STAGES
CONNECTING SCIENCE TO POLICY FOR HEALTHY SEAS

Report on Stakeholder views and expectations for an effective MSFD Science-Policy Interface Platform

STAGES - Science and Technology Advancing Governance of Good Environmental Status

Lead partner: European Marine Board

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1. Introduction and objectives

The STAGES[1] project is a specific Coordination and Support Action funded by the European Commission under 'The Ocean of Tomorrow 2012' (FP7-OCEAN-2012) initiative to support implementation of the Marine Strategy Framework Directive (MSFD)[2] . The STAGES project has three key objectives:

1. Make the knowledge generated through EU and national research funded activities with relevance to MSFD objectives widely accessible to policy and decision makers and to MSFD stakeholders (associated to Work Package 2);
2. Identify the needs for further research to improve the scientific underpinning for the implementation of the MSFD (associated to Work Package 3);

Provide concrete, pragmatic and ready to use recommendations on the development of an effective European science-policy platform to support implementation of the MSFD (associated to Work Package 4).

This report focuses on STAGES Objective 3 on the MSFD science-policy interface (SPI). In particular, it reviews an extensive STAGES stakeholder consultation conducted by Work Package 4 "Building a science-policy interface to support MSFD implementation." Work Package 4 is led by the European Marine Board (EMB), in collaboration with STAGES partners. The work presented here constitutes Task 4.1. "Stakeholder Analysis". The key objective of this Task was to implement a structured stakeholder consultation to seek perceptions, views and expectations on the current and future MSFD SPI for MSFD. This was conducted in three key steps, namely Stakeholder identification, an extensive online survey (May-July 2013) and an interactive workshop (12 February, 2014). In addition, WP4 is also investigating best practice in existing science-policy interfaces for MSFD and wider environmental/marine policies. This report presents examples of ongoing work from a number of geographical scales (European, regional and national).

STAGES would like to thank the marine stakeholder community for their cooperation and input to the consultation process. These results will inform the final output from WP4, a proposal[3] for a European science-policy platform to support implementation of the MSFD.

2. Methodology for stakeholder consultation

Marine stakeholders are at the heart of providing the knowledge and expertise needed to achieve or maintain Good Environmental Status (GES) in European marine environments by the year 2020 and beyond. Significant advances are being made in marine research that can (and will) underpin environmental assessments such as the MSFD. However, the full uptake of this marine knowledge is being hindered by the lack of effective interfaces between science and environmental policy. From September 2012 to February 2014, STAGES Task 4.1 conducted an extensive stakeholder consultation to seek perspectives from marine stakeholders on needs and expectations for the MSFD science advisory process and wider science-policy interface. The stakeholder consultation on the MSFD SPI was conducted in a three-step process:

a Stakeholder identification: Identify relevant MSFD stakeholders at national, regional, and pan-European level. (September 2012 – July 2013).

b Online survey: Design, implementation and analysis. (January 2013 – December 2013)

c Stakeholder workshop: Design, delivery, reporting. (September 2013 – March 2014)

For each of these three activities, the methodology, design, implementation and results stages are presented. During the course of the project, WP4 have interacted with the European Commission (particularly DG Environment Marine Environment and Water Industry Unit and DG Research and Innovation), as key clients of the SPI Proposal. In addition, the

[1] *Science and Technology Advancing Governance on Good Environmental Status. www.stagesproject.eu*
[2] *http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm*
[3] *STAGES Deliverable D4.2 'Proposal for an Effective MSFD Science Policy Interface Platform' (June 2014)*

European Marine Board are official observers to the Marine Strategy Coordination Group (MSCG) since June 2013 and STAGES project Coordinator Marisa Fernandez and WP4 leader Niall McDonough presented the STAGES project and in particular the work conducted on MSFD SPI to the MSFD Project Coordination Group (PCG) during 2013 and 2014.

To provide context to the stakeholder consultation, a review was also conducted of wider environmental SPI best practice, models and case studies and more specific MSFD governance structure analysis. Various methods were used including a desk-based literature review, contacts with relevant projects, communication with DG Environment and attending relevant SPI meetings presenting existing initiatives and effective mechanisms etc to contribute to the proposal for a SPI. Specific examples of science-policy conferences attended include meetings of the Common Implementation Strategy (CIS) and SPI for the Water Framework Directive (WFD) e.g. CIS-SPI and SPI-Water Cluster Final Conference[4] which both took place in 2012.

WP4 also fostered interactions on MSFD, wider science-policy interfaces and Stakeholder identification with relevant European projects including a FP7 ODEMM (Governance workshop, 26 February 2013, Brussels), SPIRAL (workshop on Biodiversity SPI, 11-12 June2013, Brussels), PERSEUS and the Joint Progamming Initiative for Healthy and Productive Seas and Oceans (JPI-Oceans) Coordination and Support Action[5].

3. Science-policy interface best practice

Reviewing best practice in science-policy interfaces has been an ongoing process throughout the STAGES WP4 work. An overview is presented below with some examples. More information of direct relevance to the SPI proposal will be provided in STAGES deliverable D4.2.

3.1 Science-policy interfaces: Rationale and overview

Science–policy interfaces can be defined as "*….social processes which encompass relations between scientists and other actors in the policy process, and which allow for exchanges, co-evolution, and joint construction of knowledge with the aim of enriching decision-making*" (van den Hove, 2007, Futures Vol 39, p. 807-826). This puts people at the heart of a science-policy interface, stimulating dialogue and exchange between relevant stakeholders. An effective SPI also harnesses existing knowledge, often from a diverse stakeholder community, and makes this knowledge available in a timely and relevant manner that is appropriate to the target user and the geographical scale. The process is also iterative and cyclical, utilizing efficient ways for defining science needs. This requires a robust science advisory process to both provide advice to policy and to drive the identification and production of new knowledge relevant to policy. In reality, there is much to be improved in terms of increasing the awareness and uptake of knowledge available for policy. In many instances, this has not yet transcended sectoral boundaries at the administrative and political levels.

Theory on science-policy interfaces has largely moved on from the 'linear model' of transferring knowledge from science to policy. In reality, science-policy interfaces are much more complex, multi-dimensional and unpredictable. Exchange and dialogue is recognized as a social activity where scientific knowledge is just one component of a wider knowledge base and must be credible, legitimate and relevant (European Marine Board, 2013 [6]). For further information see reviews by Zamparutti *et al.* (2012)[7] which assesses the Science and EU environment-policy interface and Young *et al.* (2014)[8] which focuses on the Biodiversity science-policy interface.

[4] *http://www.spi-water.eu/*
[5] *http://www.jpi-oceans.eu . Discussions took place between STAEGS WP4 and JPI-Oceans CSA WP5 to identify potential areas for collaboration regarding science-policy best practice, survey design and Stakeholder identification and consultation.*
[6] *European Marine Board, 2013, Navigating the Future IV. Position Paper 20 of the European Marine Board, Ostend, Belgium. http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf*
[7] *Zamparutti et al. (2012). Assessing and Strengthening the Science and EU Environment Policy Interface. Technical Report -2012-059. Prepared by Milieu Ltd. And Collingwood Environmental Planning Ltd. For DG Environment of the European Commission*
[8] *Young et al. (2014). Biodivers Conserv 23:387–404. DOI 10.1007/s10531-013-0607-0*

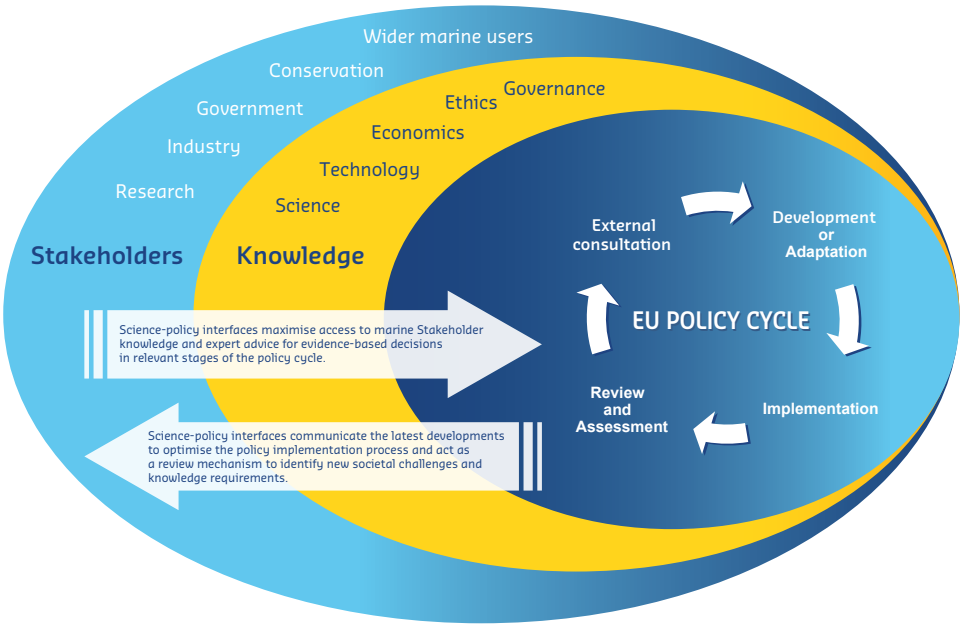

Figure 1: Components of an effective Science-Policy interface showing the important role of Stakeholders and Knowledge and the need for multi-way dialogue to promote evidence-based decision making.
Source: European Marine Board, 2013, Navigating the Future IV. Chapter 13, Marine science-policy interfaces, p.168 (see footnote 6 above for weblink).

A conceptual diagram is presented in Figure 1 representing the role of science-policy interfaces in the European policy process. This shows that science is a crucial component of the knowledge base underpinning evidence-base decision-making. However, for scientific knowledge to be used in a timely and relevant way, an effective science-policy interface is required to stimulate dialogue between the science and policy domains, and transfer knowledge in a timely and appropriate manner. Such interfaces and exchanges should be both bottom-up, engaging stakeholders across multiple sectors and top-down with leadership from policy makers to communicate recommendations on policy requirements. This feedback mechanism is vital to identify gaps in current knowledge and drive the production of relevant new knowledge. Mechanisms and tools, such as personal interactions, online repositories and workshops, make it possible to exchange and construct knowledge between scientists, policy makers and other stakeholders in the decision-making process. New tools are needed to make stakeholder dialogue and knowledge exchange more efficient, iterative and timely (see Figure 1).

For more information please see a review on Marine science-policy interfaces conducted by the European Marine Board (EMB) in its flagship publication Navigating the Future IV[9] which sets out recommendations for developing long-term effective science-policy interfaces at multiple levels.

3.2 Science-policy interfacing in water management

Adopted in 2000, the Water Framework Directive (WFD) is a European environmental policy which presents a target for water managers, governments across Europe and wider society to achieve Good Ecological Status for all surface waters by 2015. Early on, the Directive identified a need for improvement of the information exchange and knowledge uptake in the process of designing measures and management approaches to support WFD implementation. In order to promote coherence across Europe, the implementation of the WFD is organized through a Common Implementation Strategy (CIS). This includes a dedicated SPI working group to assess ways to enhance the transfer and dissemination of knowledge in the

[9] *Chapter 13 'Towards effective European marine science-policy interfaces', from European Marine Board (2013) Navigating the Future IV. Position Paper 20 of the European Marine Board, Ostend, Belgium. See also footnote 6.*

context of WFD implementation. To further improve the science-policy interface supporting the WFD, a series of European conferences were held between 2010-2013 called 'CIS SPI Water' to gather WFD stakeholders together and discuss how to streamline knowledge to address WFD challenges. In 2010 the European Commission also funded a cluster of SPI-Water projects: STEP-WISE, STREAM and WaterDiss 2.0 to support and recommend strategies for the communication and dissemination of EU water-research project results. The final conference on 3-4 December 2012 as called "Facilitating water information exchange between science, policy and industry". This produced a roadmap with recommendations for a better uptake of EU water research into policy[10]. Three key elements of the roadmap were highlighted:

- Increase communication efforts of EU water research projects to reach distinct targeted audiences: professional communication strategy engaging appropriate Stakeholders
- Improve accessibility to water research results and speed up their transfer: flexibility in resources planning for dissemination activities, particularly at the end of a project. Utilize multiple dissemination tools including web platforms, e-learning, webinars and social media.
- Strengthen the water science-policy-industry interface to become results-oriented: this recommended that SPIs are in fact complex processes between science and policy that intersect with multiple relations and lack common reservoirs of knowledge, intermediaries and knowledge brokers.

Many of the SPI approaches are transferable and cross-cutting and best practice can be applied to other policies, in particular, the MSFD. To foster open access and information sharing, the European Commission also created an internet-based platform, now called "CIRCABC" ("Communication and Information Resource Centre for Administrations, Businesses and Citizens"[11]) software tool. This has also been applied to the MSFD, with an area dedicated to MSFD providing open access to a public library of European MSFD working group documents and related meetings. In addition, the wealth of knowledge produced by research projects across Europe is often poorly accessible. To improve accessibility of knowledge to support implementation of the WFD and other (European) water related policies a WISE (Water Information System for Europe) RTD Knowledge Portal12 was also launched for stakeholders and user groups hosting information on policy, data and products, modeling and research project information. The open access web portal serves as a dissemination tool, linking diverse EC WFD policy aspects to FP RTD (and LIFE) results and enabling user groups to conduct targeted searches for knowledge and products from water related research, technology and development. Plans are currently underway to extend WISE to serve as a common reporting platform for the Data, Information and Knowledge Exchange on the marine environment (WISE-Marine). See the MSFD CIS WorkPlan 2014 and beyond[13] for further details.

