredgedikes.eu/>; Sedi-Port (LIFE-programme) <http://www.lifesediportsil.eu/>.

⁵⁰ See for example reports on stakeholder consultations on maritime spatial planning at www.ec.europa.eu.

⁵¹ See further Annex 4.

cross-border installations such as for renewable energy grids, for example in the North Sea offshore grid.⁵²

Sector-by-sector management of economic sectors such as aquaculture, tourism, agriculture, renewable energy, oil and gas industry can cause conflicts and disadvantageous economic trade-offs between sectors, while at the same time putting significant pressures on the environment. Management of sea use needs to take all aspects into account in allocating space to uses and supporting co-existence. This again shows the need for co-ordinated management of land-sea interactions of human activities in marine regions and sub-regions.

Fishing vessels may require similar port services as tourism activities as well as an infrastructure system that supplies water, sanitation, transportation, and telecommunications. Therefore, plans for both tourism and fisheries activities should be integrated with those for transportation and public works in coastal areas. This would lead to cost savings for infrastructure and service provisions.

Better co-ordination across the key economic sectors and resource management would create beneficial trade-offs and contribute to long term sustainable economic development.

Such co-operation is particularly valid in cross-border areas. Euro-region Baltic⁵³ (ERB) was established in February 1998 and is a co-operation project in the south-east Baltic Sea, involving eight coastal regions of Denmark, Lithuania, Poland, Russia and Sweden. In 2005, ERB partners elaborated a long-term development strategy for sustainable economic growth. Concrete activities focus on reducing marine pollution, promoting innovation in SMEs, better transport links, improving accident responses, transferring knowledge between regions and development of information exchange systems.

Such forms of co-operation are rarely seen across the EU which shows the added value of an EU initiative that would create the framework for such co-operation.

Problem 5: Insufficient adaptation to climate risks and degradation of marine and coastal environments

EU coastal states have not been able to fully address the challenges of climate change through a more risk resilient coastal development: With 140 000 km² at less than 1 m above sea level, coastal zones are particularly vulnerable to rising sea levels, related erosion, flooding and increased risk of salinisation⁵⁴. The EUROSION study⁵⁵ showed that ill-planned coastal defence infrastructures made erosion worse in adjacent coastal areas. Despite the recognition that climate change aggravates these risks, the majority of EU coastal Member States do not have a climate change adaptation plan or strategy dedicated to their coastal zones⁵⁶. At the

⁵² The 2010 economic benefits study concluded that MSP unnecessary (opportunity) costs related to inefficiencies or lack of predictability can range between €170 million and € 1.3 billion by 2020. The study on the impacts of EU action on MSP concluded that in sectors such as dredging and aquaculture, the introduction of an MSP system alone could lead to reduction of such costs by around 10%. Studies carried out under the Windspeed project estimate costs of wind energy expansion under various scenarios and point to the cost of licensing and planning as a significant factor in this context. Moreover, they conclude that "MSP efforts to date have generally been nationally oriented. While some cross-border consultation takes place, it is often ad-hoc or sector based. There is currently no official transnational forum for MSP in the North Sea. Furthermore, different Member States have undertaken MSP activities at different times. Without streamlining of the development of MSP and trying to co-ordinate activities, it is difficult to effectively cooperate on planning decisions."

⁵³ <http://www.euroregionbaltic.eu>.

⁵⁴ SOER (2010). *Thematic Assessment: Land Use*, p. 28.

⁵⁵ <http://www.euroSION.org>.

⁵⁶ EC (2008). *The economics of climate change adaptation in EU coastal areas* http://ec.europa.eu/maritimeaffairs/climate_change/report_en.pdf; EEA (2008), *Impacts of Europe's*

end of 2010 the ANCORIM network evaluated that risks are not systematically integrated into coastal land planning decisions⁵⁷. Coastal reinforcements in the context of rising sea levels and other climate change impacts will require significant and continued use of sand and gravel extracted at sea⁵⁸. In a context where sea space is limited, the impacts of dredging and extraction on other resources need to be considered in a wider framework to enhance resource efficiency and maximise sustainability⁵⁹.

The principal threats to the marine environment have been identified in the Marine Strategy⁶⁰ and include the effects of climate change, pollution; the impacts of commercial fishing, the introduction of non-native (exotic) species, eutrophication and associated algal blooms. Economic activities that directly depend on the quality of the marine environment would be particularly affected.

In coastal areas intensive human activities such as fishing, aquaculture, agriculture and tourism cause large and severe impacts on local ecosystems. This includes so called 'blue carbon ecosystems'⁶¹. Only 8% of coastal habitats have a favourable conservation status, and only 11% of coastal species are in a favourable condition.

The EU objective of halting biodiversity loss by 2010⁶² was not met, neither in the coastal nor the marine environment. Coastal erosion is a main driver and contributes to 64%⁶³ of losses observed. About twenty thousand kilometres of coasts, corresponding to 20%, face serious impacts in 2004.

Many of the above mentioned impacts are regulated through environmental legislation⁶⁴. However, some environmental pressures and possible instruments to address them are not (sufficiently) covered by the current *acquis*, in particular:

changing climate, http://www.eea.europa.eu/publications/eea_report_2008_4/pp161-192CC2008Ch6_7Adaptation_Consequences.pdf.

⁵⁷ http://ancorim.aquitaine.fr/IMG/pdf/ANCORIM_Survey_global_report_EN.pdf.

⁵⁸ In order to maintain the Dutch coastline in the context of climate change, sand needs are estimated to rise from 12 million m³/year now to 20 million m³/year in the short term. These needs could rise further to 30 million m³/year by 2040 and up to 60 million m³/year in 2100, depending on the climate and development scenario applied (ref. Probleemanalyse deelprogramma kust, Deltaprogramma, 2011). Locally and regionally sediment needs and costs can be important: e.g. Regione Lazio (Italy) estimated that for the recharging of its most important beaches, 8 to 10 million m³ would be needed at a cost of 80 M€, and 300.000 m³ per year for maintenance (2.4 M€/year). Beach-erosion often affects important economic resources. Cartographic analysis has shown that Tuscany suffered a net loss of 214 000m² beach areal in 20 years. (ref.: Beachmed-e, 1er cahier technique phase A, 2007).

⁵⁹ E.g. re-use of dredged material, such as implemented in the projects DredgeDikes. <http://www.dredgedikes.eu/> (Interreg), Sedi-Port <http://www.lifesediportsil.eu/> (LIFE-programme); reducing obstacles in natural sediment transport in river basins, see e.g. Interreg project BEACHMED – sub-project GESA, Gestion des stocks sableux interceptés par les ouvrages côtiers et fluviaux, récupération du transport solide, Rapport technique phase C, 2008 <http://www.beachmed.it/>. Stakeholders also refer to the case of displacement of aggregate extraction activities due to a national-level decision, from marine waters to inland areas in another country (Dutch North Sea to Norway) with questionable overall sustainability outcomes.

⁶⁰ COM (2005)504 final-Thematic Strategy on the Protection and Conservation of the Marine Environment.

⁶¹ Blue Carbon is the carbon stored by coastal and ocean ecosystems. In particular, coastal ecosystems such as tidal marshes, mangroves, and sea grasses remove carbon from the atmosphere and ocean, storing it in plants and depositing it in the sediment below them by natural processes.

⁶² EEA (2010). Marine and coastal environment –SOER 2010 thematic assessment.

⁶³ EEA (2010). *10 messages for 2010 – Coastal ecosystems*.

⁶⁴ In particular the Marine Strategy Framework Directive, the Habitats and Birds Directive and others (see Annex 8). The SEA Directive ensures overall environmental protection of plans and programmes and the EIA Directive for particular projects that are planned in coastal and marine areas.

- Adaptation to climate change impacts, including erosion control;
- Degradation due to urbanisation, changes in agriculture land-use, and pollution⁶⁵;
- Increased use of sediment related uses.⁶⁶

The effective implementation of marine strategies by Member States requires the management of the use of space by human activities across marine regions and sub-regions. In the same vein, the requirement to implement networks of MPAs under Natura 2000 legislation requires planning across marine regions and sub-regions in order to be effective.

Maritime planning and coastal management can be effective to help complement the objectives set out in these pieces of legislation and fill in the gaps not sufficiently covered by EU legislation.

The above mentioned problems occur or are potentially to occur throughout the coastal and maritime areas in the EU. Many of the problems faced by European coastal regions have an international dimension.

3.2. Underlying causes of the problems – what are the drivers and regulatory failures?

Not all EU Member States have adapted their governance structures to manage human uses in marine regions or sub-regions and coastal zones through fully integrated and dedicated processes. Some EU Member States tend to continue to organise themselves in a sectoral manner, or to manage maritime and coastal issues with minimal or *ad-hoc* processes. In some cases, decision makers of individual policy areas continue to adopt decisions without full scale co-ordination, or comprehensive long-term planning. This was not a big problem in the past since the utilisation of the coasts, seas and oceans was scarce (mostly linked to fishing and maritime transport) and seldom subject to any conflicts. This *modus operandi* is costly and inefficient in a situation with a need for maximum efficiency, high demands for space and increasing conflicts/competition between uses. Without fully integrated and dedicated planning and management mechanisms, decisions at sector level risk undermining each other and reduce growth opportunities.

The five problems as identified above can be linked to one or several of the following causes:

At the marine region and sub-region level:

- Lack of (seamless) coherent and sustainable planning and allocation by Member States of maritime and coastal space to uses across complete marine regions in the EU. This can be linked to the absence or incomplete establishment of appropriate mechanisms within and between Member States, and at EU-level, that enable such planning as well as limited and/or late stage cross-border co-operation (cause 1).
- Lack of scientific data and assessment to support integrated governance and planning mechanisms and the capacities to provide (cause 3).
- Inadequate involvement of the stakeholders in formulating and implementing solutions to coastal and maritime problems, particularly across marine regions (cause 4).

At EU level:

⁶⁵ The Commission guidance on estuaries and the EU Biodiversity Strategy recognise that more integrated spatial planning is needed to address these issues and maintain valuable ecosystem services.

⁶⁶ E.g. aggregate dredging for the construction industry, agricultural use of floodplains, dredging for navigation purposes, drinking water supply, hydropower generation, flood protection and nature conservation necessitate appropriate management of sediments in coastal zones and estuaries.

- Feeble or insufficient elaboration of the spatial/human sea use management aspects (including coherence between them) of EU policies and programmes affecting the sea and coasts as defined in the EU Treaty (cause 2).

As requested by the Impact Assessment Board, these causes are further discussed, explained and illustrated with examples:

Cause 1: Lack of (seamless) coherent and sustainable planning and allocation by Member States of coastal and sea space to uses, including across marine regions and sub-regions in the EU

Member States (and the EU as a whole) do not at this stage collectively ensure appropriate management of human sea uses across marine regions and sub-regions. Although a good number of Member States apply some aspects of MSP or ICZM processes, the types of process differ widely, or are still in the process of being established. Only in a few cases is MSP applied on the basis of a complete single documented MSP process. In other cases, existing national governance structures and co-ordination of sectoral policies do not per se explicitly address spatial issues and have thus not systematically led to tangible improvements.

Coastal zone governance today is characterised by a mixture of sectoral/thematic plans and strategies (e.g. fisheries, energy, ports) on the one hand, and spatial management (e.g. terrestrial planning) on the other hand. An analysis of 350 coastal practice cases found that fragmentation in decision- and policy-making is one of the most important factors limiting success in⁶⁷. A study on coastal governance in East England found that actors in the decision making process were poorly organised and coastal issues were dealt with in isolation without sufficient connection to mainstream planning and management programmes⁶⁸. Little co-ordination between levels of governance was found regarding climate change adaptation measures in the Baltic⁶⁹. Although integration over the land-sea boundary is at the heart of ICZM and constitutes a key principle of MSP, a separation between on-shore and offshore planning regimes is often observed⁷⁰.

At sea, the coherent organisation of the management of human sea uses through integrated processes is only beginning, on an individual, mostly national basis⁷¹. There are only a few cases of such co-ordinated approaches in and between the Member States⁷² while much more widespread implementation would be needed⁷³.

Having available reliable data and linkage of data sources and making data more compatible is essential to implement MSP and ICZM policies. Decision makers and planners would be able to take more informed decisions if all had access to the same data.

Geographical Information Systems (GIS) are necessary for integrated and sustainable management of coastal and maritime regions. Access to and integration of existing data sources is indispensable in order to arrive at well elaborated spatial management plans.

⁶⁷ <http://ec.europa.eu/ourcoast/download.cfm?fileID=1709>.

⁶⁸ SQW Consulting (2009). "Who decides?" A study of governance processes across three coastal areas, report to East England Coastal Initiative.

⁶⁹ BALTCICA, Governance of Climate Change Adaptation: Policy Review, March 2010; EEA 2010, 2008.

⁷⁰ COREPOINT, Report on Spatial Planning and ICZM in NW Europe, 2008.

⁷¹ This conclusion is, *inter alia*, confirmed by the interim assessment report of the ongoing pilot project for cross-border co-operation on MSP in the North Sea, the so called MASPNOSE project, which confirms that barriers to an effective cross-border co-operation are important and that opportunities for improvement are considerable. <https://www.surfgroepen.nl/sites/CMP/maspnose/default.aspx>.

⁷² See for example legal systems in the UK, Germany, NL, and others; see also table summarising state of play on MSP in EU Member States in section 3.4.1.

⁷³ See section 1.2.1.

Current scientific data are not organized towards an integrated policy approach. The incompatibility of data sets and information systems make planning and management especially in cross-boundary context very difficult and hinders international co-operation and exchange of data. The on-going plan Bothnia project⁷⁴ between Sweden and Finland has demonstrated that authorities spend considerable time and effort to collect and compile data even before any planning of activities can take place.

Work is on-going at EU level to improve the situation through the creation of common information sharing environments such as EMODNET⁷⁵ and GMES⁷⁶. Data collected by Member States through the implementation of the Marine Strategy Framework Directive is also expected to improve the situation. Moreover, the Commission is integrating its data and information initiatives under the Marine Knowledge 2020 agenda which could be expanded to cover coastal areas as well. These issues have been examined in the recent impact assessment and Communication of the Commission to the European Parliament and the Council on Marine knowledge 2020.⁷⁷

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an infrastructure for spatial information in the European Community (the Inspire Directive) could provide a suitable platform for collecting marine spatial data. However, this Directive does not focus on data on maritime space.

***Cause 2:** Feeble or insufficient coherence or linkage between the different elaboration of the spatial/human sea use management aspects (including coherence between them) of EU policies and programmes affecting the sea and coasts as defined in the EU Treaty.*

The realisation of EU policy objectives affecting the sea ultimately depends on the organisation of human activities vs. maritime space. They also require coherence both to achieve maximum efficiency and economic potential, and because the result could otherwise be that decisions taken under one EU policy undermine decisions taken under another EU policy or *vice versa*. Currently, there is no requirement for this to take place. None of the existing EU instruments on the management and utilisation of our coasts and oceans and its resources foresee a system whereby decision makers co-ordinate the management of the human uses of coastal and maritime space amongst each other or across marine regions and sub-regions. For example, the designation of a Marine Protected Area will not prevent fishing or maritime transport activities from taking place in that area unless additional or compatible measures, such as developing appropriate fisheries management plans are also taken. Complaints about the cross-purpose action of EU policies as implemented by MS/EU are frequent and demonstrate the gaps identified above. For instance, the Commission received several complaints on excessive green algae growth nearby the coast of Brittany France. This is a serious environmental but complex problem that affects different sectors and policies, including agriculture, waste water treatment, nature protection, health and tourism. Several EU instruments are relevant in this context and need co-ordination., among which: nitrate action programmes under the Nitrates Directive, river basin management plans under the Water Framework Directive, rural development programmes and support measures under the Common Agricultural Policy, application of best available techniques in the poultry and pig

⁷⁴ Preparatory action sponsored within the framework of the Integrated Maritime Policy to test cross-border MSP co-operation between Finland and Sweden in the Bothnian Sea, see further www.planbothnia.org.

⁷⁵ European Marine Observation and Data Network -another cross cutting tool identified within the integrated maritime policy.

⁷⁶ Global Monitoring for Environment and Security.

⁷⁷ COM (2010) 461.

business under the Directive on industrial emissions and the treatment of urban wastewater Directive.

EU environment legislation provides for specific norms and targets, with direct implications for the spatial planning and management of marine and coastal uses (see Annex 8; e.g. Birds- and Habitats Directives, Water Framework Directive, Marine Strategy Framework Directive). However, none of these instruments require specific and coherent action to manage human activities vs. sea space. They do not set out mechanisms to link planning and management of sea and coastal uses across relevant policies (e.g. agriculture, etc.) through a coherent cross sector decision making process. The Marine Strategy Framework Directive goes furthest in recognising the need for a comprehensive, ecosystem based approach to the management of the seas and in fact demands cross-border co-operation among Member States in sea regions or marine regions, in the context of achieving Good Environmental Status. In the programme of measures, it explicitly mentions the possible use of “spatial and temporal distribution controls”. Yet, maritime spatial planning is only part of the possible mix of measures and the implementation of the MSFD does not necessarily provide in itself for maritime spatial planning systems, in particular where requirements are concerned that go beyond environmental objectives⁷⁸.

The Strategic Environmental Assessment Directive only applies to existing plans (or plans under development) falling in the scope of the Directive, but it does not call for planning to take place across sectors. The results of the public consultation indicated that additional work on MSP and ICZM is expected to contribute to the achievement of Good Environmental Status. The Common Fisheries Policy requires the management of fishermen's activities at sea, yet does not foresee the linkage of this management with the management of human sea uses in other contexts, although fisheries activities routinely interact or enter into conflict with other sea uses – wind energy, MPAs, etc.. Again, the outcome is economic cost and inefficiency.

This reasoning also applies to energy and transport. Sectoral legislation is already in place in these policy areas, but it does not provide for co-ordination of the management of human activities with other policy areas. Recent initiatives (Regulation on guidelines for Trans-European Energy Infrastructure) refer to MSP as an important tool to support the objectives of this legislation [to be adjusted following ISC/adoption], particularly with regard to the implementation of the North Sea Offshore Grid identified as one of the energy infrastructure priority corridors. [to be adjusted following ISC/adoption].

The targets imposed by the Renewable Energy Directive require speedy and in particular cost-efficient development of renewable energy sources (offshore wind) by Member States. The cost savings and investment acceleration that can be expected through the application of coherent planning mechanisms across connected sea areas are significant, as indicated by the EWEA and in the context of the Commission's study on the economic impacts of MSP.

The Ministers for Spatial Planning and Territorial Development, in their declaration of 19 May 2011 stated: "The Marine Strategy Framework Directive and EU Integrated Maritime Policy call for co-ordinated action... on Maritime Spatial Planning. Such planning should ... enable sustainable development of the land-sea continuum."

Implementation of the EU ICZM Recommendation is fragmented and progress remains slow. Member States' action has improved since 2006⁷⁹, but the number of dedicated national ICZM strategies remains small (5 out of 22 coastal Member States). Most Member States use

⁷⁸ See MSFD impact assessment report:

http://ec.europa.eu/environment/water/marine/pdf/2005_10_impactassess_en.pdf.

⁷⁹ The reporting period formally covered by the Recommendation ended in 2006.

existing frameworks and for some countries considerable effort and progress on ICZM is noted. An evaluation of Member States' progress reports on ICZM concluded this approach leads to more heterogeneity, in scope and level activity⁸⁰. The overall level of implementation is evaluated at just 50% showing significant divergence between Member States. Consequently large potential benefits are not realised⁸¹.

Cause 3: Lack of (seamless) coherent and sustainable planning and allocation by Member States of coastal and sea space to uses across marine regions and sub-regions in the EU

Member States that are already applying MSP to spatially manage human maritime uses are doing this based on a purely national basis, even though the main drivers are at EU-level (renewable energy, maritime transport, MSFD implementation, CFP). Developments proceed at different speeds⁸² and through unspecified co-ordination mechanisms, with the risk of continued inefficiency and lack of realisation of the potential benefits of a more comprehensive and co-ordinated system, as highlighted by a number of studies and operators⁸³.

Cross-border co-operation on maritime planning and coastal management in EU marine regions and sub-regions is highly relevant since many maritime features and infrastructures run across national borders, such as cables, pipelines, shipping lanes, oil, gas and wind installations as well as fishing grounds and marine protected areas. Ecosystems tend to be transnational and do not acknowledge administrative borders.

The on-going work on a North Sea Offshore Grid Initiative explicitly recognises the importance of cross-border MSP and facilitation of licensing processes in the context of building the grid structure to support the supply of increasing quantities of offshore wind energy, and similar work is starting in the Baltic Sea and Atlantic⁸⁴. Cross-border impacts or effects of economic activities at sea cannot be mitigated by sea use management or MSP that is organised on a purely national basis⁸⁵. Some steps have already been taken towards a common approach among EU Member States for coherent and efficient management of sea uses, i.e. through the development of 10 key principles developed in the 2008 Roadmap Communication on MSP.

Apart from these efforts, there are no agreed standards or mechanisms for co-operation on the cross-border management of sea uses. Cross-border planning takes place on an *ad hoc* basis or is absent⁸⁶. Areas where cross-border co-operation is either suboptimal or absent, but would benefit from active development, include border areas between Germany and Poland, Poland and Denmark (Bornholm), Germany, the UK and Holland and joint areas of the Dogger Bank in the North Sea, or some areas of the Mediterranean. This means that sea use (or spatial) planning frequently remains purely a national matter. Cross-border installations can only be carried out when separate national planning and permitting processes have been completed separately. This means that prospective planning which could lead to direct cost benefits for operators.

⁸⁰ http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf

⁸¹ COWI (2011) http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf.

⁸² See table 1 of MSP implementation in section 3.4., See also study on the implementation of MSP in the Mediterranean Sea referred to in Annex 7.

⁸³ See further study on economic benefits: costs of non-co-ordination, recommendations, i.e. Windspeed, EWEA, fishing on a postage stamp referred to above

⁸⁴ North Sea Offshore Grid Initiative, MoU, Annex 4, Planning and authorisation procedures

⁸⁵ Examples of gas and oil extraction vs. tourism in the Adriatic, Natura 2000 vs. gravel extraction in the North Sea, PRC, Impacts of MSP study, p. 53

⁸⁶ See for example:

http://www.windspeed.eu/media/publications/WINDSPEED_Roadmap_110719_final.pdf

Existing mechanisms and provisions can be useful to support cross-border development of MSP in the EU. Cross-border co-ordination of management of sea uses is in some cases based on existing cross-border co-operation mechanisms such as under the SEA Directive. As in other cases, the SEA Directive does not provide a sufficient basis for fully integrated cross-border co-operation which goes beyond environmental issues to allow a wider consideration of social and economic aspects.

The results of the public consultation support the analysis that improvements in co-ordination of maritime spatial planning and coastal zone management and related participation processes in a cross-border context are necessary. This includes analysis of cross-border impacts⁸⁷. This conclusion is, *inter alia*, confirmed by the on-going pilot project for cross-border co-operation on MSP in the North Sea, which confirms that barriers to effective cross-border co-operation are important and that opportunities for improvement are considerable⁸⁸.

Cause 4: Inadequate involvement of the stakeholders in formulating and implementing solutions to coastal and maritime problems

The involvement of stakeholders in the decision-making process is necessary to ensure the buy in of those affected by decisions. Today, stakeholders of one sectoral policy are in general well informed and follow the decision making process within their specific policy area, but they are often a lot less acquainted with policy decisions of other sectoral policies affecting the same sea area.

For example, fishermen often complain that they are not sufficiently consulted or informed or involved about the establishment of Natura 2000 sites and offshore wind park installations despite the fact that these uses are put in place in shallow waters which at the same time are important fishing grounds, and despite the fact that fishermen could contribute to these processes through their historical knowledge of the areas concerned. Inadequacies in stakeholder involvement of this nature reduce the acceptance level of new investments or uses among stakeholders and create unnecessary conflicts between sectoral policies.

At EU level, initiatives have been taken to improve the situation through the promotion of an integrated maritime policy and the cross cutting tools identified therein, including MSP and ICZM. No legislative action has yet been taken at this level for an integrated maritime policy, with the exception of the adoption of the Council and EP recommendation on ICZM. No EU approach for transboundary issues is in place.

In order to address this situation, a number of potential solutions have been identified for this initiative which would address the above mentioned problems and causes and would form the basis for identifying possible policy options. The possible solutions (measures) and the way they are addressed in the analysed policy options are described in section 5. The effectiveness of the measures to resolve the underlying problems is assessed in section 6.2. The link between the possible solutions, their effectiveness for resolving the underlying problems and the analysed policy options is provided in the overview table in Annex 1.

3.3. Who is affected?

MSP and ICZM directly involve public administrations involved with planning and management of human uses in marine waters and the coastal zone (at central, regional and/or local levels).

⁸⁷ 43% disagreed and a further 28% somewhat disagreed that “planning and management of neighbouring countries/regions are well co-ordinated and impacts across administrative boundaries are adequately analysed”.

⁸⁸ See the initial assessment report of the so called MASPNOSE project referred to in footnote 63, EWEA briefing on MSP, September 2011, PRC, Economic Benefits of MSP in the EU, Recommendations p. 45 all referred to above.

Conflict or competition for maritime space is likely to happen to a varying degree across marine regions and sub-regions in the EU and affects almost all operators⁸⁹. Sectors and services affected include maritime transport and shipbuilding (deep sea shipping, short sea shipping, passenger ferry services and inland waterway transports), commercial and recreational fishing, aquaculture, energy and raw materials (oil, gas, offshore wind, wave tidal, carbon capture and storage, aggregates mining fresh water supply, etc.) agriculture on saline soils, nutrition, health and cosmetics (high value use of marine resources for cosmetics), leisure, working and living (coastline tourism, yachting and marinas, cruise shipping, living in coastal areas), coastal protection (against flooding and erosion, preventing salt water intrusion protection of habitats) and maritime monitoring and surveillance (security of good supply chains, prevention of illegal movements of goods and persons, environmental monitoring). Further details on relevant actors within the field of maritime economy are found in Annex 4, which also has a table with conflicts of space between sectors.

Giving the pivotal role of governance and spatial planning in MSP and ICZM, public authorities have the primary role regarding implementation.

Given that the problems are most acute in heavily used sea areas, in particular coastal waters and adjacent land, the authorities, economic actors, civil society and stakeholders operating in these areas are most affected.

3.4. How would the problem evolve, all things being equal (baseline scenario)?

MSP and ICZM are widely recognised as tools to achieve co-ordinated planning and management of human uses in marine regions or sub-regions and coastal zones and to provide benefits, in particular as regards governance, by increasing efficiency and in contributing to more balanced and sustainable planning and development⁹⁰. Stakeholders expect that the systematic use of MSP would contribute significantly to enhanced regulatory efficiency by facilitating the co-ordination between actors responsible for implementation of these instruments⁹¹. One can therefore expect that also under a baseline scenario, the pressure for strengthened management and planning of sea uses will mean that both MSP and ICZM will continue to progress to some extent, notably in cases where conflicts between uses are apparent and need to be resolved in the short term. On the other hand, there is no guarantee that such progress will lead to processes which are mutually compatible between Member States, evolve eventually on similar timescales, or allow for co-ordinated cross-border maritime planning and coastal management in marine regions within a reasonable timeframe.

3.4.1. MSP

Under the baseline scenario MSP is likely to progress to deal with conflicts between uses or short term needs. However, there is a risk that policy action will remain largely national. The risk is further that priorities and objectives that are set at national level might not be fully shared with neighbouring States and without appropriate *ex-ante* analysis of potential benefits of cross-border planning of uses within marine regions and sub-regions which would facilitate the co-existence of the priorities set at Member State level. This in turn may well lead to cross-border co-operation that is essentially reactive and leads to suboptimal results. As current practice shows, the development of MSP processes as such is progressing and can be expected to continue to progress. But it takes place at different speeds, is not always geared towards a common approach and does not per se include fully effective cross-border co-

⁸⁹ See compatibility matrix in Annex 6 of the Economic Benefits Study p. 9, referred to in Annex 7.

⁹⁰ COWI (2011). http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf; http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf; Williams, E., Mcglashan, D., Firm, J. (2006). Assessing Socioeconomic Costs and Benefits of ICZM in the European Union. *Coastal Management* 34(1), pp.65-86; See also results of the BaltSeaPlan project on MSP.

⁹¹ PRC IA Study, p. 85.

operation. More details on identified shortcomings at national level, which are common for MSP and ICZM, are found in section 3.4.3

Against the background of continued intensification of maritime economic activities and pressures for the use of space described above, an outcome which does not ensure the development of MSP processes by all Member States is likely to lead to unnecessary costs and inefficiencies⁹² in areas where potential conflicts between users may arise. In the absence of structured cross-border co-operation, the risk of inefficient forward planning, conflicts and unnecessary costs continues to exist, including for administrations⁹³. Inefficient resource use is a more indirect, but equally clear consequence.

Competition for space and conflicts between traditional uses (such as fisheries) and rapidly emerging uses (such as offshore renewable energy) will become much more frequent in the future. The absence of a proper framework for managing the development of emerging activities at Member State level could either lead to an unnecessary impact on traditional activities or undue delays in developing new installations such as wind farms as described in the Commission's Communication on offshore wind energy⁹⁴. Lack of use or slow development of proper planning systems will lead to suboptimal allocation of space and spatial inefficiency⁹⁵ because the relative costs of displacing one activity to allow for another are not properly weighted. Inadequate governance structures, and in particular poor co-ordination of sectoral policies, are likely to persist in some cases.

Member States who do not implement a national integrated framework for MSP will have difficulty participating in cross-border planning on transnational issues since they will be unable to implement measures into national law. Another concern is that Member States may be tempted to limit the management of a designated sea area to one specific issue rather than ensuring comprehensive planning.

The result currently, and under a no-action scenario, would be divergent implementation of MSP in different European sea areas. The risk is that in such a situation, potential synergies or even development potentials are not even considered in the absence of appropriate mechanisms for co-ordination or planning of cross-border activities. Indeed the drivers and challenges for MSP differ significantly across marine regions and sub-regions. In sum, the baseline tendency would be that only those Member States with heavily used sea areas will be addressing these challenges, whereas Member States without such pressures will take limited action or remain absent from the process⁹⁶.

Table 1: Current MSP implementation in EU Member States

MARINE & COASTAL MEMBER STATES	Applies MSP?	Specific MSP legislation?	Member States last known MSP status
Belgium	YES	IN PREP*	Applies MSP legislation in preparation, preparing to develop their MSP further
Bulgaria	NO	NO	No MSP action yet
Cyprus	NO	NO	MSP use is under development, single authority in process of designation. Need for cross-border co-operation with other EU member States limited because of the geographical

⁹² See economic benefit study referred to in Annex 7.

⁹³ See studies on policy options and economic benefits of MSP, referred to in Annex 7. See also position papers of WWF and EWEA referred to above.

⁹⁴ COM (2008)768 final.

⁹⁵ On the concept of spatial efficiency, see further the 2011 report of the INTERREG project BaltSeaPlan 2030, towards the sustainable planning of Baltic Sea space, www.baltseaplan.eu. The main idea is to create synergies and stimulate co-uses in order to concentrate uses as much as possible in order to keep other areas free.

⁹⁶ See further PRC report on policy options referred to under section 2.3.3.

			situation
Denmark	PROG*	IN PREP*	No specific MSP legislation or governance structures in place but MSP principles are to some extent applied within the present legislation and governance structures, new MSP legislation is in preparation but pending further action at EU level
Estonia	PARTIAL	NO	in territorial waters only
Finland	PARTIAL	NO	No specific MSP legislation or governance structures in place but MSP principles are to some extent applied within the present legislation and governance structures, in territorial waters
France	PARTIAL	NO	No specific MSP legislation or governance structures in place but MSP is to some extent applied within the present legislation and governance structures
Germany	YES	YES	Advanced MSP in place, including legislation and governance structures
Greece	YES	NO	No specific MSP legislation or governance structures in place but MSP principles are to some extent applied within the present legislation and governance structures. Planning is taking place in territorial waters mainly
Ireland	PARTIAL	NO	Introduction of full MSP use is under consideration
Italy	PROG*	NO	MSP use is under consideration, first steps in applying MSP are taken
Latvia	PROG*	IN PREP*	Progressing rapidly towards wider application of MSP, MSP legislation is in preparation
Lithuania	NO?	NO	First steps in applying MSP are taken
Malta	YES?	NO	No specific MSP legislation or governance structures in place but MSP principles are to some extent applied within the present legislation and governance structures
Netherlands	YES	YES	Advanced MSP in place, including legislation and governance structures
Poland	PROG*	IN PREP*	Progressing rapidly towards wider application of MSP, MSP legislation is in preparation
Portugal	YES	YES	Applies MSP, legislation in place, preparing to develop their MSP further
Rumania	NO	YES	First steps in applying MSP are taken
Slovenia	YES	YES	First steps in applying MSP are taken
Spain	PROG*	NO	First steps in applying MSP are taken
Sweden	PROG*	IN PREP*	Progressing rapidly towards wider application of MSP, MSP legislation is in preparation
UK	YES	YES	Advanced MSP in place, including legislation and governance structures

Implementation of relevant EU legislation, such as the Renewable Energy Directive, the Regulation on Trans-European Energy Infrastructure, the Marine Strategy Framework Directive and the Habitat and Birds Directives, and policies developed under the Europe 2020 agenda including resource efficiency and policies designed to combat the financial crisis, also depends on the co-ordinated management of human use of sea space across sea areas in order to be fully effective⁹⁷.