3.3 Towards a science-policy interface supporting MSFD implementation

The Marine Strategy Framework Directive (2008/56/C) is the environmental pillar of the Integrated Maritime Policy[14]. Adopted in 2008, the MSFD has completed its first phase and is now one step closer to the concrete implementation of the ecosystem approach with regard to the management of human activities impacting our seas (COM(2014) 97 final)[15] [16]. However, the submission of Member State first assessments revealed a lack of data availability across Europe that will be required to achieve the ambitious target of Good Environmental Status of European marine waters by 2020. In addition, although implementing the MSFD is first and foremost a Member State responsibility, a real need was identified for regional coherence and coordination between Member States and across multiple geographical scales (sub-regional, regional and European).

[10] *http://www.stream-project.eu/sites/default/files/SPI%20Cluster%20Roadmap%20FINAL_0.pdf*
[11] *Now called circabc: https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp*
[12] *http://www.wise-rtd.info/en*
[13] *MSFD CIS Strategic Document including a work programme for 2014 and beyond. Final version agreed by Marine Directors on 5/12/2013. http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/pdf/MSFD%20CIS%20future%20work%20programme%202014.pdf*
[14] *European Commission (2007) An Integrated Maritime Policy for the European Union. COM(2007) 575 final.*
[15] *http://ec.europa.eu/environment/marine/hope-conference/conference-programme/index.htm*
[16] *http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0097&from=EN*

MSFD Common Implementation Strategy
Organisational structure - 2014 and beyond

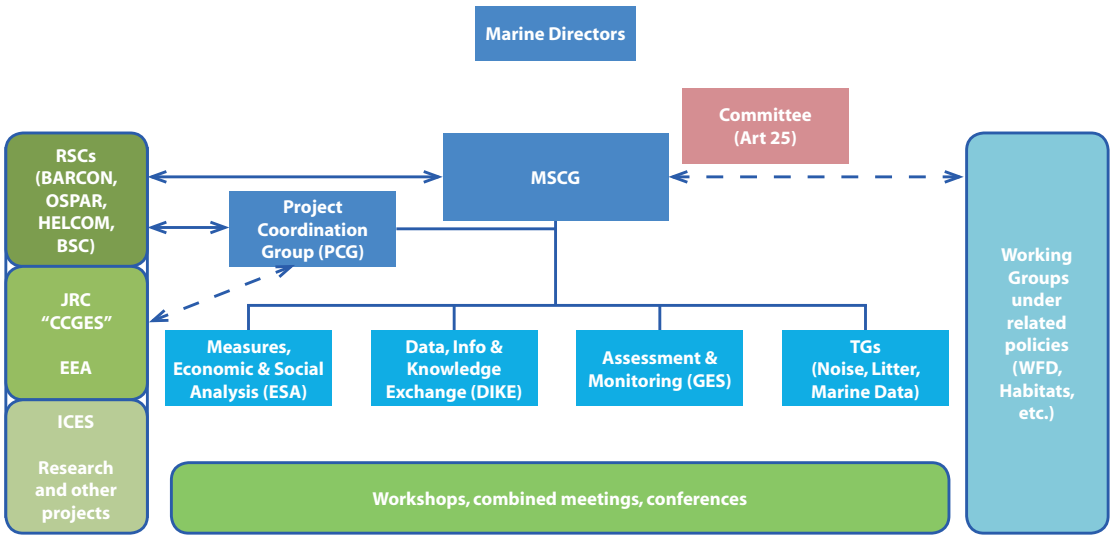

Figure 2. MSFD Common Implementation Strategy organizational structure 2014 and beyond. Redrawn from MSFD CIS strategic document (see footnote[13]).

There are many science-policy interfaces and platforms already in place at national, regional and European levels directly and indirectly supporting MSFD implementation (see Figure 2 for European MSFD Coordination and Working Groups established by the European Commission). The existing structures foster dialogue across geographical scales between knowledge producers, wider Stakeholders and policy makers. Initiatives include national expert meetings, Regional Sea Convention meetings (e.g. OSPAR Intersessional Correspondance Group for MSFD) and European level MSFD meetings e.g. Working Groups and the Marine Science Coordination Group (MSCG). Further detail is provided in a review by the JPI-Oceans CSA[17]. It is crucial that a successful SPI builds on these existing initiatives and identify gaps where new capacities are needed to further support MSFD implementation into the future. The MSFD CIS Strategic Document for 2014 and beyond (see footnote 13) outlines some cross-cutting activities for enhancing science-policy interface. This includes scientific advice building on the work already established by the Joint Research Centre (JRC, EC) and International Council for the Exploration of the Sea (ICES). The MSFD Project Coordination Group (PCG) is also highlighted as a key platform for coordination of the dissemination, identification of knowledge relevant for MSFD implementation and identification of future short-, mid- and long-term research needs.

3.4 National MSFD Science-Policy Interface Case Studies

Based on reviews of best practice and feedback from the stakeholder consultation, WP4 identified a lack of coherence in MSFD science-policy interfaces at a national level. For this reason and to add value to existing and ongoing studies (e.g. Zamparutti *et al.*, 2012; Redd *et al.*, 2014 [18]), STAGES WP4 focused on investigating the effectiveness of existing MSFD science-policy interfaces at the National level. Case study examples are presented here from four Member States, namely Croatia, the Netherlands, Belgium and France. These summarize the existing national governance structure for MSFD implementation, including any science-policy interfaces currently in place to support MSFD. For Croatia and France the organogram was directly provided by the national contact whereas for the Belgium the diagram was designed in close cooperation with the national contact. The case studies also present the main hurdles and potential solutions that could make the SPI more effective. This information is summarized together with recommendations in STAGES D4.2.

[17] *JPI-Oceans CSA Mapping and preliminary analysis of policy needs for evidence. See also footnote 5.*
[18] *Redd, T., Wood, J., Foden, J., Mills, D., Bonne, W (2014). Mapping and preliminary analysis of policy needs and evidence. CSA Healthy and Productive Seas and Oceans D5.1.*

I: Croatia

Contact Person: Barbara Škevin Ivošević, Senior Policy Advisor, Ministry of Environmental and Nature Protection

GENERAL SETTING

Croatia has legal structures in place to address MSFD implementation. However a major hurdle of optimizing MFSD implementation in Croatia is lack of human capacity both in terms of expertise and financial resources. In addition, the fragmentation of the competencies makes effective communication more demanding.

The legal framework for the implementation of MSFD in Croatia is represented in Figure 3 based on the national regulations to establish an action framework for the Republic of Croatia in the field of marine environment protection, Official Gazette 136/11.

- The **Ministry of Environmental and Nature Protection** is competent body for implementation of the Regulation.
- **The National Committee** appoints the experts for implementation of the national Marine Strategy. The National Committee is composed of scientists and professionals appointed as individuals; in addition to representatives of scientific institutions and representatives of the Ministry and other competent bodies. The National Committee meets several times a year and is managed by the chairperson who is both the Ministry's representative and is appointed by the Government of the Republic of Croatia as part of the aforementioned decision. The National Committee is expressing its opinions on the developed marine strategy documents.
- **The Coordination Commission** is composed of ministers in accordance with the corresponding competence of the ministries referred to in table 1 of the diagram. The Coordination Commission is headed by the minister in charge

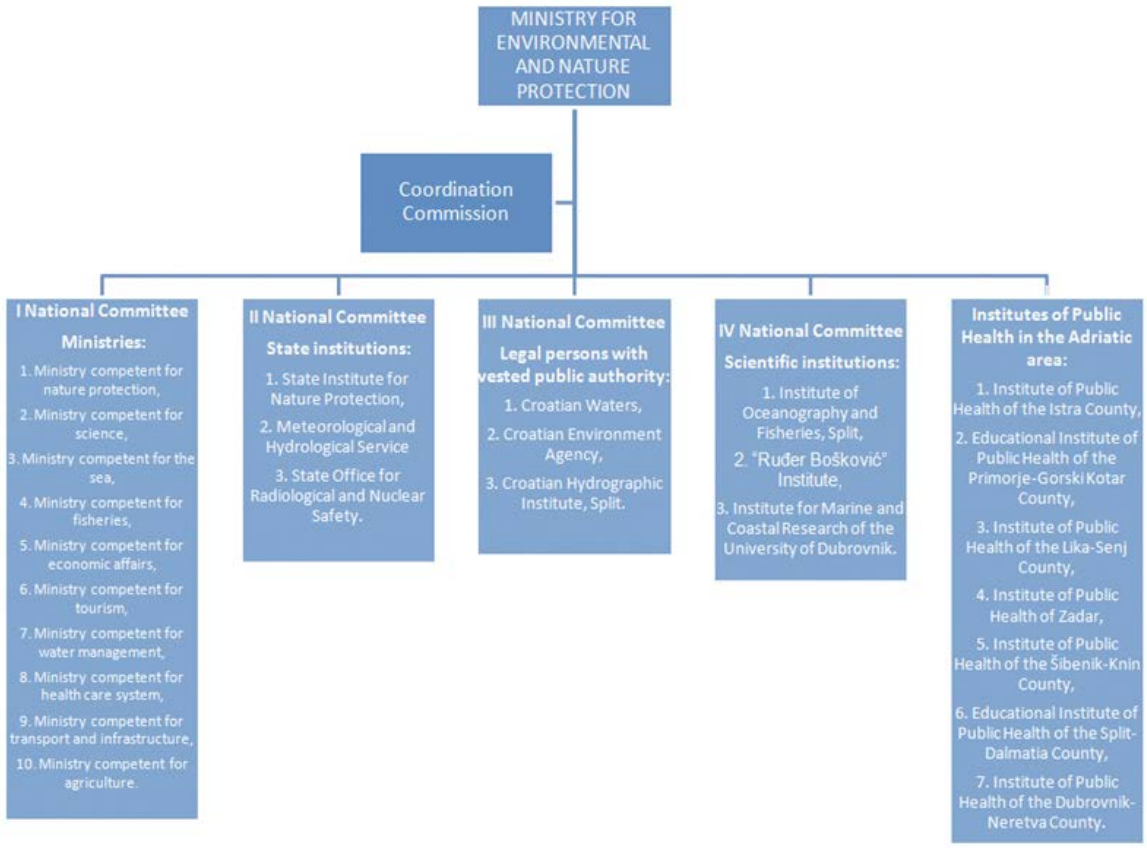

Figure 3. The legal framework for the implementation of MSFD in Croatia.

of environmental protection. The Coordination Committee, in the form of a conclusion, confirms the official MSFD documents. Along with the documents submitted to the Coordination Commission for consideration, opinions of the National Committee are also submitted to the Coordination Commission.

- Competent bodies are participating in the implementation of the Regulation, each within their scope of competence, including the coordination of scientific and professional activities from the administrative field.
- The chairperson of the National Committee has a mandate to appoint and set up corresponding working bodies for the purpose of efficient execution of the National Committee's tasks.

MAJOR HURDLES

Service providers of MSFD are oceanographic experts in a contractual situation

- This setting results in few oceanographic institutes centralising MSFD generated knowledge

Different actors are involved, resulting in scattering of information

- e.g. at least three ministries involved in implementation of MSFD Ministry of Agriculture and Fisheries, Ministry of Environmental and Nature Protection, Ministry of Maritime Transport

Lack of specific MSFD expertise at the governmental level

- Most recognized scientists with specialized competence on MSFD have positions in the oceanographic institutes

POSSIBLE STRATEGIES AND TOOLS FOR ENHANCING THE EFFECTIVENESS OF THE SPI PROCESS

Three possible pathways have been identified:

1. **Creation of a SPI Platform**
   A more fluent advisory process is needed whereby scientists have access to a SPI platform. Croatia currently has a pilot project in final stages of negotiations whereby an international consultancy company experienced in MSFD implementation will be responsible for the creation of an IT platform centralizing databases of the different sectors
2. **Regional consortium providing specific advice**
   Croatia would indeed benefit from regional EU support with a more fit for purpose assessment
3. **Capacity building of government officials**
   One option mentioned would be specialized MSFD training sessions and/or intensive education modules for governmental officials

II: Netherlands

Contact Person: Lisette Enserink, Senior Policy Advisor, Rijkswaterstaat/Water, Transport and Environment

GENERAL SETTING

To achieve more effective science-policy interactions, the Netherlands is currently developing a specialized structure including different MSFD key actors. The group consists of the main governmental bodies responsible for implementing MSFD and also major national science institutions (no universities). The overall setting is comparable to the concept of a Knowledge Broker. No diagram is currently available.

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Whilst the function is compatible with the general concept of knowledge brokers, a potential hurdle to successful exchange is the existing competition between the actors. However this can be overcome by a common motivation/goal. For example, a proposed way forward is for the partners to jointly tender for EU money. This would provide a common benefit to bring stakeholders together and foster knowledge exchange. However, the same hurdles still persist for knowledge brokerage across other geographical e.g. European levels.

III: Belgium

Contact Person: Dr. Saskia Van Gaever Senior Policy Advisor from the Federal Government, Marine Environment Department (FPS Health, Food Chain Safety and Environment)

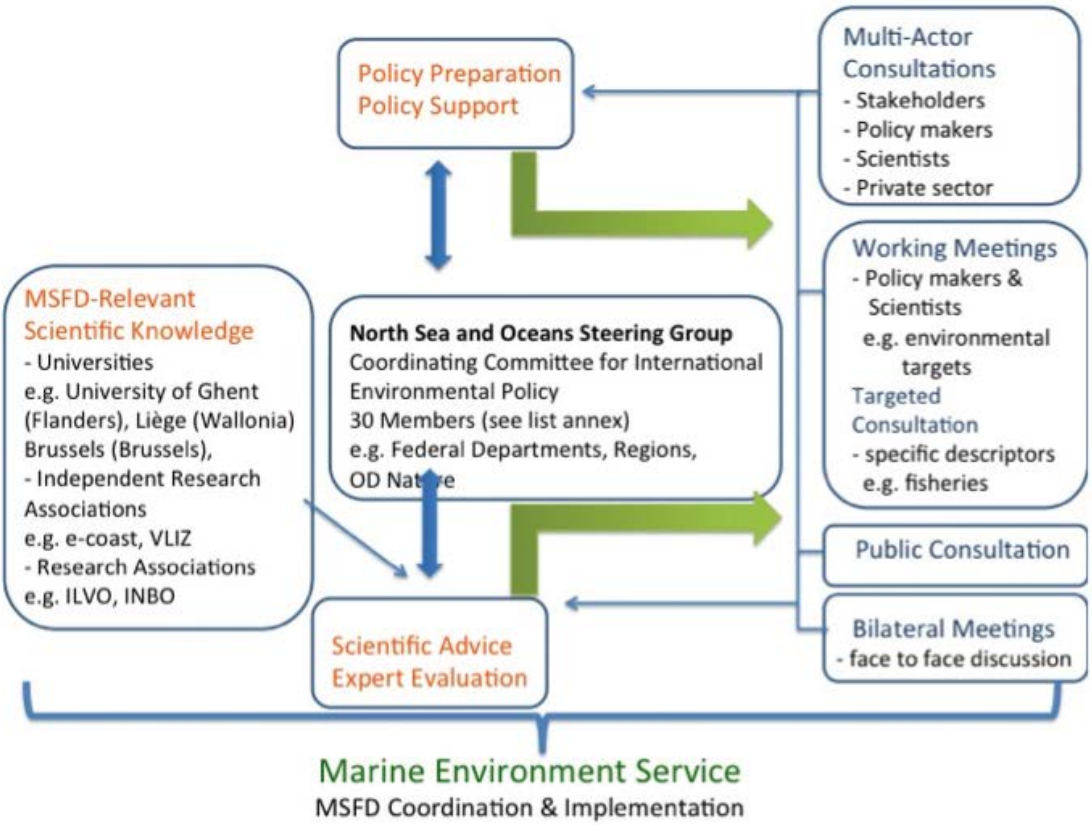
GENERAL SETTING

Belgium transposed MSFD into its national legislation in 2010, and performed an initial assessment on the state of the marine environment in 2012. This involved a public consultation (April – May 2012), at which point the final results were submitted to the permanent representation to the EC in July 2012. Policy makers and researchers collaborated intensively throughout the entire process especially for the establishment of environmental targets. The consultations and dialogue between key actors were facilitated by Dr. Van Gaever. Figure 4 presents the MSFD governance structure and science advisory process to support MSFD Implementation in Belgium.

The Marine Environment Service (FPS Health, Food Chain Safety and Environment) is the competent authority for coordination and implementation of the MSFD (Maes *et al.*, 2013 [19]). This is organized primarily in the context of the 'North Sea and Oceans' steering group of the Coordinating Committee for International Environmental Policy (CCIM) of DG Environment. This committee hosts competent federal departments and as well as representation of the Regions and is chaired by the Marine Service. The North Seas and Ocean Steering Group prepares, agrees and finalizes the official Belgian position and MSFD documents.

At an operational level, several instruments were used by the Marine Service for effectively translating relevant MSFD scientific findings into concrete policy guideline. These included multi-actors consultations, working meetings, targeted consultations, bilateral meetings and public consultations. All are coordinated by the Marine Environment Service who act as a channel for presenting scientific advice and the expert recommendations to the North Sea Oceans Steering Group.

[19] *Maes, F., Cliquet, A., Van Gaever, S., Lescrauwaet, A.K., Pirlet, H., Verleye, T., 2013. The marine science-policy interface. In: Lescrauwaet, A.K., Pirlet, H., Verleye, T., Mees, J., Herman, R. (Eds.), Compendium for Coast and Sea 2013: integrating knowledge on the socio-economic, environmental and institutional aspects of the Coast and Sea in Flanders and Belgium. Oostende, Belgium, p. 274-307.*



List of Abbreviations

- ILVO: Institute for Agriculture and Fisheries
- INBO: Research Institute for Nature and Forest
- VLIZ: Flanders Marine Institute: centre for marine and coastal research.
- e-coast: research centre http://www.ecoast.be/en/About-us
- Natuurpunt: Belgian ONG for nature conservation http://www.natuurpunt.be/default.aspx
- OD-Nature: Operational Directorate Natural Environment of the Royal Belgian Institute of Natural Sciences

Figure 4. MSFD coordination and implementation in Belgium.

Regarding direct input to the MSFD policy process, both policy makers and researchers were involved in discussing the overall focus of the description of good environmental status and targets. Working group meetings were organized for several descriptors and these were often followed up with a targeted consultation e.g. for commercial fisheries. Private companies were also invited to engage, including representatives from the wind farm and dredging sectors. The Marine

Environment Service assured that the MSFD relevant marine scientific knowledge and know-how was included during policy preparation and policy support.

The Marine Environment Service has membership to OSPAR, feeding Belgian policy recommendations and the official federal position into regional MSFD levels. The Marine Environment Service also attends EU-CIS MSFD meetings.

CURRENT STATUS OF A SPI TO SUPPORT MSFD

There is no specific committee or structure in place dedicated to a science-policy interface supporting MSFD. However, the Marine Environment Service selectively translate the scientific data for strategic MSFD implementation and therefore acts effectively as Knowledge Brokers engaged in both top-down (responding to policy questions for MSFD) and bottom-up (scanning the National research for relevance to MSFD) activities.

The unique political situation of Belgium results in a division of certain competencies albeit federal (mobility and transport) compared to regional (e.g. fisheries) whilst in some cases both federal and regional departments have similar competencies (e.g. economy). For this reason, it is possible that certain competencies are represented both at regional and federal level in the Steering Group. The high quality of the network and efficient interpersonal connections assure quality and smooth operation of the Steering Group and implementation of MSFD in Belgium.

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It was found that transparency and trust are essential to optimize this interaction. Aspects that encourage this interaction and could be considered essential for effective knowledge brokering include: transparency in government, procedures and communication, scientifically substantiated policy choices, responsibility in the scientific argumentation and clear communication regarding uncertainties in the scientific information.

IV: France

Contact Person: Jean-Paul Lecomte, Centre de Nantes, Ifremer

GENERAL SETTING

The Ministry of Ecology, Sustainable Development and Energy defines the general policy and strategy for the marine environment. It manages the implementation of the MSFD and the legal acts referring to it. It organizes decentralized actions in the marine sub-regions.

MSFD Scientific and Technical Implementation is coordinated by dedicated experts at IFREMER and the Agency of Marine Protected Areas with the support of numerous operators (Figure 5).

This organizational structure has been established since 2010 and it relies on three Working groups:

1. A consultation group that brings together the Ministry of Ecology, Sustainable Development and Energy (MEDDE) and its decentralized offices, partners from the civil society (e.g. NGOs, Nature Protection Associations, Fishermen, Ship owners, WWF) and public institutions (Water Agencies). It meets once year.
2. A group composed of the Ministry with its local, regional and departmental representatives and scientific experts on the 11 Descriptors. It meets twice a year.
3. Expert groups on GES and monitoring programmes conducted by the Ministry. They meet more than 3 to 4 times a year.

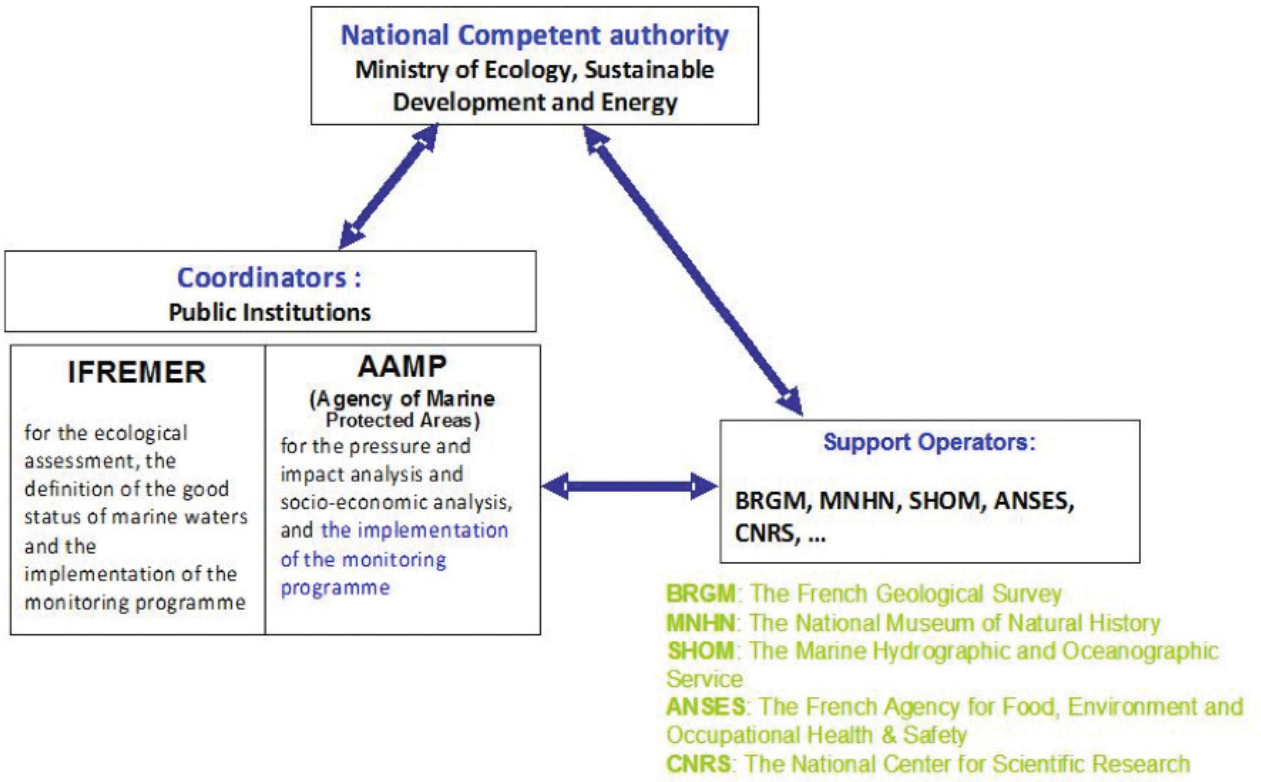

Figure 5.. Organizational structure and interactions for MSFD Scientific and Technical Implementation in France.

In parallel the implementation process is decentralised at the marine sub-region level. This gives the opportunity to involve both national and local experts, as well as the local authorities, local governmental representatives, local NGOs, civil society, etc.

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This organization is quite complex and involves multiple levels for decision-making. However, this also gives the stakeholders more opportunities to meet the scientific experts and to share issues and solutions. In doing so, the Science-Policy interface is also widened and fosters dissemination of the debate on marine issues.

As for many other countries, the current context of financial restraint has led to a reduction in finances available for public involvement, particularly for implementing the Directive. The consequences are that scientific objectives may have to be reduced and key stages such as monitoring programmes may need to be adapted to these budgetary constraints.

4. Stakeholder identification

4.1.1 Sources

Stakeholder identification for the STAGES Consultation on MSFD SPI (Task 4.1) was closely linked and built upon related STAGES activities. This included an inventory of MSFD organizations conducted by Work Package 1. Task 1.3 produced a list of stakeholders spanning coastal member states and Norway from government agencies (competent authorities for MSFD implementation), research institutions, research funding agencies, NGOs and industry. Stakeholder contacts were sourced from open access sources e.g. circabc[11] for EU-CIS-MSFD meeting minutes, internet searches and from expert channels e.g. from competent authorities, STAGES partners and Advisory Board. In parallel, Work Package 2 supplemented contacts from research projects and research funding and performing organizations[20] (European, regional and national level) through a consultation to identify MSFD-relevant research projects. This included the revision of around 13,900 projects: circa 10,000 from European funding programmes, such as FP6, FP7, LIFE including LIFE+, Interreg III and IV, ENPI CBC, IPA CBC, ESPON, INTERACT, Integrated Maritime Policy, COST, EUROCORES; circa 2,000 from RFPOs; and circa 3,900 projects from national project repositories. This resulted in the identification of around 4,000 marine projects (1.500 EU and 2.500 national) with contact details of coordinators or PIs. STAGES WP4 also referred to the stakeholder workshops coordinated by the EC DG Environment that took place in 2006-2007 prior to launching the Marine Directive in 2008. From this it was possible to assess Level 1 and Level 2 Stakeholders[21] (as identified by the European Commission).