The time factor is likely to be a significant element in the effectiveness of introducing MSP in the Member State's marine waters over the next 5 to 10 years⁹⁸. This is linked to two specific points: (1) The timing of the outcomes as foreseen under EU legislation and policy initiatives (e.g. MSFD, Renewable Energy Directive, Europe 2020 targets, etc.) and (2) The continued growth of economic activities at sea leading to increased competition for space.

A purely national approach to the management and planning of sea uses through MSP is likely to lead to opportunity costs for business investments since the potential for cross-border projects are not fully exploited. A baseline or no-action scenario may lead to some improvements on an *ad-hoc* basis, but it is not likely to ensure upstream cross-border planning co-ordination. This scenario will not lead to significant additional administrative cost in the short term, but may entail unnecessary (opportunity) costs for investors and administrations are likely to occur in the medium to long term because potential efficiency

⁹⁷ NSOGI, WWF Position Paper, Call for EU Leadership on Integrated Sea Use Management referred to above.

⁹⁸ Europe 2020, MSFD, White Paper on Transport, Blue Belt Initiative, NSOGI MoU.

gains of coherent planning across adjacent sea or coastal areas are not exploited. This is in particular the case for cross-border investors⁹⁹. The stakeholder consultation showed very clearly that EU action on cross-border co-operation is expected to provide significant added value.

To sum up, although further progress is projected in absence of an EU MSP policy, current experience shows overall insufficient progress and divergences in approach between Member States. The problems and their underlying causes identified in chapter 3.1 and 3.2 are addressed but only partially, and with a significant risk for delay. From a holistic perspective, a significant portion of the benefits of integrated management of human sea uses (MSP) will therefore not be realised.

3.4.2. ICZM

The problems and their underlying causes are likely to continue and intensify in the future. Land-use modelling results¹⁰⁰ from 2000 up to 2050, indicate that under the baseline scenario the share of built up areas in the coastal zones will grow by about 15% across the EU, and confirm the more intense pressures in coastal areas compared to in-land areas. Coastal areas are furthermore likely to see an increase of infrastructure related to renewable energy, Liquefied Natural Gas (LNG) and transport developments at sea. A sea-level rise scenario may lead in 2080 to 1.5 million people being at risk of flooding every year in the 22 EU coastal Member States and provoke a yearly costs of nearly 19 billion € due to land losses, salinisation, sea and river flooding, as well as migration¹⁰¹. Sectoral policies address these problems but are not applied in an integrated way.

Against this background of persisting and growing challenges in the coastal zones, the average ICZM implementation level across the 22 EU coastal Member States is projected to increase from 50% today to 62% in 2020 in the baseline scenario¹⁰². This is an estimate, based on the tendency for Member States with relatively larger populations and more concentrated economic activity to be further ahead in terms of implementation of ICZM principles. The existence of a national ICZM Strategy and progress in implementing ICZM principles in the period 2006-2010 are considered factors that will continue to positively support progress. For the baseline scenario, some development of measures related to the identified problems is expected in particular through the implementation of the Floods Directive (covering coastal floods, preliminary risks assessments, hazard and risks maps, and where appropriate risk management plans, by the end of 2015) and the INSPIRE Directive (as regards facilitation of GIS based-distributed information systems). For the EU coastal Member States concerned¹⁰³, the ICZM Protocol to the Barcelona Convention will provide impetus, but it is noted that the Protocol does not set out milestones for implementation, nor does it specify any minimum requirements for planning or management processes.

To sum up, although further progress is thus projected in absence of further EU ICZM policy, the pattern of overall slow progress and significant divergence between Member States is

⁹⁹ See further the economic benefits study referred to in Annex 7.

¹⁰⁰ JRC (2011). *Coastal Zones- Policy alternatives impacts on European Coastal Zones 2000-2050*. http://ec.europa.eu/environment/enveco/impact_studies/pdf/land_use_modelling%20adaptation_activities_coastal.pdf.

¹⁰¹ JRC (2011). *Impacts of climate change in coastal systems in Europe. PESETA-Coastal Systems study*.

¹⁰² COWI (2011), pp. 42-46.

¹⁰³ http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf

France, Greece, Cyprus, Italy, Malta, Slovenia, Spain.

confirmed. Still a significant portion of potential benefits of ICZM will not be harvested.

3.4.3: Examples of identified shortcomings

As shown above, an inventory of the implementation of MSP and ICZM at Member States show quite a diverse picture. The following is a list of examples of some of the shortcomings which have been observed in at least one or in some cases in several Member States or in marine regions and sub-regions:

- Lack of a fully integrated, co-ordinated national planning and management process in for marine waters and coastal zones (including the development of authoritative plans including all uses for sea areas under jurisdiction of Member States and their coastal zones) involving all concerned administrations upstream. Progress under baseline scenario: MSP and ICZM processes will evolve but on different timescales, and without comparability Lack of fully appropriately documented, or comparability between, MSP and ICZM processes and risk of further developing different approaches
- Lack of designated authorities that “front-ends” the MSP and ICZM processes towards stakeholders and co-ordinates co-operation with neighbours. Progress under baseline scenario: uncertain.
- Lack of a fully comprehensive, cross-cutting analysis or objectives development for future developments and needs, in marine regions and sub-regions. Progress under baseline scenario: likely to vary, with progress in some areas (environment) moving faster than in others, and no overall co-ordination on objectives.
- No dedicated forum for planning co-ordination across-borders. Progress under baseline scenario: is underway in some areas, but on an *ad-hoc* basis. No dedicated mechanism to ensure co-ordination of planning with different EU level objectives and processes. Progress under baseline scenario: highly dependent on Member State. At EU level, this does not exist, several parallel processes are taking place (renewables/NSOGI, MSFD, EIA, SEA, CFP) No, or minimal co-ordinated planning of areas of common interest in marine regions and sub-regions, including land-sea interactions of activities in coastal areas. Progress under baseline scenario: likely to progress, but on an *ad-hoc* basis with low perspective for prospective planning over longer time periods.
- Tendency to plan where pressures exist, but not to set out strategic planning objectives for maritime areas. Progress under baseline scenario: plan for areas where there is an immediate need, prospective planning only in exceptional cases where full-scale MSP is implemented
- Lack of fully prospective, comprehensive stakeholder consultation processes. Progress under baseline scenario: no change, as short-term pressures and priorities will continue to define the objectives; stakeholder consultation takes place on as-needed basis.
- Different time-frames for planning across marine regions and sub-regions. Progress under baseline scenario: will gradually improve indirectly through enhanced cross-border co-operation
- No fully systematic linkage between ICZM and MSP in cases where both exist

3.4.3. Regional Sea Conventions

Maritime Spatial Planning and ICZM are addressed to varying degrees in the Regional Sea Conventions.

Table 3: Regional Sea Conventions' (RSC) MSP and ICZM activities

RSC	MSP and/or ICZM Guidance?	Regional MSP and/or ICZM forum?	Non-Binding MSP and/or ICZM legislation?	Binding MSP and/or ICZM legislation?
HELCOM	Principles, Guidance documents, on-going project (PlanBothnia)	Yes, a joint Working Group with VASAB on MSP, HELCOM-GIS webpage	Yes, Recommendations for both MSP and ICZM	No
OSPAR	No, but the need for OSPAR measures is under consideration	Yes, the Environmental Impacts of Human Activities Committee	No	No
Barcelona Convention	Yes	Yes, regional co-operation as a part of the protocol implementation	No	Yes, for ICZM applicable in national waters
Bucharest Convention	Yes	Yes	No	No

Implementation has not been fully efficient since these bodies do not have the legal competences and capacity to enforce decisions. Given that the mandate of these regional bodies is limited to environment issues, the inclusion of other objectives remains a challenge.

For the Mediterranean a significant step was the adoption of the ICZM Protocol to the Barcelona Convention. However, this approach cannot be replicated in other regional seas. The EU is not a contracting party to the Bucharest Convention (Black Sea). The Convention for the protection of the marine environment of the North-East Atlantic (OSPAR) does not include ICZM among its activities and the interest in discussing MSP has been lukewarm. The same applies to a large extent to Convention on the Protection of the Marine Environment in the Baltic Sea Area (HELCOM), although work is progressing on MSP.

However, work at EU level can still be complemented by work through regional seas conventions to the extent these efforts will be compatible with the efforts made at EU level and can be beneficial within marine regions and sub-regions.

3.5. Does the EU have the right to act and is EU added-value evident?

3.5.1. The right to act -Treaty basis

This impact assessment examines policy options combining MSP and ICZM. The concept of maritime spatial planning is currently not addressed in EU legislation. In case of legislative action on MSP, it will be process oriented to support the specific objectives of a number of relevant sector policies listed below. Against that background, EU action for MSP will have to be based on those Articles of the EU Treaty which serve as the legal base for the main policy areas whose objectives will be supported through the application of MSP processes. The table below includes a list of the main policy areas which will first and foremost be included in the MSP process:

Table: List of policy areas and TFEU articles relevant for MSP

Article 43	fisheries – requirement to manage living marine resources
Article 100	transport – pursuit of EU transport policy goals
Article 175	economic, social and territorial cohesion
Article 192	Environment
Article 194	energy – notably the development of marine energy resources

MSP and ICZM are instruments of the Integrated Maritime Policy of the European Union (IMP). The objective of IMP is to ensure better coherence between the sector policies of the

TFEU and to achieve multiple concurrent objectives of an economic, social and environmental nature. Initiatives taken so far under the IMP, such as Council Regulation 1255/2011¹⁰⁴, have accordingly been adopted with a multiple legal bases, representing those sector policies which affect seas, coasts and oceans. The same rationale applies to legislative action on MSP. Furthermore, it is settled case-law that when a measure simultaneously pursues a number of objectives or has several components that are indissolubly linked, without one being secondary or indirect in relation to the other, such an act will have to be founded on the various legal bases¹⁰⁵.

In the past and by contrast, ICZM was based on Article 192(1) of the Treaty which provides the basis for EU policy on the environment, inter alia, to pursue the preservation, protection and improvement of the quality of the environment, and to promote a prudent and rational utilisation of natural resources. Given that ICZM similarly to MSP more recently has been identified as an integrated maritime governance tool within the framework of the Integrated Maritime policy of the EU with the aim to achieve both environment, economic and social goals and therefore constitutes a cross sector policy aiming to ensure consistency between the different policy areas of the EU Treaty warrants, a more broad legal basis for the management of our coasts. The list of Articles identified above as a legal base for MSP would allow for a joint up proposal with one set of objectives.

These objectives of MSP and ICZM consist of:

- the facilitation of sustainable development and growth of the fisheries sector, including employment in fisheries and affiliated sectors;
- the need to secure the energy supply of the union by promoting development of maritime energy sources and energy transport;
- the need for efficient and cost-effective shipping routes across Europe, including port accessibility and transport safety;
- the reduction of disparities between regions by increasing the competitiveness of coastal regions and facilitating a level playing field;
- the preservation, protection and improvement of the quality of the coastal zone and the coastal and marine environments, as well as the need to utilise natural resources in a prudent and rational manner.

If the present Impact Assessment should determine that the optimal action on MSP and ICZM would be a proposal for legal instrument, this should be based on a combined, multiple legal basis.

3.5.2. *Application of the principles of subsidiarity and proportionality*

The subsidiarity principle is highly relevant for MSP and ICZM and it is important to ensure that it is fully respected when EU action is envisaged. Issues such as the choice of actual development, location of investment, priority setting and determining solutions in cases of conflicting spatial claims are clearly a matter for national, regional or local decision-making. In the context of MSP processes, this means that spatial challenges should be dealt with at the

¹⁰⁴ Regulation (EU) No 1255/2011 of the European Parliament and of the Council of 30 November 2011 establishing a Programme to support the further development of an Integrated Maritime Policy, L 321 5.12.2011 p 1.

lowest most appropriate level¹⁰⁶. The scale of national MSP can vary, from relatively broad plans established at regional or national level for bigger sea areas, to detailed plans established by local authorities for a limited or densely used sea area. The planning process as such needs to be carried out by authorities in the Member States in accordance with the national governance and constitutional structures. It is thus not intended that the EU tackles practical planning processes in themselves. The same reasoning also applies to ICZM. ICZM aims at the development of improved coastal planning and management mechanisms, with particular attention to sustainable development, a long-term perspective and effects across the land-sea and administrative boundaries. However, the normative setting within coastal plans or programmes needs to be necessarily left to the coastal area(s) and the national or regional institutions concerned to fit the local context. The ICZM principles recognise in this respect the need for ‘local specificity’.

3.5.3 EU added value

EU action is therefore of added value in a context where it provides the appropriate framework at EU level which allows Member States to adopt comprehensive, co-ordinated planning and management mechanisms that ensure an integrated maritime planning and coastal management process in European marine regions. EU Action is equally of added value where it sets out a framework for co-operation between Member States that share marine regions and sub-regions through which the co-ordinated, long-term planning of connected cross-border sea areas becomes possible. At the same time, there would be no added value for EU-level involvement in the planning processes as such, or in determining detailed processes to be set up in Member States where institutional set-ups are very different.

Particularly relevant in this context are the following elements where EU action can provide added value:

- Streamlining of Member State action on maritime planning and coastal zone management to ensure consistent and coherent implementation across the EU, for example through minimum standards.
- Ensuring coherent and cross-cutting cross-border co-operation on maritime planning and coastal management, notably to achieve prospective medium and long-term planning and coherence of plans/planning across marine regions and sub-regions.

The second aspect of the added value of EU action is recognised in the responses to the public consultation¹⁰⁷ and the fact that coastal and maritime development processes both have a strong trans-boundary nature. This applies to natural processes (e.g. water, sediments), but also to economic and social networks which span across traditional administrative borders. Issues which have a trans-boundary nature can vary from one European marine region or sub-region to the next depending on the specificities and geographical conditions of each region.

The Interreg project BaltSeaPlan 2030 report identified four key areas for which transnational co-operation would be necessary. Those topics are a strategy for a healthy marine environment, a coherent pan Baltic energy policy, a safe clean and efficient maritime transport policy and a sustainable fisheries and aquaculture policy.

¹⁰⁶ The principle of spatial subsidiarity has for example been developed within the framework of the Interreg project BaltSeaPlan 2030, which develops a vision for how MSP should be organised in the Baltic Sea by 2030. See further www.baltseaplan.eu.

¹⁰⁷ http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf.

The same report concluded that transnational co-operation can only take place if all Baltic States have established a national framework for implementing MSP, shared values of how to carry out MSP and appropriate governance mechanisms for cross-border co-operation. This conclusion mirrors the added value of EU action, namely ensuring the implementation of a national system for MSP in all EU member states, the development of a common approach between EU Member States (further development of best practices and key principles in an organised process) and appropriate mechanisms for cross-border co-operation on transnational issues.

The following two examples illustrate potential problems due to the fact that there is no transboundary spatial planning at sea:

- The planned wind park Norther 21 km west from Zeebrugge received in January 2012 a license from the Belgian Government. The Dutch authorities raised objections against this license because of a possible conflict with certain parts of this park with shipping routes and started a legal procedure. They are of the opinion it will influence the shipping traffic in the area negatively and this aspect is not taken fully into account when licensing the whole park.
- A safety zone next to a main shipping route is the zone in which no fixed construction such as a wind farm should be build. There is a difference between the width of the safety zone applied in Germany and the width applied in the Netherlands, north of the Wadden Sea Island in the North Sea. In the UK other width are applied. Discussions between the countries have started to come to a (more) coherent approach.

There are a number of similarities between MSP and ICZM which could lead to considerable synergy effects. These include process issues such as development of best practices, and key principles leading towards a common approach for MSP and ICZM (issues like stakeholder involvement, transparency, cross-border co-operation as well as monitoring and review provisions). A joint elaboration of frameworks for MSP and ICZM processes at EU level should enhance coherence between ICZM and MSP at national level.

A joint approach to EU action on integrated maritime planning and coastal management would eliminate some of the current shortcomings, notably through the following:

- Reduce or eliminate the risk that MSP and ICZM are managed through different and not necessarily connected processes;
- Streamline seamless Member State action towards long-term planning across connected areas.
- Provide a framework for co-ordination that co-ordinates land-sea interactions of human activities across sectors
- Contribute to regulatory efficiency by ensuring coherent implementation of various EU legislative policies (Europe 2020, Energy 2020, MSFD, N2k, CFP, and WFD) through a coherent maritime and coastal zone management processes.

Not establishing a framework at EU level for the implementation of MSP and ICZM processes risks a fragmented development due to a pick and choose approach. Absence of such a framework might lead to lack of co-ordination in terms of linking MSP and ICZM, on cross-border co-operation as well as on harmonisation of processes. This fragmented non-co-ordinated approach would also prevent coherent implementation of the various applicable EU policies across marine regions and sub-regions.

Lack of co-ordinated action would also prevent that the synergetic effects of integrating both process tools come to its full potential. Planning activities on seas will have consequences for coastal management and *vice versa*, given the strong land-sea interface connections.

Inappropriate management of these interactions might lead to non-gearred activities in marine regions and sub-regions resulting in reduced economic efficiency, unnecessary costs and administrative burdens, which ultimately would lead to non-efficient use of coastal and maritime resources.

EU action will have maximum added value if it ensures that planning for economic uses in European waters and coastal management is achieved without excessive burden on Member States, in particular in times of financial crisis (proportionality). Measures need to establish the right level of requirements and guidance without micro-managing the processes. They should be as simple as possible and build upon existing experience in Member States. Measures need to allow for consideration of the special circumstances in each sea and coastal region. The ambition level needs to be proportionate and in line with Member States' ability to implement the policy and to comply with the subsidiarity principle as mentioned above.

4. OBJECTIVES

The **general objective** of EU action is to ensure a coherent approach to the sustainable development of the Member States' uses of marine waters and coastal zones, in accordance with the ecosystem approach. It thus also includes the achievement of various objectives under the Treaty on the Functioning of the European Union, various policies and legislation including: Europe 2020, the Common Fisheries Policy, Territorial Cohesion, the MSFD, the Energy 2020 Directive, etc. Therefore, the general objective would provide a solution for the overarching problem defined in section 3.2.

The proposed EU action is limited to delivery mechanisms for achieving existing policy objectives.

The **specific objectives**, which serve to achieve the general objective and provide a solution for the specific problems identified in section 3.2, are to ensure:

- balanced and sustainable territorial development of marine waters and coastal zones;
- optimised development of maritime activities and business climate;
- better adaptation to risks; and
- resource efficient and integrated coastal and maritime development.

The **operational objectives**, which serve to achieve the specific objectives and provide a solution for the underlying causes of the problems defined in section 3.2, are:

- The implementation of integrated maritime planning and coastal management to coherently manage and plan human uses of maritime space (defined as MSP) and to co-ordinate coastal management policy instruments (defined as ICZM), in all coastal Member States; [indicative time target: by 2016 - 2020]
- Delivery and further development of common minimum standards and approaches for integrated maritime planning and coastal management, such as for process organisation, designation of responsible authorities, exchange of information on objectives, cross sector integration, better data information sharing environment, stakeholder involvement, one stop shop promotion, co-ordination between the two processes; [indicative time-target: by 2016 - 2020]
- Implementation of appropriate cross-border co-operation on maritime planning and coastal management between Member States, including measures for regional and bilateral co-operation. [indicative time-target; by 2018 - 2022]

These objectives are fully in line with the **Europe 2020 Strategy**. The Roadmap of the EU

2020 flagship initiative for a Resource-efficient Europe¹⁰⁸ recognises the need for EU action on maritime planning and coastal management, in order to safeguard natural coastal and maritime capital. Enhanced strategic planning in coastal and marine waters will aim at a spatial development which is better balanced regarding available space and respects the limits of ecosystems structure and function. As such it will support other components of the Resource Efficiency flagship initiative (such as valorisation of ecosystem services, development of green infrastructure, improving land-use, combating water-stress and enhancing climate resilience).

5. POLICY OPTIONS

A set of possible measures to resolve the problem drivers has been identified and combined in overarching policy options. An overview of the link between the measures and their effectiveness, as described in section 6.2, and the way the measures are addressed in the analysed policy options is given in an overview table in Annex 1.

The options have been elaborated on top of the baseline scenario already referred to in the problem definition. All options are to be compared to this baseline scenario.

The proposed options are (i) non-binding guidance, (ii) non-binding policy instruments stimulating the implementation of MSP and ICZM and (iii) legally binding instruments ensuring implementation of MSP and ICZM. All options aim to reach the operational objectives outlined in chapter four, but they differ in the used instruments, their degree to which they are binding and the level of prescriptive detail.

Option 1: Providing guidance and development of best practices

The policy initiatives under this option would be the establishment and distribution of a guidance document, or a dedicated policy programme for maritime planning and coastal management.

This option can therefore be divided into sub-options as follows:

1) a guidance document on 'best practices'

The purpose would be to establish and promote non-formalised guidelines on best practices for maritime planning and coastal management, to be elaborated together with a group of Member State experts. The guidelines would identify best practices and list the different approaches that can be taken in Member States in order to achieve a satisfactory outcome. Guidelines would for example relate to the way stakeholders are involved in policy planning, the way the different relevant policies are integrated and managed, identification of relevant steps of the planning and management processes, the institutional set up for implementation of policies, appropriate ways to enhance transboundary co-operation and consideration of land-sea interactions. The result would be a set of well elaborated best practices. Member States could then select and adapt approaches according to local needs.

2) a Policy Programme

This sub-option would go a step further than sub-option one by incorporating the guidance document in a dedicated policy programme to implement the operational objectives of EU action identified in chapter 4.

A policy programme would be based on the guidance document and add a series of supportive actions that promote and facilitate implementation of integrated maritime planning and coastal management. These other actions could include:

- seminars and workshops;

¹⁰⁸ COM (2011)571, http://ec.europa.eu/environment/resource_efficiency/index_en.htm.

- studies and research;
- recruitment of MSP facilitators;
- providing technical assistance to MS for the implementation of MSP and ICZM;
- co-ordination of a platform or network that facilitates the exchange of experiences;
- support the development of a data and information system to support MSP.

The programme's detailed delivery method would be elaborated in consultation with a network of experts on MSP/ICZM, and in close co-operation with Member States in order to make use of the expertise already developed at national level.

This sub-option draws on the experience with support actions that have accompanied the implementation of the ICZM Recommendation. The work on common indicators and coastal assessments¹⁰⁹, guidance and best-practice is of interest, e.g. the recent deployment of the OURCOAST initiative¹¹⁰. The EU ICZM and MSP Expert groups would serve as an initial, but limited, proxy for a wider EU coastal platform that would be the main delivery mechanism of the Programme option. A MSP expert group is also in place and the work of both groups would be interlinked, if not merged.

The emphasis in this option would be on collective action to support an integrated maritime planning and coastal management process, rather than a more detailed framework for implementation in and by Member States.

Option 2: Stimulating integrated maritime planning and coastal management through non-binding measures

This option refers to policy initiatives that would stimulate implementation of maritime planning and coastal management processes in Member States by means of non-binding measures. These measures would aim to implement the operational objectives defined in chapter 4 and can be divided into sub-options as follows:

1) Stimulating the establishment of a policy framework through a Council Recommendation to Member States adopted in accordance with Article 292 of the EU Treaty:

This sub-option would recommend to coastal Member States the development of a policy framework for maritime planning and coastal management that aims to reach the operational objectives identified in chapter 4, taking into account developments at national and EU level so far. It would make a limited number of recommendations, including:

- the adoption of an integrated governance structure in all coastal States which have not already done so to allow for integrated maritime planning and coastal management;
- provisions on stakeholder involvement;
- development of a national framework for developing a maritime planning and coastal management policy
- reporting provisions, nomination of competent authorities;
- recommendations for co-ordination between national authorities;
- recommendations on bilateral and multilateral co-operation in marine regions;
- provisions on the elaboration of data management tools.

¹⁰⁹ Working group on data and indicators supported by and continued through EU co-funded projects such as DEDUCE, SEB4SD, SAIL and currently on-going PEGASO.

¹¹⁰ <http://ec.europa.eu/ourcoast/index.cfm?menuID=3>.

This recommendation would need to be coupled to a process through a committee involving Member States and the Commission identified under option 1 a).

Recommendations no longer form part of the ordinary legislative procedure in accordance with Article 289 of the Lisbon Treaty. This means that the European Parliament no longer takes part in the adoption process. A new recommendation, covering both ICZM and MSP would be adopted by the Council only, and complement the 2002 ICZM Recommendation which was a joint European Parliament and Council Recommendation.

2) Stimulating the establishment of a policy framework linked to funding

This sub-option would mean linking the recommendation as described in sub-option 1 to a funding instrument. A funding programme would incite Member States to elaborate such frameworks or programmes and contribute to more streamlined and co-ordinated action on maritime planning and coastal management across the EU.

Without prejudice to on-going negotiations under the new financial perspectives 2014-2020, EU funds from a number of financial programmes¹¹¹ could be envisaged for support of some measures in strategies or programmes, as well as co-funding projects and using and disseminating their results. A MSP/ICZM strategy or programme could, *inter alia*, be supported by the proposed European Maritime and Fisheries Fund (EMFF) [COM 2011 804 final], depending on the actual content of the strategy or programme and in accordance with the provisions of the proposed EMFF.

Option 3: Obligation to implement integrated maritime planning and coastal management through a legally binding framework

The operational objectives, referred to in chapter 4, would under this option be implemented through a binding legislative framework adopted under the ordinary legislative procedure (Article 289 of the EU Treaty).

This option can be divided into sub-options that differ in the level of prescriptive detail for the establishment of frameworks or plans and the level of flexibility left to Member States for their implementation.

1) Establishing a set of general binding obligations (framework Directive)

This sub-option would establish a limited number of general obligations for the elaboration of a policy framework. Member States would be obliged to establish and implement a national policy framework for integrated maritime planning and coastal management and to set up bilateral and regional co-operation by, making use of existing regional institutional co-operation structures as appropriate, covering specific marine waters or a coastal zone. It would set out the main minimum requirements for such planning and management processes but leave the specifics of implementation to Member States.

Similarly to option 2, this option would need to be coupled with a process for the development of best practices identified under option 1 a).

This sub-option would in principle not lead to any additional obligations for those Member States which already have established maritime planning and coastal management regimes which are in line with the operational objectives identified in chapter 4.

Concrete obligations envisaged under this option to tackle the shortcomings of current Member State implementation identified in section 3.4.1 would be identical to those identified

¹¹¹ E.g. Research, Cohesion, LIFE, Fisheries and Maritime Fund.

under option 2.1, with the important distinction that under the current option they would become compulsory instead of non-binding. [9]

In line with the subsidiarity and proportionality principles, this sub-option would not affect the competence of Member States to plan in their marine waters and to manage coastal zones and there would be no transfer of management or planning powers from the Member States to the EU. In practice, the envisaged obligations would not apply to landlocked Member States.

2) Establishing a more detailed set of binding obligations (Directive)

This sub-option would prescribe more in detail the way a policy framework should be elaborated. In addition to the obligations listed above under sub-option 1) it would include a detailed normative description on how these processes should be set up and organised within the governance structure of the Member States. Instead of leaving room for the elaboration of best practices on the specific implementation of the minimum standards, it would set out exact rules for items such as those referred to under option 2.1.

It would also detail how integrated maritime planning and coastal management must be established and implemented. This sub-option would in particular elaborate more on the precise substance elements to be considered for coastal management such as on the protection and sustainable use of the coastal zones, development of coastal activities, coastal landscape protection and the risks affecting the coastal zone (e.g. natural hazards, coastal erosion and responses to natural disasters).

It would centralise certain pan-European issues to be planned at EU level, seek to harmonise how integrated maritime planning and coastal management processes will be implemented, and include specific provisions on how cross-border co-operation will be ensured, such as formal set of regional bodies in each European marine region.

By way of example, the level of prescriptive detail of provisions and concrete action to be undertaken by Member States for coastal zone management could be similar to the provisions of the Protocol on Integrated Coastal Zone Management in the Mediterranean (Barcelona Protocol) under the Barcelona Convention.

Guidance to complement the provisions of the Directive would still be possible, to provide more practical details on minimum requirements and best practices for implementation, but it would be significantly less central to the proposal than under option 3.1.

Compared to sub-option 1, this option would guarantee a more harmonised and detailed approach for maritime planning and coastal management throughout the EU and still leave some flexibility for implementation to Member States. It would require some transfer of competences to the EU level.

3) Establishing a fully detailed set of binding obligations which would be directly applicable in Member States (Regulation)

This sub-option would prescribe in detail how the operational objectives in section 4 are to be implemented. The obligations would be the same as under 3.1 and 3.2, but in contrast to both preceding sub-options, this sub-option would prescribe the specific measures and instruments to be applied directly in Member States. That is to say, it would set out binding obligations regarding institutional set-up and co-ordination for maritime planning and coastal management. In addition, it would set out measures related to the protection and sustainable use of coastal zones for specific coastal ecosystems and it would prescribe ICZM instruments on monitoring and observation mechanisms and networks. This sub-option would in addition prescribe in detail the centralisation of certain pan-European issues to be planned at EU-level, prescribe harmonised delivery of maritime planning and coastal management and impose the

method of cross-border co-operation. Given that a Regulation is binding in its entirety and directly applicable in all Member States and that no transposition is needed at Member States level, this option would leave no flexibility for implementation to Member States, which would ensure fully harmonised approaches throughout the EU.

An alternative to the above described sub-options could have been to implement integrated maritime planning and coastal management processes through an amendment of the different sectoral policy instruments in EU legislation. Such an approach would however require launching amendments to a large number of EU instruments to envisage the inclusion of the respective policy areas. Furthermore, the scope of existing instruments often prevents the inclusion of a fully integrated regime covering coastal zones and marine waters. Given the complexity of such an exercise, it is not realistic that such an approach can be implemented in a relatively reasonable timeframe and within realistic resource constraints. This alternative is therefore not analysed further.

Combinations of options:

As already mentioned, some **combinations** of options are also possible: In particular, the sub-options under options 2 or 3 could usefully be combined with one of the sub-options under option 1, supporting the more legal obligations with best practices jointly elaborated between Member States and Commission through an examination committee.

Cross-cutting option on information and data gathering and systems

All of the options above will need to consider actions for the improvement of available data and information. As highlighted throughout this impact assessment, data and information are essential for maritime planning and coastal management and not always readily available. The need for sharing information including through establishing new systems was also stressed in the web based consultation.

Several information systems and initiatives already exist. By building on these (in particular Maritime Knowledge 2020), a complementary action would be designed which would help to address EU level data needs at this stage.

It is clear that any action on this must be developed in accordance with the INSPIRE Directive¹¹² which aims to create a European Union (EU) spatial data infrastructure. The main object of such action would be the sharing of environmental spatial information among public sector organisations and facilitating access to spatial information across Europe.

The establishment of the Marine Knowledge 2020 framework which links up existing systems and initiatives has the potential to provide for a large proportion of the needs of integrated maritime planning and coastal management processes provided that it can be expanded to coastal zones. This improvement of information option is considered in a similar way across all options.

6. ANALYSIS OF IMPACTS OF POLICY OPTIONS

6.1. Methodological considerations

Support studies showed that all policy options will lead to similar kind of impacts¹¹³. These impacts would vary in timeliness, magnitude or scale, depending on the effectiveness of the options to achieve the operational objectives. In this section, it is therefore first examined to what extent each option leads to the **implementation** of such maritime planning and coastal

¹¹² Directive 2007/2/EC.

¹¹³ COWI (2011). *Support study for an impact assessment for a follow-up to the EU ICZM Recommendation (2002/413/EC) -Final Report*;

management processes referred to in the previous sections. Thereafter the economic, environmental and social impacts are presented.

It should further be noted that impacts can be split up into two types:

First, direct impacts (mostly of an administrative nature), and second, indirect impacts related to the achievement of the operational objectives.

Both qualitative and quantitative approaches were used to assess impacts. Qualitative impacts have been mainly examined on the basis of literature and case study reviews.

Quantifying costs and benefits has proved to be very difficult as they are determined by the range of processes, functions and products and services found and produced in the coastal and maritime area. In addition, the potential long-term socio-economic benefits of implementation of ICZM and MSP and the fact that many positive impacts are based on further discretionary decisions means that they are extremely difficult to be quantified, even though they have to be taken into account. Due to the complexity of developing a monetary assessment framework and the lack of data, only rough estimates can be given. The available data from individual examples do provide some useful indications as to expected costs and benefits – in particular to estimate probable gains or losses and support qualitative analysis. Therefore the present impact assessment report mainly focuses on the qualitative impact analysis and a quantitative analysis is added where possible.

6.2. Effectiveness of the options in reaching the objectives

The effectiveness of measures under the different options to resolve the underlying problem causes is summarized in the table in Annex 1:

Option 1: Providing guidance and elaboration of best practices

1) Guidance document on 'best practices'

A guidance document would improve the situation compared to the baseline scenario, and could be helpful in addressing indirectly some of the shortcomings identified under the baseline scenario, such as better alignment of planning processes of Member States, which per se cannot be addressed by way of binding EU measures. However, the elaboration of a guidance document cannot alone address the main shortcomings identified under the baseline scenario and would therefore not contribute significantly to the achievement of the operational objectives. It would help spreading information on best practices. Due to the non-binding nature, it would not significantly strengthen maritime planning and coastal management regimes at national level, but would rather be used as a 'pick and choose' list. As a stand-alone option, this option also provides little added value with regard to existing policy documents or actions, but would be useful to complement other options..

2) Policy Programme

The advantage of a programme compared to the baseline scenario is that it would provide an EU dimension on maritime planning and coastal management. The Programme is potentially helpful to overcome barriers in terms of skills and knowledge by setting up supporting activities such as workshops, studies, research, technical assistance, etc. However, supportive actions such as exchange platforms, workshops, research activities and technical assistance risk being not more than stand-alone actions without achieving overall coherence. Barriers in institutional set-up or the lack of legal effect of integrated MSP and ICZM processes are

unlikely to be overcome through this option. Most likely such a programme will be considered as low priority given its low ambition level¹¹⁴.

A Programme would allow development of maritime planning and coastal management processes in particular in Member States not yet having a MSP or ICZM policy. In coastal areas the Programme option is expected to achieve more progress in Member States that have already reached a significant ICZM implementation level by facilitating implementation of measures from EU level to national and local delivery. These Member States might also be incited to extend ICZM policies to MSP policies into integrated maritime planning and coastal management policies. It may also kick-start implementation of an integrated governance process in Member States which have only taken limited initiatives to implement ICZM and MSP processes by filling in knowledge gaps or exchange of experience. But they would still be likely to apply MSP and or ICZM "à la carte" (pick-and-choose approach) and not fully achieve objectives such as cross-border co-ordination, timeliness implementation of planning and management processes, or fully address the continued diversification of practices and differences of progress between Member States.

In the baseline scenario, however, the majority of Member States are situated in the intermediate range of implementation as far as ICZM implementation is concerned. Hence only moderate further progress is expected¹¹⁵ on integrated coastal management; however there is still some considerable scope for further integration with MSP processes. Where neighbouring Member States have similar levels of ICZM implementation, the Programme option could improve cross-border implementation and integrate this co-operation with MSP processes. For MSP, the baseline scenario considers a lower and fragmented rate of implementation; however implementation is likely to progress to deal with conflicts between uses or short term needs (see section 3.4.1). A programme could more significantly increase implementation of MSP processes and stimulate integration with ICZM processes into an overall maritime planning and coastal management policy.

Overall, the Policy Programme option is only expected to moderately achieve the operational objectives.

Option 2: Stimulating implementation of integrated maritime planning and coastal management through non-binding measures

1) Recommendation

A Recommendation can foster awareness of integrated ICZM and MSP processes but, as an instrument, is likely to be insufficient to lead to effective implementation of integrated maritime planning and coastal management. Compared to the baseline and Programme option, given that a Recommendation constitutes a legal act of the Union pursuant to Article 288 of the EU Treaty, it may provide a stronger motivation for the implementation MSP¹¹⁶ objectives. However, given its non-binding nature this legal act is unlikely to ensure that its

¹¹⁴ The results of the public consultation show that although a Programme is valued as an option for future EU action on ICZM, it should not remain merely a set of projects and it may fail to bring about systematic progress of ICZM in Member States.

¹¹⁵ Estimated at 10% to 20% reduction of the implementation gap, with variation among Member States, leading to a broad estimate of 67% implementation level, compared to 62% in the baseline; see COWI(2011), pp.69-70.

http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf.

¹¹⁶ However, Recommendations no longer form part of the ordinary legislative procedure as defined in Article 289 of the Treaty on the Functioning of the EU, but are instead adopted by the Council only under Article 292 of the same Treaty.

implementation is given sufficient priority¹¹⁷, and make it more effective in increasing the level and quality of integrated ICZM and MSP implementation compared to the Programme option. In fact, it would largely maintain the “*status quo*”. The public consultation confirmed the weak expected impact of a Recommendation¹¹⁸. In addition, it is worth noting that Recommendations, with the entry into force of the Lisbon Treaty, no longer form part of the ordinary legislative procedure referred to in Article 289, but instead are adopted by Council pursuant to Article 292 of the EU Treaty. Therefore, a Recommendation is expected to achieve the operational objectives only partially and in an inconsistent way.

2) Stimulating a policy framework linked to funding

The feasibility of linking a policy framework to funding mechanisms has to be assessed according to the on-going budget negotiations under the new financial perspective 2014-2020. As regards direct support for the further implementation of ICZM and as of 2007, the European Cohesion Policy will be a major contributor, mainly through the Co-operation objective and the Regions for Economic Change Initiative, which includes coastal management among its themes. Moreover, the proposal for the European Maritime and Fisheries Fund (EMFF) includes actions dedicated to MSP and ICZM¹¹⁹.

However, these actions have been assessed in the impact assessment¹²⁰ of the EMFF proposal and are currently under discussion between institutions and is therefore not further analysed.

Option 3: Setting out a binding framework to implement **maritime planning and coastal management**

A binding framework would address some of most important shortcomings identified under the baseline scenario, such as the need to set up maritime planning and coastal management processes and cross-border mechanisms, and also assist sector integration, co-ordination and establishment of a sound information basis to decision making. The legal strength and policy ambition of this option allows overcoming these barriers more effectively than the other options. In particular, it would lead to increased and more streamlined implementation of the objectives in Member States. In particular, this will enhance:

- Transparency of the process across the EU;
- Stakeholder involvement;
- Seamless planning of marine waters and management of coastal zones, including land-sea interactions, across borders which is in the interest both of economic operators and the implementation of the eco-system approach;
- Timely implementation of EU objectives and legislation that depend on sound cross-border planning and sea use management, including the MSFD, Renewable Energy Directive, Natura 2000 legislation, the CFP.

The integration of MSP and ICZM into one legal instrument allows to ensure the necessary coherence of the planning and management processes in marine waters and coastal zones, as

¹¹⁷ Estimated at 10 to 20% reduction of the implementation gap with variation among Member States, leading to a broad estimate of 67% implementation level, compared to 62% in baseline: COWI (2011) page 83, http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf.

¹¹⁸ See public consultation report, only 26% agree that the EU Recommendation on ICZM is a sufficient basis to achieve the objectives of ICZM in the EU (Annex 9).

¹¹⁹ See COM 2011/804 final.

¹²⁰ http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2011/sec_2011_1416_en.pdf.

well as to create synergies in implementation including the streamlining of administrative aspects (public participation, reporting).

1) 'Framework' Directive

A framework Directive is expected to achieve the added value of a legislative approach as listed above, but at the same time to limit the level of EU interference with Member State processes and competences to the minimum. It would in particular provide the necessary legal weight to address some of the shortcomings of options 1 and 2. The compulsory nature of this option would mean that it is the option which is the closest to ensure achievement the operational objectives, ensuring implementation of integrated maritime planning and coastal management across marine regions, as follows:

- Application and integration of MSP and ICZM processes by all MS, through the introduction of /minimum standards and the establishment of an examination committee for the development of further best practices for effective cross-border co-operation and co-ordination of land-sea interactions.
- Complement firm obligations with minimum requirements to support practical implementation
- Guarantee predictability, stability, transparency (as opposed to “voluntary” options)
- Provides a necessary stable support mechanism for the implementation of all legislation concerned by the distribution of sea uses, including notably MSFD and the Renewable Energy Directive.
- Provide a framework to minimise conflicts between different maritime uses and facilitate the development of new activities such as aquaculture and offshore grids.
- It is timely and constitutes a window of opportunity in view of the current trend of developing MSP by providing a firm immediate framework to support the implementation; whilst ensuring full complementarity with existing national policies. A voluntary approach (potentially followed later by legislation) would be more costly and difficult to implement as the number of Member States introducing their own potentially process would have increased thus raising the risk of divergences.

The introduction of a compulsory integrated maritime planning and coastal management policy does not amend the *acquis communautaire*, but supports its implementation in some areas.

A framework directive would also reduce or eliminate the need for Member States that already have MSP and ICZM processes in place to significantly adapt their regimes.

At the same time, it is important to note that this framework option cannot in itself address all the shortcomings identified under the baseline scenario. A framework Directive which will not prescribe in detail how the planning processes will be implemented, but will only set minimum requirements and will thus need to be supplemented with additional guidance. For example, shortcomings such as lack of alignment of national planning processes, or ensuring a level playing field between operators etc. cannot be fully addressed under this option. In order to fully address these issues, a framework Directive will have to include provisions that allow for the elaboration of more detailed guidance which can then be developed jointly with Member States.

The potential for regionally differentiated impact will be substantial under this option. An obligation to introduce MSP for marine waters under jurisdiction of the Member States will lead to different outcomes in marine regions where Member States have established exclusive economic zones (e.g. the North Sea) or in to marine regions where this is not the case (such as the Mediterranean Sea).

Full MSP implementation can only be expected in areas which are not subject to territorial disputes under international law.

This option is expected to lead to full ICZM implementation in all coastal Member States. Most progress in impacts will therefore be achieved in Member States with lower estimated levels of implementation in the baseline scenario (see 3.4.2).

In conclusion, this option combined with option 1 offers an appropriate mix of binding and guidance policy tools to guarantee implementation of MSP and ICZM and integration of both tools, but allowing wide flexibility to adapt to local conditions with guidance on implementation of minimum requirements and best practices as a helping tool for implementation.

2) 'Detailed'/full harmonisation Directive

This sub-option would contribute significantly in the achievement of the operational objective through the obligation to implement integrated maritime planning and coastal management and, through a higher level of prescriptive detail, lead to more harmonised policies across the EU than sub-option 1.

However, a detailed Directive would leave Member States less flexibility regarding implementation. More detailed and prescriptive provisions have the advantage that there is less leeway for differences in interpretation, commitments and on how to implement and apply these obligations across Member States. However, limited flexibility for implementation may well result in less adaptability to specific local or regional circumstances. They might also lead to modifications of existing governance regimes in those Member States with existing MSP and ICZM processes. This would raise subsidiarity concerns (see below). It would also be suboptimal in a context of the reduction of administrative burden.

Stakeholder consultations and contacts with Member States authorities have shown that support for this option is very limited. Stakeholders confirm that Member States need flexibility to implement the operational objectives and want to maintain control over the planning processes themselves.

In conclusion, this option would increase the likelihood of a more harmonised uptake but at the expense of flexibility, an increase in administrative burden, and a less than optimal approach to the subsidiarity concerns.

3) Regulation

Because of its direct effect a Regulation would leave no scope for differentiated implementation, or maintaining existing processes to Member States.

Given the need to allow differentiation in implementation between Member States, including at national and sub-national levels, the firm opposition from stakeholders to a detailed, prescriptive approach, and the difficulty of taking into account subsidiarity concerns appropriately, this option does not seem realistic¹²¹. This conclusion is based on initial scoping discussions with the EU ICZM Expert Group¹²², the results of the public consultation and hearing on ICZM¹²³, the study on policy options for MSP and on the consultation on MSP. Consequently, the option of a Regulation is not considered appropriate.

Cross-cutting option in improving data and information availability

¹²¹ See further section 3.5.2. on subsidiarity issues.

¹²² <http://ec.europa.eu/environment/iczm/pdf/Report%20Earlyreflection.pdf>.

¹²³ http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf.

The guarantee to improve availability of data and linking data sources would be most effective if included in a binding policy option. However, as databases need to be very specific, there should be left sufficiently flexibility for Member States to develop and adapt data gathering according to local conditions. Therefore, the reference to appropriate data gathering and management would be most effective under the framework Directive option.

6.3. Economic Impacts

6.3.1. Economic benefits

Lower transaction costs for maritime businesses: Preparatory studies have shown that coherent and cross-cutting management and planning of human uses of seas and coasts by means of MSP and ICZM processes can lead to cost reductions for maritime businesses and industries: decision-making processes at national and international level are more streamlined, and transparency regarding sea area use is increased. This results in lower search, transaction, administrative, legal, opportunity and operating costs¹²⁴, particularly for SME's. For three scenarios, a reduction of 1% in transaction costs led to positive economic effects ranging from € 170 million to € 1.3 billion in 2020. This can increase further due to acceleration of investments in e.g. renewable energy installations¹²⁵. To be noted that implementation costs to be faced by authorities are not expected for businesses for whom the main impact would be a de facto reduction of regulatory burden.

Improved certainty and predictability for private investments: Development of a (cross-border) maritime spatial plan at sea, or integrated management through MSP and ICZM processes increases certainty for investors, who will know sooner and better which and where activities will be allowed or prohibited. Improved certainty can reduce or solve (existing and potential) conflicts between uses. The expected acceleration of investments based on enhanced certainty could lead to estimated benefits between € 155 million and € 1.6 billion in 2030¹²⁶.

Improved certainty to obtain financing for offshore investments: Increased certainty provided by integrated MSP and/or ICZM processes within and between Member States may facilitate financing of offshore investments, including through lower interest rates linked to reduced risks of failed investment.

Improved use of the sea space and the best possible coexistence of uses in coastal zones and marine waters: MSP and ICZM are needed within marine regions and sub-regions and at Member State level to avoid and solve conflicts between uses and co-ordinate land-sea interactions of activities. Handling claims for space through a single process for integrated Maritime planning and coastal management developed and implemented within and between Member States will better ensure an effective balance between maritime activities. This also helps to enhance potential synergies between activities that might not otherwise be explored¹²⁷ and to increase efficiency by co-ordination of land-sea interactions of human

¹²⁴ See Introduction and chapter 3: economic benefits, PRC: Study on economic benefits of MSP.

¹²⁵ Policy Research Corporation (2010). *Study on the economic effects of Maritime Spatial Planning*, p. 41-42. For reference to this study, see Annex 7.

¹²⁶ Policy Research Corporation (2010). *Study on the economic effects of Maritime Spatial Planning*, p. 41-42.

¹²⁷ Several existing studies have examined and mapped the possibilities of co-existence or risk of conflicts between sea uses including nature conservation e.g. Schultz-Zehden, A., Gee, K., Scibior, K. (2008), *Handbook on Integrated Maritime Spatial Planning*, s.Pro sustainable projects: Berlin; Cieslak, A. et al. (2009), *Compendium on Maritime Spatial Planning Systems in the Baltic Sea Region Countries*; van der Wal, J.T. et al. (2009), *Identification and analysis of interactions between sea use functions*; Ehler, C., Douvère, F. (2009), *Marine Spatial Planning: a step-by-step approach toward eco-system-based management*. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme.

activities, e.g. design for cruise ship ports and connection to touristic facilities and connection of wind farm energy to the electricity grid on land.

Improved attractiveness of coastal regions: better maritime planning includes improved preservation of natural and amenity values. This is crucial for some added-value economic activities, e.g. in the field of tourism.

Reduced co-ordination costs for public authorities: Reduced costs resulting from integrated MSP and ICZM processes are also achievable for public authorities¹²⁸ (i.e. lower administrative burden because of more transparent and effective co-ordination mechanisms, better and more streamlined information on space use, more anticipatory and coherent planning). But implementation requires investments by public authorities in the short term.

Development of innovation and research: The application of (cross-border) maritime planning and coastal management processes requires reliable and valid data, information and knowledge. This can make them a driver for initiatives to gather and make available new information on existing and future sea uses, and new analysis methods to support all aspects of integrated MSP and ICZM processes.

Enhanced and integrated data and information: the compilation and integration of coastal and marine data is essential for the preparation of the plans and essential for informed decision-making that helps increased economic performance of business activities¹²⁹. According to the impact assessment supporting the 2010 Communication on Marine knowledge 2020, European companies would save at least 300 million € per year if they had better access to relevant data.

6.3.2. Implementation and administrative costs

The methodology to assess implementation and administrative costs is mainly based on general estimates due to lack of empirical evidence of costs. Both MSP and ICZM are relatively new concepts and relate to cross sector decision making processes, which makes it very difficult to make exact cost quantification. The data considered come from case-studies, projects and questionnaire responses¹³⁰:

- o Option 1 and 2: costs necessary for the functioning of a coastal platform/expert network and supportive activities such as best practice guidance development, common projects, etc. The emphasis of option 1 and 2 is mainly exchange of information and promote MSP/ICZM but ultimately it should lead to additional implementation of ICZM for which the involved additional costs are also considered.
- o Option 3: costs necessary for the required institutional set up, co-ordination mechanisms, decision making procedures, methods and tools for stakeholder involvement, etc.

The exercise resulted in wide cost estimate ranges due to limited available data and large differences across Member States in terms of initial set-up, foundations for information systems, mechanisms and culture for national and regional co-operation.

Implementation costs for full ICZM delivery are estimated to average around 200 M€ start-up costs and some 20 M€ annual operational costs.¹³¹ However, Member States in the baseline

IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO; European Commission (2010), *The economic benefits of Maritime Spatial Planning*.

¹²⁸ Can refer to government, public authorities at national, regional and local level, depending on which level is affected by and responsible for developing and implementing MSP.

¹²⁹ See also chapter 6.2, option on improving data and information availability.

¹³⁰ See annex 3 for details on methodology.

¹³¹ COWI study.

scenario have already achieved a certain level of ICZM. The assessment is therefore linked only to the additional implementation expected under the different policy options. A large degree of uncertainty is associated with the start-up costs which depend on national and regional contexts in Member States. By contrast, the operational costs of ICZM once established are relatively modest. Operational costs for maintenance of information systems could be a more significant recurrent cost.

The reasoning in the previous paragraph applies to a large extent also to MSP. The study on the policy options for future action on MSP concluded that it was not possible in any reliable way to quantify the implementation costs due to a lack of EU-wide data. Reference can however be made to the impact assessment of the maritime planning system in the UK which made an attempt to quantify the costs for public institutions, maritime businesses and local authorities to develop and implement marine plans in their waters. The total discounted costs over 20 years were estimated to be around 95.5 million GBP (around 108.9 million €), including the costs for setting up the Marine Management Organisation. The average annual costs of the Maritime Planning System were estimated to be about 4.3 million GBP (4.9 million €), annual costs for running the Marine Management Authority included.

These costs were then compared with the estimated benefits of having an MSP system in place. The best estimate of the total discounted benefits over 20 years were about 487 million GBP (555 million €) and the average annual benefits about 46.8 million GBP (53.4 million €).¹³² In contrast to this very ambitious example, lighter and more cost-effective approaches may be found in other Member States. In Germany, for example, the whole process of developing and adopting a federal level maritime spatial plan was done with a limited number of statutory staff (less than ten) in an existing agency (the Bundesamt für Seeschifffahrt und Hydrographie, BSH). However, a full-scale Impact Assessment of the same planning process was not carried out.

Option 1: Providing guidance and elaboration of best practices

It is not expected that the first sub-option of elaborating best practices would have any particular impacts on administrative costs since they would be elaborated under existing structures, such as the Member State expert groups under the Integrated Maritime Policy. Costs would therefore in all essentials be limited to travel costs for participants to these meetings.

The implementation costs for a policy programme on ICZM are estimated to range from 1 to 2 M€ for specific projects mostly carried out by Member States authorities and experts to feed into the Programme (5 to 10 projects/year of 200K€ each) and less than 10000 € additional administrative costs for the Commission to support the functioning of an expert group or coastal stakeholders platform to drive the Programme. The costs associated with the moderate increase in ICZM implementation within the 22 coastal Member States are evaluated to range from some 2 to 22 M€ start-up cost¹³³ and around 1 M€ operational costs¹³⁴.

For MSP, the overall costs in budget terms could range from 1 to 3 M€ per year for the range of actions, depending on uptake by Member States.

These figures are however highly uncertain given the difficulty to calculate the effect on an EU wide basis due to the lack of data. These figures will also depend on the outcome of the

¹³² For further details, see Annex 5 of the study on policy options (referred to in Annex 7) and DEFRA study (2011) the maritime planning system in the UK: Impact assessment. (See Annex 5 in the study on policy options).

¹³³ Estimate for start-up costs are characterised by a high degree of uncertainty, varying from 0.1M€ to 3 M€ by Member State.

¹³⁴ COWI (2011).

negotiations on the future EMFF fund; indeed, the actions proposed under the EMFF fund include proposals for financial support of the development of MSP practices¹³⁵.

Option 2: Stimulating implementation of integrated maritime planning and coastal management through non-binding measures

The Recommendation option does not in itself lead to administrative costs for authorities or businesses, as it is by nature a voluntary instrument. No additional reporting efforts are expected compared to the voluntary reports delivered by the majority of Member States under the 2002 Recommendation.

The costs associated with the moderate increase in ICZM implementation within the 22 coastal Member States are evaluated to be in the same range as above. Additional costs would also be associated with the upgrading of data and information systems.

The administrative costs for MSP under this option could be relatively similar to those estimated for option 1.

Option 3: Setting out a binding framework to implement integrated maritime planning and coastal management

An obligation to introduce compulsory maritime planning and coastal management among Member States will mean that Member States which have not yet taken any steps to implement MSP and/or ICZM processes will have to restructure their respective national governance regime. Similarly to options 1 and 2, there is no EU wide data available which would make it possible to make any form of reliable calculation on what the financial consequences would be. However, as mentioned above, when a MSP framework was introduced in the United Kingdom in 2010, the estimated administrative costs over 20 years amount around 95.5 million GBP.

The costs could be further reduced by allowing Member States having already national policies in place to fully build on the national work

Additional administrative costs in the short term are likely to be compensated by cost savings in the medium and long terms through efficiency gains. In the case of the UK, the overall economic gains over 20 years were estimated to be around 455.million GBP, i.e. 4-5 times higher than the estimated costs. These figures should however be treated with extreme care since extrapolation of the UK example to other Member States is extremely difficult. Also, significantly less costly approaches can also be envisaged. The feasibility of either of these approaches, or indeed variations on them is highly dependent on the administrative structures in individual Member States. Full investigation of this is beyond the scope of the current Impact Assessment.

Costs associated with the increase to full ICZM implementation within the 22 coastal Member States are evaluated to range from some 15 to 150 M€ start-up cost and around 5 to 10 M€ operational costs. The huge difference in the range of start-up and operational costs is due to the fact that each Member State exhibit large differences in institutional set-up, foundations for information systems, mechanisms and culture for national and regional collaboration, which are bound to influence the costs of implementing ICZM. Upgrading of national coastal information systems may lead to additional costs (estimated in case of maximum implementation at national level and in all coastal NUTS 3 regions: 13.3-20 M€ one-off development cost, and 26-38.9M€ yearly maintenance costs)¹³⁶.

¹³⁵ COM 2011 804 final.

¹³⁶ COWI (2011).

The framework Directive option will include a reporting requirement on Member States, but the costs are assessed to be relatively minor for ICZM. The majority of Member States already reported under the 2002 Recommendation so that reporting would not lead to *additional* costs for those Member States since no additional reporting is envisaged. The measures under the Directive are not in themselves expected to lead to additional information requirements and thus administrative burden on businesses.

It is equally more or less impossible to estimate the administrative costs for a detailed/harmonisation type Directive and for a Regulation since no EU wide data are available for these options either. Because in this case administrative costs would be incurred also by those Member States who have functioning MSP and ICZM processes, it is estimated that the overall administrative costs will be considerably higher than in the case of the option of a framework Directive. In the case of a Regulation, which is immediately enforceable as law in all Member States, implementation costs are expected to be higher. A Regulation sets out binding obligations regarding institutional co-ordination causing a rigid administrative implementation process. Possible 'mismatches' and incompatibilities between ICZM/MSP policy requirements and existing sectoral arrangements at the national and regional level cannot be catered for and may trigger extremely high start-up costs. Operational costs linked to the compliance with detailed measures and instruments such as monitoring and observation mechanisms and networks for ICZM are expected to be higher too.

Overall Economic assessment

It has proven to be difficult to make any reliable estimations of what the administrative costs of the different policy options would be due to the limited availability of EU wide data. Figures presented in this section should therefore be treated with care, even if they do provide a reasonable indication of impacts that can be expected under certain conditions.

In the short term, the option of a Directive would lead to significant implementation and administrative costs as compared to the baseline scenario and other options. This consideration must be weighed against the potential economic benefits of each option, and must be assessed bearing in mind that considerable variation is possible depending on the administrative setup and approach of individual Member States. In the case of UK, prudent estimations have shown that the overall economic benefits are around 4-5 times higher than the administrative costs.

When the economic benefit study on MSP was presented during the European Maritime day in 2010, several stakeholders stated that the estimations are prudent and economic benefits are much higher. No quantitative figures were however given by those who intervened in this debate.

On ICZM experience with numerous projects suggests that in general ICZM implementation pays off and the benefits exceed by far the incurred administrative costs. For instance the comparison of the EU demonstration program has shown that the benefits generated by ICZM initiatives had a vastly positive benefit-cost ratio, the economic benefits being 8 to 13 times higher than the related costs.

6.4. Environmental impacts:

The environmental impacts are only beneficial as they relate to a more sustainable use of coastal and maritime resources and the existing legal obligations will ensure the envisaged level of protection for the environment. The main additional impacts can be broadly summarized as follows:

- Reduction of pressure on environment in particular through an improved use of coastal and maritime space: Due to the comprehensive approach of integrated MSP/ICZM processes, impacts among uses and opportunities for multiple use of

space can be better identified and translated into more efficient spatial planning, as well as a more balanced spatial development. In the public consultation, stakeholders stressed "the more efficient use of coastal resources" as an important benefit. A study conducted by the JRC¹³⁷ on policy alternatives' impacts on European coastal zones pointed out that sustainable coastal zone management can reduce the increase in built-up areas by one third compared to the baseline scenario and minimize landscape fragmentation, and environmental impacts. At sea MSP can help to reduce environmentally damaging activities in protected areas (e.g. reallocation of shipping lanes reduce the risk of ship accidents in marine protected areas, location of a windfarm established on the basis of cross-border MSP leads to greater efficiency and less environmental impacts than locating the same windfarm in two separate and more vulnerable spots because cross-border planning was not an option).

- Improved biodiversity conservation and environmental quality: MSP will specify in more detail the tools foreseen already in environmental legislation (e.g. Annex VI of MSFD). ICZM integrates ecosystems into spatial planning and thus contributes to reduced fragmentation of natural areas. More opportunities for green infrastructure are created, including in coastal risks management. The use of renewable and non-renewable resources (e.g. fish stocks) can be better managed with the help of development and implementation of MSP resulting in better conditions of the marine environment.
- Improved resilience to risks: ICZM stimulates better knowledge about coastal processes (e.g. recognition of sediment dynamics) and long-term effects such as through climate change. Together with more participation in planning and design this leads to improved solutions for coastal erosion and mitigation of adverse impacts on sediment balances. In the maritime areas MSP action is likely to leverage all relevant action to mitigate and adapt to climate change risks, as its prime objective is the optimisation of use of maritime space – for example, it would optimise the designation of sand and gravel extraction areas, necessary to support coastal protection (adaptation). Also the impacts of climate change on for instance the current location of shipping lanes can be taken into account in existing and future MSP projects at Member State and EU level. Finally, the joint implementation of MSP and ICZM into an integrated maritime planning and coastal management process will create synergies and help to avoid that decisions are made on land that have negative environmental impacts on the sea and vice versa.

Option 1: Providing guidance and elaboration of best practices

It is not expected that this option will lead to significant sustained beneficial environmental impacts across marine regions. The fact that this option would not significantly contribute to achievement of the operational objectives and the guidance would be used as a pick and choose list will make that beneficial effects are expected to be limited to very local effects and rather focused on one issue topics such as marine litter or protection of a specific nature site. Integration of local environmental protection initiatives into a wider regional planning and management policy would be limited or non-existing.

Integration of a best practice guidance into a policy programme would provide potential for a more coherent approach. However, given the fact that a policy programme most probably will be considered 'low priority' and supportive actions are limited to workshops, exchange platforms and research, the beneficial environmental effect would be limited to mainly awareness raising and local, non-coherent beneficial effects.

¹³⁷ JRC (2011). Coastal Zones – Policy alternatives impacts on European Coastal zones 2000 – 2050.

Option 2: Stimulating maritime planning and coastal management through non-binding measures

A recommendation would provide for an EU dimension for maritime planning and coastal management, but as its main added value relates to awareness-raising and most likely is insufficient to guarantee effective implementation of MSP/ICZM processes, it is expected to barely lead to more environmental benefits than under option 1.

Linking a policy framework to funding may trigger increased MSP/ICZM implementation, but as funded projects would most probably be limited to specific smaller areas, the overall increased environmental beneficial impacts may be higher for these specific areas but is expected to be not significantly higher than a recommendation without funding for larger areas.

Option 3: Setting out a binding framework for maritime planning and coastal management

Obligatory implementation of MSP/ICZM processes would provide the best guarantee for significant beneficial environmental impacts throughout a sea basin. This option would provide for a strong support mechanism ensuring that environmental objectives under different legislation (Bird and Habitats, MSFD, WFD, CFP, etc.) and protection of areas against climate change risks have better chance to be achieved through its obligatory integration into the overall maritime planning and coastal management policy across marine regions. A 'framework directive' would be the most appropriate instrument as it allows sufficient flexibility to regions to adapt policies to very local conditions, which in the environmental context can be very specific. More prescriptive instruments - such as a detailed Directive or Regulation - risk being too prescriptive which could lead to redundant or non-effective measures.

6.5. Social impacts:

Concrete social impacts are difficult to assess since it is very difficult to assess the exact economic impacts (see section 6.3), because much of them would be in terms of gains or losses in employment. However, following general impacts can be given.

- Improved engagement of population and stakeholders: by actively pursuing information provision and participation, MSP and ICZM integrated implementation increase awareness about maritime and coastal values, risk and opportunities; they stimulate a better sense of participation of the coastal population with their environment. Enterprises and organisations take greater responsibility for social matters (*e.g.* ports activities on societal integration). Improved participation of population and stakeholders leads to better understanding between stakeholders and authorities and to more transparent planning and management, as well as improving stakeholder buy-in. In the public consultation, these two aspects have been pointed out as beneficial and confirmed by relevant ICZM actors.
- Improved amenity and cultural heritage: Preservation of maritime cultural heritage due to better planning is considered a benefit (*e.g.* historical wrecks, artefacts and sunken buildings). Better integration of natural and cultural heritage in planning and management allows preservation of the coastal landscape, or improved urban environment in the case of ports and urbanised coastal zones.
- Increased business opportunities and jobs: Integrated maritime planning and coastal management can enhance the economic growth of emerging maritime sectors and increase employment within Member States and at EU level. The emergence of new industries and technologies such as wind energy will provide a significant increase in jobs, also in areas that are currently faced with above average unemployment rates.

¹³⁸, Systematic implementation will bring employment to sectors whose development needs transparent, predictable, and stable planning processes. Co-ordination of land-sea interactions will contribute to innovation and research opportunities and related job creation (e.g. innovative coastal risk management, green infrastructure provision, information management; or eco-tourism).