The STAGES project consortium and Advisory Group were also key providers of stakeholder contacts, based on their extensive expertise and networks of contacts at all geographical levels. For example, the European Marine Board (EMB) could draw upon a network of delegates from 36 National Marine RPOs and RFOs across Europe. In turn, ICES represents a network of more than 4000 scientists from 300 research institutes across 20 countries spanning EU member states and associated countries. Partner networks were particularly important to further define stakeholders at the national level. This process was iterative, whereby existing stakeholder contacts were asked to identify further contacts and channels of information to add to the stakeholder inventory.

Another important source of stakeholder information came from related European projects, building on STAGES WP1 and WP2 interactions with projects e.g. DEVOTES, PERSEUS. In particular, STAGES WP4 interacted closely with the project ODEMM[22] (Options for Delivering Ecosystem-Based Marine Management) that conducted a Consultation of Marine/MSFD stakeholders in 2012-2013 on governance options for marine policy e.g. MSFD. The inventory was further supplemented by contacts established at relevant conferences and meetings e.g. CIS-WFD SPI meetings (2012), Green Week 2012, ODEMM workshop (February 2013), SPIRAL workshop (June 2013).

4.1.2 Stakeholder categorization

Between September 2012 and March 2013 STAGES WP4 conducted a targeted search across marine sectors and geographical scales to identify a broad cross-section of relevant Stakeholders at the national, regional and pan-European level. To determine the relevant marine sectors and categorization of organizations, the EMB built on its work in previous Stakeholder consultations (e.g. European projects MARCOM+, EMAR2RES [23]), together with the Stakeholder inventory work conducted in STAGES by WP1 (Task 1.3) and WP2.

[20] *RPO: Research performing organization; RFO: Research funding organization*

[21] ***Level 1 Stakeholder*** *(MSFD): Stakeholders invited by the European Commission to attend meetings of the European-level Working Groups and/or Marine Strategy Co-ordination Group. The group includes representatives of third countries, international organizations and stakeholders as observers. NB. The Level 1 list of observers for MSCG and CIS meetings was revised in 1st June 2013 following an update to the rules of procedure of the Informal Commission Group of Experts on the Implementation of the MSFD (adopted February 2013 (see MSCG/11/2013/03).*
Level 2 Stakeholder *(MSFD): Other Stakeholders that can feed views on MSFD through the level 1 groups or through National contact point.*

[22] *http://www.liv.ac.uk/odemm/*

[23] *Cooperation between the Communities of European MARine and MARitime REsearch and Science; project ID: 234359; 2009-2012*

Firstly, organizations were categorized in terms of their organizational status to determine the main mandate and geographical scale of the organization e.g. research performing organization and geographical scale e.g. European administration (see Question 2 below).

2. What category does your organization belong to? Tick one answer from the selection below. Response required. *

- ○ National Government Administration
- ○ Regional Seas Administration
- ○ European Administration e.g. European Commission
- ○ Research/Science Funding Organization
- ○ Non-Governmental Organization
- ○ European Research Project/Network e.g. FP7, LIFE+, INTERREG
- ○ Other Research Project/Network
- ○ Industry (SME)
- ○ Industry (Other)
- ○ Industry Association (national)
- ○ Industry Association (Regional/European/International)
- ○ Other (Please Specify) _____

_____

Stakeholders were also targeted from 11 marine sectors of principal activity (see Question 3, next page):

2. Which marine sector(s) does your organization work in? Tick all that apply. Response required. *

- ○ Conservation
- ○ Marine Research and Technology
- ○ Marine Policy
- ○ Navigation and Shipping (including ports and harbours)
- ○ Marine Tourism and Leisure
- ○ Fisheries and Aquaculture
- ○ Energy (Renewables)
- ○ Energy (Oil and Gas)
- ○ Energy (Other)
- ○ Extraction e.g. dredging
- ○ Marine/Maritime Spatial Planning
- ○ Other (Please Specify) _____

_____

4.1.3 Methods of stakeholder involvement

To invite participation in the online survey, stakeholders were contacted by email and sent an official invitation together with supporting documents for the survey on MSFD and the STAGES project. These invitations were followed up with targeted phone calls, particularly to encourage national stakeholders some of whom were less aware or engaged in the MSFD process (e.g. industry). The consultation was also advertised on the STAGES and EMB websites with a direct link to the online survey. EMB were proactive in sending personal invitations and inviting responses via email or as telephone interviews. Following the online survey, follow-up interviews were also conducted with specific stakeholders including Regional Sea Conventions (RSCs) and national stakeholders to assess examples of existing MSFD SPI, future plans for implementation and gaps/needs. These are further reviewed in STAGES Deliverable D4.2.

4.1.4 STAGES stakeholder database

STAGES WP4 identified over 600 marine stakeholders from across marine and maritime sectors spanning national, regional and European levels. These include organizations and networks from industry, research performing organizations, research funding agencies, government administration (e.g. competent authorities) and non-governmental organizations. A database was created building on an inventory of MSFD stakeholder organizations and communication outputs developed by the STAGES Consortium (WP1 and WP2). Stakeholder contacts were also provided by the FP7 ODEMM project and sourced from MSFD European stakeholder lists and Working Groups (European Commission). The main information collected included:

- the MSFD institution/organization
- Contact persons (name, position, telephone, email)
- Source of information

Most of the information was collected from public sources such as MSFD meeting minutes, website, internet searches, etc, but there is also a group of records that were obtained from other sources, basically from contributions from the STAGES partners, from competent authorities and MSCG members replying to our initial request of information, contributions from the Black Sea Commission, from the DEVOTES project, etc.

STAGES Stakeholder Survey on views and expectations for a science-policy interface to support the MSFD




Examples of MSFD stakeholders including marine policy/governance, marine research and marine/maritime industry. (For image credits see European Marine Board 2013, Navigating the Future IV, Position Paper 20 of the European Marine Board).

> *MSFD is a bold initiative. When it started, the tools to implement it were not in place. Scientists effectively informed policy on the marine status and where to set the level of ambition for GES etc. Scientists are largely the client base for producing knowledge for MSFD.*
>
> *Regional sea coordination stakeholder.*

> *Stakeholder views are essential to get insight into practical views and solutions tapping into the diverse evidence-based expertise in the marine and maritime communities.*
>
> *National academic researcher.*

Quotes from stakeholders from the STAGES online consultation on the MSFD science-policy interface.

5. STAGES stakeholder survey on a science-policy interface to support the MSFD

As part of a wider stakeholder consultation, STAGES WP4 launched an online survey in summer 2013 to assess Stakeholder views on the current MSFD science advisory process and define ways to enhance knowledge uptake into the future. The survey was designed to complement ongoing related surveys such as the STAGES survey on MSFD projects and a wider Consultation by the JPI-Oceans Coordination and Support Action[5].

5.1 Survey design

Examples of previous and ongoing surveys were viewed to gather information on best practice in survey design and methodology, and to assess the current landscape of MSFD activities and surveys. This ensured that the STAGES SPI survey would be complimentary to ongoing work of relevant initiatives. Examples of surveys and work assessed as part of the design phase included:

1. STAGES WP2 survey on 'MSFD knowledge outputs' (Spring-Summer 2013). The target population of the questionnaire was project coordinators/principal investigators from all publicly funded marine environment research at European, regional and national levels (D2.2. Collection Tool). Questions were targeted to assess if the project dealt with research that was relevant for MSFD implementation [24].
2. ODEMM FP7 project WP7 survey on Regional Cooperation (Spring 2012) using Statements, Propositions (Multiple Choice) and Scenarios.
3. JPI-Oceans CSA questionnaire (Spring – Summer 2013). Discussions were held between CSA-Oceans WP5 and STAGES WP4.
4. MARLISCO FP7 SiS project on marine litter (Autumn 2012-Spring 2013). A survey was developed to provide a "snapshot" of stakeholder attitudes and perceptions to marine litter at the start of the project.
5. MSFD national stakeholder survey, marine policy team, Northern Ireland (2009)

The survey content was designed by the EMB Secretariat to include fourteen questions (See Annex I for full questionnaire). Questions were aimed at gathering Stakeholder opinions and perceptions on three key areas of the MSFD science-policy interface:

a MSFD knowledge production, availability and access

b Stakeholder involvement in the current MSFD science-policy interface and perceptions of how effective existing SPIs are at different geographical scales.

c Tools and mechanisms for enhancing the existing science-policy interface: Defining the mechanisms for engagement and exploring the options of incentives for boosting engagement

The survey was designed as an online consultation using the software eSurveyspro. Access and assistance was kindly provided by STAGES partner AquaTT. This software allowed a mixture of multiple choice and open text questions and data export options where further analysis could be conducted (Baker, 2013 [25]).

[24] *See www.stagesproject.eu for final deliverable*
[25] *Baker, J (2013). MSc Thesis on the MSFD science to policy advisory process*


STAGES
CONNECTING SCIENCE TO POLICY FOR HEALTHY SEAS

Under Grant agreement no 308473.

Answers marked with a * are required.

Welcome to the STAGES survey on marine science-policy interfaces!

The Marine Strategy Framework Directive (MSFD) is a key European legislation with the aim of achieving Good Environmental Status (GES) across European seas and oceans by 2020 and beyond. This survey aims to assess Stakeholder needs and expectations for contributing to the MSFD science advisory process, leading to enhanced and more cost-effective implementation of the MSFD into the future.

The Survey is short and will take approximately 15 minutes.
It is composed of 3 main sections:
A. Organization Information
B. Marine Knowledge Producers and Users for MSFD
C. The MSFD Science-Policy Advisory process

As a marine Stakeholder your views are important to us. These will be used to provide the European Commission with recommendations for future Stakeholder engagement, helping to build a more effective science-policy interface to support MSFD implementation.

Whether you produce scientific knowledge, work in the marine industry sector or use scientific knowledge in marine policy and advisory processes, STAGES would like to hear your views.

We thank you in advance for your participation. Individual responses to the survey will be kept confidential. Only summary information derived from multiple returns will be published.

Further information on MSFD and a glossary of terms has been sent to you by email to aid completion of the questionnaire. For any queries contact the European Marine Board Secretariat;
Email: stageswp4@gmail.com Telephone: +32 59 34 01 56.

Save and Continue Later

Next

Front page of STAGES WP4 MSFD SPI online survey (using esurveysPro).
See Annex I for full questionnaire and supporting documents.

5.2 Online consultation

Following approval by STAGES partners and review by the STAGES Advisory Board (e.g. OSPAR Regional Sea Commission), the online survey was launched on 31 May 2013 for a 6 week Consultation. From the full list of over 600 stakeholders, participants were selected to represent a cross-section of sectors and ensure a pan-European representation. Further work included interaction with other STAGES partners, particularly to advise on national stakeholder prioritization.

KEY FACTS: STAGES WP4 Stakeholder Consultation Survey

6 Week Consultation, launched 31 May 2013

436 Stakeholders invited from 30 countries

113 responses from 23 countries (response rate 25.9%)

Key Facts of the STAGES WP4 Stakeholder Consultation survey

436 MSFD stakeholders were contacted from 30 countries, from organizations at a variety of geographical scales (International, European, regional and national) and across marine and maritime sectors (see Figure 6 and comparison of invites versus responses in Table 1). The EMB Secretariat conducted follow-up contact by email and telephone, particularly to stimulate response from national stakeholders. In addition, the survey was further distributed through national networks. One example is the Spanish Fisheries and Aquaculture Technology Platform (PTEPA), an association of different entities related with the R&D of fisheries and aquaculture in Spain. Following invitation to participate in the STAGES MSFD SPI survey, PTEPA circulated this to 258 PTEPA member organizations (María Egea Llorente, Technical Secretary to PTEPA, *personal communication).*

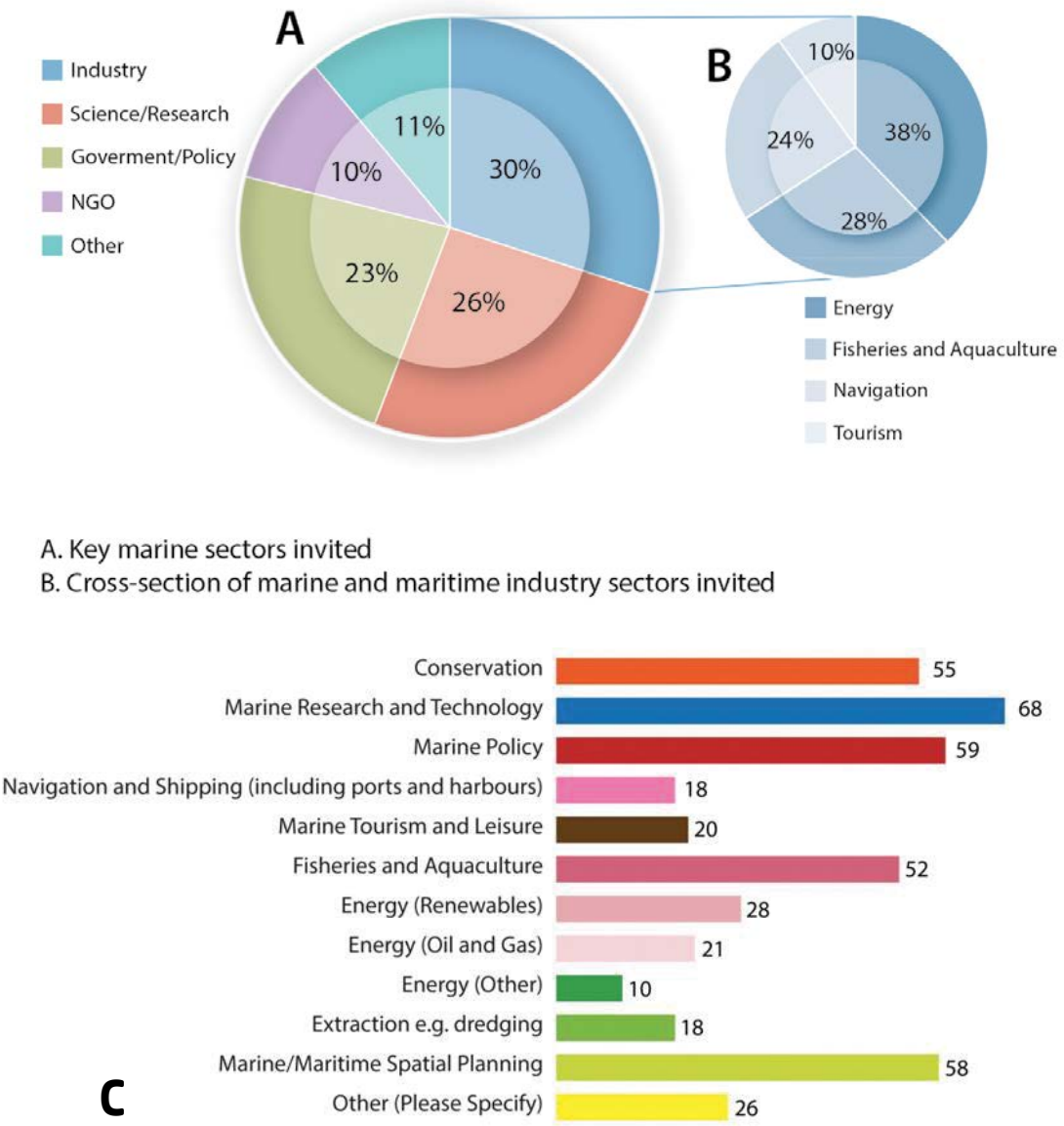
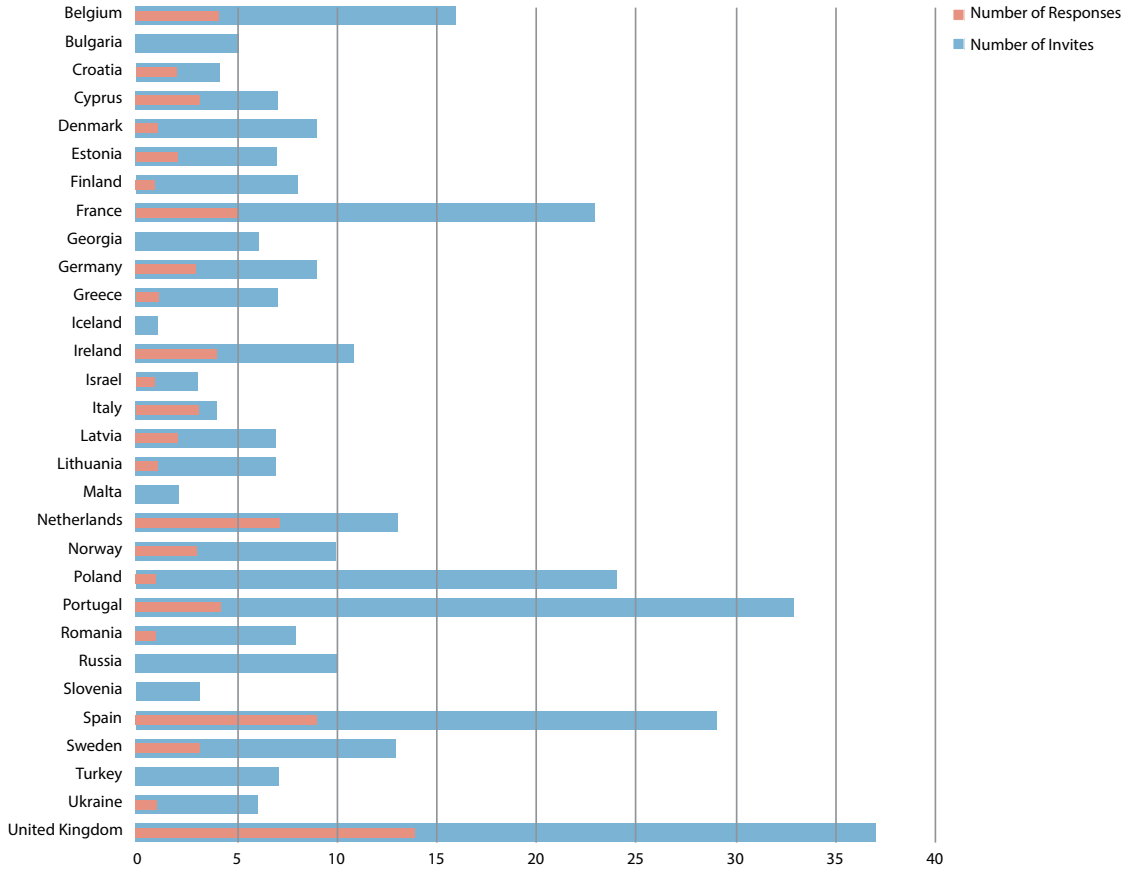


Figure 6: Cross-section of marine stakeholders invited to participate in the STAGES WP4 Consultation on MSFD science-policy interface A) Categorization of organization type B) Industry sectors. NB. Stakeholders were invited from organizations spanning International, European, regional and national geographical scales. C) Marine Science sectors of interest, as indicated by Stakeholders in the questionnaire. NB. Stakeholders could select multiple sectors of interest/ activity.

Response by geographical scale and analysis of pan-European spread

The survey invitations aimed for a wide geographical scale with stakeholders being invited from 30 countries, including European Member States, associated countries e.g. Iceland and international cooperation partner countries e.g. Russia. **113 responses were submitted from 23 countries** (see Figure 7A for the invitation : response comparison). Organization responses were received from International, European, regional and national scales with a large proportion (>65%) of responses coming from national stakeholders, mainly from European Member States (Figure 7B).

A



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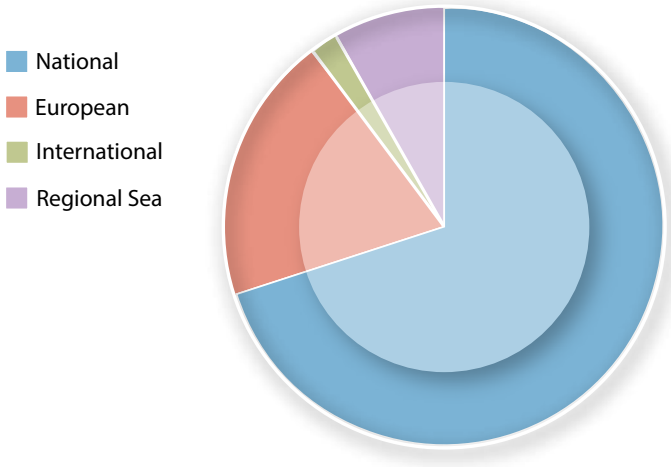

Figure 7. Survey response across European marine regions and geographical scales. A: Number of invitations and responses per country. B: Overview of responses per geographical scale of the organization.

Response by organization type

The response rates varied between the type of organization and marine/maritime sector (Table 1 and Figure 8). The highest response rate was from the academic scientific/research community (37.1%), in particular RPOs (Figure 8). This is most likely a result of the high awareness within the research community of the MSFD and the active role many academic institutes already play in producing knowledge for policy. The lowest response rate was from industry (11.5%) with 15 responses. In many cases industry is currently less aware of the MSFD. For this reason this sector was sent the most invitations (130) compared to other sectors which affects the response rate. However it is still a sector where more could be done to engage them in the MSFD SPI process.

	Invites	Responses	Response rate (%)
Government administration /Policy	100	25	25.0
NGO	43	14	32.6
Scientist/Research	116	43	37.1
Industry	130	15	11.5
Other	47	16	34.0
Total	436	113	

Table 1: STAGES WP4 stakeholder survey: Comparison of number of invites and responses by organization type.

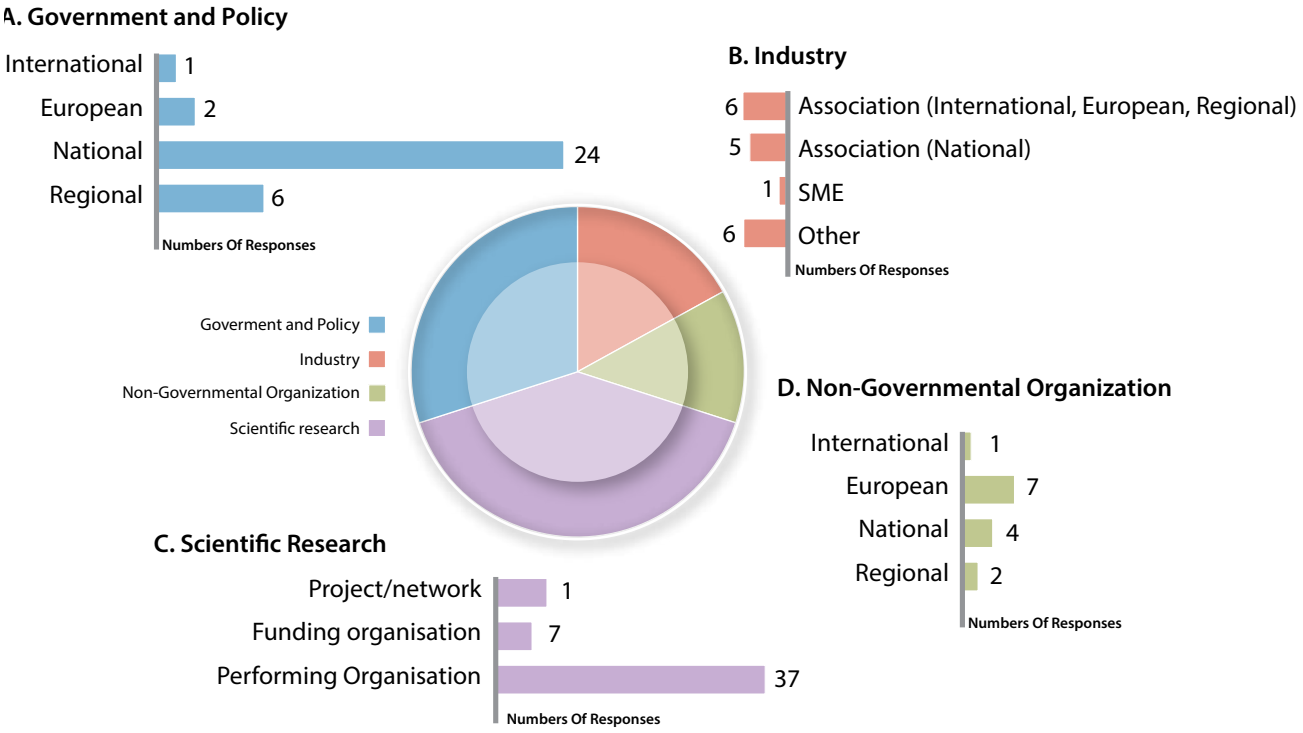

Figure 8. The response of different types of organizations to the STAGES WP4 Stakeholder survey on MSFD science-policy interfaces showing four high level sectors and subdivisions. NB. Each stakeholder noted the status of the organization in question 2 of the survey.

5.3 Results

Results are presented in the following 3 key areas, according to the survey design:

a **MSFD knowledge packaging and availability**

b **Views of the current Science-Policy Interface**

c **Assessing Tools and Mechanisms for enhancing the existing Science-Policy Interface**

A) MSFD knowledge packaging and availability

Scientific knowledge is crucial to the successful implementation of the MSFD, to define and track good environmental status and to achieve successful monitoring and implementation. The survey assessed stakeholder involvement in producing and/or using MSFD-relevant knowledge[26] .

Stakeholders noted a variety of knowledge outputs produced and/or used for MSFD (Question 5a-e):

- Scientific data (raw and/or quality controlled)
- Scientific products and services (e.g. maps, model outputs, forecasts, derived data)
- Expert advice (verbal or written expert advice). It was noted this was often for a specific target audience such as the research community, policy makers or Industry.