- Improvement in maritime safety: MSP on a Member State and EU level can improve the level of maritime safety (e.g. by avoiding the installation of a wind farm on a busy maritime traffic lane or altering existing flight paths of helicopters to and from offshore platforms).
- Improved political co-operation climate: the approach of ICZM to address issues in a holistic way based on minimum requirements, sharing of information, inclusiveness and transparency in processes allows establishing a better dialogue in cross-border situations and enhances co-operation with 3rd countries.

Option 1: Providing guidance and elaboration of best practices

Social impacts are expected to be weak and limited to very local spots. Following the likely 'pick and choose' approach, some stakeholder engagement may be triggered around local initiatives or projects that are most likely focused on particular issues, such as for instance construction of a dike for erosion prevention, construction of a wind farm or planning of a new touristic attraction or facility. Cross sector and wide stakeholder involvement on overall maritime planning and coastal management throughout a sea basin would be most likely non-existing.

Improved amenity and cultural heritage may also occur very local for specific local projects, but lack of integration or coherent overall policy would make that impacts on sea basin level would be limited.

Impacts on business opportunities and jobs, maritime safety and political co-operation to address issues in a holistic way would be negligible as these would require integrated action on regional scale that would not be triggered by means of a guidance document.

Option 2: Stimulating maritime planning and coastal management through non-binding measures

The main added value for this option would be awareness-raising, which might incite stakeholders to become more actively involved than under option 1. However, given the non-binding nature, sustained overall stakeholder involvement across marine regions is expected to be limited.

Other positive social impacts are expected not to be significantly higher than under option 1, as this option gives no strong guarantees for more effective MSP/ICZM implementation than under option 1.

Linking a policy framework to funding may lead to positive social impacts in specific project areas but are expected not to be significantly higher for larger areas.

Option 3: Setting out a binding framework for maritime planning and coastal management

Obligatory implementation of MSP/ICZM processes would provide the best guarantee for significant beneficial social impacts throughout a sea basin. Formal mechanisms would be created for wide stakeholder involvement and obligatory cross sector integrated planning and management processes would give the best guarantees for improved amenity and cultural heritage, economic development and job growth, improvement in overall maritime safety and

¹³⁸ See Study on economic benefits of MSP, The Maritime planning System: Impact Assessment, DEFRA (See Annex 5 of the study on policy options referred to in Annex 7).

political co-operation to address issues in a holistic way, across marine regions. A 'framework directive' would be the most appropriate instrument as it allows sufficient flexibility to regions to adapt policies to local conditions. A detailed directive or regulation would be too descriptive to adapt policies to specific economic and social conditions that require tailor-made solutions.

7. COMPARING THE OPTIONS

7.1. Overview policy options

Table

		Achievement of operational objectives	Economic benefits	Implementation Costs*	Environmental benefits	Social benefits
Option 1	Guidance	+	+	0	0 to +	0
	Policy programme	+	+	0	+	0
Option 2	Recommendation	+	+	+	+	+
	Recommendation + funding	++	++	+	++	+
Option 3	Framework Directive	++++	+++	+	+++	+++
	Directive	+++	+++	++	++	++
	Regulation	+++	+++	+++	++	++

0: no change compared to baseline scenario; +: limited increase compared to baseline scenario ++ : moderate increase compared to the baseline scenario +++: high increase compared to the baseline scenario

7.2. Joint policy options for integrated maritime planning and coastal management processes

The non-binding options would be helpful to address some of the shortcomings identified under the baseline scenario but only moderately achieve progress towards the objectives set out in chapter 4 or may lead to no significant progress over the baseline scenario. Joint non-binding options are not likely to improve these results significantly to a level similar to the Directive option. In particular, they are not likely to fully address the need to achieve, within reasonable timeframes, comparable fully documented processes in all coastal Member States, and to achieve, as quickly as possible, coherent and prospective co-ordination of planning in relevant sea areas. The Directive option is assessed to be most effective and to deliver optimal results. However, the Directive option should be combined with the first option, which envisages the elaboration of best practices for maritime and coastal planning to be developed in close collaboration between the Commission and Member State Experts.

The public consultation stressed the need for strong co-ordination of MSP and ICZM, despite the fact that authorities or issues may differ between the coast and offshore areas¹³⁹. Progress towards a coherent development of land and the sea parts of the coastal zone can be better stimulated by EU action if a closer link-up of ICZM and MSP is ensured.

¹³⁹ 59% of respondents disagree/somewhat disagree that differences in competent authorities, stakeholders or issues is a reason to address land and sea planning through different instruments.

The envisaged EU action aims to improve the effective use of planning and management mechanisms, without prescribing specific land-use or zoning plans¹⁴⁰. A joint Directive could improve synergies between maritime planning and coastal management, and ensure better consistency between measures (e.g. co-ordination mechanisms, participation,). Cost effectiveness may be improved, notably in information management and administrative streamlining.

Coherence with existing EU legislation and effective support to EU policies in marine waters and coastal zones can be more efficient through a single, instead of two separate Directives. Finally, the ICZM Protocol to the Barcelona Convention covers the land- and sea parts of the coastal zone, up to the territorial sea. Separate initiatives at the EU level, on ICZM and in addition one on MSP, risks being a source of inconsistency and confusion for Member States concerned by the Protocol.

7.3. Conclusions and preferred option

The implementation of maritime planning and coastal management at national level would lead to significant economic, environmental and social benefits and resource efficiency gains both for stakeholders and national administrations. Enhanced transnational co-operation would contribute to these benefits and gains and help eliminating barriers and bottlenecks in order to enhance sustainable economic growth while respecting the ecological boundaries of the ecosystem. Ensuring smart data infrastructures which would link existing data sources and make all these data available in a compatible form will not only enable public authorities to take more informed decisions on the planning of their sea space (such as placement of offshore wind farms), but also lead to considerable cost savings for European Companies (estimated to be around 300 million € per year).

The challenges/problems identified in chapter 3 need to be tackled through instruments that allow the coherent and cross-cutting management of human uses of seas and coasts, in a sea basin context. The problems can be tackled through achieving a series of operational objectives as per chapter 4, and proposes a combination of binding and non-binding options (chapter 5.).

A comparison of the identified options demonstrates that the optimal action to fulfil the objectives identified in chapter 4 of the impact assessment would be to combine the option for a framework Directive on maritime planning and coastal management with the first option to establish best practices. This would mean in practice a framework Directive which establishes a limited set of obligations and a process for the development of best practices.

A detailed Directive or Regulation would be disproportionate since it would require a move towards harmonisation of governance structures in EU Member States, which is not necessary to attain the objectives of this initiative. It would also interfere unnecessarily with the internal administrative processes of the Member States. It would disregard the subsidiarity principle as examined in section 3.5.2. Stakeholder consultations have shown that Member States are firmly opposed to any measures which would transfer planning and management competence on MSP and ICZM from national level to EU level. The above Impact Assessment shows that EU action would have most added value by providing a framework that ensures the implementation of management and planning processes by and between the Member States.

¹⁴⁰ See also section 3.5.2. on subsidiarity. The public consultation showed 52% of respondents to favour strong co-ordination of spatial planning processes in coast and marine areas, and only 27% favouring a fully linked up process from coast to the EEZ. The areas where specific plans or programmes are needed and in which existing plans may be used or built on is a matter of subsidiarity. The different scales of plans (more detailed near the coast and on-shore, broader scale further offshore) needs to be recognised.

It is important to distinguish between the non-binding options on the one hand, and the legally binding option, on the other. The assessment in chapter 5 and supporting studies of the policy options for this impact assessment show that both MSP and ICZM have the potential to tackle the problems identified in chapter 3, and to lead to considerable environmental, economic and social benefits. These benefits can only fully be achieved if integrated MSP and ICZM are implemented on the basis of a framework that sets out a number of binding minimum standards. The same considerations have also been made in impact assessments at national level, such as the 2010 impact assessment for the introduction of the Marine Bill of the UK.

Even though non-binding options offer some advantages compared to the baseline, experience shows that a legally binding approach has the best potential of action and sends a sufficiently strong political message on the urgency of it.

This has been shown *inter alia* by the 2002 Recommendation on ICZM where implementation by Member States has been variable and the political ambition to implement non-binding legislation is visibly low. Some Member States authorities have during the consultation process pointed out that a legally binding instrument is crucial to bring together different national and regional authorities to implement integrated policies such as MSP and ICZM. It would seem that the implementation of such cross sector policies would require a broad political consensus of a way forward by both European legislative bodies. A Directive is the only legislative instrument among the options considered which can achieve that objective, given also that Recommendations no longer form part of the ordinary legislative procedure in the EU Treaty.

Without ignoring the differences between the two instruments (geographical scope, content of action), this impact assessment has also demonstrated (see *inter alia* section 6.3) that there are considerable similarities between the objectives for action on MSP and ICZM. Both tools target the application of an integrated approach to oceans management through enhanced maritime and coastal governance. MSP and ICZM share similar data needs. Considerable synergies can be achieved through a joint legislative initiative for MSP and ICZM that would ensure full coherence between these policy areas and their implementation in marine regions across EU Member States. The consultation process highlighted the need for a strong co-ordination between the two policies.

It can also be noted that the stakeholder consultation demonstrated considerable support (72 %) for upgrading the current ICZM Recommendation to binding legislation. The operational timeline of the ICZM Recommendation ended in 2006. Although some have called for legislative or binding action by the EU on MSP¹⁴¹, there have also been negative reactions linked in most cases to subsidiarity and legislative fatigue concerns, and those will need to be addressed by the proposed action.

The initiative must be timed and designed so that it can support the achievement of objectives in the context of EU initiatives such as the MSFD, the Renewable Energy Directive and other resource efficiency initiatives such as the Agenda 2020. It should therefore be in place as soon as possible but not later than in 2-3 years. At the same time, this relative urgency in achieving the objectives of the proposed action supports the case for a legislative approach as this has significantly better chances of achieving measurable outcomes within a short timeframe.

It will also have to take into account differences in implementation levels and administrative structures between Member States, and propose how to take this into account, for instance

¹⁴¹ European Parliament Report on the Integrated Maritime Policy 2010/2040(INI), para. 28, WWF position paper on the Impact Assessment on MSP and ICZM, September 2011, EWEA briefing on MSP September 2011).

through differentiated timing of implementation and the possibility for Member States to build on their national policies.

This work at EU level can also be further complemented through further work at regional and international level (e.g. the regional sea conventions) to strengthen collaboration with neighbouring third countries sharing the same marine regions as EU member States

A proposal for a joint Directive integrating MSP and ICZM will furthermore have to fully comply with the subsidiarity principle. EU action will also have to be proportionate and respect the particularities of each sea region. Full coherence with existing legislative instruments such as the Marine Strategy Framework Directive, the Strategic Environment Assessment Directive, and other relevant legislation will have to be ensured. A proposal will have to be limited to the establishment of general obligations which can be accompanied by guidelines destined to support Member States in this work. Such guidelines will need to be elaborated in close collaboration with Member States through a formalised process.

Finally, moving towards a more integrated approach will be particularly important during these times of financial crisis. The marine and maritime sectors represent a source of untapped economic potential that is vital for Europe's future and will have an important role to play in the economic recovery of Europe. The on-going blue growth initiative will provide a comprehensive and robust analysis of what can be done further to unlock the unexploited sustainable potential in maritime sectors. The study will be building a picture of where Europe's marine and maritime economic sectors will be in 5-15 years to come and trace the most credible growth scenarios for the most promising maritime economic activities in terms of economic growth and employment. The Commission is preparing a Communication on blue growth to the European Parliament and Council which is foreseen for September 2010 on the basis of the conclusions of this study.

8. MONITORING AND EVALUATION

The monitoring should focus on implementation and compliance level at Member State level. These should however be "light" and limited to reporting progress of implementation of the various obligations adopted. Stakeholder consultations have shown very clearly that there is little support for massive monitoring regimes, which would put additional pressure on national administrations in times of financial crisis. It is also doubtful that detailed reporting and monitoring obligations have significant added value with regard to the objectives of the action.

For ICZM the monitoring and evaluation can be based on previous experience from Member States national reporting in 2006 and 2010 respectively. The monitoring should be able to show expected progress both in terms of the governance systems being implemented on ICZM as well as the actual state of the coasts. Already available progress indicators of ICZM implementation can be used to monitor the specific policy options and ICZM process phases. These indicators rank from (1) planning and management are taking place in the coastal zone; (2.) a framework exists for taking ICZM forward; (3) most aspects of an ICZM approach are in place and function reasonably well; (4) an efficient, adaptive and integrative process is embedded at all levels of governance and is delivering greater sustainable use of the coast¹⁴².

For MSP a similar approach can be taken, based on the recommendations for indicators to measure progress on MSP¹⁴³. Indicators should cover issues such as progress in establishing the legal framework within Member States to govern MSP, information management,

¹⁴² For more details of specific progress indicators under each phase please consult p. 6 ff.:

¹⁴³ http://ec.europa.eu/environment/iczm/pdf/iczm_guidance_notes.pdf.

<http://ec.europa.eu/maritimeaffairs>.

permitting and licensing; consultation; sector conflict management; cross-border co-operation; Implementation of MSP. Indicatively, the indicators could concern for the preferred policy option:

- Output indicators (linked to the operational objectives): *e.g.* the (increased) number of approved national strategies and maritime plans adopted, (increased) number of cross-border co-operation actions and/or plans established. In qualitative terms these outputs should be evaluated in terms of incorporation of the MSP/ICZM minimum requirements (number of plans, programmes set-up in line with these requirements).
- Result indicators (linked to the specific objectives): (reduced) time and/or costs of planning and licensing operations in Member States, reduction of conflicts and litigation regarding infrastructure development, (improved) spatial development patterns, (less) diffuse sprawl or (reduced) fragmentation of landscapes, (reduced) pressures on coastal and marine resources, (reduced) vulnerability to risks assets, population and biodiversity, co-ordinated cross-border plans.
- Impact indicators (linked to general objective): maintained/restored biodiversity (or ecosystem services potential) in coastal and maritime areas, (increased) added value and (reduced) seasonality in coastal and maritime economy, (improved) resilience to climate change, growth in key economic sectors, coexistence of economic activities.
- Evaluation of the consequences of the application of the proposed Directive could take place in due time considering the timing set in the objectives in the form of a Commission report to the Council and the European Parliament.

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Annex 1: Link between the possible solutions, the underlying problem causes and the policy options

Measure	Options ¹⁴⁴		Option 2 Recommendation		Option 3 Legally binding framework			Problem ¹⁴⁵ resolution scale 1 (low) -5 (high)				Strength (+) / weakness (-)
	a	b	a	b	a	b	c	a	b	c	d	
Guidelines detailing common principles for integrated maritime planning and coastal management	yes	yes	yes	yes	yes	yes	no	1	1	1	1	+: uniform guidelines available -: not obligatory => risk for no coherent and overall implementation
Guidelines on common principles and best practices for integrated maritime planning and coastal management	yes	yes	yes	yes	yes	yes	no	2	2	2	2	+: uniform guidelines available, exchange of best practices stimulated - : not obligatory, risk for no coherent and overall implementation through pick and choose practices
supportive actions (exchange platform, workshops, research programme, technical assistance)	no	yes	no	no	no	no	no	2	2	2	2	+: awareness raising, filling knowledge gaps, exchange platform for best practices -: stand-alone actions, little linkages to different initiatives, no guarantee for MSP/ICZM implementation
limited set of common standards for ICZM/MSP (governance structure, stakeholder involvement, cross-border co-operation, data management) and promoted by and EU level working group or committee	No	No	Yes	Yes	yes	no	no	2	2	2	2	+: EU co-ordinated and wide promotion of common standards; -: Although action will be triggered no guarantee for effective implementation of MSP/ICZM
Financial instruments to promote and support MSP and ICZM based on limited set of common standards	No	No	No	Yes	No	No	No	3	3	3	3	+: Provides strong incentive for action -: Setting indicators + follow up of cross compliance will create administrative burden Availability of funding not guaranteed
Obligation to establish and implement integrated maritime planning and coastal management based on general principles relating to policy integration, stakeholder involvement, data management, consideration of type of activities, etc. but without further specifics on minimum requirements for implementation	No	No	No	No	Yes	No	No	5	5	5	5	+ : Guaranteed implementation of MSP/ICZM Respect of general principles but flexibility to consider local specifics; no or little action required in regions where MSP/ICZM is already in place -: No full harmonisation on EU level
Obligation to establish integrated maritime planning and coastal	No	No	No	No	No	Yes	No	4	4	4	4	+: Guaranteed implementation of MSP/ICZM that respect general principles and fulfils minimum requirements

¹⁴⁴ 1a: guidance; 1b: policy programme; 2a: Recommendation; 2b: Recommendation + funding; **3a: Framework Directive**; 3b: Directive; 3c: Regulation

¹⁴⁵ These columns indicate to which extent the underlying causes of the problems will be resolved (causes identified in chapter 3.2: a) Lack of coherent planning and allocation of space to uses b) Insufficient coherence or linkage between different EU policies and programmes affecting the sea and coasts c) lack of coherent and sustainable transboundary co-operation across complete marine regions d) inadequate involvement of stakeholders

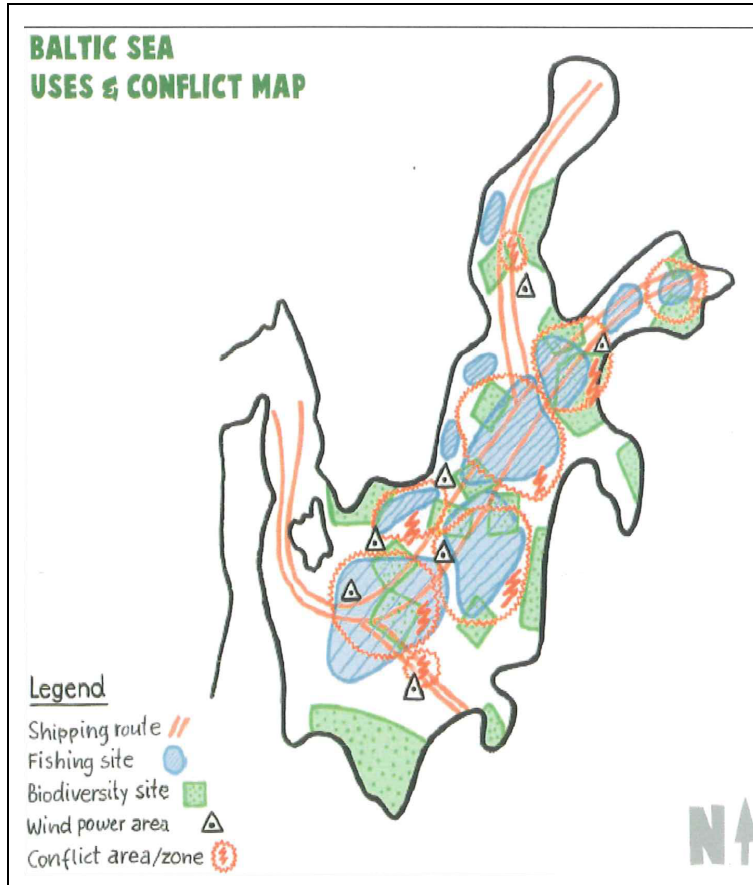
Annex 1: Link between the possible solutions, the underlying problem causes and the policy options

Options ¹⁴⁴ Measure	Option 1 Guidance policies		Option 2 Recommen dation		Option 3 Legally binding framework			Problem ¹⁴⁵ resolution scale 1 (low) -5 (high)				Strength (+) / weakness (-)
	a	b	a	b	a	b	c	a	b	c	d	
management based on fixed common standards and minimum requirements for implementation (how to set up governance structure, data management structure, stakeholder involvement etc.)												-: Less flexibility to take account of local conditions; existing MSP/ICZM schemes might need to be amended with no or little added value
Detailed and uniform rules on establishment of integrated maritime planning and coastal management, little to no flexibility	No	No	No	No	No	No	Yes	3	3	3	3	+ : guaranteed implementation of MSP/ICZM - : no flexibility as regards the way of implementation to take account of local conditions, existing MSP/ICZM schemes will need to be revised to meet requirements with no or little added value
Obligation to establish transboundary co-operation without further specification	No	No	No	No	Yes	No	No	-	-	5	-	+ : Guaranteed transboundary co-operation; Flexibility on how co-operation is organised, no requirement to set up additional bodies - : non specified co-operation mechanisms could lead to difficulties in setting up such structures (e.g. difficult negotiations, defining responsibilities of parties, etc.)
Obligation to establish transboundary co-operation by means of specified co-ordination mechanisms between existing bodies across different policy domains	No	No	No	No	No	Yes	No			4		+ : Guaranteed transboundary co-operation according to specified co-ordination mechanisms - : little flexibility on how to establish co-operation mechanisms
Obligation to establish transboundary co-operation by means of an established EU body/committee representing MS and operating according fixed rules	No	No	No	No	No	No	Yes			3		+ : Guaranteed transboundary co-operation according to fixed rules - : no flexibility, creation of an additional administrative body leads to additional administrative burden
Facilitate the set-up of shared data ¹⁴⁶ information systems	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5	4	4	3	Shared information systems will help mainly the lack of coherent planning and allocation of space which requires well founded knowledge decision making. To some extent it will also give support to the other problem drivers
Conclusion: The implementation of instruments to resolve the underlying drivers of the defined problems in chapter 3 can be most effectively achieved by a framework directive that guarantees implementation of MSP/ICZM but allows wide flexibility to adapt to local conditions while referring to further guidance on best practices as a helping tool for implementation. (this table does not consider economic/environmental/social impacts)												

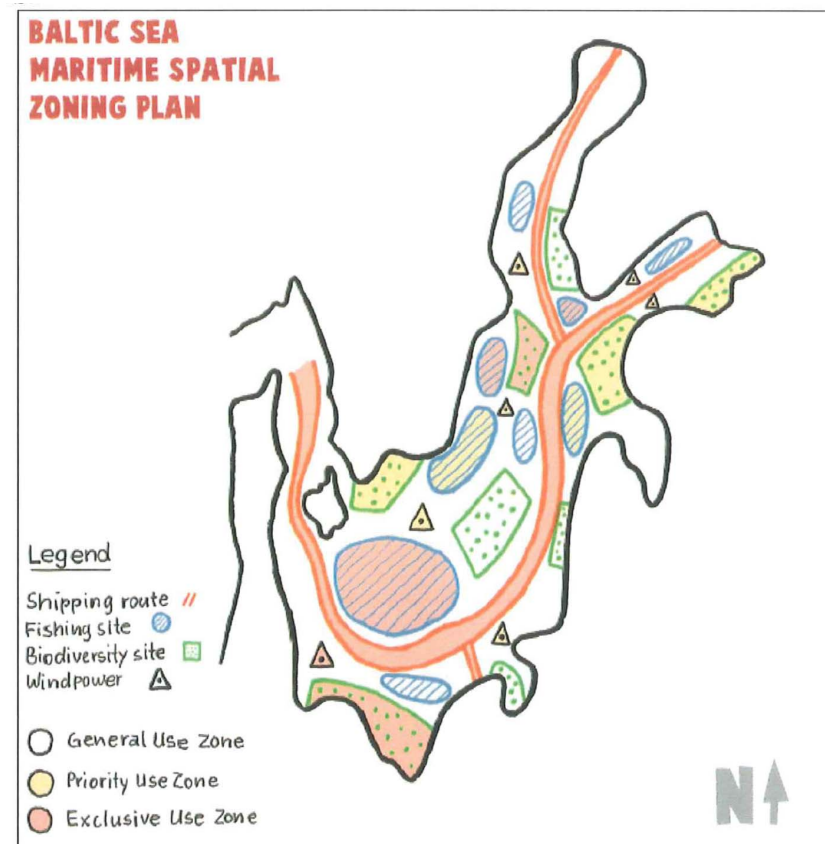
¹⁴⁶ Considered in each policy option, only the level of prescriptive detail and binding character differs

Annex 2: Illustrations of Sea uses and conflicts, and MSP, based on the Baltic Sea

Annex 2a: Map of competition and conflicts in the Baltic Sea



Annex 2b: Map of MSP based on the Baltic Sea



Annex 3: Stakeholder consultation, studies and preparatory actions

A. Consultations

The results of the web-based consultation on MSP and ICZM are summarised in section 2.3.1 of this impact assessment report. A more detailed account of the stakeholder consultation is available in the consultation and the hearing reports¹⁴⁷.

In addition to the web-based consultation on MSP and ICZM, and public hearing, other consultations have been used to inform the impact assessment:

- Four **workshops on MSP** in 2009. The main purpose of these workshops was to discuss the MSP key principles established in the Commission Roadmap Communication of 2008 among Member States, regions and stakeholders from industry as well as NGOs. The overall result of these four workshops was a general acknowledgement that the key principles of the Roadmap were considered to be appropriate, comprehensive and an important basis for further development of MSP at EU level, which as such was broadly welcomed.
- Regular discussions with Member States experts within the context of the **Member States expert group on the Integrated Maritime Policy**. While these discussions have revealed a general support for the concept of MSP as such, certain Member States have also voiced subsidiarity concerns vis-à-vis EU action and that EU action could lead to an additional administrative burden difficult to bear in times of on-going financial crisis. A meeting of Member State **Marine Directors**, responsible for the implementation of the Marine Strategy Framework Directive, expressed caution on the need for possible legislation on MSP¹⁴⁸.
- Regular discussions on ICZM, the impact assessment and its related studies, have taken place with Member States experts and coastal interest network in the context of the **EU ICZM expert group**¹⁴⁹. The discussions have generally supported the continued need for ICZM support at EU level. However as regards the possible form which future action may take, differences between Member States have been voiced. Key concerns are respect for subsidiarity, consistency and continuity to existing efforts of ICZM implementation (e.g. requirements of the ICZM Protocol of the Barcelona Convention, existing national ICZM strategies and Member State structures). The participants have stressed the need for coherence and co-ordination with initiatives on MSP.
- Regular discussions with the **European Parliament** in the context of the progress of the integrated maritime policy. In 2010, the Parliament requested the Commission to submit in 2011 a proposal for a Directive on MSP or to propose the type of instrument most suitable for ensuring coherence between MSP and the other existing initiatives (ICZM; Natura 2000, Marine strategy Framework Directive)¹⁵⁰.

B. Studies and preparatory actions

The Commission has launched a number of separate studies and preparatory actions with the aim to explore the potential for further action on MSP and ICZM in the EU. These initiatives can be summarised as follows:

¹⁴⁷ http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf

¹⁴⁸ http://ec.europa.eu/environment/iczm/pdf/ICZM_Hearing_Report_20110530.pdf

Informal meeting Marine and Water Directors, Spa, Belgium, 2-3 December 2010.

¹⁴⁹ http://ec.europa.eu/environment/water/marine/pdf/syntesis_spa_dec2010.pdf

¹⁵⁰ http://ec.europa.eu/environment/iczm/expert_group.htm

See para. 28 of the EP report on the Integrated Maritime policy – evolution of progress made and new challenges (2010/2040(INI)).

As regards MSP¹⁵¹:

- A 2008 **study on the legal aspects of MSP**; the main conclusion was that Coastal States can put in place an MSP process for waters under their national jurisdiction as long as they ensure that their obligations under international law are respected (such as to ensure right of free passage under Law of the Sea);
- A 2010 **study on the economic benefits of MSP**; the main conclusion was that MSP can lead to significant economic benefits in terms of lower co-ordination and transaction costs as well as better investment climate. For three scenarios, a reduction of 1% in transaction costs led to positive economic effects ranging from € 170 million to € 1.3 billion in 2020, a figure which can increase further due to acceleration of emerging activities such as renewable energy installations.
- A 2011 study on the **potential for MSP in the Mediterranean**; the main conclusion was that there is potential for implementing MSP in the Mediterranean sea but that the scope for coastal states to apply MSP in most cases is limited to their territorial sea since up until now, very few exclusive economic zones have been established in this sea basin.
- A 2011 **study on the impacts of policy options on MSP**; the main purpose of this study was to evaluate the different policy options identified in this impact assessment. The main conclusions of this study are therefore dealt with in chapter 5 of the impact assessment.
- Two MSP 18 month **pilot projects** launched in 2010 on cross-border co-operation, one for the Baltic Sea¹⁵² and one for the North Sea¹⁵³. The main objective of these pilot projects is to obtain practical experience with cross-border maritime spatial planning¹⁵⁴.

As regards ICZM:

- In 2009 the **Working group report on the follow-up to the EU ICZM Recommendation**¹⁵⁵ identified policy options for detailed examination as being a programme, a revised recommendation and a directive. Regarding contents of the options, the report signals that more focussed objectives and deliverables would need to be defined compared to the 2002 Recommendation contents.
- In 2011 the **Comparative analysis of OURCOAST cases**¹⁵⁶ concluded that significant experience is available in ICZM practice in Europe, leading to improved coastal planning and management. The report provides insights in success factors and barrier to ICZM.
- In 2011, reports were received from 16 EU coastal Member States (out of 22)¹⁵⁷ reporting on a voluntary basis concerning the period 2006-2010. The study **Analysis of Member State progress reports on ICZM**¹⁵⁸ provides an overview of these

¹⁵¹ These studies can be found at http://ec.europa.eu/maritimeaffairs/index_en.html

¹⁵² <http://planbothnia.org/>

¹⁵³ <https://www.surfgroepen.nl/sites/CMP/maspnose/default.aspx>

¹⁵⁴ Additional pilot projects are planned as part of the Commission proposal for a funding Regulation to support the Integrated Maritime Policy (COD (2010/0257)).

¹⁵⁵ <http://www.acceptance.ec.europa.eu/environment/iczm/pdf/Report%20Earlyreflection.pdf>; The working group responded to the need identified in the evaluation of the EU ICZM Recommendation (COM(2007)308, that for the medium- and long term

¹⁵⁶ <http://ec.europa.eu/ourcoast/download.cfm?fileID=1709>

¹⁵⁷ http://ec.europa.eu/environment/iczm/ia_reports.htm

¹⁵⁸ http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf

Member State reports. The study shows that some Member States have advanced in terms of delivering a national ICZM strategy, but large variations in scope and contents are observed, as well as progress on the ICZM principles.

- In 2011 the study **Options for coastal information systems**¹⁵⁹ provided an analysis of a selection of coastal information systems and subsequently identified and assessed three policy options, with increasing degree of ambition, to improve such coastal information systems to support ICZM implementation. As part of this study a stakeholder workshop was held on 6 May 2011.
- In 2011 the JRC study on **Coastal Zones-Policy alternatives impacts on European Coastal Zones 2000-2050**¹⁶⁰. The land-use modelling results in this study indicate that the more intense trends towards built-up and fragmentation in Europe's coastal zones compared to inland areas, also hold true under future scenario's.
- In 2011, the **Support study for an impact assessment for a follow-up to the EU ICZM Recommendation**¹⁶¹ evaluated the different policy options identified in this impact assessment.

Moreover, EUROSTAT statistical analysis of coastal zones and EEA reports on the state of the coast, coastal biodiversity and climate change impact inform the impact assessment¹⁶². Use has been made of selected reports and surveys from ICZM projects supported through the Cohesion policy (Interreg), RTD and LIFE programmes¹⁶³.

¹⁵⁹ http://ec.europa.eu/environment/iczm/pdf/21807-REL-T006.2_Final_Report.pdf

¹⁶⁰

http://ec.europa.eu/environment/enveco/impact_studies/pdf/land_use_modelling%20adaptation_activities_coastal.pdf

¹⁶¹ COWI (2011) http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf

¹⁶² http://ec.europa.eu/environment/iczm/state_coast.htm

¹⁶³ <http://ec.europa.eu/environment/iczm/pdf/ICZM%20-%20Information%20sources%20-%20overview.pdf>

Annex 4: Figures on maritime economy in the EU and compatibility table

Indicative size of sub-functions (Source: ECORYS/DELTA/ES/Oceanic Development (2011) "Blue Growth: Scenarios and Drivers for Sustainable Growth from the Oceans, Seas and Coasts". First/Second Interim Report (On behalf of the European Commission, DG MARE). All figures refer to the total impact of the sub-functions (all included within the value chain).