Examples of knowledge outputs ranged from **basic research** (through National and EU initiatives) underpinning MSFD assessments to producing summary reports on the status of the environment (e.g. National Environment Agencies) and providing **technical/scientific advice** to governments on the development and implementation of policies and expert advice on data management for the marine sector. **73.5% of Stakeholders rated expert advice from the research community as a high priority** and 14.2% considered expert advice from industry and other marine users to be useful but currently under-utilized as a source of knowledge.

Stakeholders suggested new and emerging knowledge outputs perceived of importance for informing policy included predictive modeling such as Habitat suitability modeling. "Habitat modeling incorporating 3D oceanographic modeling is seen as the way forward…" (EU FP7 research project)

Industry was seen to be a direct user of scientific knowledge to support their role in MSFD *"Knowledge generated by the MSFD process is and will be used in discussions with EU and IMO"* National Industry Association, Navigation and Shipping sector.

Some organizations noted the potential of knowledge being produced but currently under-utilized for MSFD purposes e.g. on quotas and catch limits of marine organisms (e.g. Regional network supplying knowledge indirectly to MSFD).

The perceived role of Regional Sea Commission in knowledge management varied greatly between regions ranging from facilitating knowledge production, to data storage, online data portals (accessible to contracting parties) and facilitating regional assessments including regional scientific synthesis. Some stakeholders proposed an enhanced coordinating role for RSCs in knowledge management, particularly for the regional assessments and joint monitoring programmes. This should build on the work already conducted on regional core indicators in line with MSFD descriptors (e.g. see examples by RSCs HELCOM and OSPAR).

[26] ***MSFD Knowledge Producer:*** *Marine Stakeholder that produces knowledge for MSFD such as datasets, products and services e.g. environmental status maps, predictions, reports.*
MSFD Knowledge User: *Marine Stakeholder that utilizes marine knowledge in MSFD reporting process, policy making and legislative process or whose organization is directly involved or impacted by the MSFD implementation process. (See also Annex I for MSFD Glossary of Terms).*

Participants also gave opinions on the perceived availability of knowledge by each of the 11 MSFD descriptors. Figure 9 shows the results grouped by MSFD Descriptor (A) and MSFD Theme (B). Participants in general perceived the Disturbances Theme (composed of Descriptor 10 'marine litter' and Descriptor 11 'introduction of energy') to have the lowest availability of knowledge. Indeed a national stakeholder representing the Navigation and Shipping sector commented on the need for more data in these areas: "*…. Additional scientific data is needed on several subjects, e.g. underwater noise and microplastics before new goals and/or regulation can be discussed and agreed.*" Descriptor 5 (Eutrophication) and consequently MSFD Theme 'Contaminants and Nutrients' was perceived to have the highest knowledge availability. In some cases, different marine sectors displayed very different responses. For example, Industry showed a markedly lower perception of data availability for Descriptor 3 (Populations of Commercially exploited fish/shellfish) compared to stakeholders representing other organizations e.g. NGO, research and government administrations.

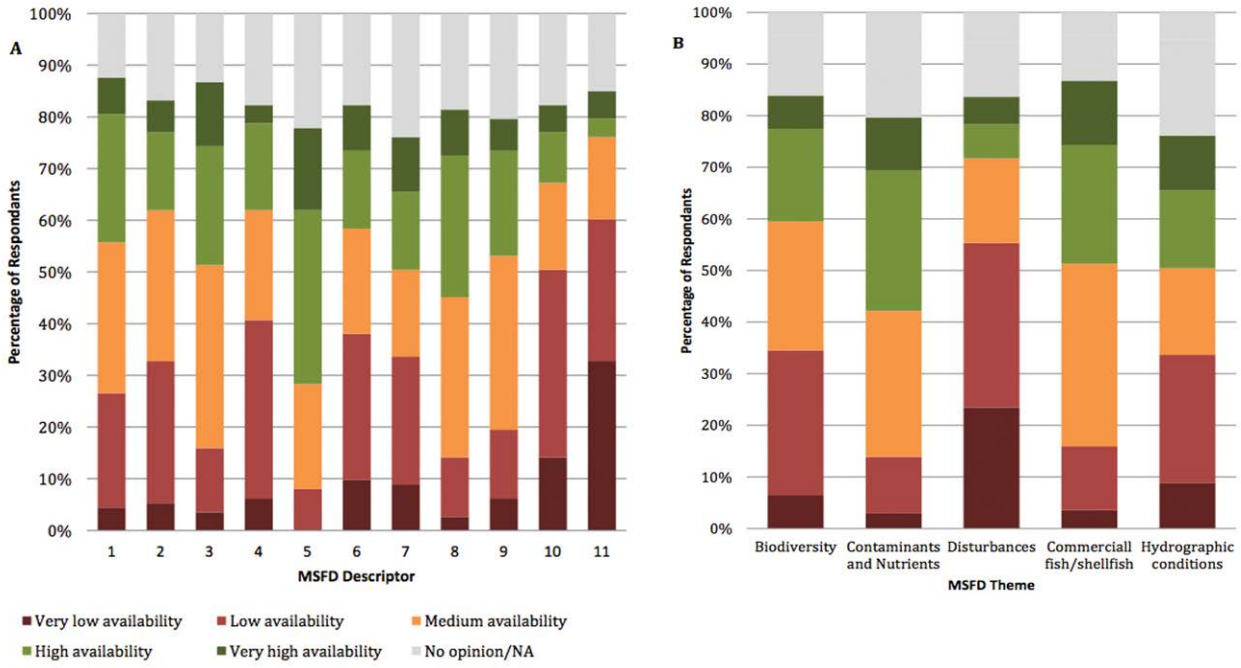

Figure 9: Stakeholder perceptions on knowledge availability by A) MSFD Descriptor B) MSFD Theme (STAGES WP4 MSFD SPI survey Questions 6a-b)

B) Views of the current Science-Policy Interface

Stakeholders gave their opinions on the perceived effectiveness of existing science-policy interface structures across different geographical scales. Results are presented in Figure 10. Less than 30% of Stakeholders perceived any existing SPI to be "Very Effective" or "Effective" (see red line, Figure 10). The sub-regional sea level was perceived by stakeholders to be the least effective existing governance structure, with the largest number of stakeholders (>35%) commenting they were unaware of this process or had no opinion.

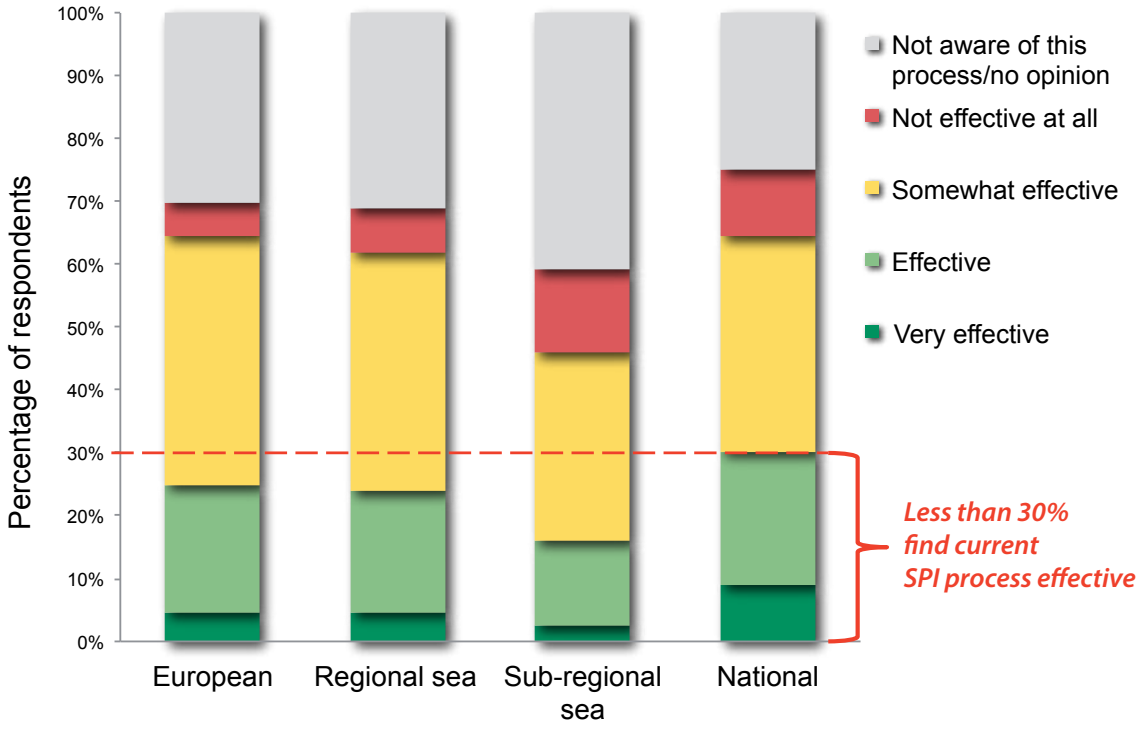

Figure 10: Perceived effectiveness of the MSFD Science-Policy Interface at European, Regional; Sea, Sub-regional sea and National levels. (Question 9, STAGES WP4 online Consultation on MSFD SPI)

Involvement in the MSFD SPI: 41 stakeholders responded they do not currently contribute to the MSFD policy process but

Extended Views on the effectiveness of existing MSFD science-policy interfaces

European scale: Pragmatic top-down coordination and oversight was considered to be important and many stakeholders from organizations with national and regional mandates commented on the usefulness of being engaged in MSFD coordination at the European level "We really appreciated to be part of this working group (EU MSFD group)…to have a direct access and contact with decision-makers….opportunity to share points of view and recommendations with other European stakeholders." European NGO.

Perceived barriers to engagement at European level included:

1. **Stakeholder resources:** The number of meetings and lack of funding was seen as a barrier to engagement "… experience is good and helps formulate the National advisory process. The problem is there are many meetings and the travel cost is high." National academic researcher
2. **Timing** "Improvements could be made by involving the scientific community and knowledge producers at any stage of the MSFD implementation by participant to policy WGs and Coordination groups." National research institute representative.
3. **Engagement of wider Stakeholder community** *"…planned outcomes of projects tend to be badly coordinated with MSFD deadlines…."* National government ministry (NL). *"..the visibility to non-policy makers, scientists or stakeholder sectors is not sufficient."* European decision maker.

Extended Views on the effectiveness of existing MSFD science-policy interfaces (continued)

Regional scale: Many stakeholders commented that more coordination and collaboration between RSCs would be helpful to achieve European coherence and was the lack of alignment of timing and work plans across RSCs and with MSFD was currently a missed opportunity: *"…science is playing a fundamental role in the advisory process. Improvement could be made by establishing ad hoc Commissions or at least organizing meetings in which the knowledge producers can provide information on products available and assist policy makers in data use, user requirements, defining new knowledge etc"* National research institute, Mediterranean region. *"The speed of the MSFD deliverables and cycle……make it very difficult for RSCs to develop mechanisms to take into account neighbouring countries. This is a missed opportunity for coordinating and promoting monitoring of GES at the regional scale."* Stakeholder involved in regional coordination of MSFD.

Sub-regional scale: Many stakeholders (e.g. International NGO) found this scale relevant but under-utilized as a platform to further engage neighbouring countries and civil society. In many cases Stakeholders were not aware of SPI processes at this geographical scale and sub-regional level science-advisory process perceived to be more disconnected from central national policy and decision makers. *"This [sub-regional] process needs to be stabilized in some way, since different countries make different priorities."* National competent authority for MSFD. Sub-regional initiatives such as the JPI-Oceans pilot action on integrated monitoring in the North Sea was given as an example of a supporting and coordination platform at sub-regional level. A national stakeholder from the Netherlands explained that sub-regional coordination was conducted "Mainly through OSPAR, establishing a network of contact persons for national science agendas and connecting MSFD thematic leads across neighbouring countries."

National scale: The SPI initiatives at national level were perceived to be highly variable and some Stakeholders recommended a more formal, strategic and coordinated approach that integrated the advice of industry and other marine/maritime users, e.g. *"The current science advisory process is different from country to country and the level of effectiveness of quite variable ranging from "effective" to "not effective at all",* Stakeholder representing European initiative working at the science-policy interface. *"…A more inclusive and formal relationship should be established between the statutory authorities responsible for the implementation of MSFD and research institutes",* Stakeholder from European FP7 research project. Barriers to National SPI effectiveness included the lack of cyclic interaction and feedback between scientists, policy makers and wider stakeholders: *"scientists have made the observation that their advice has been ignored at [National] policy level and that the process of "consultation" has been used to suggest that because scientific advice has been sought there is satisfactory answer to the question of what constitutes GES."* National decision-maker, environmental policy.