Function / sub-function	Cross-border relevance?	Value added (€ bn)	Recent Annual Growth	Employment (*1000)	Demand for sea-space ?
1. Maritime transport and shipbuilding					
1.1 Deep sea shipping	YES	106	+8.5%	1 400	YES
1.2 Short sea shipping (incl. RoRo)	YES	63	+6.1%	820	YES
1.3 Passenger ferry services	YES	20	0/+	200-300	YES
1.4 Inland waterway transport	NO	6	0	43	NO
2. Food, nutrition, health and ecosystem services					
2.1 Commercial fisheries (for human consumption)	YES	7.9	+4.0%	200-240	YES
2.2 Commercial fisheries (for animal feeding)	YES	0.2	-5.8%	5.7	YES
2.3 Aquaculture (growing aquatic products)	YES	N/a	N/A	N/A	YES
2.4 High value use of marine resources (health, cosmetics, well-being, etc.)	YES	0.6	+	<0.5	YES
2.5 Agriculture on saline soils	NO	<0.25	+	<0.5	NO
3. Energy and raw materials					
3.1 Oil, gas and methane hydrates	YES	107-133	-4.8%	25-50	YES
3.2 Offshore wind energy (including offshore grids)	YES	1.3	+21.7%	7-40	YES
3.3 Other renewables (wave, tidal, OTEC, thermal, biofuels, etc.)	YES?	<0.25	+	<0.5	YES
3.4 Carbon capture and storage	YES?	<0.25	+	<0.5	YES
3.5 Aggregates mining (sand, gravel, etc.)	YES?	0.7	+5.9%	4.3	YES
3.6 Other raw materials and marine mineral resources	YES?	<0.25	0/+	<0.5	YES
3.7 Securing fresh water supply (desalination)	NO	0.7	+12.3%	7	NO
4. Leisure, working and living					
4.1 Coastline tourism	YES	121	+2.8%	2350	YES
4.2 Yachting and marinas	YES	23.4	+5.0%	253	YES
4.3 Cruise industry (including port cities)	YES?	14.1	+12.3%	143	YES

4.4 Working (e.g. in maritime industries/trades/government)	NO	4.1	+4.5%	75 000	MAYBE
4.5 Living (in coastal areas)	NO	n/a	0.1%	177 000	MAYBE
5. Coastal protection					
5.1 Protection against flooding and erosion	YES?	1.0-5.4	+4.0%	10-50	MAYBE
5.2 Preventing salt water intrusion	YES?	<0.25	+	<0.5	MAYBE
5.3 Protection of habitats (goal set by UN is 10%, now <1%)	YES	<0.25	+	<0.5	YES
6. Maritime monitoring and surveillance					
6.1 Traceability and security of goods supply chains	YES	0.6-1	+	5-10	NO
6.2 Prevent and protect against illegal movement of people and goods	YES	1.1	+	10	NO
6.3 Environmental monitoring	YES	0.1-0.2	+	1-1.5	MAYBE

Table 1: Conflict matrix for maritime activities¹⁶⁴

No conflict		Incidental conflict, activities can co-exist (○)		Considerable conflict, co-existence may lead to costs (-)			Strong conflict, co-existence is implausible (x)			
	Shipping	Cruise tourism	Dredging	Oil & gas	CCS	Offshore wind	Wave & tidal	Fishing	Aqua- culture	Marine tourism
Shipping										
Cruise tourism										
Dredging	○	○								
Oil & gas	○	○								
CCS	○	○	○							
Offshore wind	-	-	○	-	-					
Wave & tidal	-	-	-	-	x	○ (?)				
Fishing			-	○	-	x	x			
Aqua- culture	-	-	-	x	-	?	x	x		
Marine tourism				x		-	x	○	○	

(?) potential synergies apply

Source: Policy Research Corporation based on multiple sources¹⁶⁵

¹⁶⁴ Although military use is an important maritime activity, it is not included in this study as it is not an economic activity.

¹⁶⁵ Cieslak Andrzej et al. (2009), *Compendium on Maritime Spatial Planning Systems in the Baltic Sea Region Countries*; UNESCO (2009), *Maritime Spatial Planning: A Step-by-Step Approach toward ecosystem-based Management*; expert interviews, survey and conference calls.

Annex 5: Assessing potential ICZM impacts and risks of not developing and implementing MSP in the EU

A: Assessing potential economic social and environmental impacts of ICZM

The results of the public web-based consultation show that respondents rate the benefits of ICZM invariably as significant¹⁶⁶. Confirming literature and study results, the most important benefits deriving from ICZM implementation concern **improved governance**, in particular by achieving:

- **Better understanding between stakeholders and authorities in the coastal zone**

Public participation, engagement of stakeholders in coastal zone management and co-operation between authorities are core principles of ICZM. Participation allows for improved information exchange, better understanding of issues and avoidance of misperceptions. Systematic pursuit of participation and co-operation improves the understanding of roles, responsibilities and activities among coastal zone actors. For economic investors this also implies a clearer understanding of opportunities and constraints arising from regulatory practice.

- **More transparent planning and management of the coastal zone**

Planning and management activities based on a participatory approach, using a broader information basis, lead to a clearer pathway of plan development. The decision-making process will be more transparent and results more stable. The resulting coastal plans or programmes are likely to relate better to the coastal issues at play, and make their acceptance by the public and stakeholders easier.

- **More efficient use of coastal space and resources**, reduction of conflicting claims on space and/or resources

The pursuit of coherence between coastal plans and programmes is stimulated by the ICZM principles. Planning and management processes using on broad information basis and early-stage participation make it possible to identify opportunities for synergetic development and support multi-functional use of space. Potential conflicts and alternative solutions can be identified so that adverse impacts among uses can be avoided or minimised.

In turn, this leads to **improvements to the coastal environment** and enhances the **attractiveness of coastal regions** for the coastal communities and activities depending on a coastal location. Impacts associated with ICZM implementation are noted especially in the sphere of spatial management and the environment (less uncontrolled urban sprawl, including in areas exposed to risks, better spatial use with less adverse impacts among adjacent uses, safeguarding of landscape, amenity and cultural values, access to the shore). Coastal uses depending on good environmental and amenity values will benefit. The result of land-use modelling study carried out for this impact assessment¹⁶⁷, show that a sustainable policy scenario, applying *inter alia* land-use restrictions, leads to less increase in built-up in the coastal zone, compared to an uncontrolled policy scenario. In the uncontrolled scenario, a higher proportion of built-up areas was found to be exposed to coastal erosion and coastal flooding, having as a consequence more potential assets at risk (*i.e.* social and economic losses). Moreover the uncontrolled alternative resulted in a considerably more scattered spatial development pattern, thus potentially increasing landscape fragmentation and habitat loss, contributing to a decrease in biodiversity.

¹⁶⁶ Page 8, http://ec.europa.eu/environment/iczm/pdf/report_online_consultation.pdf

¹⁶⁷ The modelling covered a period from 2000 up to 2050, JRC(2011)
http://ec.europa.eu/environment/enveco/impact_studies/pdf/land_use_modelling%20adaptation_activities_coastal.pdf

ICZM implementation can support fundamental structural changes in coastal areas to provide for more sustainable development (more varied, less seasonally dependent economy and employment basis, balanced social fabric), but these are necessarily longer term issues.

Impacts deriving from ICZM implementation are difficult to quantify at EU level. Ultimately impacts are achieved at local level implementation. Both the precise nature and scope of measures taken as part of an ICZM initiative, and the coastal context in which ICZM is implemented will vary. Effects achieved cannot simply be used for extrapolations beyond the area concerned. Moreover, a major constraint is the lack of systematic monitoring data. Nonetheless, the 2007 evaluation study of the ICZM Recommendation, and, in 2000, a comprehensive study on socio-economic benefits of ICZM concluded on a significant positive ratio of benefit over costs, based on an evaluation of ICZM demonstration projects¹⁶⁸. The net-positive contribution of ICZM at local implementation level has subsequently been confirmed also in international research¹⁶⁹. Recent studies point to the significant values of ecosystems and their services to society and the high value of coastal assets likely to be impacted by climate change¹⁷⁰. Although the valuation of such non-market values is not yet common place, the integration of natural processes and ecosystems into planning and management processes allows taking better account of these values.

In strict terms the impacts of ICZM relate to the added-value of integration over an (alternative) sectoral approach. However, insufficient data and analyses are available to inform the impact assessment more precisely on cost-benefit ratios of the integration component of ICZM¹⁷¹, so that a more global approach is followed.

The benefits of ICZM are potentially highest in coastal zones where most pressures and multiple claims on space and resources occur. This is the case in the majority of Member States (high and medium benefits potential)¹⁷², without clear marked differences in regional seas.

¹⁶⁸ http://ec.europa.eu/environment/iczm/pdf/evaluation_iczm_report.pdf ;
http://ec.europa.eu/environment/iczm/pdf/socec_en.pdf

¹⁶⁹ A perspective on the Environmental and socioeconomic benefits and costs of ICM: the case of Xiamen, PR China, PEMSEA (GEF/UNDP/IMO), 2006.

¹⁷⁰ The Economics of Eco-systems and Biodiversity (TEEB), 2010; Impacts of climate change in coastal systems in Europe; PESETA-Coastal Systems study, JRC, December 2009.

¹⁷¹ Ruijgrok, E., De baten van de integrale aanpak: zijn de hoge verwachtingen terecht? (to be published, 2011); OURCOAST Comparative Analysis of cases (2011).

¹⁷² See section 6.1.3., COWI (2011)
http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf

B: Potential risks of not developing and implementing (cross-border) MSP in the EU

The lack of an integrated, comprehensive and cross-border approach towards MSP can lead to specific negative consequences for companies/businesses. Existing literature¹⁷³ sums up some of these negative consequences when a cross-border spatial planning approach is lacking:

- A spatial and temporal overlap of human activities and their objectives, causing conflicts in the coastal and marine environment;
- A lack of co-ordination between the various authorities responsible for individual activities or the protection and management of the environment as a whole;
- A lack of connection between offshore activities and their resource use, and onshore communities that are dependent on them;
- A lack of conservation of biologically sensitive marine areas;
- A lack of investment certainty and higher co-ordination and transaction costs for marine developers and users of ocean resources, notably in a cross-border context;
- A lack of co-ordination and simplification in decision processes, and associated higher administrative costs in terms of both time and resources;
- A lack of legal certainty for all stakeholders in the marine arena;
- A lack of coherence with other planning systems (*e.g.* on shore, or across borders).

¹⁷³ Douvere, F. (2008), The importance of marine spatial planning in advancing eco-system-based sea use management, *Marine Policy*, 32(5), pp.762-771; European Commission (2010), *The economic benefits of Maritime Spatial Planning*.

Annex 6: Implementation cost and administrative burden

A. ICZM

Implementation costs of the ICZM options have been estimated on the following basis:

The costs taken into account are those necessary for the implementation of the options:

For Option 1: Programme – the costs necessary for the functioning of a coastal platform/expert network and activities in the Programme (best-practice, guidance development, common projects, etc.). Although the Programme emphasises co-operation and collective learning at EU level, ultimately it should lead to improved and additional implementation of ICZM within the EU coastal Member States. Costs associated with this additional implementation are therefore also taken into account.

For Options 2 and 3: Recommendation and Directive – the costs necessary to the delivery of a national strategy (institutional set-up, co-ordination mechanisms, decision-making procedures, methods and tools for stakeholder involvement, provision of information basis, pilot projects to develop and/or support the strategy).

Administrative burden in the strict sense relates to information requirements contained in proposals. In this impact assessment, only option 3 Directive would lead to a mandatory reporting requirement on Member States.

The implementation of ICZM is primarily a matter for public authorities. The implementation costs fall on Member State authorities, and some costs on the EU budget/Commission. The options do not include implementation measures that place a direct obligation on businesses, civil society or other stakeholders.

In summary the costs estimated for **additional ICZM implementation** in the Member States under the main policy options are as follows¹⁷⁴:

From case-studies, projects and questionnaire responses¹⁷⁵, a cost range has been derived, for start-up and operational costs, to represent the total cost of ICZM implementation. Different cost ranges are due to the fact that each Member State exhibit large differences in terms of initial institutional set-up, foundations for information systems, mechanisms and culture for national regional collaboration, which are bound to influence the cost of implementing ICZM. The information provided by Member States by means of a questionnaire survey and interview questions have been used to estimate start up and operational costs. Different Member States with diverging levels of ICZM implementation such as Germany, Spain, Greece, Ireland, Portugal and the Netherlands have been asked to give cost estimates on past and current ICZM implementation experiences¹⁷⁶. As an upper estimate of the costs, German costs have been applied¹⁷⁷. The data provided by the countries above and case studies from the OURCOAST or Interreg project have been analysed and been related to the key components of ICZM implementation, namely: the establishment of a national strategy, regional/local establishment of the strategy with “action plans”, or adaptation of existing plans and the setting up of pilot projects to establish information bases, increase stakeholder involvement, explore benefits of ICZM etc. However, it was pointed out that the provided cost data could not be linked to the ICZM components in any clear and transparent way, meaning that only rough indications can be drawn and large uncertainties associated with assessing the costs for each individual country s exist. In the following, the main cost

¹⁷⁴ COWI (2011), section 6.1.4 and Annex B

http://ec.europa.eu/environment/iczm/pdf/ICZM%20IA%20study_Final_report.pdf

¹⁷⁵ Questionnaire survey and interviews questions asked about the past and current cost experience considering Germany, Spain, Greece and the Netherlands

¹⁷⁶ See COWI (2011), pp. 120-121.

¹⁷⁷ Ibid., p. 121

estimates obtained from the COWI study are presented. In start-up costs typical costs considered are development of a national strategy (100-500K€), at least 2 implementation of regional strategies/programmes (each 100-500K€), a number of support, research or pilot projects (100-750K€, at minimum 3; to an upper range of 10M€)¹⁷⁸. In operational costs the costs for co-ordination and administrative structures and the costs related to the update of national plans and information (ranging from 300-600K€/year) were taken into account.

On the basis of the above obtained values, **total** start-up costs in the EU are estimated to range from 40M€ in a low estimate to 420 M€ in high range estimate (average 230 M€). Operational costs range from 15 M€ in lower boundary to 30 M€ in high boundary (average 23 M€).

However, the actual implementation cost will in reality vary substantially from one Member State to another depending on a range of factors such as the extent to which ICZM concepts can easily be integrated into existing administrative and institutional cultures, whether well-functioning approaches for stakeholder involvement already exist, whether there is a high degree of decentralisation or centralisation in government structures and so forth. Costs are also likely to be larger in Member States which have a long coastlines, large coastal areas, large populations, and/or heavy economic activity. Also the cost of reaching 100 % ICZM implementation level depends on how far the country has already come and thus on the current baseline scenario of ICZM implementation in the respective Member State. From these estimated total costs (as presented above), the **additional** costs to the baseline scenario for each option have been calculated. Firstly, the costs are adjusted for each Member State to reflect coastal characteristics (such as coastline length, density of use and pressures)¹⁷⁹. Secondly, the level of ICZM implementation achieved in the baseline is taken into account, with varying levels for each Member State. Thirdly, progress in ICZM implementation in addition to the baseline and thus related additional costs are different in each option (varying for each Member State between 1% to 20% additional ICZM implementation under Options 1 and 2, and between 10 to 70 % additional ICZM implementation under Option 3)¹⁸⁰. The specific ICZM cost component for each country has been calculated by relating the cost basis (see footnote 6) to the specific country's baseline ICZM level, and then this was used as the basis for estimating the costs of the additional ICZM implementation level which the option would lead to for that particular country. Based on this methodology the total estimated start-up costs for ICZM implementation in coastal Member States have been calculated (see Table below).

¹⁷⁸ It is important to note that the start-up costs also can vary depending on the specific number of years a country would be in the start-up phase.

¹⁷⁹ To calculate the specific ICZM cost component for each Member State, the estimated cost per coastline km, coastal area (km²), coastal population and coastal GDP was applied to each country's own characteristic and then multiplied with the country's baseline ICZM level to arrive at a cost basis for each characteristic.

¹⁸⁰ See also COWI (2011), Tables 6-4, 6-9, 6-13

Table: Costs of additional ICZM implementation compared to the baseline scenario¹⁸¹

	ICZM Implementation in coastal Member States		Specific costs related to the options
	Start-up costs	Operational costs	
Option 1 - Programme	2.1 - 21.4 M€	0.7 - 1.4 M€	Functioning of the Programme: joint projects and input Member States 1-2 M€ (5-10 projects/year @ 200K€) Commission: meetings and network support <1M€ <i>limited change to current situation</i>
Option 2 - Recommendation	1.8 - 18.2 M€	0.6 - 1.2 M€	<i>Implementation support by Commission similar to 2002 Recommendation – no specific additional costs.</i>
Option 3 - Directive	14.8 - 148.3 M€	4.8 – 9.7 M€	<i>Administrative burden: limited reporting costs Implementation support similar to 2002 Recommendation.</i>

Due to the related difficulties of estimating the ICZM implementation costs and limited costs information underpinning the estimates, the costs are subject to significant uncertainty. This is in particular the case for the start-up costs, which depend on the number and nature of support research and pilot projects necessary in each Member State.

B. MSP

Administrative costs/burden for MSP includes the following elements:

- The costs of introducing an MSP system
- The costs of maintaining and MSP system

(1) In the event of the introduction of an EU-level instrument, costs to comply with this instrument and its requirements.

The Commission has contracted a series of studies that have looked at the costs and benefits of Maritime Spatial Planning in an EU context¹⁸². As a rule, the quantitative result of these studies has been limited due to the lack of empirical evidence of actual MSP costs and benefits at this time. There is only one Member State where such costs and benefits have been extrapolated or projected¹⁸³, and even in this case, the conclusions are based on projections rather than existing evidence. The conclusions below are therefore based on a combination of a limited amount of quantitative information available, qualitative information gained through the above studies, and assumptions based on how an ideal MSP system would work. The latter is derived from extensive research and on-the-ground experience documented in a number of academic studies and projects.¹⁸⁴

The outcome of this work is as follows:

¹⁸¹ Source: Ibid, p. 178

¹⁸² Studies referred to in Annex 7.

¹⁸³ See Annex 5 of the study on policy options for MSP in the EU, referred to in Annex 7.

¹⁸⁴ Douvère/Ehlers, others – see PRC References

- It is clear that an MSP process under certain conditions¹⁸⁵ will lead to reduced costs for businesses and administrations alike.
- These cost reductions can be substantial, resulting in overall figures of between several hundred million to several billion EUR¹⁸⁶.
- The benefits are created by reduced co-ordination costs, reduced transaction costs, increased transparency, and greater predictability.
- The benefits in the mid-to long term, both in terms of overall economic benefits, and in the context of administrative efficiency gains, are expected outweigh any short terms costs incurred upon introduction of the system.
- The additional costs for introducing compliance with an EU instrument do not need to be significant and should be linked mainly to strengthened cross-border co-operation processes.
- The main costs linked to the introduction of MSP including in a context of an EU instrument would be borne by those Member States where no such system is yet in place, but, again, the mid- to long-term benefits should exceed the short term cost.
- The main benefits (both qualitative and quantitative) expected by stakeholders in some Member States are:
 - Reducing duplication and complexity in legislation
 - Information and data sharing
 - Reducing the number of licenses required
 - Earlier identification of potential conflicts
 - Improved objective setting
 - Reducing the costs of SEA and other assessment processes due to less duplication¹⁸⁷

¹⁸⁵ Such as the 10 key principles introduced in the MSP Roadmap Communication of 2008

¹⁸⁶ Study on the economic effects of Maritime Spatial Planning, EC (2011); http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/economic_effects_maritime_spatial_planning_en.pdf

¹⁸⁷ PRC, MSP Impact Study, pp. 85, 86

Annex 7: Information sources

Studies commissioned by the Commission and used for the impact assessment

DG Environment commissioned studies, ICZM: Available on:

http://ec.europa.eu/environment/iczm/ia_studies.htm

- A study to examine the Member States reports (July 2011)
- Study on Options for Coastal Information Systems; August 2011. Including a stakeholder workshop report.
- Support study for the impact assessment towards the follow-up of the EU ICZM Recommendation (September 2011).
- Coastal assessment JRC Scenario-driven land-use modelling: Application to coasts JRC (February 2011)

DG MARE commissioned studies are available on

http://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning/index_en.htm. List of studies include:

- The impacts of future Maritime Spatial Planning options in the European Union (in support of this impact assessment).
- Economic effects of Maritime Spatial Planning.
- Exploring the potential of Maritime Spatial Planning in the Mediterranean Sea.
- Legal aspects of maritime spatial planning.

List of EU Projects linked to ICZM and MSP

- ANCORIM. Atlantic Network for Coastal Risks Management. Available at: <<http://ancorim.aquitaine.fr/>>
- BALTCICA. Climate Change: Impacts, Costs and Adaptation in the Baltic Sea Region. Available at: <<http://www.baltcica.org/>>
- BALTSEAPLAN. Introducing Maritime Spatial Planning in the Baltic Sea. Available at: <<http://www.baltseaplan.eu/>>
- BAR. Beaches at Risk. Available at: <<http://www.sussex.ac.uk/geography/researchprojects/BAR/>>
- BEACHMED-3. Strategic resources for the adaptations of Mediterranean littorals to climate change. Available at: <<http://www.beachmed.it/Beachmed3/tabid/130/Default.aspx>>
- BLAST. Bringing Land and Sea Together. Available at: <<http://www.blast-project.eu/>>
- COASTANCE. Regional Common Action Strategy against Coastal Erosion in the Mediterranean basin. Available at: <<http://www.coastance.eu/>>
- COEXIST. Interaction in coastal waters: A roadmap to sustainable integration of aquaculture and fisheries. Available at: <<http://www.coexistproject.eu/>>
- CONSCIENCE. Concepts and Science for Coastal Erosion Management. Available at: <<http://www.conscience-eu.net>>
- COREPOINT. Creating a Sustainable Framework for ICZM. Available at: <<http://corepoint.ucc.ie/index.php>>
- C-SCOPE. Combining Sea and Coastal Planning in Europe. Available at: <<http://www.cscope.eu/en/>>
- DEDUCE. Développement durable des Côtes Européennes. Available at: <<http://www.deduce.eu/>>

- FRES-MOS. Franco-Spanish Motorways of the Sea project. Available at:
- IMCORE. Innovative Management for Europe's Changing Coastal Resource. Available at: <<http://www.imcore.eu/>>
- LITUSGO. • Training Mediterranean Local Authorities and Civil Organisations on Integrated Coastal Zone Management and Reaction to the Impacts of Climate Changes. Available at: <<http://www.litusgo.eu/>>
- MAREMED <<http://www.maremed.eu>>
- MASPNOSE <<https://www.surfgroepen.nl/sites/CMP/maspnose/default.aspx>>
- MICORE. Morphological impacts and coastal risks induced by extreme storm events. Available at: <<https://www.micore.eu/>>
- MESMA. Monitoring and Evaluation of Spatially Managed Areas. Available at: <<http://www.mesma.org>>
- PLAN BOTHNIA [online] Available at: <<http://planbothnia.org/>> [Accessed July 2011];
- PEGASO. People for Ecosystem-based Governance in Assessing Sustainable development of Ocean and coast. Available at: <<http://www.pegasoproject.eu/>>
- RADOST. Regional Adaptation Strategy for the German Baltic Sea Coast. Available at: <<http://klimzug-radost.de/en>>
- SPICOSA (2008-2011). Science and Policy Integration for Coastal System Assessment. Available at: <<http://www.spicosa.eu/index.htm>>
- SUSCOD (2009 - 2013). Sustainable Coastal Development Available at: <<http://www.noord-holland.nl/web/Projecten/Suscod.htm>>
- SUSTAIN. Assessing Sustainability and Strengthening Operational Policy. Available at: <<http://cmrc.ie/projects/sustain-assessing-sustainability-and-strengthening-operational-policy.html>>
- THESEUS. Innovative technologies for safer European coasts in a changing climate. Available at: <<http://www.theseusproject.eu/>>
- Wind Barriers. Available at: <http://www.windbarriers.eu/>
- WINDSPEED. Available at: <http://www.windspeed.eu>

Annex 8: Relevant EU legislation with implications for ICZM and MSP

This annex gives an overview of the existing EU legislation and policies which are of particular importance for Coastal Management (ICZM) and Maritime Spatial Planning (MSP). It outlines the policy context and examines how far a new joint legislative proposal could help to foster an EU wide more coherent governance framework for the integrated management of European coastal zones, ensuring the most effective achievement of the environmental objectives set out in these pieces of legislation.

NON-EXHAUSTIVE LIST OF EU LEGISLATION AND POLICIES¹⁸⁸¹⁸⁹

Several pieces of EU legislation and policies are already in place affecting the governance and management of coastal zones; most notably, in the area of nature conservation, environmental protection, maritime environment, development planning and information management. However, the majority of existing legislation, being either of sectoral or horizontal nature, do not specifically address or aim at the integrated management of the coastal zone. ICZM and MSP as a governance tools do not aim at the duplication of existing legislation but rather intends to establish an integrative policy platform serving a superordinate function to assure the long-term sustainable development of the coast and the sea. ICZM is designed to create synergies between these pieces of legislation and complements the, with other aspects which are not regulated by the EU (e.g. erosion).

EU legislation

The **Water Framework Directive (WFD)** sets out a legal framework for the protection of inland surface waters, transitional waters, groundwater and coastal waters (up to 1 nautical mile). It aims at preventing and reducing pollution, promoting sustainable water usage, environmental protection, improving aquatic ecosystems and mitigating the effects of floods and droughts. Its ultimate objective is to achieve "good ecological and chemical status for all Community waters by 2015"¹⁹⁰.

In the context of ICZM the Water Framework Directive provides opportunities for coupling coastal zone management with catchment basin management. The linking between freshwater and maritime systems has a good prospect of resulting in lower pollutant loads and improved conditions in estuaries.

The aim of the **Flood Risk Directive**¹⁹¹ is to assess and manage flood risk and thereby reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive requires Member States to first carry out a preliminary assessment by 2011 to identify the river basins and associated coastal areas at risk of flooding. For such zones they would then need to draw up flood and hazard risk maps by 2013 and establish flood risk management plans focused on prevention, protection and preparedness by 2015. These plans shall address all aspect of flood risk management, with a focus on prevention, protection and preparedness, including early warning systems and flood forecasting. The plans shall also take into account spatial planning, land use, nature conservation, navigation and port infrastructure. Climate change shall also be taken into account in different stages of the implementation process, which can include addressing increased vulnerability of coastal areas due to floods when sea levels have risen, and the adaptation/development of coastal flood defence infrastructure and land use policies accordingly.

¹⁸⁸ Marine Law and Ocean Policy Centre (2007). *EU legislation and policies with implications for coastal management*.

¹⁸⁹ Ruprecht Consult (2006). *Evaluation of Integrated Coastal Zone Management (ICZM) in Europe – Final Report*.

¹⁹⁰ Directive 2000/60/EC

¹⁹¹ Directive 2007/60 EC

ICZM as an integrative coastal governance tool can help to set up co-ordinated and common action programmes on flood prevention, protection and mitigation.

The **Nitrates Directive**¹⁹² aims to protect waters, including coastal, maritime and transitional waters, against nitrate pollution from agriculture. The biggest share of nutrient pollution in coastal areas comes from agriculture, mostly drained from inland catchments through rivers/groundwater. The Directive requires MS to identify polluted/at risk waters, to designate the land that drains into these waters and to establish action programmes that contain measures to reduce nitrate pressures.

The **Birds and Habitats Directives**¹⁹³

The Birds Directive establishes a comprehensive scheme of protection for all wild birds' species naturally occurring in Europe. It obliges Member States to set up a coherent network of Special Protection Areas (SPA) comprising the most suitable territories for the species.

The Habitats Directive requires Member States to design Special Areas of Conservation (SAC). The Birds and Habitats Directives in conjunction ultimately aim at the establishment of a coherent Natura 2000 network of protected areas.

Together they constitute a major instrument for the protection and conservation of coastal and maritime ecosystems. ICZM will support the sound management of conservation areas under these Directives by providing a participatory and integrative platform pro-actively bringing together stakeholders along the respective coastal areas. The MSP will promote the strategic planning in the marine areas, hence allowing for the integration of the Natura 2000 network needs and requirements, at an early stage, with the other uses of marine areas.

The **Marine Strategy Framework Directive (MSFD)**¹⁹⁴ intends to protect the marine environment across Europe and aims to achieve good environmental status of EU's marine waters by 2020. Under the directive Member States have to identify the measures which need to be taken in order to secure the protection of their marine waters including spatial protection measures, contributing to coherent and representative networks of marine protected areas.

MSP as a tool will implement in more detail measures related to spatial and distributional controls (Annex VI(3) of the Directive).

In the context of ICZM, the directive gives guidance and sets standards for the preservation of the coastal zone at national and regional level. MSFD like ICZM focuses on the sustainable development of the marine environment based on the ecosystem-based approach. It intends to ensure that biological life is self-sustaining while at the same time exploiting the seas to feed populations and economic activity.

The **Inspire Directive**¹⁹⁵ aims to facilitate access to GIS based-distributed information systems. It ensures that the spatial data infrastructure is compatible among Members States and usable in a Community and transboundary context.

By setting up a consistent and well-established spatial data infrastructure, the Inspire Directive constitutes an important support for maritime and coastal zone spatial planning. ICZM, which addresses areas of activities like coastal land planning, habitat management and pollution control, is dependent on common information systems providing detailed and consistent spatial data for indicator sets. The INSPIRE data system contributes to such information and strengthens the knowledge base needed for ICZM.

¹⁹² Directive 91/676/EEC

¹⁹³ Directive (79/409/EEC) and Directive (92/43/EEC)

¹⁹⁴ Directive (2008/56/EC)

¹⁹⁵ Directive (2007/2/EC)

The **Environmental Impact Assessment (EIA) Directive**¹⁹⁶ and the **Strategic Environmental Assessment (SEA) Directive**¹⁹⁷ are both legal instruments of high relevance for coastal zone planning. The EIA Directive requires an assessment of the environmental consequences of certain public or private projects which are likely to have significant effects on the environment. For those projects which fall under Annex I of the Directive a mandatory EIA procedure has to be carried out, which comprises also the information and consultation of the public. For any other projects which fall under Annex II, national authorities have to decide whether an EIA is needed. The SEA Directive aims to provide for a high level of environmental protection. It prescribes the integration of environmental considerations into the preparation and adoption phase of certain plans and programs. The SEA requires an assessment of reasonable alternatives and obliges Member States to monitor the significant environmental effects of the implementation of plans/programs in order to identify unforeseen adverse effects and undertake appropriate remedial action.

The EIA and the SEA are important procedures, which intent to ensure that projects like for instance the construction of harbors or renewable energy installations do not undermine sustainable development in the coastal zone. It is assumed that ICZM may place projects considered under the EIA Directive into a wider coastal planning and management context. Particular the principles of a holistic approach, long term perspective, local specificity and stakeholder participation will be strengthened. Furthermore, it is pointed out that the SEA Directive is crucial for addressing conflicts in the long term development of the coastal zone and for creating synergies with ICZM. The Directive provides good grounds for integrated spatial planning and risk management with a view to increase the sustainability of coastal zones. In this way SEA will contribute to a better planning process as it also envisaged by ICZM (adaptive management, stakeholder participation, involvement of relevant administrative bodies).

The **Directive on the Promotion of Renewable Energy**¹⁹⁸ establishes a common framework for the production and promotion of energy from renewable sources. It sets mandatory national targets for the overall share of energy from renewable sources in gross final consumption of energy and for the share of energy from renewable sources in transport. At the coastal zone several renewable energy resources are available like wind and wave energy which will further be exploited putting pressure on the development of the coastal zone. The installation of renewable energy technologies like for instance offshore wind parks have to be carefully planned taking into consideration also their ecological implications. ICZM will help to place such renewable energy projects into a wider planning and management context.

EU policy frameworks

Resource Efficiency

The Roadmap of EU 2020 flagship initiative for a Resource-efficient Europe¹⁹⁹ recognises the need for EU action on management and coastal planning in coastal and marine areas, in order to safeguard natural coastal and marine capital" sustainable use of resources. Within this context, the issue of **land use** and land as a resource has come to the fore as a crucial element in tackling unsustainable resource trends. The roadmap contains a section on land use, including a commitment to publish guidelines on best practice to limit, mitigate or compensate soil sealing (2012) and a Communication on land use (2014).

¹⁹⁶ Directive (85/337/EEC)

¹⁹⁷ Directive (2001/42/EC)

¹⁹⁸ 2009/28/EC

¹⁹⁹ COM(2011)571

The **EU Cohesion Policy**²⁰⁰ is built on the assumption that a redistribution of wealth should happen between richer and poorer regions in Europe so that a more balanced economic integration and overall development can be achieved. The Community Strategic Guidelines for Cohesion (SGC 2007-2013) aims to strengthen the synergies between environmental protection and growth. Emphasis is placed on the investment in infrastructure and the compliance with environmental legislation in the fields of water, waste, air and nature.