C) Suggested mechanisms and future involvement

An effective SPI draws on a diverse stakeholder community. Targeted mechanisms and tools make it possible to exchange and construct knowledge between scientists, policy makers and other stakeholders in the decision-making process. New tools are needed to make stakeholder dialogue and knowledge exchange more efficient, iterative and timely. Stakeholders were asked to rank SPI mechanisms and tools from low to high impact. The top 4 ranked tools were: Online data/knowledge portals, Regional Sea Commissions as a hub for information exchange, cross-sector funding for MSFD research, stakeholder workshops (see Figure 11, blue arrows indicate highest ranked tools).

would like to. Of these, 20 considered themselves to be a science/research organization, 7 industry, 4 NGO, 2 Government. Mechanisms considered most effective by stakeholders representing research/science organizations included online data/knowledge portals and regional sea commissions as a hub for information exchange. The main incentive appeared to be opportunity to contribute knowledge and/or expert opinion to the MSFD policy process (19/20 considered this to be an important incentive). Notably, 50.3% of stakeholders would be interested in very regular or regular meetings to participate in MSFD science-policy process. The highest demand for very regular meetings was on a national scale (34.8%) and annual meetings for regional seas (32.2%) (Baker, 2013).

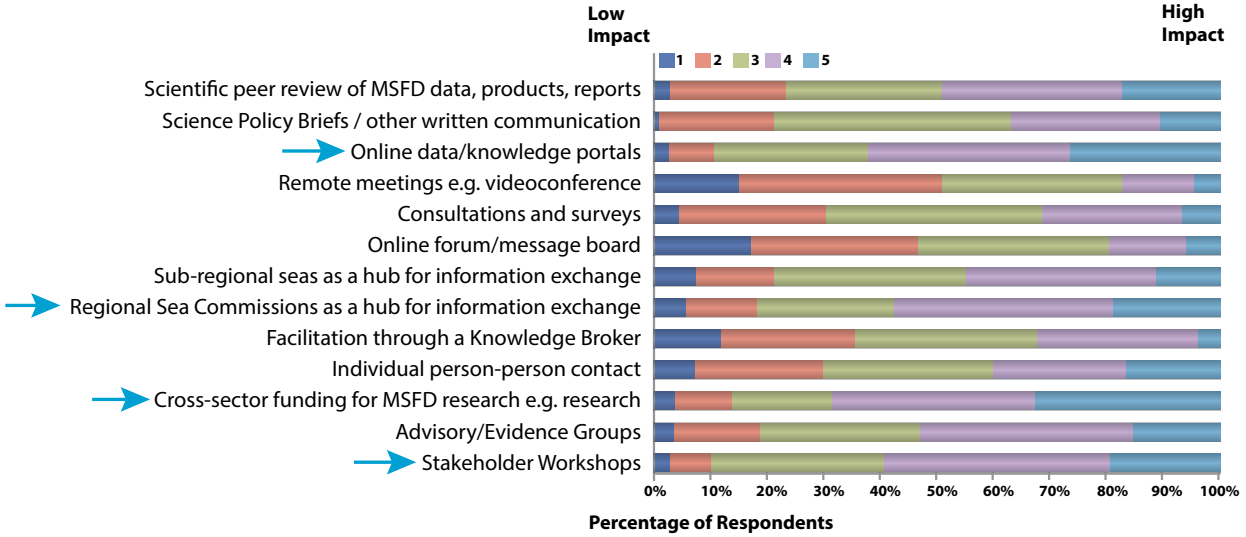

Figure 11. Stakeholder responses to rating different mechanisms and tools for SPI (n=113). Question 11, STAGES WP4 Consultation on MSFD SPI.

Barriers and incentives: Many stakeholders commented on the need for incentives to encourage engagement, including the need for funding for stakeholders to attend MSFD meetings and the opportunity to contribute knowledge or expert opinion and access to marine knowledge.

"There is a need for providing funding for stakeholders to attend MSFD meetings as an opportunity to contribute knowledge and/or expert opinion to the MSFD policy process. Access to marine data, products and services will also facilitate this process" **National industry representative, Shipping and Navigation sector.**

"Suitable guidance on input requirement would be helpful." **National fisheries sector stakeholder.**

Mechanisms to build an effective long-term SPI:
Stakeholders were invited to provide extended answers on mechanisms to build an effective long-term SPI for MSFD. Examples are provided below:

"Promotion of 'soft' (non-legally-binding mechanisms) to encourage a wider involvement in development of pragmatic and acceptable (by stakeholders) solution to achieve implementation targets (more effective and easier to enforce), e.g. through Global Marine Litter Partnership, Global Waste Management Partnership etc." **National government research institute (UK).**

"More (appropriate) connectivity is required between EC websites of DG ENV (CIRCA)-DG MARE – DG RTD etc, JRC, EEA" **European science-policy organization.**

"A portal that organizes and links the jigsaw puzzle of scientific (advice) producers with policy working groups and industry target groups/platforms." **National policy maker.**

"Science-policy interfaces are only useful if the scientist can provide objective, impartial evidence and those in policy have a clear understanding of the implications of that evidence." **National marine research stakeholder.**

"Top-down advice from a combination of Emodnet and WISE might provide a mechanism for a regional/pan-European co-ordination of monitoring." **EU FP7 research project**

"A crucial point in all of this is who pays for it? …scientists are not employed to take part in endless consultations and "interfaces". **National marine research stakeholder.**

STAGES stakeholder workshop on views and expectations for a science-policy interface to support implementation of the Marine Strategy Framework Directive 12 February 2014, Brussels

Photos from the STAGES WP4 Stakeholder workshop on 12 February 2014. Left: Participants in breakout session on SPI mechanisms and tools. Right: Session moderator Jan van Tatenhove (Wageningen University), STAGES Coordinator Marisa Fernandez (CETMAR), session moderator Gert Verreet (OSPAR) and STAGES partner Kate Larkin (EMB).

6. STAGES stakeholder workshop on a science-policy interface to support the MSFD

6.1 Introduction

The second stage of the STAGES WP4 MSFD SPI consultation was an interactive stakeholder workshop, which took place in Brussels on 12 February 2014, in collaboration with EU FP7 project DEVOTES[27] . The main aim of the workshop was to build on the online stakeholder consultation conducted in 2013 (section 5) and further assess stakeholder views on the MSFD science-policy interface with representatives from a broad cross-section of MSFD stakeholders and further assess views to optimize a future MSFD science-policy interface through participatory discussion.

As STAGES WP4 leaders, the European Marine Board led the process, from the workshop design and organization to the implementation and analysis of results. STAGES partners CETMAR and EurOcean, were consulted on the workshop design, as a result of their related work in STAGES Work Packages 1 and 2, in particular the WP2 consultation and Inventory on MSFD-relevant research. WP3 foresight workshops on research needs and gaps were important resources to inform this work.

STAGES Advisory Board member Gert Verreet (OSPAR) and Prof. Jan van Tatenhove (Wageningen University) were invited as independent moderators for breakout discussions and they provided crucial input on the design and content of these sessions focusing on MSFD Knowledge and SPI tools. The agenda, supporting documents for the two breakout sessions and a full participant list are available in Annex II. In addition, an invitation letter was sent to each stakeholder and supporting documents were circulated ahead of the meeting.

6.2 Workshop design

The workshop was designed with an emphasis on interactive and structured discussions on the MSFD science-policy interface, specifically in the areas of knowledge production, uptake and SPI tools. The full agenda is presented in Annex II. In summary, the agenda included an opening statement and chairing by Niall McDonough (EMB), presentations on the STAGES project (Marisa Fernandez, CETMAR), STAGES WP4 online survey (Kate Larkin, EMB), and a session dedicated to results and outputs from the FP7 DEVOTES project key outputs. Next, participants split into two MSFD SPI discussion groups and rotated between two discussion themes (2 x 1h30 sessions) before re-convening for a plenary brainstorming and discussion.

The breakout discussions built upon the main topics and preliminary results from the WP4 online survey, focusing on two overarching themes:

- **Discussion theme 1: Which Knowledge and When?** Moderated by Gert Verreet (Deputy Secretary at OSPAR Commission; STAGES Advisory Board Member)
- **Discussion theme 2: Choosing the best SPI tools.** Moderated by Jan van Tatenhove (Special Professor Marine Governance Wageningen University, partner in FP7 ODEMM project).

External experts Gert Verreet (OSPAR) and Jan van Tatenhove (Wageningen University) were invited to chair and moderate the breakout discussions based on their expertise in MSFD and science-policy interfaces spanning national, regional and European levels. Inviting independent moderators ensured impartiality of stakeholder discussions and also enabled the European Marine Board to further facilitate discussions, supporting the note taking and production of strategic recommendations.

[27] http://www.devotes-project.eu/

To ensure stimulating discussions, supporting documents were produced by EMB for each breakout discussion theme and circulated to all participants before the meeting (see Annex II). These provided background information and conceptual figures and presented examples of the online survey results to provide feedback on the first stage of the consultation and context for those stakeholders new to the process.

MSFD SPI workshop, 12/02/2014, Brussels

Breakout Session Supporting Document: Choosing the best SPI tools

"Science–policy interfaces are defined as social processes which encompass relations between scientists and other actors in the policy process, and which allow for exchanges, co-evolution, and joint construction of knowledge with the aim of enriching decision-making" [Van de Hove, 2007, Futures Vol 39, p. 807-826]

Science is just one part of the extensive knowledge-base drawn upon in environmental policy making. It is therefore crucial to find innovative mechanisms to make available updated and ongoing scientific knowledge to underpin the decision-making process. An effective SPI draws on a diverse Stakeholder community. Mechanisms and tools make it possible to exchange and construct knowledge between scientists, policy makers and other stakeholders in the decision-making process. New tools are needed to make Stakeholder dialogue and knowledge exchange more efficient, iterative and timely (see Figure 1).

Figure 1: Components of an effective Science-Policy interface showing the important role of Stakeholders and Knowledge and the need for multi-way dialogue to promote evidence-based decision making.
Source: NFIV, Chapter 13, Marine SPI, European Marine Board 2013, p.168]
http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

Participants are invited to discuss **'Choosing the best SPI tools'**, in the context of the Marine Strategy Framework Directive, focusing on 2 topics:

1. Maximizing Stakeholder interaction in the MSFD process.
2. Enhancing scientific knowledge transfer and uptake into MSFD policy.

At all times, keep in mind the following cross-cutting issues:

a) **Multiple geographical scales** (e.g. National, Sub-Regional, Regional, European)
b) **Timing** and the need to maximize the interplay between the research (longer-term) and policy (shorter-term) time-frames.

MSFD SPI workshop, 12/02/2014, Brussels

Breakout Session Supporting Document: Which Knowledge and When?

"SPIs are implemented to promote the interplay between the science and policy domains, fostering exchange between [1]knowledge producers (e.g. the research community) and [2]knowledge users (e.g. policy makers)." ['NFIV, Chapter 13, European Marine Board 2013, p.167]

Knowledge forms the foundation of evidence-based decision-making and there is a growing wealth of information available to MSFD policy makers. Harnessing existing knowledge from a diverse stakeholder community is crucial to make this knowledge available and the packaging of information and level of detail provided should be appropriate to the target user and the geographical scale. Finding efficient ways for defining science needs through a science advisory process is also key to drive new knowledge that is relevant to policy going forward (see Figure 1).

Participants are invited to discuss **'Which Knowledge and When?'** in the context of the Marine Strategy Framework Directive (MSFD), focusing on 3 main topics:

1. Packaging relevant knowledge outputs for MSFD.
2. Harnessing knowledge: Maximizing the impact throughout the research cycle.
3. Targeting windows of opportunity for exchange between research and MSFD policy.

At all times, keep in mind the following cross-cutting issues:

a) **Multiple geographical scales** (e.g. National, Sub-Regional, Regional, European)
b) **Timing** and the need to maximize the interplay between the research (longer-term) and policy (shorter-term) time-frames.

For each topic, key questions are provided below to stimulate discussion:

1. Packaging relevant knowledge outputs for MSFD.

Q1: What types of knowledge does MSFD policy require and is there currently a mismatch between knowledge produced and policy needs? Using Figure 1, discuss if the current MSFD science-policy interface promotes production and transfer of relevant knowledge required to support MSFD implementation. Are there recommendations for types of knowledge and packaging of Knowledge Outputs?

Q2: How could the 'packaging' of information be targeted for different geographical scales? e.g. A National example of synthesizing and packaging knowledge for policy is the UK Charting Progress Report.

[1,2] See supporting document 'MSFD information sheet' for glossary of terms
[3]http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

The breakout session briefing documents also proposed key topics and questions to stimulate discussion (see also Annex II for full supporting documents):

Which Knowledge and When?

1. **Packaging relevant knowledge outputs for MSFD.**
   - ➤ Q1 What types of knowledge does MSFD policy require and is there currently a mismatch between knowledge produced and policy needs?
   - ➤ Q2 How could the 'packaging' of information be targeted for different geographical scales?
2. **Harnessing knowledge: maximizing the impact throughout the research cycle.**
   - ➤ Q3 How can we maximize the impact of knowledge throughout the full research cycle and ensure new research is addressing knowledge gaps relevant to policy needs?
3. **Targeting windows of opportunity for exchange between research and MSFD policy.**
   - ➤ Q4 How does knowledge production (process and timing) vary across stakeholder communities e.g. industry etc?
   - ➤ Q5 What are the windows of opportunity for exchange between research and MSFD policy?