The Integrated Maritime Policy aims to enhance the optimal and sustainable development of all sea-related activities. It intends to foster the integration of maritime governance and envisages putting permanent structures for cross-sectoral collaboration and stakeholder consultation into place. Furthermore, it supports the development of cross-cutting policy tools. The EU Maritime policy has many synergies with ICZM. Both strategies put high emphasis on a holistic and cross-sectoral maritime governance approach and aim to strengthen knowledge-based methods.

The **Common Fisheries Policy (CFP)** aims at the responsible and sustainable management of EU fisheries. It contains measures on conservation, structures, markets and relations with States outside the European Union. The CFP aims at socio-economic stability and social cohesion within different fisheries regions and intends to foster the long term sustainable development of fisheries dependent communities. MSP and ICZM processes are relevant for the CFP since it permits these policy areas to interact in the strategic planning of the use of the sea space with other sectoral policies.

The **Common Agricultural Policy (CAP)** sets the rules for EU farming and financial support. It becomes relevant for the coastal zones characterised by intensive/extensive agriculture but it has also an impact on coastal pressures coming from inland. CAP measures that relate to environmental protection, including water, refer to both pillar 1 and 2. Under pillar 1 cross compliance requires farmers to respect good agricultural and environmental conditions and to comply with statutory management requirements linked to EU legislation relating to the protection of environment; public, animal and plant health; animal welfare. Under pillar 2, particularly agri-environmental measures in rural development plans become relevant. Under the **CAP and leader programmes** there are support measures for green infrastructure and landscape features that can be relevant for coastal protection, however targeted to agricultural land and not to common land.

The **Forest Policy** includes relevant policy papers such as the green paper on forests²⁰¹, the EU forest strategy²⁰² and the EU forest action programme²⁰³. Forest functions include environmental protection and ecosystem services particularly relevant nearby coasts: soil protection, regulation of water supplies, water quantity buffering, flood protection, biodiversity conservation, and regulation of local and regional weather patterns. Forest policy is mainly a MS competence, some support measures exist under rural development programmes of the CAP.

The Commission adopted a **Soil Thematic Strategy** (COM (2006) 231) and a proposal for a Soil Framework Directive (COM (2006) 232) on 22 September 2006 with the objective to protect soils across the EU. The legislative proposal contains a provision according to which Member States should limit soil sealing and, where not possible, mitigate its consequences on soil functions. In addition, the proposal aims at curbing soil degradation processes such as erosion.

Particularly for coastal zones soil sealing is relevant for densely populated areas as well as

²⁰⁰ COM(2008)876

²⁰¹ SEC(2010)163 final

²⁰² Council Resolution (1999/C 56/01)

²⁰³ SEC(2006) 748

erosion of coastlines by the sea. The latter is not the focus of the draft Soil Framework Directive and could thus constitute a potential policy gap.

EU White Paper on Adaptation to Climate Change²⁰⁴ sets out a framework to reduce the EU's vulnerability to climate change, focusing on integrated adaption into EU key policy areas. It requires a coherent and integrated approach to maritime planning and management.

The **European Spatial Development Perspective (ESDP)/EU Territorial Agenda**²⁰⁵ provides policy objectives and general principles for spatial development to ensure the sustainable and balanced development of the European territory, whilst respecting social and economic, cultural and environmental diversity. It has been designed to provide a framework for spatial planning that has a long-term strategic perspective. The Territorial Agenda of the EU is a common policy paper aiming at mobilising the potentials of European regions and cities and at utilizing its territorial diversity for sustainable economic growth and jobs through integrated spatial development.

With the **Trans-European Networks (TEN)** the Community aims to contribute to the establishment of the trans-European systems related to the transport, telecommunications and energy supply sectors. The trans-European transport network (TEN-T) envisages the optimisation of traffic infrastructures like for instance waterways and ports. The European Commission has on 19 October adopted a proposal for a Regulation on TEN-T with the objective of updating and improving the implementation of the Trans European network for transport.²⁰⁶

The 6th Environmental Action Programme²⁰⁷ identifies seven thematic strategies. These seven key environmental issues require a holistic approach because of their complexity, the diversity of actors concerned and the need to find multiple and innovative solutions. One of the strategies specifically relates to the protection and conservation of the marine environment.

²⁰⁴ COM(2009)147 Final

²⁰⁵ See <http://www.eu-territorial-agenda.eu/Pages/Default.aspx>

²⁰⁶ See further http://ec.europa.eu/transport/infrastructure/connecting/proposal-ten-t_en.htm.

²⁰⁷ COM(2002) 539 Final

Annex 9: Public consultation report



EUROPEAN COMMISSION
DIRECTORATE-GENERAL
ENVIRONMENT

ENV.D.2 - Marine Environment & Water Industry

Brussels, 10.06.2011
ENV.D2 (2011)

PUBLIC CONSULTATION "POSSIBLE WAY FORWARD FOR MARITIME SPATIAL PLANNING AND INTEGRATED COASTAL ZONE MANAGEMENT IN THE EU"

ICZM COMPONENT - PROVISIONAL RESULTS OF THE WEB-BASED CONSULTATION 23/3 – 20/5 2011

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1. INTRODUCTION

Building upon a European Parliament and Council Recommendation on the implementation of Integrated Coastal Zone Management (ICZM) of 30 May 2002, (2002/413/EC) an Impact Assessment (IA) to evaluate further EU-policy options on ICZM was launched in 2010. Given the need for coherent spatial planning of coastal and maritime areas, the IA was done jointly with the assessment of possible future actions on Maritime Spatial Planning (MSP). To elicit relevant opinions from stakeholders and practitioners on the main challenges and opportunities for ICZM and MSP, an internet-based public consultation was launched.

The on-line consultation took place from 23 March to 20 May 2011. During the eight weeks, a total of 225 respondents replied to the questionnaire. In addition, by the closing date of the on-line consultation on 20 May, also 5 general statements or reactions were received, not using the questionnaire²⁰⁸. These statements all emanated from respondents that also provided a response using the questionnaire.

The questionnaire was composed of 5 parts

1. Identification of the respondent (compulsory questions);
2. Maritime Spatial Planning (MSP);
3. Integrated Coastal Zone Management (ICZM);
4. Linking MSP and ICZM;
5. EU publications and sharing information about MSP and ICZM.

This document provides the provisional evaluation of the ICZM-part of the on-line consultation, and covers parts 1 and 3 of the questionnaire.

The ICZM questions were mostly multiple choice ones. In some questions the participants were asked to rank given statements on a scale between 1 and 5, where 1 represented always the most negative (e.g. low importance) and 5 the most positive

²⁰⁸ From CRPM, EUCC, EUDA, group of NGOs, Region Västra Götaland.

assessment (e.g. very important). 2 general open questions were included, in addition to the opportunity for respondents to provide suggestions under an item 'other' in closed questions. However the number of contributions received as 'other' was rather limited.

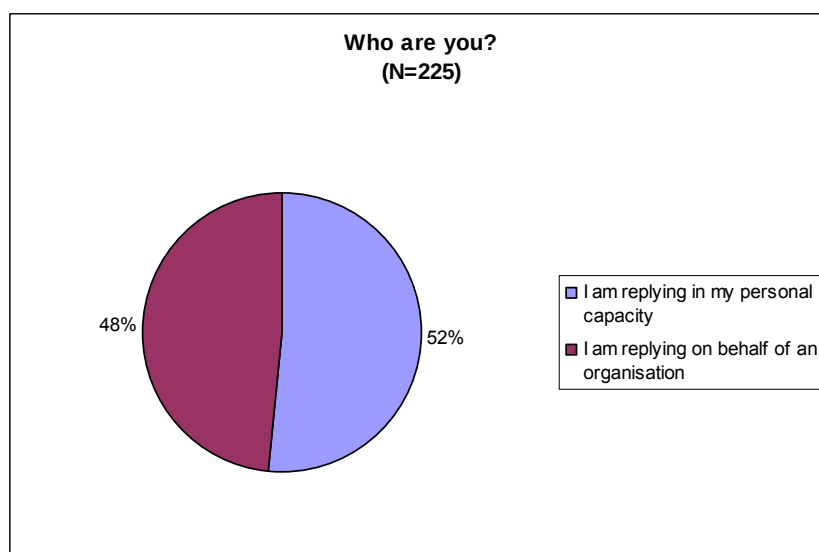
2. IDENTIFICATION OF THE RESPONDENT

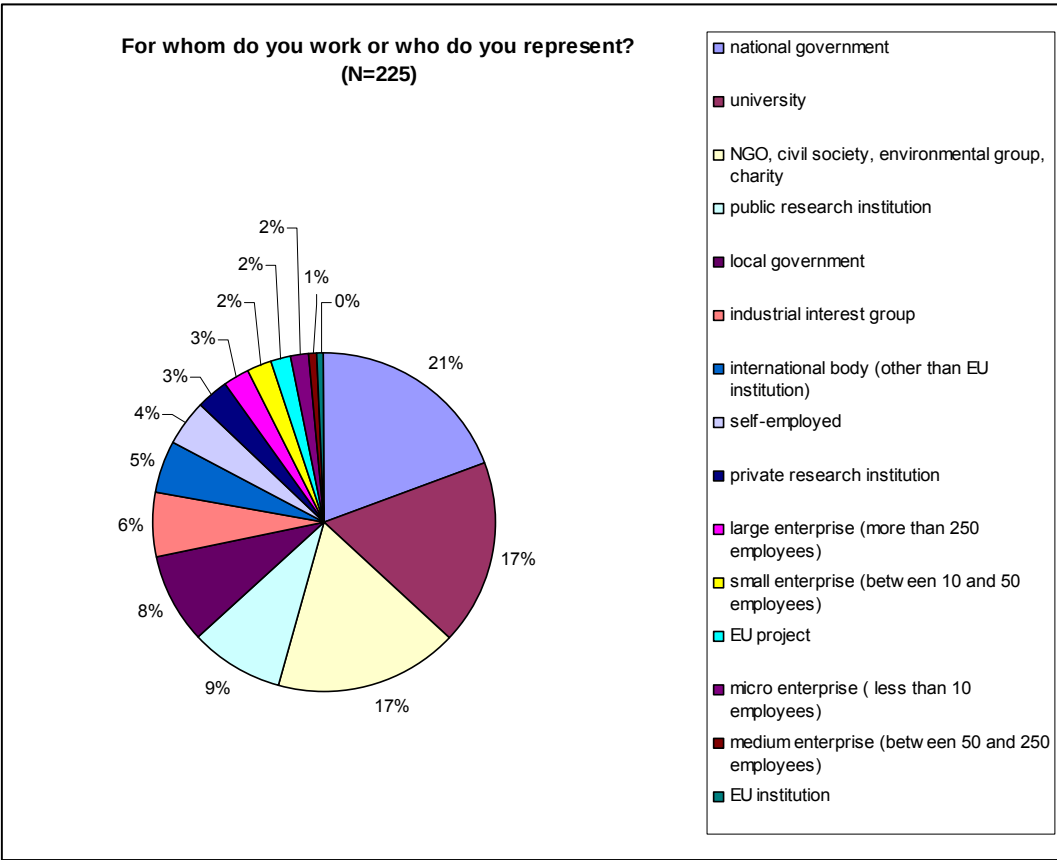
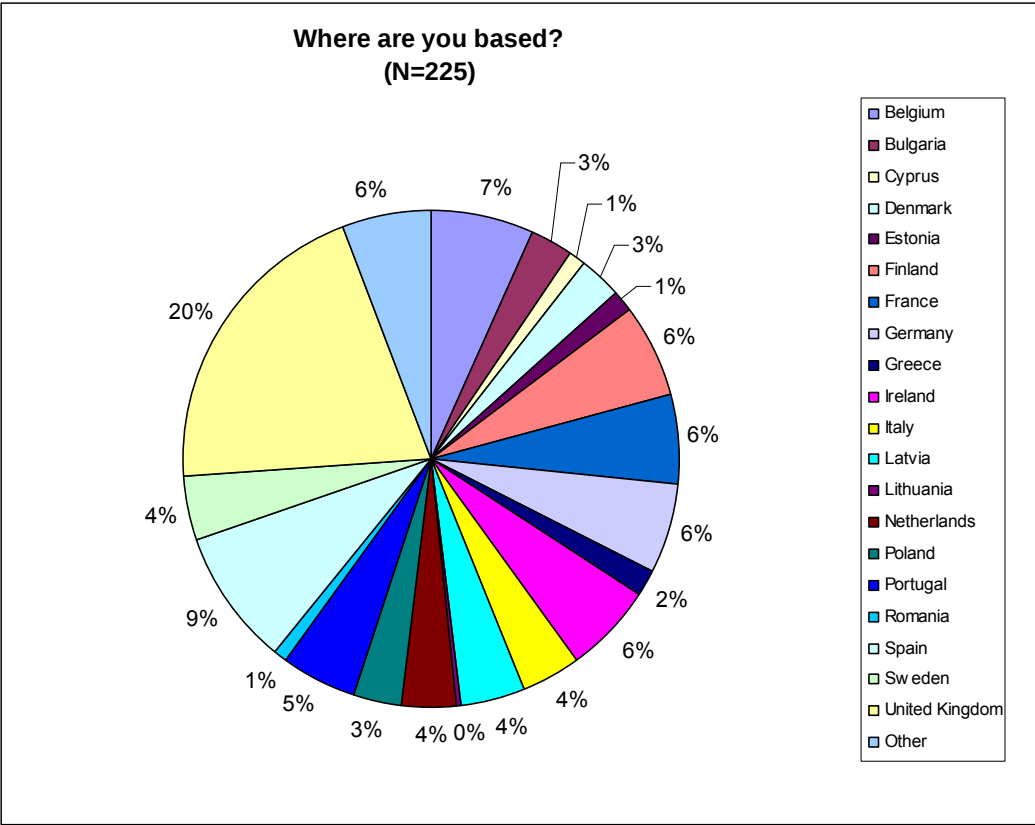
The first section of the questionnaire consisted of compulsory questions; for the first questions only one answer per question could be given.

52 % of the respondents replied in their personal capacity, 48 % replied on behalf of an organisation.

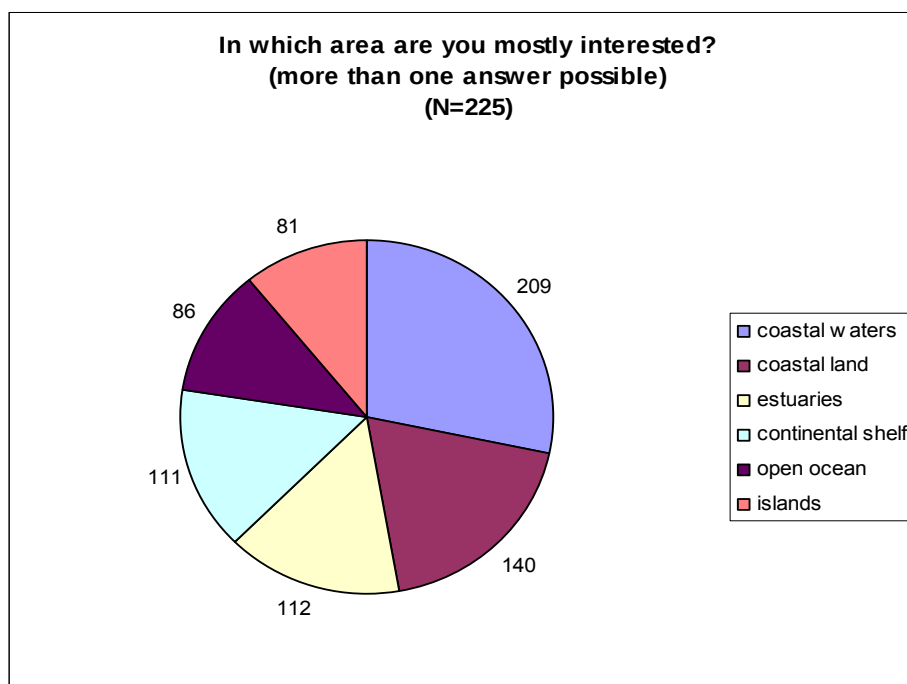
Respondents from twenty countries out of the twenty-two coastal Member States participated in the online consultation. Although 20% of the replies originated from participants from the United Kingdom, the spread was generally very good (UK based respondents include several respondents from international organisations). In total respondents from twenty-eight different countries submitted replies (non-EU based respondents included participants from the United States, New Zealand, Turkey, Georgia, Norway, Brazil and Canada).

31% of the respondents represent or work for research institutions (universities or public or private research institutions). 29% of the respondents represent national or local governments. 17% responses came from NGO, civil society or environmental group or charity, 18% from industrial interest groups, enterprises (all sizes) and self-employed.





With regard to geographical areas the respondents are mostly interested in coastal waters (209 respondents), coastal land (140 respondents) and estuaries (112 respondents). The participants had the opportunity to choose more than one answer.

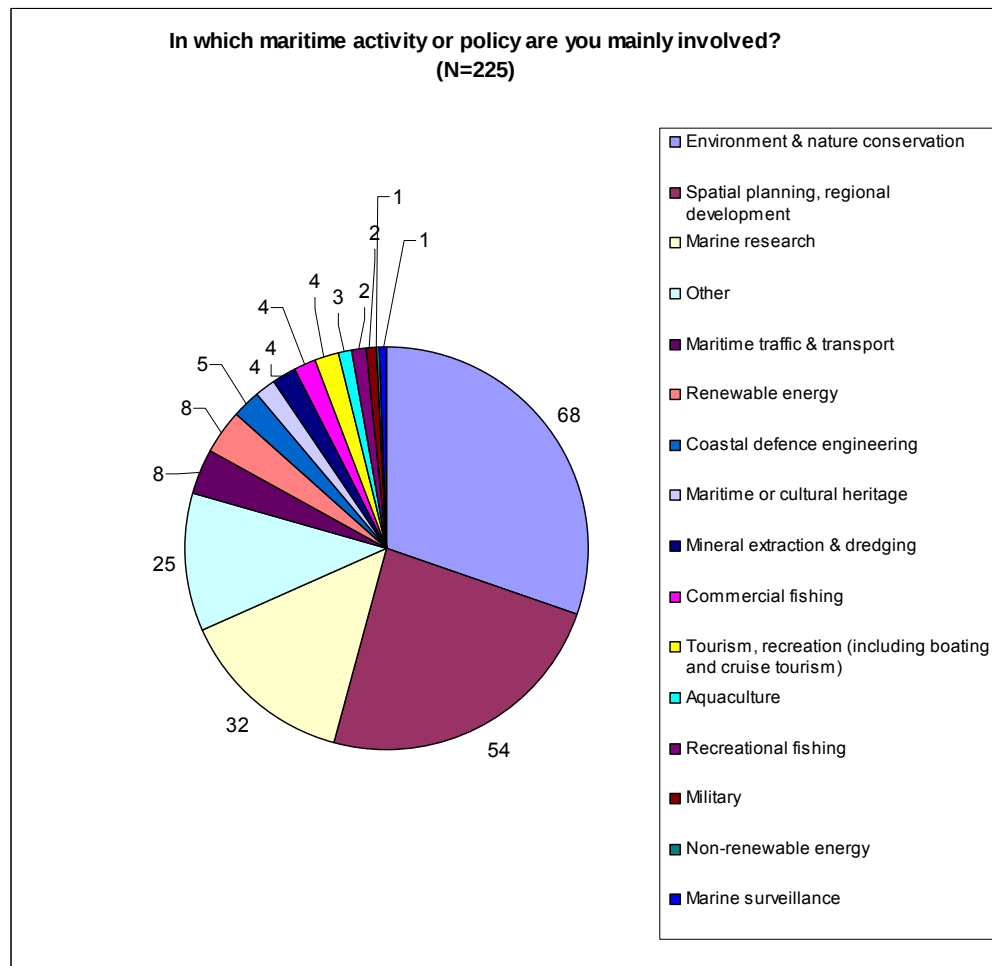


Most of the respondents are mainly involved into the following maritime activities or policies: Environment and nature conservation (68 respondents), spatial planning, regional development (54 respondents) and marine research (32 respondents). 'Other' (25 respondents) include respondents that state to be active in several activities/policies.

Nearly half of the respondents with an interest in environmental activities belong to the group "NGO, civil society, environmental group, charity" (26 respondents). With regard to spatial planning, it is mainly national governments (14 respondents) and universities (13 respondents) interested in this topic.

The results presented in this report provide the results of all respondents, without distinction between these groups. For some questions a slight difference in appreciation was noted in relative ranking of some possible objectives, measures or instruments for ICZM. Where appropriate, the text accompanying the graphs indicates such differences. However, in all cases the overall pattern of the total responses was confirmed for all groups of respondents.

While the total responses show a good spread across coastal Member States, the number of responses from individual countries is too low to affirm response patterns by Member State.

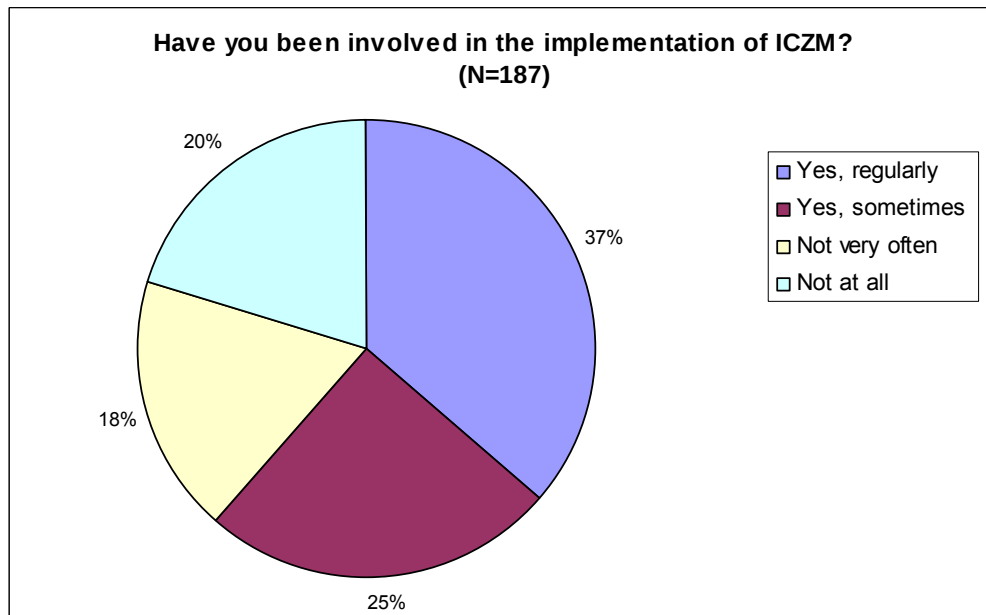
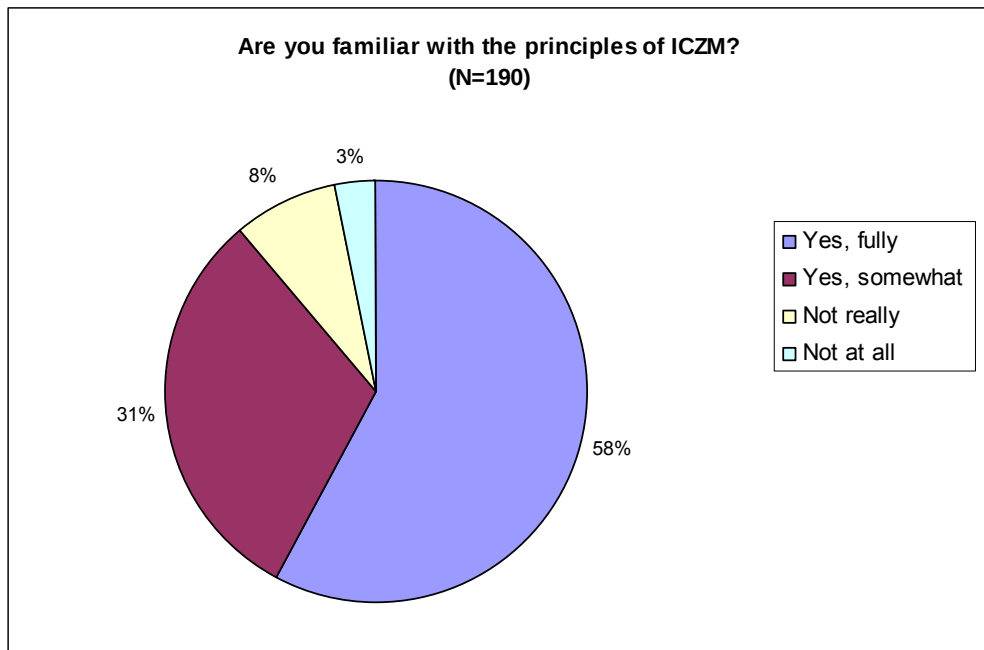


3. COASTAL MANAGEMENT

While the questions in the section "Identification of the respondent" were compulsory, the ICZM-questions were optional ones. Out of 225 respondents, an average of 163 participants replied to the questions on ICZM (72%).

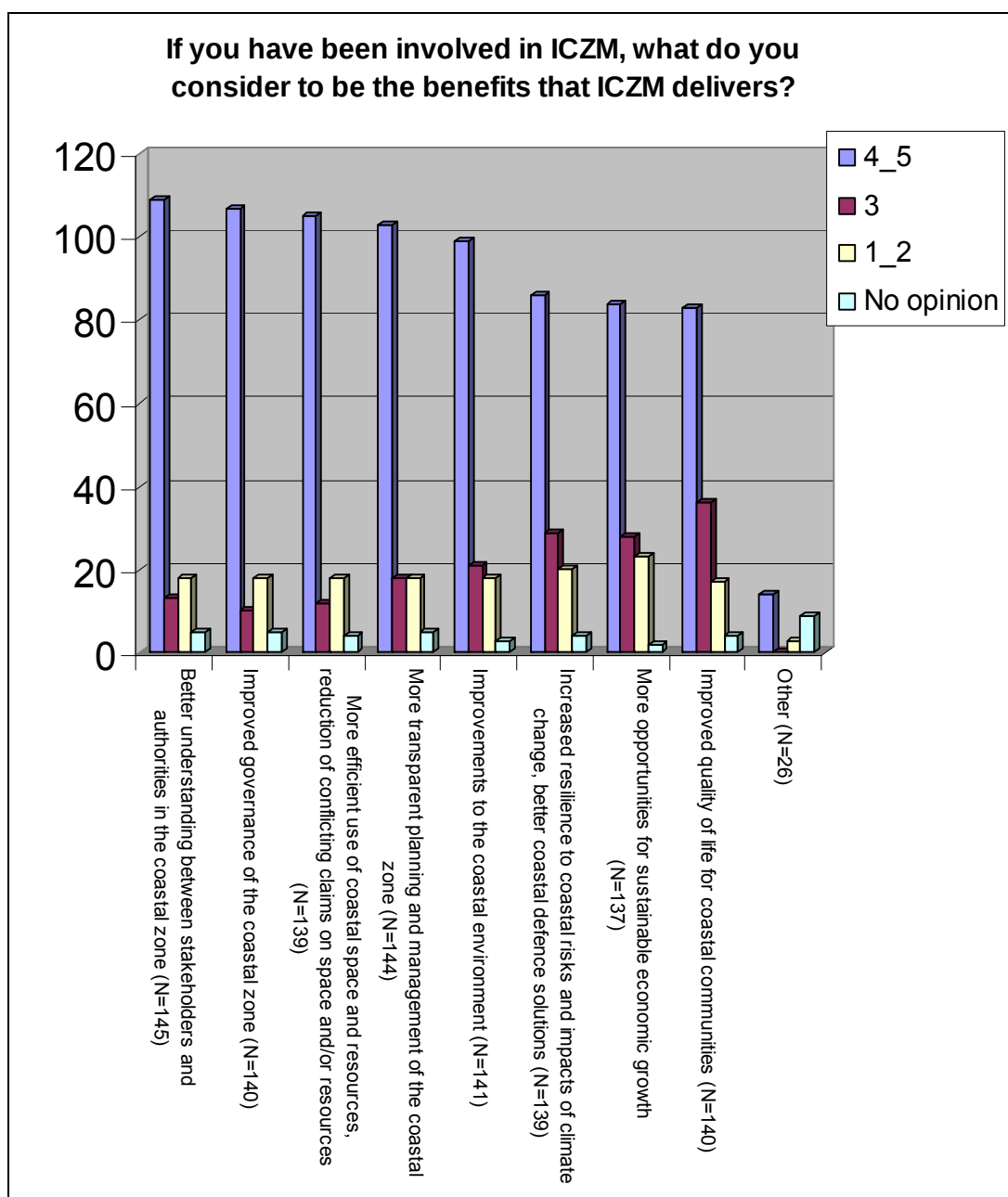
a) Familiarity with the principles of ICZM

Out of 190 respondents 110 (58%) are fully, 59 (31%) are somewhat familiar with the principles of ICZM. Out of 187 respondents 68 (37%) are regularly, 47 (25%) sometimes involved in the implementation of ICZM.



b) The benefits of ICZM

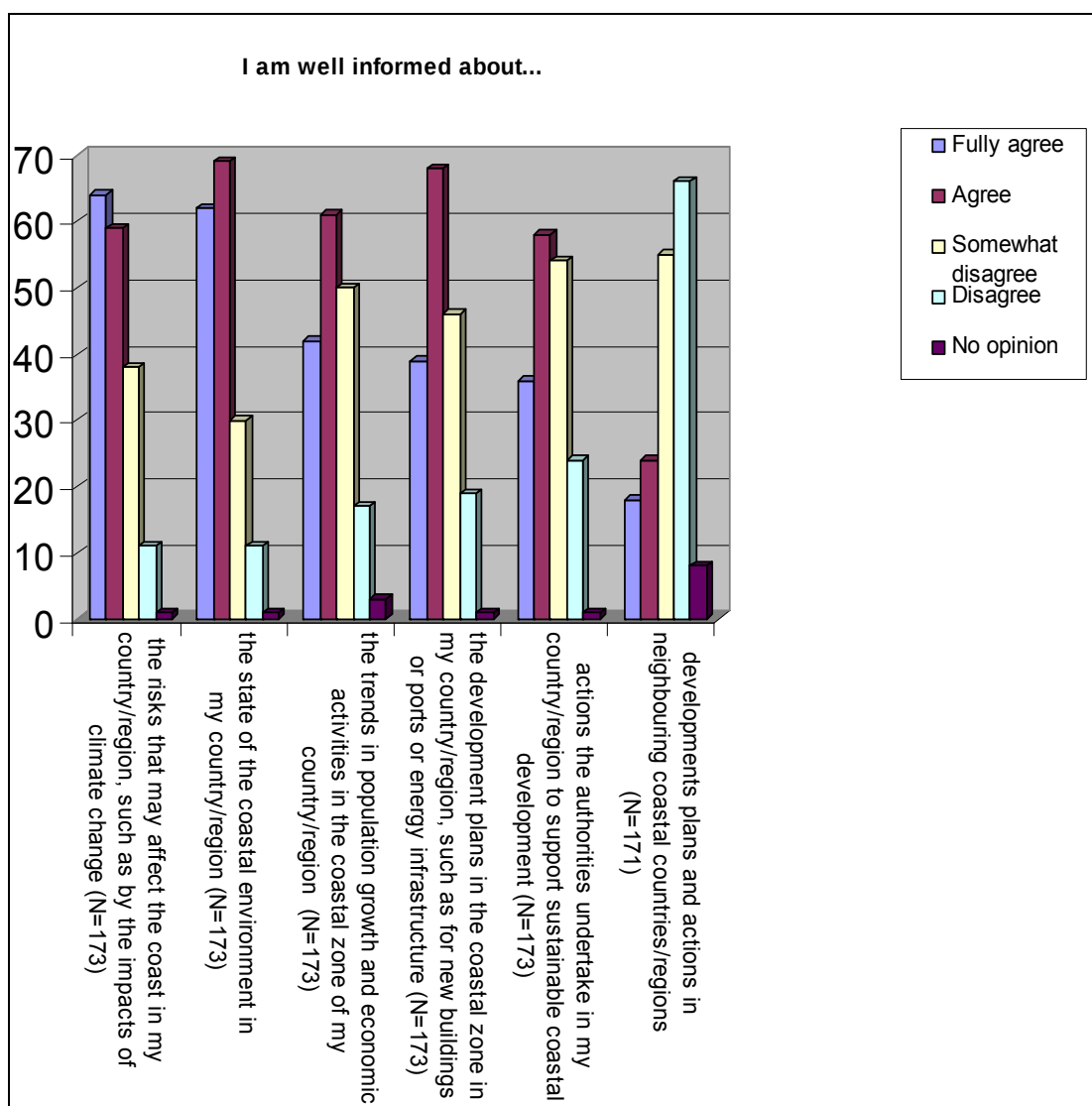
The questionnaire asked what benefits ICZM delivered, with a scale of appreciation 1 insignificant to 5 very significant. Given that the question was geared towards appreciation of benefits based on actual experience in implementation, this question shows a lower number of respondents than the other ICZM questions. The results show that respondents rate benefits overall in a positive way (upper range scores predominate). Respondents considered "Better understanding between stakeholders and authorities in the coastal zone" (109 respondents chose 4 or 5), "improved governance of the coastal zone" (107 respondents chose 4 or 5), "more efficient use of coastal resources" (105 respondents chose 4 or 5) and "more transparent planning and management of the coastal zone" to be the most important benefits deriving from ICZM implementation. These benefits are closely followed by "improvements to the coastal environment".



c) Information

As for transparent planning and management of the coast the availability of sufficient information to authorities, stakeholders and concerned citizens is required, the participants were asked to rank to what extent they feel "well informed" about different topics.

131 participants feel well informed about "the state of the environment" in their country / region (62 fully agree, 69 agree), followed by 123 participants who feel well informed about "the risks that may affect the coast" in their country / region (64 fully agree, 59 agree). 121 participants somewhat disagree or disagree about a good level of information with regard to "development plans and actions undertaken in neighbouring coastal countries / regions" (55 somewhat disagree, 66 disagree).



d) The integrated approach of ICZM

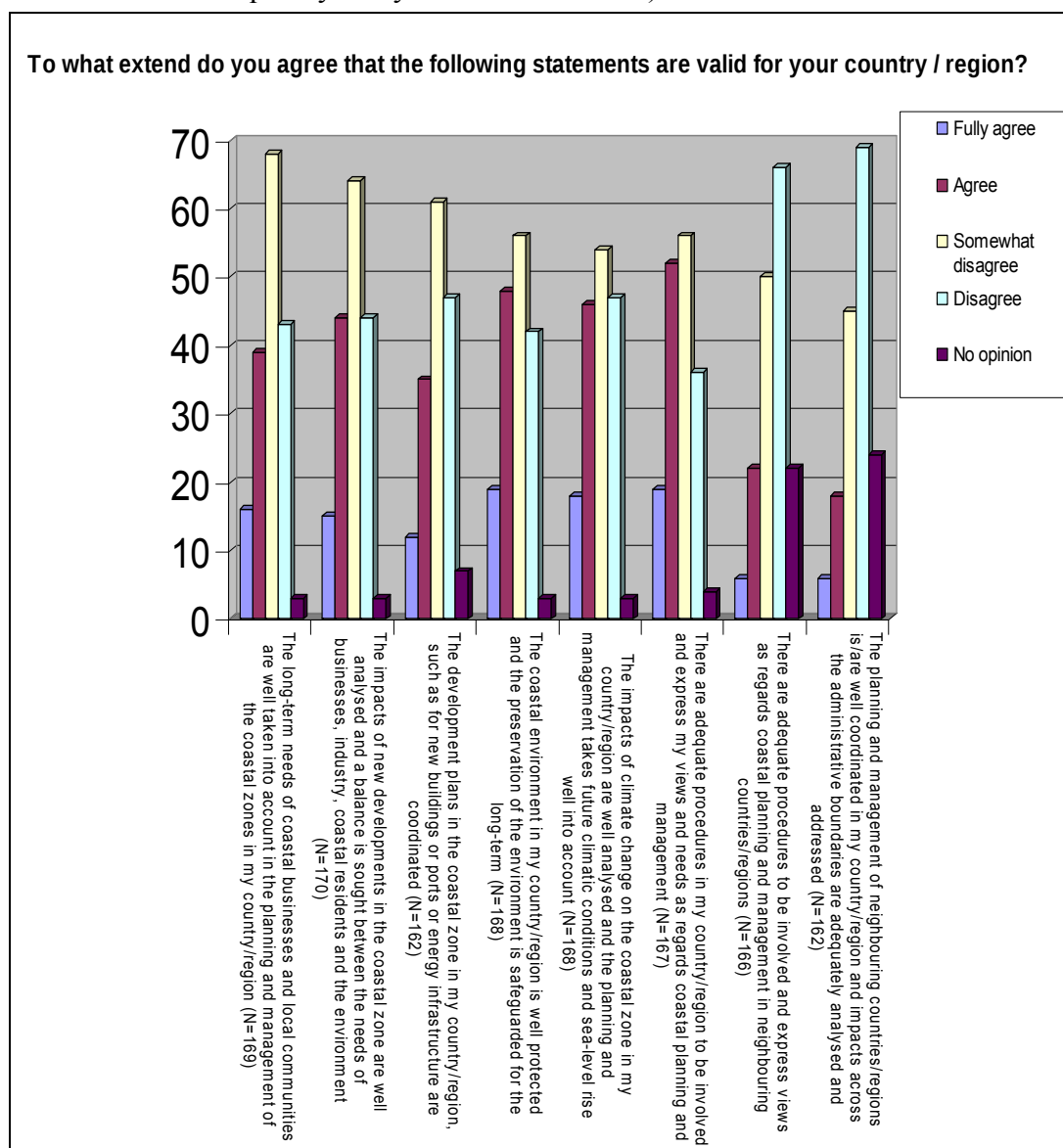
To address the integrated approach of ICZM (e.g. integration of all sectors and uses of the coast, preservation of the coastal environment and cross-border integration) the participants were asked to state to which extent they thought given statements were valid in their country / region. The responses to the statements are an indication to which extent ICZM principles are thought to be implemented and achieved.

The results show that most of the participants disagreed or somewhat disagreed to the given statements. 112 respondents "somewhat disagreed" or "disagreed" on the statement "The long-term needs of coastal businesses and local communities are well taken into account in the planning and management of the coastal zones in my country/region" (68 somewhat disagree, 43 disagree), followed by "The impacts of new developments in the coastal zone are well analysed and a balance is sought between the needs of businesses, industry, coastal residents and the environment" (64 somewhat disagree, 44 agree).

The statement most of the respondents agreed on is "There are adequate procedures in my country/region to be involved and express my views and needs as regards coastal planning and management" (19 fully agree, 52 agree).

Most "disagree" responses are noted for the statements related to cross-border issues (66 disagree to "There are adequate procedures to be involved and express views as

regards coastal planning and management in neighbouring countries/regions"; 69 disagree to "The planning and management of neighbouring countries/regions is/are well co-ordinated in my country/region and impacts across the administrative boundaries are adequately analysed and addressed").



e) The objectives of ICZM and relevance for action on EU level

With a view to exploring options for possible future EU action on ICZM, respondents were asked to evaluate which in their opinion are the most important objectives to be addressed by ICZM (1=low importance, 5=very important).

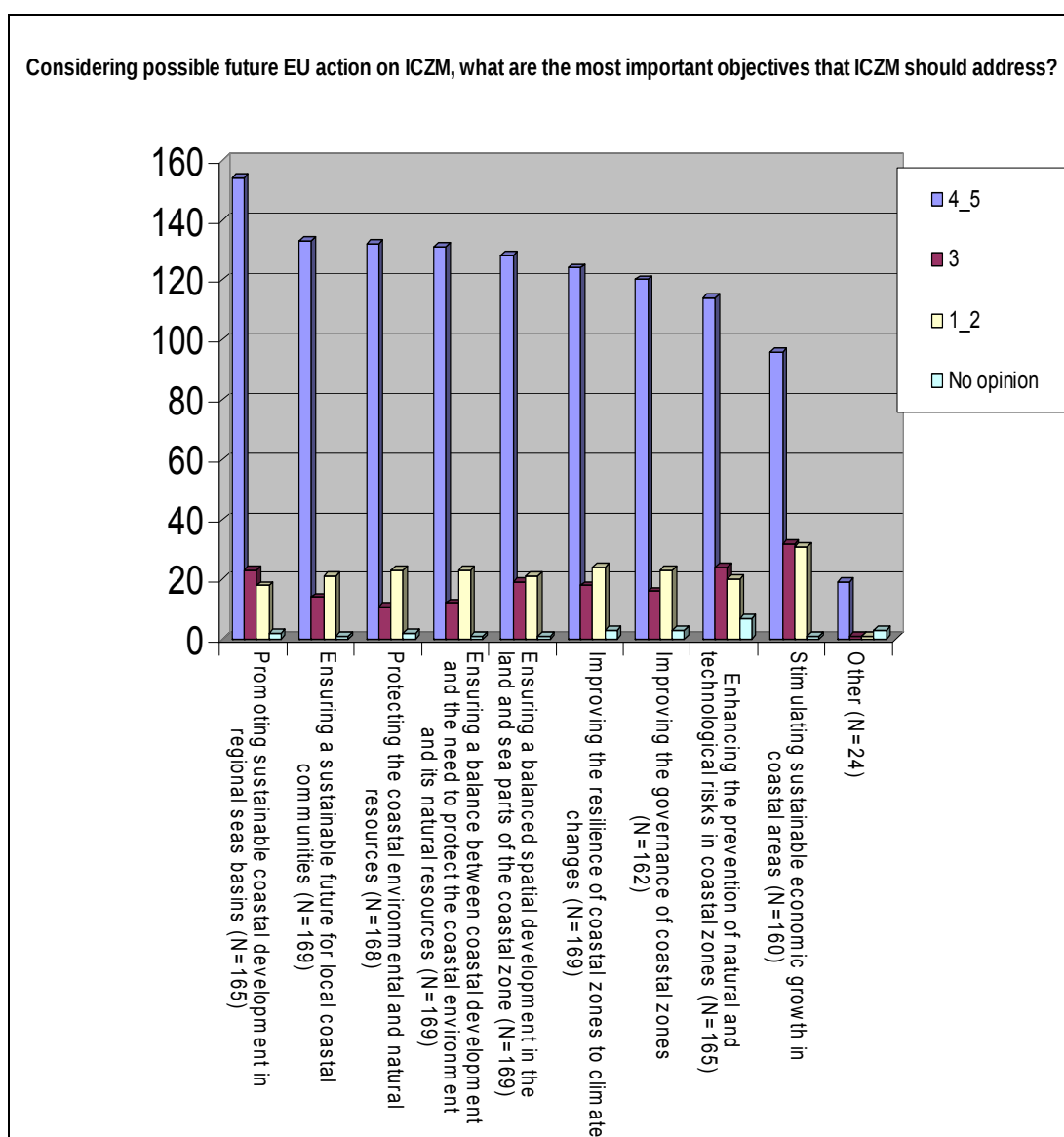
154 respondents assessed the "promotion of sustainable coastal development in regional marine regions" to be most important (scores 4 or 5).

The next in rank attract very equal top range scores ("Ensuring a sustainable future for local coastal communities" (133 chose 4 or 5), "Protecting the coastal environmental and natural resources" (132 chose 4 or 5), "Ensuring a balance between coastal development and the need to protect the coastal environment and its natural resources" (131 chose 4 or 5) and "Ensuring a balanced spatial development in the land and sea parts of the coastal zone (128 chose 4 or 5)).

"Ensuring a balance between coastal development and the need to protect the coastal environment and its natural resources" and "Protecting the coastal environmental and natural resources" attract the highest number of the top score 5.

While the overall appreciation of the 5 most important objectives among the ones proposed in the questionnaire is a general pattern, some variation in relative appreciation is observed among groups of respondents. Respondents mainly involved in Spatial planning/Regional development rate higher the objective "Improving the resilience of coastal zones to climate change", participants mainly involved in Marine research consider the objective "Enhancing the prevention of natural and technological risks in coastal zones" to be important.

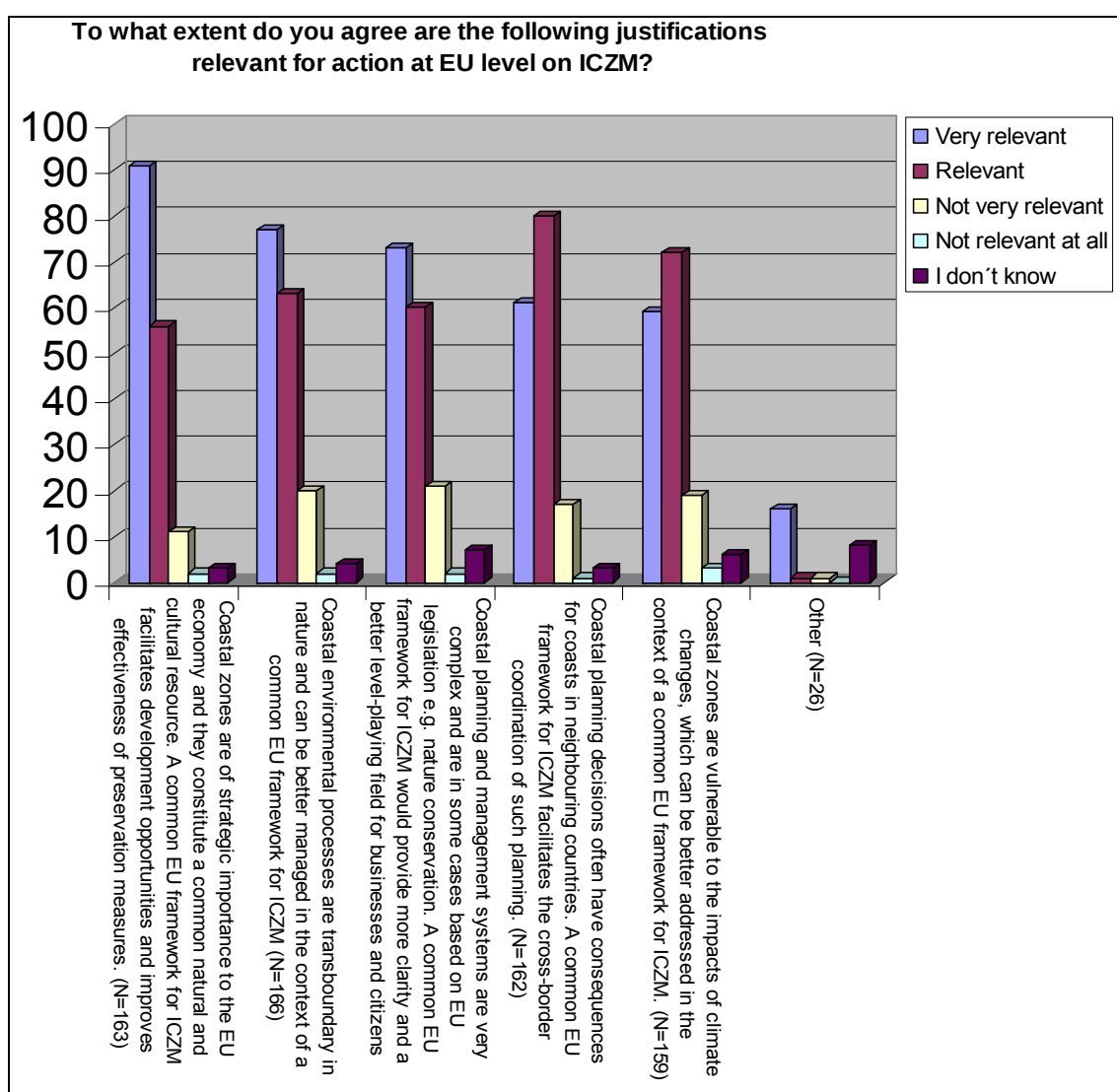
For all groups, the objective "Stimulating economic growth in coastal areas" is rated relatively lower as an important objective.



In an **open question** the participants had the opportunity to express their views on the most challenging issues that the EU should acknowledge when considering further actions to support ICZM implementation. 82 respondents replied to that question. Most of the answers addressed several challenges. One challenge addressed

very often was the lack of a binding but flexible framework for the implementation of ICZM. The absence of co-operation and integration amongst different sectors and hierarchies, the need for land-sea interaction and the difficulty to find a balance between environmental protection and the economic development of coastal zones were also addressed. Respondents to that open question also asked for better participation and integration of stakeholders.

To evaluate the relevance for action on EU level, the participants had the opportunity to assess different justifications. The justifications were rated in general positively (responses "very relevant" and "relevant" predominate). In particular the justification "Coastal zones are of strategic importance to the EU economy and they constitute a common natural and cultural resource; a common EU framework for ICZM facilitates development opportunities and improves effectiveness of preservation measures" was rated most positively with 91 respondents considering it "very relevant".



f) Measures, specific instruments and tools

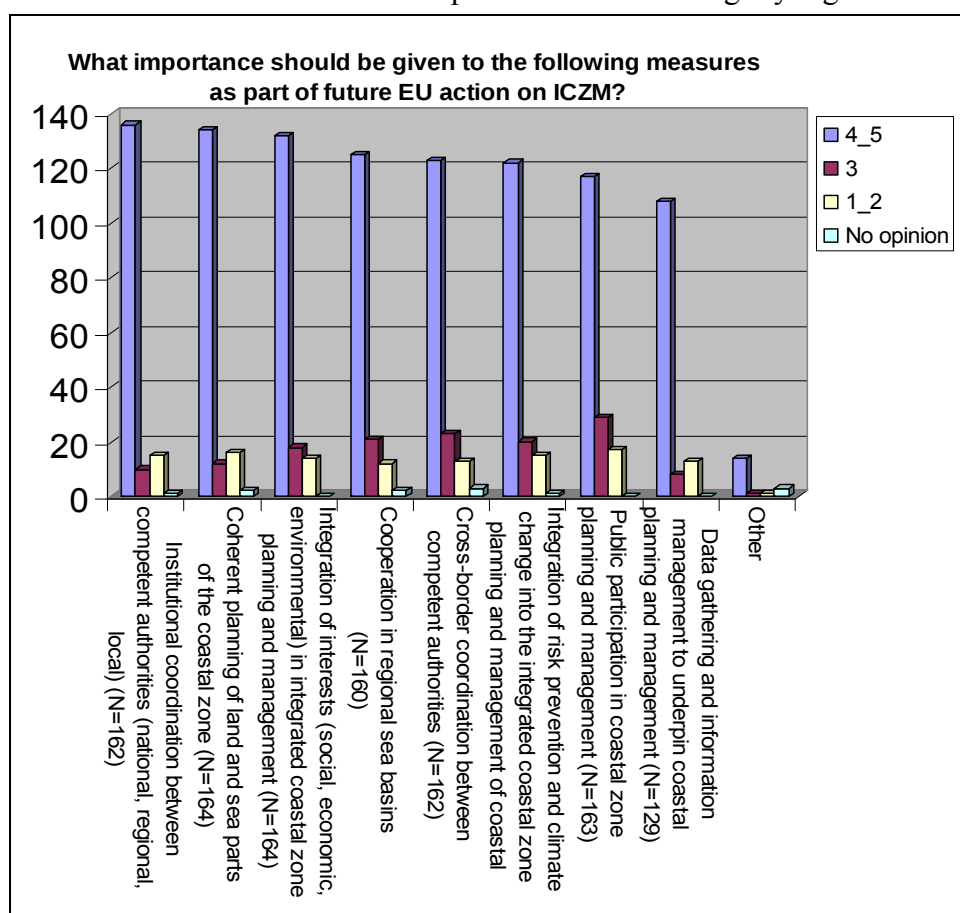
The EU Recommendation on integrated coastal zone management invites Member States to set up national strategies, indicating a broad range of possible measures for such national strategies. With a view to future EU action on ICZM, respondents were

asked to indicate the importance (1=low importance, to 5 very important) to be given to certain measures, as well as some specific instruments as tools.

Participants assessed as measures most importance should be given to "institutional co-ordination between competent authorities" (136 chose 4 or 5), "coherent planning of land and sea parts of the coastal zone" (134 chose 4 or 5) and the "integration of interests (social, economic, environmental) in coastal planning and management" (132 chose 4 or 5).

The next measures in the ranking attract slightly less top range scores ("Co-operation in regional marine regions", "Cross-border co-ordination", "Integration of risk prevention" and "Public participation"). "Data gathering" has been evaluated as least important.

Respondents mainly involved in environment and nature conservation rank "Cross-border co-ordination between competent authorities" slightly higher.



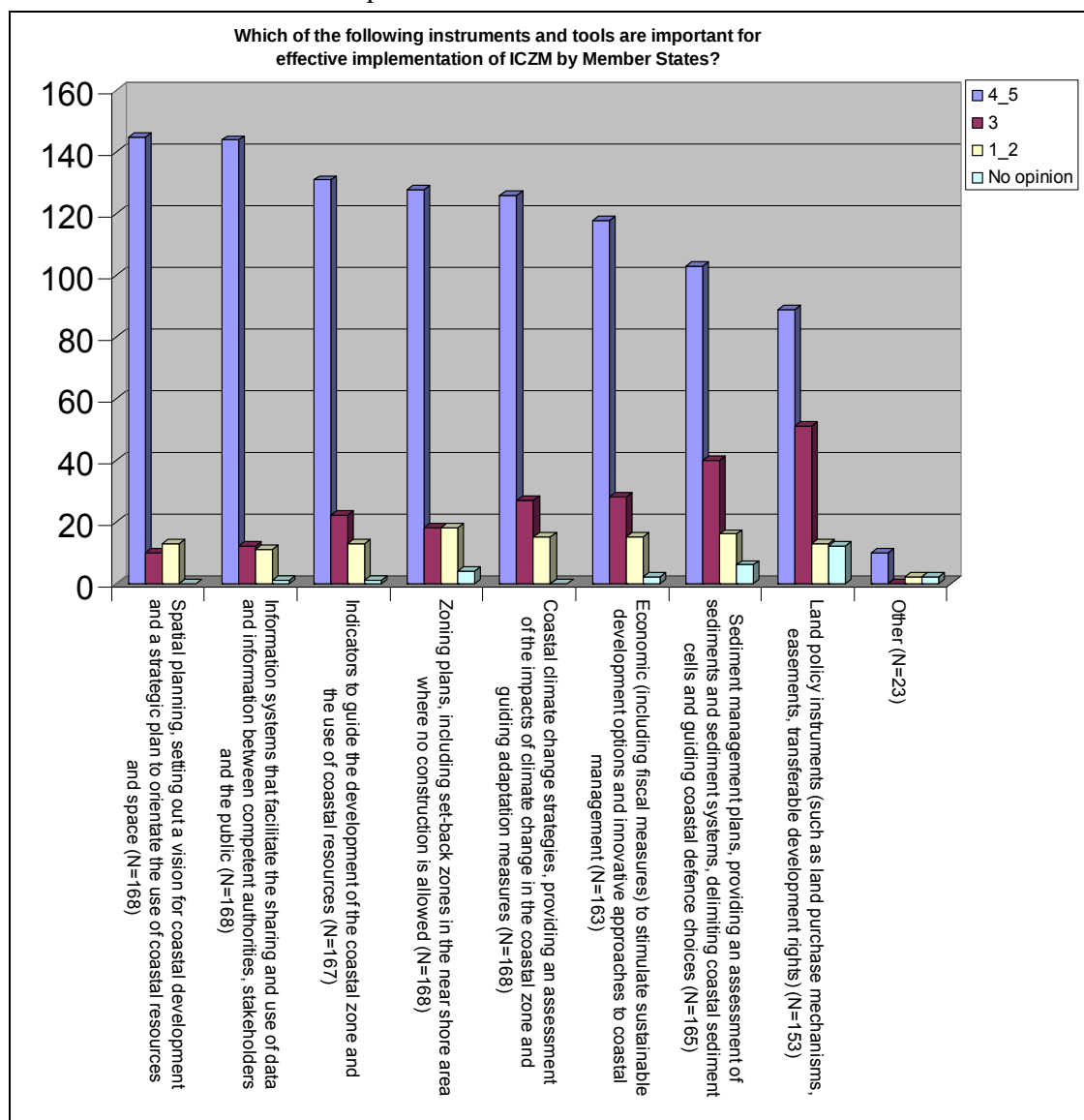
In addition to the general measures, the questionnaire invited respondents to evaluate some **specific instruments and tools** with regard to their importance for the effective implementation of ICZM by Member States.

145 participants evaluated "Spatial planning, setting out a vision for coastal development and a strategic plan to orientate the use of coastal resources and space" with 4 or 5. 144 gave a 4 or 5 to "Information systems that facilitate the sharing and use of data and information between competent authorities, stakeholders and the public".

The appreciation of the next instruments/tools is relatively equal and ranges from 131 participants choosing 4 or 5 for "Indicators to guide the development of the

coastal zone and the use of coastal resources", over 128 for "Zoning plans, including setback zones in the near shore area where no construction is allowed" to 126 "Coastal climate change strategies, providing an assessment of the impacts of climate change in the coastal zone and guiding adaptation measures". More detailed tools (sediment management plans, land policy instruments) attract relatively less top range scores (4, 5).

While for respondents mainly involved in marine research "Zoning plans" range only in fifth place, respondents mainly involved in environment and nature conservation and spatial planning rank it more important (second and third place). Respondents mainly involved in marine research consider "Indicators to guide the development of coastal zones" to be more important.



g) Future EU action

Currently, the European Parliament and Council Recommendation on ICZM (2002/413/EC) is the main instrument by which the EU promotes the implementation of ICZM. For the Mediterranean coastal zones an additional step was set in 2010 by

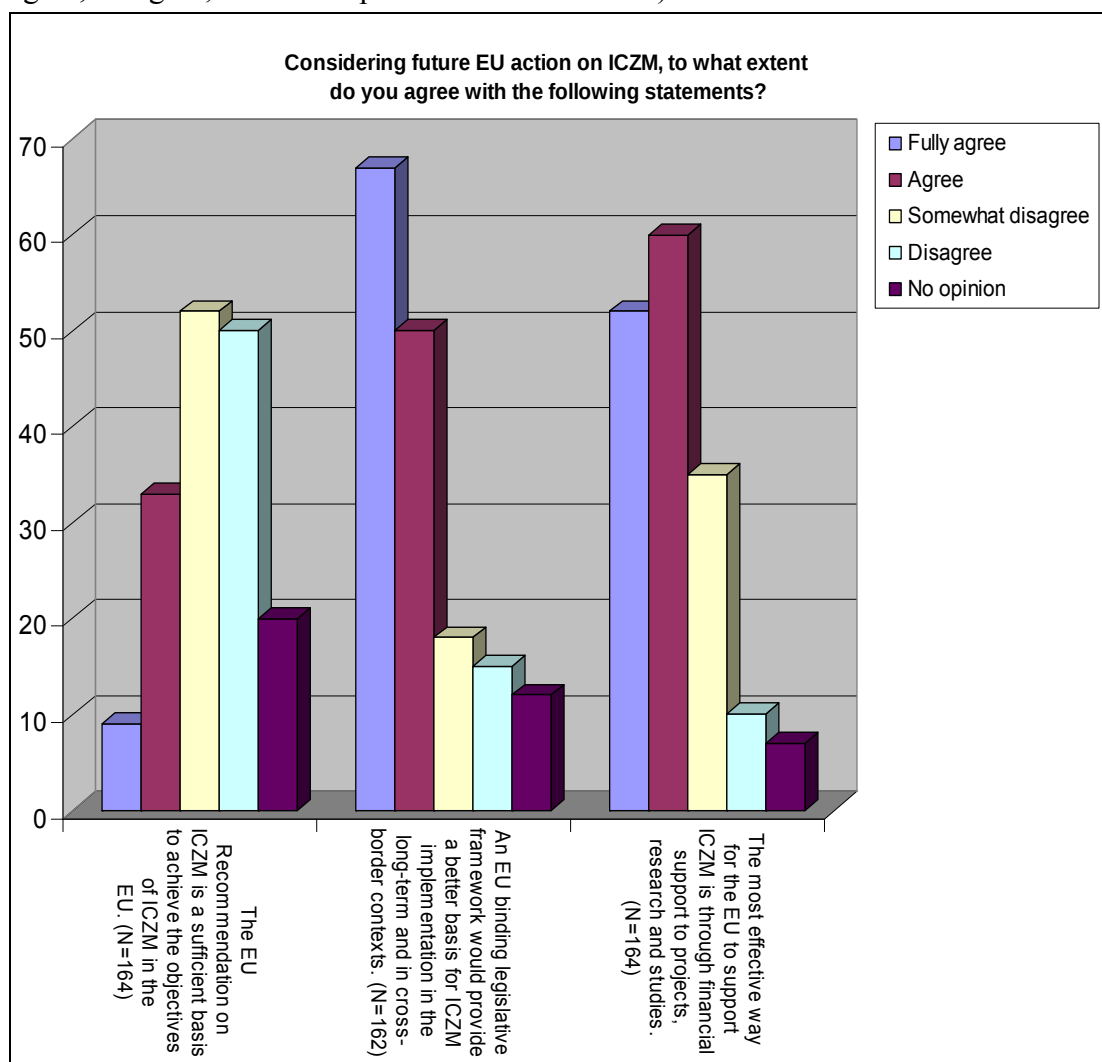
the EU ratification of the ICZM Protocol to the Barcelona Convention (Council Decision 2010/631/EU).

With regard to future EU action on ICZM respondents were asked their degree of agreement to 3 statements, appreciating the form which future EU action could take.

42 participants express agreement to "the EU Recommendation on ICZM is a sufficient basis to achieve the objectives of ICZM in the EU" (9 fully agree, 33 agree; 26% of responses to the statement). This statement attracts relatively most disagreement. 102 participants somewhat disagreed or disagreed to the statement (52 somewhat disagree, 50 disagree).

117 participants express agreement to the statement "An EU binding legislative framework would provide a better basis for ICZM implementation in the long-term and in cross-border contexts" (67 fully agree, 50 agree; 72% of responses to the statement).

112 participants express agreement with "the most effective way for the EU to support ICZM is through financial support to projects, research and studies" (52 fully agree, 60 agree; 68% of responses to the statement).



Breaking down the whole of respondents into the main different groups (covering c.94% of all respondents) the outcome shows some variation in relative results, while confirming the overall pattern of appreciation of the statements.

Respondents from universities and research institutes give more often a 'fully agree'/'agree' appreciation to the effectiveness of EU financial support to support ICZM. By contrast, respondents from industry groups and enterprises respond less often to fully agree or agree on this point, although over half still expresses agreement.

Respondents from NGO, civil society, environmental groups and charities give more often 'fully agree'/'agree' appreciation to the statement that "EU binding legislative framework that would provide a better basis for ICZM implementation the long-term and in cross-border contexts". By contrast, respondents from industry groups and enterprises respond less often to fully agree or agree with the same statement, although over half still expresses agreement.

	Fully agree/Agree "The EU Recommendation on ICZM is a sufficient basis to achieve the objectives of ICZM in the EU"	Fully agree/Agree "EU binding legislative framework that would provide a better basis for ICZM implementation in the long-term and in cross-border contexts"	Fully agree/Agree "The most effective way for the EU to support ICZM is through financial support to projects, research and studies"
All respondents	26% (N=164)	72% (N=162)	68% (N=164)
Respondents from national or local government	31% (N=48)	70% (N=46)	68% (N=47)
Respondents university, public or private research	24% (N= 51)	75% (N=51)	82% (N=51)
Respondents NGO, civil society, environmental group, charity	26% (N=27)	85% (N=26)	63% (N=27)
Respondents from industrial interest groups/enterprises and self-employed	21% (n=28)	57% (N=28)	54% (N=28)

When grouping respondents according to activity or policy in which they are involved, also some variations in relative responses can be found: respondents predominantly involved in marine research more often fully agree or agree to the effectiveness of financial support to projects, research and studies. Respondents mainly involved in environment and nature protection and respondents mainly involved in marine research more often reply to fully agree or agree to "an EU binding legislative framework would provide a better basis for ICZM implementation", (89% and 84% respectively, compared to the overall result 72%). On this point, with 60% respondents mainly involved in spatial planning or regional development agree less on a binding legislative framework than the total.

Finally at the end of the ICZM part of the questionnaire, in an **open question** the respondents had the opportunity to specify what in their opinion the EU should do or propose concerning ICZM. 59 participants responded to that question. Nearly half of the respondents to this question suggested a legally binding instrument for the further implementation of ICZM. Participants not explicitly referring to a binding instrument often asked for a common general scheme or common rules for the implementation of ICZM. Analogue to the answers given to the first open question the respondents mention that the instrument would have to be flexible enough to be applicable in

different coastal and governance contexts. Funding opportunities to support projects implementing ICZM and a co-ordinated or joint ICZM-MSP-approach were also suggested as answers to both open questions.

* * *

ANNEX: DATA QUESTIONNAIRE:

Parts I (Identification respondent) and III (ICZM related questions)

- Part I Identification of the respondent (compulsory questions)

Who are you? (Single choice reply)	
I am replying in my personal capacity	116
I am replying on behalf of an organisation	109

For whom do you work or who do you represent? (Single choice reply)	
national government	44
university	39
NGO, civil society, environmental group, charity	39
public research institution	20
local government	19
industrial interest group	14
international body (other than EU institution)	11
self-employed	10
private research institution	7
large enterprise (more than 250 employees)	6
small enterprise (between 10 and 50 employees)	5
EU project	4
micro enterprise (less than 10 employees)	4
medium enterprise (between 50 and 250 employees)	2
EU institution	1

Where are you based? (Single choice reply)	
Belgium	15
Bulgaria	6
Cyprus	3
Denmark	6
Estonia	3
Finland	14
France	13
Germany	13
Greece	4
Ireland	13
Italy	9
Latvia	9

Lithuania	1
Netherlands	8
Poland	7
Portugal	11
Romania	2
Spain	20
Sweden	9
United Kingdom	46
Other	13

In which area are you mostly interested (you may choose more than one alternative)?	
coastal waters	209
coastal land	140
estuaries	112
continental shelf	111
open ocean	86
islands	81

In which maritime activity or policy are you mainly involved? (Single choice reply)	
Environment & nature conservation	68
Spatial planning, regional development	54
Marine research	32
Other	25
Maritime traffic & transport	8
Renewable energy	8
Coastal defence engineering	5
Maritime or cultural heritage	4
Mineral extraction & dredging	4
Commercial fishing	4
Tourism, recreation (including boating and cruise tourism)	4
Aquaculture	3
Recreational fishing	2
Military	2
Non-renewable energy	1
Marine surveillance	1

- **Part III ICZM questions (optional questions)**

Are you familiar with the principles of integrated coastal zone management?	
Yes, fully	110
Yes, somewhat	59
Not really	15
Not at all	6
N/A	-
Have you been involved in the implementation of integrated coastal zone management?	
Yes, regularly	68
Yes, sometimes	47
Not very often	34
Not at all	38
N/A	-

If you have been involved in ICZM, what do you consider to be the benefits that integrated coastal zone management delivers? From 1=insignificant to 5=very significant	1	2	3	4
Better understanding between stakeholders and authorities in the coastal zone (N=145)	7	11	13	46
Improved governance of the coastal zone (N=140)	12	6	10	44
More efficient use of coastal space and resources, reduction of conflicting claims on space and/or resources (N=139)	13	5	12	34
More transparent planning and management of the coastal zone (N=144)	11	7	18	36
Improvements to the coastal environment (N=141)	9	9	21	30
Increased resilience to coastal risks and impacts of climate change, better coastal defence solutions (N=139)	11	9	29	32
More opportunities for sustainable economic growth (N=137)	13	10	28	42
Improved quality of life for coastal communities (N=140)	7	10	36	33
Other (N=26)	3	0	0	0

Planning and managing the coast well implies that sufficient information is available to the authorities, stakeholders and concerned citizens.

To what extent do you agree with the following statements?					
I am well informed about	Fully agree	Agree	Somewhat disagree	Disagree	No opinion
the risks that may affect the coast in my country/region, such as by the impacts of climate change (N=173)	64	59	38	11	1
the state of the coastal environment in my country/region (N=173)	62	69	30	11	1
the trends in population growth and economic activities in the coastal zone of my country/region (N=173)	42	61	50	17	3
the development plans in the coastal zone in my country/region, such as for new buildings or ports or energy infrastructure (N=173)	39	68	46	19	1
actions the authorities undertake in my country/region to support sustainable coastal development (N=173)	36	58	54	24	1
developments plans and actions in neighbouring coastal countries/regions (N=171)	18	24	55	66	8

The implementation of integrated coastal zone management implies that the planning and management of coastal zones is based on a long-term perspective covering all sectors and uses of the coast, preservation of the coastal environment, robust information and analysis, co-ordinated action by relevant authorities, including across borders, and due involvement of stakeholders.

To what extent do you agree that the following statements are valid for your country/region?	Fully agree	Agree	Somewhat disagree	Disagree	No opinion
The long-term needs of coastal businesses and local communities are well taken into account in the planning and management of the coastal zones in my country/region (N=169)	16	39	68	43	3

The impacts of new developments in the coastal zone are well analysed and a balance is sought between the needs of businesses, industry, coastal residents and the environment (N=170)	15	44	64	44	3
The development plans in the coastal zone in my country/region, such as for new buildings or ports or energy infrastructure are co-ordinated (N=162)	12	35	61	47	7
The coastal environment in my country/region is well protected and the preservation of the environment is safeguarded for the long-term (N=168)	19	48	56	42	3
The impacts of climate change on the coastal zone in my country/region are well analysed and the planning and management takes future climatic conditions and sea-level rise well into account (N=168)	18	46	54	47	3
There are adequate procedures in my country/region to be involved and express my views and needs as regards coastal planning and management (N=167)	19	52	56	36	4
There are adequate procedures to be involved and express views as regards coastal planning and management in neighbouring countries/regions (N=166)	6	22	50	66	22
The planning and management of neighbouring countries/regions is/are well co-ordinated in my country/region and impacts across the administrative boundaries are adequately analysed and addressed (N=162)	6	18	45	69	24

Considering possible future EU action on ICZM, what are the most important objectives that integrated coastal zone management should address? 1=low importance – 5 = very important	1	2	3	4	5
Promoting sustainable coastal development in regional seas basins (N=165)	11	7	23	77	77
Ensuring a sustainable future for local coastal communities (N=169)	13	8	14	48	85
Protecting the coastal environmental and natural resources (N=168)	18	5	11	30	102
Ensuring a balance between coastal development and the need to protect the coastal environment and its natural resources (N=169)	16	7	12	28	103
Ensuring a balanced spatial development in the land and sea parts of the coastal zone (N=169)	16	5	19	49	79
Improving the resilience of coastal zones to climate changes (N=169)	16	8	18	51	73
Improving the governance of coastal zones (N=162)	15	8	16	39	81
Enhancing the prevention of natural and technological risks in coastal zones (N=165)	10	10	24	48	66
Stimulating sustainable economic growth in coastal areas (N=160)	9	22	32	40	56
Other (N=24)	1	0	1	2	17

Open Question: What is / are the most challenging issue(s) that the EU should acknowledge when considering further actions to support ICZM implementation? 82 respondents

The EU Recommendation on integrated coastal zone management sets a common framework for implementation in EU coastal Member States. However, coastal zones are very diverse and the coastal planning and management arrangements between national, regional and/or local authorities differ significantly from one Member State to the other.

To what extent are the following justifications relevant for action at EU level on integrated coastal zone management?	Very relevant	Relevant	Not very relevant	Not relevant at all	I don't know
Coastal zones are of strategic importance to the EU economy and they constitute a common natural and cultural resource. A	91	56	11	2	3

common EU framework for ICZM facilitates development opportunities and improves effectiveness of preservation measures. (N=163)					
Coastal environmental processes are trans-boundary in nature and can be better managed in the context of a common EU framework for ICZM (N=166)	77	63	20	2	4
Coastal planning and management systems are very complex and are in some cases based on EU legislation e.g. nature conservation. A common EU framework for ICZM would provide more clarity and a better level-playing field for businesses and citizens who invest and work in coastal zones. (N=163)	73	60	21	2	7
Coastal planning decisions often have consequences for coasts in neighbouring countries. A common EU framework for ICZM facilitates the cross-border co-ordination of such planning. (N=162)	61	80	17	1	3
Coastal zones are vulnerable to the impacts of climate changes, which can be better addressed in the context of a common EU framework for ICZM. (N=159)	59	72	19	3	6
Other (N=26)	16	1	1	0	8

The EU Recommendation on integrated coastal zone management invites Member States to set up national strategies, indicating a broad range of possible measures for such national strategies. The implementation of integrated coastal zone management strategies in coastal Member States constitutes the major way to implement and deliver ICZM in the EU.

What importance should be given to the following measures as part of future EU action on integrated coastal zone management? From 1= low importance, to 5=very important	1	2	3	4	5	No opinion
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Institutional co-ordination between competent authorities (national, regional, local) (N=162)	7	8	10	40	96	1
Coherent planning of land and sea parts of the coastal zone (N=164)	9	7	12	40	94	2
Integration of interests (social, economic, environmental) in integrated coastal zone planning and management (N=164)	8	6	18	36	96	0
Co-operation in marine regions (N=160)	4	8	21	62	63	2
Cross-border co-ordination between competent authorities (N=162)	6	7	23	57	66	3
Integration of risk prevention and climate change into the integrated coastal zone planning and management of coastal zones (=158)	6	9	20	50	72	1
Public participation in coastal zone planning and management (N=163)	7	10	29	48	69	0
Data gathering and information management to underpin coastal planning and management (N=129)	6	7	8	38	70	0
Other	1	0	1	1	13	3

Which of the following instruments and tools are important for effective implementation of integrated coastal zone management by Member States? From 1= low importance, to 5=very important	1	2	3	4	5	No opinion
Spatial planning, setting out a vision for coastal development and a strategic plan to orientate the use of coastal resources and space (N=168)	9	4	10	32	113	0
Information systems that facilitate the sharing and use of data and information between competent authorities, stakeholders and the public (N=168)	6	5	12	44	100	1

Indicators to guide the development of the coastal zone and the use of coastal resources (N=167)	9	4	22	54	77	1
Zoning plans, including set-back zones in the near shore area where no construction is allowed (N=168)	8	10	18	53	75	4
Coastal climate change strategies, providing an assessment of the impacts of climate change in the coastal zone and guiding adaptation measures (N=168)	6	9	27	63	63	0
Economic (including fiscal measures) to stimulate sustainable development options and innovative approaches to coastal management (N=163)	5	10	28	53	65	2
Sediment management plans, providing an assessment of sediments and sediment systems, delimiting coastal sediment cells and guiding coastal defence choices (N=165)	4	12	40	59	44	6
Land policy instruments (such as land purchase mechanisms, easements, transferable development rights) (N=153)	6	7	51	49	40	12
Other (N=23)	1	1	0	1	9	2

The main instrument by which the EU promotes implementation of Integrated Coastal Zone Management is currently the European Parliament and Council Recommendation on ICZM (2002/413/EC). For the Mediterranean coastal zones, an additional step has been set by the EU conclusion of the Protocol on Integrated Coastal Zone Management (Council Decision 2010/631/EU).

Considering future EU action on Integrated Coastal Zone Management, to what extent do you agree with the following statements?	Fully agree	Agree	Somewhat disagree	Disagree	No opinion
The EU Recommendation on ICZM is a sufficient basis to achieve the objectives of ICZM in the EU. (N=164)	9	33	52	50	20
An EU binding legislative framework would provide a better basis for ICZM implementation in the long-term	67	50	18	15	12

and in cross-border contexts. (N=162)					
The most effective way for the EU to support ICZM is through financial support to projects, research and studies. (N=164)	52	60	35	10	7

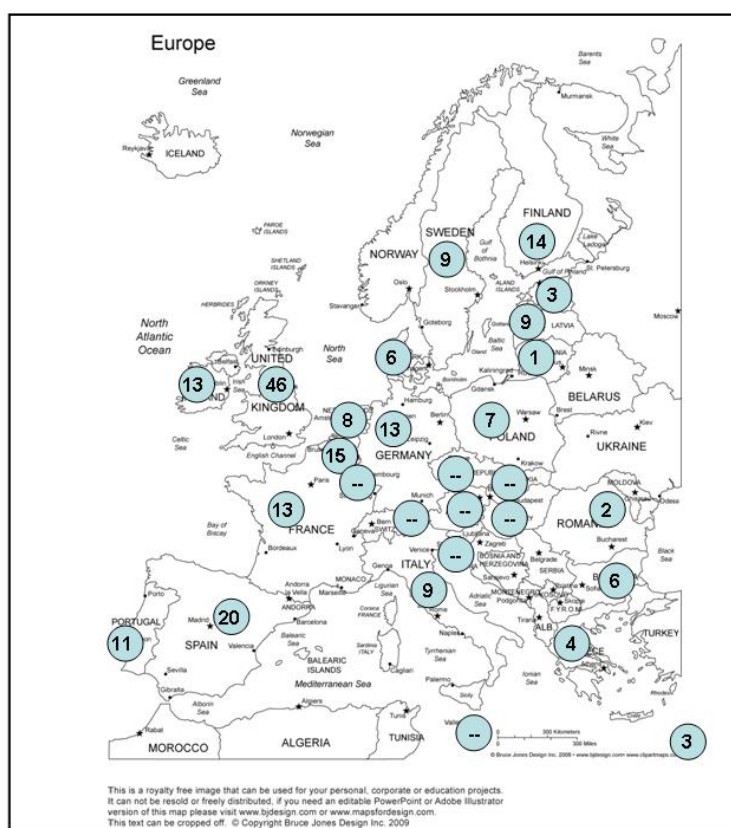
Open Question: What would you suggest that the EU should do or propose concerning ICZM i.e. how to go forward with ICZM within the EU? 59 respondents

Annex 10: Stakeholder consultation summary results

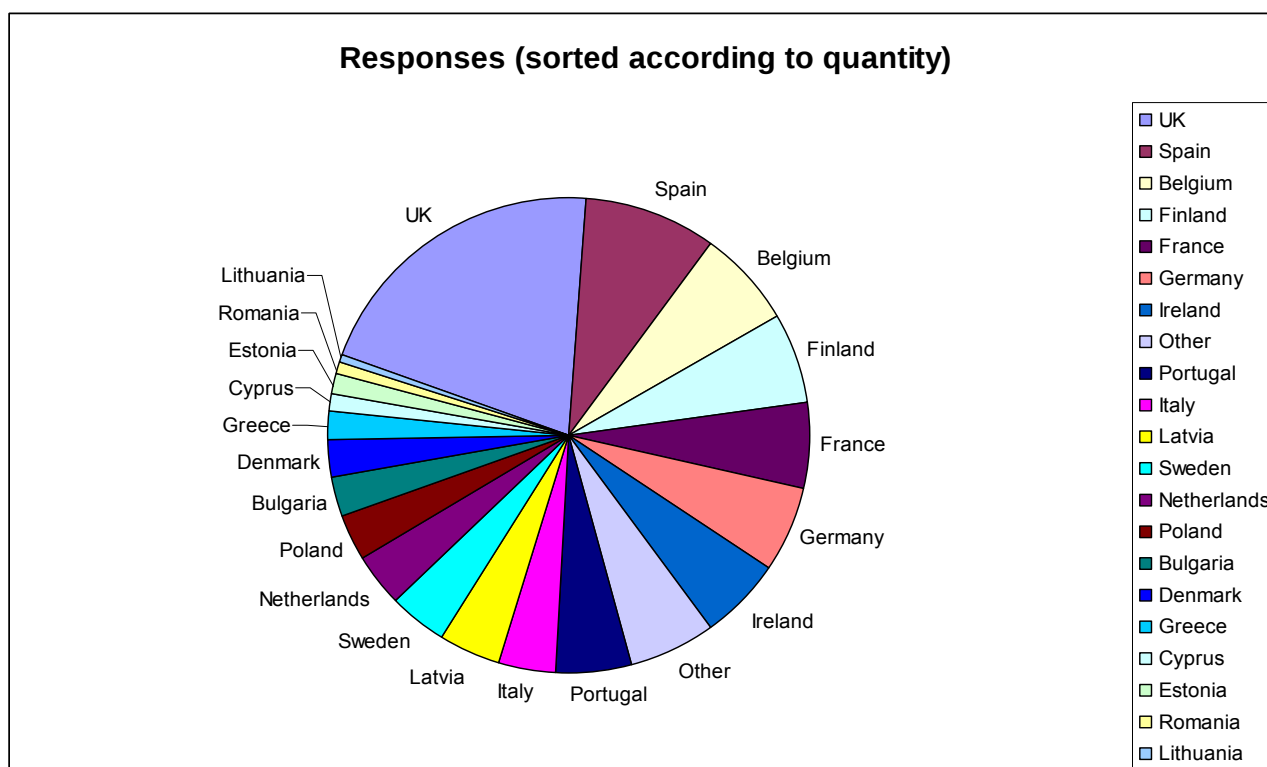
Participation

A total of 225 responses had been registered when the consultation closed on 20 May 2011. This should be regarded as a good return, since the topic requires expertise on the subjects MSP and ICZM, or at least a basic knowledge on these issues. Roughly half of the participants (109) responded on behalf of an organisation, which shows that a good number of the responses are the result of a collective reflection.

Most of the responses come from the public sector such as research institutions, national and local authorities (20%), universities but also from NGOs. Very few of the respondents come from the private sector.



An overwhelming majority of the respondents are based in EU Member States. Relatively limited participation (13 responses) came from third countries. These 13 responses include USA, Canada, Brazil, Turkey, Georgia, Norway, Mauritius, and New Zealand. Participation is relatively evenly spread out among the coastal Member States with reasonably good balance between north-south and east-west responses, respectively, despite the high number of contributions from one MS (UK, 46 responses, 20% of the total). No contribution at all was received from: two coastal MS (Slovenia and Malta), and from the five land-locked Member States (Austria, Check republic, Slovakia, Luxembourg and Hungary).



A clear majority of respondents' main interest is either environment and nature conservation (68 respondents, 30%) or marine regions and regional development (54 respondents, 24%) and marine research (32 respondents, 14%). It is noticeable that relatively limited participation was registered from other marine sectors than those referred to above. Participants are in general well informed of what MSP is about and have often participated in such a process already.

Conflict in the use of sea space

A clear majority of the participants have encountered either many (97 responses, 43%) or some (86 responses, 38%) conflicts of space between or within sectors and an equally clear majority also foresees that spatial claims will either increase significantly (124 responses, 55%) or moderately (64 responses 28%) in the future.

This confirms our perception that many sectors at present experience conflicts between sectors regarding the use of sea-space and that the competition for maritime space will further increase in the future. Among the examples provided we find in particular conflicts between traditional users (such as shipping, oil exploration and fishing) and emerging activities (such as tourism/recreational uses, aquaculture and, in particular, offshore renewable energy sector) as well as marine environment protection (including marine protected areas, in addition to the already existing marine and coastal Natura2000 sites).

General applicability and benefits of MSP

Only 4 respondents (<2%) either somewhat disagree or disagree with the statement that MSP is a useful process/set of tools for European marine regions.

A majority of participants feel that MSP would be an important contributor on a wide range of issues, including the following.

- *economic growth,*

- environmental protection,
- maintenance and restoration of ecosystems/ecosystem services²⁰⁹
- climate change adaption,
- sustainable use of resources
- regional and social development,
- improved governance,
- the creation of a level playing field,
- transparency,
- competitiveness,
- innovation,
- preservation of cultural heritage
- improved stakeholder involvement and
- improved maritime safety.

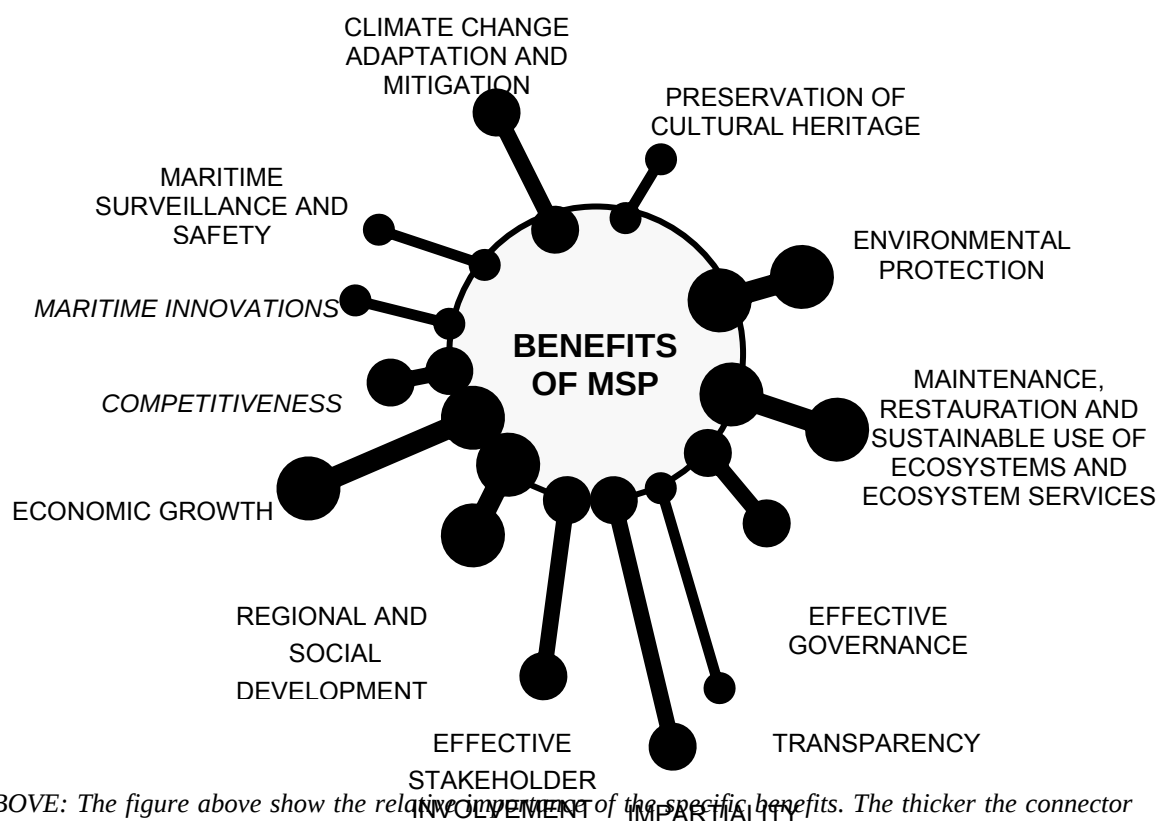


FIG ABOVE: The figure above show the relative importance of the specific benefits. The thicker the connector the more important the relationship between the MSP and the benefit is. The benefits specifically related to the MSFD goals are marked with bold.

Respondents are also very supportive of the main concepts of MSP developed in the EU and elsewhere. This includes the definition of MSP as a process and tool (or set of tools), as well as the 10 key principles identified in the 2008 Communication on MSP (the need for transparency, predictability, stability, stakeholder participation, proper data collection, cross-border co-operation, legally binding plans etc.).

Several responses indicate the further need to further develop MSP within the EU. They particularly emphasise improvements that can be made in relation to cross-border co-

operation and they also stress the need to apply a regional sea-basin approach to MSP. The need of a common framework for MSP was referred to by many respondents and the present lack of co-ordination and harmonisation was seen as a problem.

On stakeholder involvement, there is general agreement that MSP should be based on a co-ordinated, transparent and pragmatic stakeholder consultation; involvement of regional and local level is necessary. However, the degree to which respondents wish to see stakeholders involved at different stages in the process varies.

Monitoring and Data issues – relation with MSFD

Monitoring and evaluation of the effectiveness of the plan makes it possible to check whether the goals and objectives of the plan can be/are achieved, or not. This makes it possible to change the plan if necessary. This is often referred to as adaptive planning and management and it is fundamental for successful MSP. Cross-border areas and cross-border activities deserve a special focus since there is an apparent risk of failure of adaptive planning and management in these types of areas if the data-sets from MS are too different. Many stakeholders have emphasised the importance of being able to compile and compare information and having a common system for evaluation across EU or at least at sea-basin level. Indicators and objectives that are clearly defined across sectors and countries are important.

The relevance of MSP in the context of the implementation of the MSFD is commonly accepted among the respondents. 146 respondents (65%) agree and only 16 disagree (7%) with the statement that the implementation of the MSFD should provide data and information that are useful for MSP. Many respondents (147 respondents, 65%) also believe that MSP would provide added value specifically to the implementation of the MSFD by complementing its overarching goal to achieve good environmental status (GES).

Several participants have highlighted the need for co-operation at European level towards common standards for data collection and made references to other data sources which could be used for MSP implementation (in particular collected by Regional sea conventions).

Cross-border co-operation

Cross-border co-operation is considered a very important issue for an overwhelming majority of the participants. It is also considered either moderately difficult (72 participants) or difficult (82 participants) and an area where considerable improvements can be made. Many suggest a focus on a transnational approach and a common framework and point out that the planning at regional level is not satisfactory at present even if individual states are carrying out MSP. This is very important as the number of broad scale infrastructure projects is increasing, e.g. the North Sea Offshore Energy Grid along with the wind energy plans that are necessary to achieve the EU's goal to produce 20% of its energy by renewable sources by 2020. There are also other reasons for cross-border planning such as maritime traffic, IT cables, pipelines, fishing and conservation of fish stocks, mineral extraction and non-economic uses such as nature conservation networks.

Cross-border activities are common in a number of sectors, including shipping, fishing, cabling, wind parks, data gathering, climate change adaptation and coastal defence, and for environmental purposes, such as designation and management of MPAs and prevention of pollution. Challenges highlighted by participants to improve cross-border co-operation include: that no cross-border planning is done in the first place, incompatibility of data sets in different countries, or no agreed framework and procedures for cross-border MSP. Other cross-border challenges include differences between national legal systems, difference in

understanding of MSP concept, difference in timing (different stages of development of MSP), etc. The main identified challenge is differences in political priorities.

Respondents mention a large number of planning issues that MS can't deal with in isolation. According to many participants this means that even if some co-operation taking place, it is often difficult and in many cases takes place on an *Ad Hoc* basis only and/or at technical level. Such approach is slow and makes it difficult for all involved to obtain an overall understanding for how to plan across borders. At present, difficulties in co-operation seem to relate mostly to co-operation between Member States, or within a single sector. Only few participants signal problems in cross-border co-operation with third countries.

Despite these indications of a relatively poor cross-border co-operation on MSP issues between EU Member States, many respondents are in favour of MSP being carried out in co-operation with neighbouring states (77 respondents, 34%) and that cross-border co-operation should take place with neighbours from the beginning for cross-border areas (106 respondents, 47%). Only 7 respondents (3%) considered that MS should carry out MSP independently from each other. A relatively high number of respondents (107 respondents, 48%) supported the installation of a MSP platform for MSP co-operation in each sea basin.

The conclusion is that cross-border aspects are a central element in the future MSP work done within the EU.

What should the EU do?

The responses on what role the EU should play are diverse and range from suggesting new EU legislation to firm opinions that no new legislation is needed. However, among the responses one of the most repeated suggestion is that a common framework is needed, that the EU must have a coherent direction and common goals and objectives for MSP. It difficult to draw any firm conclusions to how many respondents are in support of a binding legislative instrument since relatively few of the participants express a firm opinion on that issue.

Suggestions for EU action often repeated in the written comments by respondents include:

- To ensure that EU give a coherent direction and clear goals for the Member States to implement MSP
- Offer a common binding legal framework and methodology for MSP within the EU
- Focus on cross-border co-operation issues between MS by providing a framework for such co-operation.
- The existing directives, recommendations and policies such as the MSFD, CFP, Habitats- and Bird Directives, WFD, and agriculture (CAP) must be acknowledged when developing MSP further to ensure that the provided co-ordination and guidance is in good agreement with these.
- Apply the Ecosystem Based Approach to MSP
- Support best practice measures,
- The need to further develop the common principles of MSP in order to provide further guidance to MS on how to implement MSP.

Some of the moderate/"do-nothing" comments provided by the respondents include:

- Additional regulation is not necessary. MS have already a lot on their hands with the implementation of the existing EU legislation.
- MSP should be mainly left to Member States (safeguarding the subsidiarity principle) and the EU should not get involved in detailed planning
- Apply "soft law" such as guidelines, recommendation, communications
- Integrate MSP with existing policies

Participants have also proposed number of ideas on how the EU should deal with various challenges and problems in order to develop MSP. In general, respondents representing a single sector or interest group tend to emphasise the interests they represent. For example, a number of respondents state that the main aim of the MSP process should be to protect the environment, putting other interests, such as economic prosperity, innovations, creating new jobs, or renewable energy goals, in second place.

International co-operation on the high seas (Areas beyond national jurisdiction)

Participants generally consider international co-operation to be a rather difficult issue, but also tend to point out that it needs to be reflected upon since MSP could also be relevant for high seas areas. The need for collaboration is therefore highlighted by many participants (in particular from the marine research sector). Several participants highlight the need for a more structured dialogue on MSP in existing international fora such as the UN and its various organisations e.g. FAO, CBD, Regional Sea Conventions (OSPAR, HELCOM, Barcelona Convention, Bucharest Convention), RFMO:s, ISA, IMO, for addressing MSP in high seas areas.

Respondents, in their written comments, regard enforceability as a problem for high seas measures. In conclusion, a more active debate in international fora should be promoted by the EU.

Link MSP - ICZM

Respondents recognise the need for a close link between MSP and ICZM initiatives. A majority of the respondents (98 respondents, 43%) say that they would like to see co-ordination of MSP and ICZM but that the processes themselves should be kept separate.

52 respondents (23%) are in favour of a full linkage between ICZM and MSP. The separate question whether MSP and ICZM should be addressed through separate (legal) instruments yields 68% (115 respondents) against a separation of the two, with 38% (70 respondents) are in favour of separating the two tools .

36% of the respondents (82 out of 225) have experience in applying a combination of MSP and ICZM.

Annex 11: Glossary of technical terms – list of abbreviations

Aquaculture - farming of aquatic organisms such as fish, crustaceans, molluscs and aquatic plants under controlled conditions.

Coastal zone - the part of the land affected by its proximity to the sea, and that part of the sea affected by its proximity to the land as the extent to which man's land-based activities have a measurable influence on water chemistry and marine ecology.

Ecosystem - any unit that includes all of the organisms in a given area interacting with the physical environment so that a flow of energy leads to clearly defined trophic structure, biotic diversity, and material cycles.

Ecosystem approach - strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

Ecosystem health - concept which is closely linked to the idea of sustainability. It integrates environmental conditions with the impacts of anthropogenic activities in order to give information for a sustainable use and management of natural resources.

Ecosystem services - benefits human beings obtain from their natural ecosystems, including *provisioning services*, such as the production of food and water; *regulating services*, such as the control of climate and disease; *supporting services*, such as nutrient cycles and crop pollination; and *cultural services*, such as spiritual and recreational benefits

Exclusive Economic Zone (EEZ) - sea zone over which a state has special rights over the exploration and use of marine resources, including production of energy from water and wind. It stretches from the seaward edge of the state's territorial sea out to 200 nautical miles from its coast.

(Ecological) footprint - measure of human demand on the Earth's ecosystems, which represents the amount of biologically productive land and sea area necessary to supply the resources a human population consumes, and to mitigate associated waste.

Green Infrastructure - concept that highlights the importance of the natural environment in decisions about land use planning. It places emphasis on the "life support" functions provided by a network of natural ecosystems and on their interconnectivity to support long-term sustainability.

Integrated Coastal Zone Management (ICZM) - dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones; which seeks, to balance environmental, economic, social objectives, all within the limits set by natural dynamics.

Maritime Spatial Planning (MSP) - public process for analysing and allocating spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives

Resource efficiency - sustainable management and use of resources throughout their life cycle - from extraction, transport, transformation, consumption to the disposal of waste

Resilience - capacity of an ecosystem to respond to a perturbation or disturbance by resisting damage and recovering quickly

Sustainable development - development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

List of abbreviations

CFP	Common Fisheries Policy
CIS	Coastal Information Systems
DEDUCE	Développement Durable des Côtes Européennes
EEA	European Environment Agency
EMFF	European Maritime and Fisheries Fund
ESPO	European Sea Ports Organisation
EWEA	European Wind Energy Association
HELCOM	Helsinki Commission (Baltic Marine Environment Protection Commission)
ICZM	Integrated Coastal Zone Management
MMA	Marine Management Authority
MSFD	Marine Strategy Framework Directive
MS	Member States
MSP	Maritime Spatial Planning
NUTS	Nomenclature des Unités Territoriales Statistiques (Nomenclature of territorial units for statistics)
OSPAR	OSPAR Commission for the protection of the marine environment of the North-East Atlantic
TEN-E	Trans-European-Energy Networks
SEA	Strategic Environmental Assessment
TEN-T	Trans-European-Transport Networks
VASAB	Vision and Strategies Around the Baltic