Choosing the best SPI tools

4. **Maximizing stakeholder interaction in the MSFD process.**
   - Q6 Is the current stakeholder engagement fit for purpose?
   - Q7 What barriers are there to stakeholder engagement and how do we overcome them?
   - Q8 How can we enhance the MSFD stakeholder interaction?
5. **Enhancing scientific knowledge transfer and uptake into MSFD policy.**
   - Q9 Should specific SPI tools be targeted for different stakeholders e.g. industry, NGO's, academic research community?
   - Q10 What innovative tools and mechanisms could enhance the MSFD SPI to deliver updated and ongoing uptake of scientific knowledge?
   - Q11 Should knowledge brokers be used more to increase the transfer and impact of knowledge relevant MSFD? Who should be the key actors and can you give examples (people, organizations etc)
   - Q12 What other new capacities are required e.g. online portals, experts groups etc?

Prior to the meeting, the organizers (EMB) divided participants into two groups, ensuring where possible that each group consisted of actors of multiple geographical scales (e.g. national, sub-regional, regional, European) with representatives from marine sectors (e.g. fisheries, shipping) and organization category (e.g. NGO, university, industry, government). On registration, participants were provided with their group number. During the course of the workshop, participants stayed in their group and rotated between discussion themes before re-convening in plenary for a final brainstorming discussion session. Additionally specific guidelines were provided for the chairs and an individual briefing took place via video conference.

As the aim was to gather personal/marine sector perceptions and views, not official positions of organizations, the workshop used the Chatham House Meeting Rules. This promotes open and free discussion or opinions without views being associated to individual people or organizations. Where quotes are used, they are presented as perceptions by a marine sector or organization category rather than an individual organization/person.

6.3 Stakeholder invitations and final participants

230 Stakeholders were invited, drawing from the database of over 600 MSFD Stakeholders identified through STAGES WP4 in collaboration with the EU FP7 project ODEMM (see section on Stakeholder identification). Particular groups of stakeholders were targeted, including the 113 Survey respondents, participants of EU MSFD working groups (e.g. MSCG mailing list) and a selection of stakeholders from each marine sector, geographical scale and organization category to ensure, where possible, a wide cross-section of stakeholders at the meeting. Key facts of the workshop participants including the sectors, organization status and geographical scales represented are presented (see Annex II for final Workshop participant list).

Number of participants:	**30 participants** (of which 13 were national stakeholders from the private and public sectors). NB. This does not include the organizers (3 EMB-STAGES staff and 1 DEVOTES colleague).
Number of countries:	**14** (13 Member States and 1 associated country)
Organization categories represented:	**International:** Scientist networks e.g. ICES, marine industry associations. **European:** Administration/policy e.g. European Commission (JRC and other); Industry associations (including international); research projects (FP7); NGOs, other initiatives e.g. JPI-Oceans, EurOcean. **Regional:** Administration/policy e.g. Regional Sea Conventions, Regional Environmental fora. **National:** Government Ministries (e.g. Environment, Ecology, Infrastructure) and MSFD competent authorities, Industry networks/ associations, research performing organizations (e.g. universities, government institutes, private labs).
Marine sectors represented: (spanning the public and private sectors across geographical scales)	**Industry:** Energy e.g. Oil and Gas, Fisheries (including Angling), Extraction e.g. Dredging, Marine entrepreneurs, Marine Research and Technology, Marine/Maritime Spatial Planning, Marine Policy, Conservation, Navigation and Shipping.
MSFD-relevant research projects/ initiatives represented:	**European:** PERSEUS, OPEC/MEECE, Celtic Seas Partnership/PISCES, ODEMM, MedPAN, KnowSeas, JPI-Oceans CSA, **Regional and National:** Regional networks and national research performing organizations (public and private).

Table 2: Key facts for the STAGES WP4 stakeholder workshop on MSFD SPI, 12 February 2014, Brussels.

6.4 Discussions and key messages

A summary of discussions across the two breakout sessions and plenary discussions is presented below. At all times, participants were asked to keep in mind the following cross-cutting issues:

a **Multiple geographical scales** (e.g. National, Sub-Regional, Regional, European)

b **Timing** and the need to maximize the interplay between the research (longer-term) and policy (shorter-term) time-frames.

Across both breakout sessions participants recognized that the stakeholder community for MSFD is diverse and individual Stakeholders often have multiple roles as knowledge producers and knowledge users[28]. In addition, participants noted that the existing MSFD SPI science-policy interface can be built upon by identifying real gaps in the system and also enhancing the role/SPI tools of existing actors.

1. **Packaging Knowledge Outputs:** It was agreed that it is vital to identify what information is relevant for stakeholders and that information for MSFD must be adapted to the target user. It was suggested the work of packaging information should not be the role of scientists who focus on scientific peer-review publications. Knowledge Outputs

for policy should define specific science needs and policy needs. It was noted that **effective communication often requires simplification to deliver a clear message**, particularly since the legislative framework of MSFD requires the use of complex jargon.

At a European level, participants highlighted good examples of publications summarizing marine knowledge for MSFD policy e.g. from EU working groups on litter and on noise. **Model outputs were noted as a useful tool for policy** as they typically utilize a wide variety of data to provide information on system functioning. It was also noted that a more holistic approach is required when packaging scientific knowledge for policy and **socio-economics should be more fully integrated with natural science** (e.g. marine science).

> *"Ecosystem Based Management requires scientific knowledge that takes a holistic approach, integrating socio-economics natural science",* European stakeholder, fisheries sector.

2. **Access to Knowledge:** Participants discussed the **necessity for open access to knowledge**. A stakeholder from the national research community commented that online databases are often designed for a limited stakeholder group which can lead to a high risk of misinterpretation when openly accessed by the wider stakeholder community. A stakeholder from the European policy community noted that whilst portals are a valid way to share information, **there is a need for an extra 'layer' for translation of information for different target stakeholder groups.** Industry representatives also noted the commercial framework is often a barrier to sharing information, although at some level this could be overcome if incentives to sharing data could be given e.g. access to data products and services. **Language barriers and cultural differences between stakeholder sectors** were also noted as an issue to making knowledge accessible, particularly for research conducted at national level. The need for enhanced communication programmes across stakeholder communities was identified that should recognize the needs of stakeholders e.g. industry. It was recommended that **a Knowledge Portal or Platform designed for multiple user groups would be an effective 'intermediate level'** where knowledge could be hosted and made available to policy. This should have clear information/guidance on the types of information that policy makers want. Participants questioned if existing databases/knowledge portals were really serving all relevant users and noted that future data portals could be better targeted for MSFD purposes.

3. **Stakeholder interaction and information flow:** It was noted that **better two-way communication and information sharing is needed in the MSFD implementation process** to promote discussion and consolidation **between Stakeholders.** It was also noted that while the principle dialogue may be between the scientific and policy communities, the process should be open to other stakeholders to contribute and use knowledge and a SPI could help raise awareness of MSFD to wider stakeholders so they can assess implications and opportunities of the MSFD implementation for their business. An example was given by a representative of the private sector stating that industry has the potential to deliver a lot of equipment, tools, platforms to support research as a basis for legislation. Participants identified a **greater need to engage stakeholders more efficiently at all stages of the research cycle from the identification of gaps to the co-evolution of research.** It was noted that based on the diversity of marine sectors and geographical scales, the potential stakeholder list for MSFD is large. It was noted that **stakeholder interaction needs to be targeted, timely and appropriate** to avoid stakeholder fatigue. It was also suggested that **there should be more top-down communication of what stakeholders need**, e.g. a more strategic approach for policy to science communication, providing information on MSFD policy implementation to the scientific community. Currently there is a lack of infrastructure/fora in place to gather, process and communicate these views and needs.

4. **Knowledge Brokers:** Participants discussed how to identify MSFD relevant research and translate this most effectively to increase uptake into policy. Many participants suggested that independent **'Knowledge Brokers' are required to support MSFD implementation**. Such people could be an individual person or a company/organization and should act as **independent mediators working at the interface between MSFD actors with expertise/roles spanning science and policy.** Specific skills were perceived to be:

    1. Expertise spanning both science and policy. This mixed skills set was seen to be vital to facilitate the dialogue between

knowledge producers (e.g. science) and knowledge users (e.g. policy) and help clarify both the specific policy requirements and to clarify the scientific questions to be answered.

2. High synthesis and communication skills. Experts in these areas are essential to support and carry out the two-way communication, i.e. clarifying the specific questions that need to be answered scientifically effective filtering, packaging and translation of MSFD relevant knowledge to different target audiences.

The importance of **independent Knowledge Brokers** was noted as essential to an effective SPI to ensure **transparency** and **credibility**. Such individuals were noted to require **interdisciplinary expertise** spanning science, policy and communication.

Stakeholders perceived a lack of interdisciplinary expertise in personnel working to support MSFD implementation. This was particularly noted at national level where MSFD service providers have strong scientific expertise (e.g. oceanographic experts from national research institutes) in comparison with personnel in national ministries with policy backgrounds. A more interdisciplinary approach was recommended to improve the communication and uptake of scientific knowledge to support MSFD implementation. An example was given from the Netherlands where some dedicated MSFD knowledge brokers are in place in ministries, but that the job title e.g. "account manager" does not always indicate their full role. However this was a minority and **most stakeholders identified a real gap in knowledge brokerage or any strategic MSFD SPI at national level**. A participant representing a European organization noted that a translator/broker is needed at the level of national research organisations and this could be applied across Europe with some coordination/centralization at national level, reporting to and from EU levels. This could be a scientific role acting as a "science broker". However, it was noted that if scientists were to take on these roles this would need to be recognized as they are currently assessed mainly on scientific peer-review publications. It was suggested that although time-consuming, **a step-wise approach would be beneficial** including identification of relevant research, synthesis and dissemination. This could include a **bottom-up proactive role of scanning of research for relevance to MSFD and a reactive role responding to top-down requests for specific reviews/information from policy makers and wider stakeholders.**

At the **European level,** the **Joint Research Centre (EC)** was named as having the capability for acting as a knowledge broker focused on the policy maker community. However, it was noted there is currently no dedicated unit in the current structure, and the JRC is a part of the European Commission which has particular roles in the MSFD implementation. **EU technology platforms** were also suggested as platforms that could be used as a tool for MSFD linking stakeholders. It was noted existing technology platforms effectively link policy makers and industry but more could be done to enhance the involvement of scientists who could contribute in areas such as sustainability aspects. Participants highlighted the need to **build on existing Science advisory processes** e.g. **ICES** which produces advice in a user-friendly policy makers delivery form. It was noted the scientists (individual experts) need to be included in the process.

Some participants identified a **need to enhance stakeholder interaction and knowledge brokerage needs at the Regional scale. Regional Sea** Conventions were noted as a key platform with mandates for "Bridging the Gap" but with a current lack of coherence across the four Regional Seas. An example was given of the NE Atlantic OSPAR RSC[28] where Committees decide how to address scientific needs (e.g. commission ICES advice) and formulate research needs. Where the Member States cannot address the issue themselves, they increasingly need to rely on external developments. The Mediterranean BARCON (UNEP-MAP)[29] was noted to have added complexity of being a UN organization. National Stakeholders perceived that in many cases, the **existing National science-policy interface structures and capacities do not meet the needs of the MSFD.** An example from Croatia outlined that it could benefit from further support at regional and/or European level to create a more fluent advisory process through a national SPI platform with regional support and a fit-for-purpose assessment.

[28] *Oslo and Paris Convention for protecting the North-East Atlantic and its resources*
[29] *Barcelona Convention for the Protection of the Mediterranean*

5. **Harnessing knowledge:** Participants recommended a continuous dialogue between projects, project funders, policy makers and wider stakeholders to maximize the impact of research throughout the research cycle and also to avoid duplication of effort and waste of resources already in the planning phase. In particular, **more connectivity and dialogue was suggested between the Policy makers, research funders and knowledge producers**. An example was given of a national SPI in the Netherlands where a platform has been designed to bring together those trying to define knowledge needs (top down process) and those communicating research needs to policy makers (in a bottom up process). It was noted **an incentive is often required for stakeholder engagement** and in this case the added value of the network was to develop stronger cross-sector bids for European funding. It was suggested that **large projects, e.g. Consortia funded through EU Framework Programmes, could act as scientific advisors to the Regional Sea Conventions , and that they should be mandated to interact more directly with the users of the information they produce.**

   Stakeholders suggested that **a more strategic approach is required for identifying and reviewing MSFD relevant research across geographical scales.** Such work and in particular scientific synthesis and packaging of relevant research is a labour intensive task but a vital step to maximise the accessibility and uptake of relevant research spanning research with immediate MSFD relevance e.g. biogeochemical time-series data to basic (blue skies) research with potential MSFD relevance e.g. emerging technology. The importance of adequate communication throughout the whole project life-cycle was noted for ensuring the harnessing of knowledge and identifying the potential of ongoing research.

   Co-design and co-authorship of science and the information gathering process was suggested to increase the relevance and perceived ownership of knowledge for supporting MSFD implementation. **Policy network analysis** was suggested as one method to help ensure that the project implementation process maximizes useful uptake of results.

   Impact Monitoring was discussed as an important step to assess the dissemination and uptake of knowledge outputs and to determine the best packaging and communication tools for each target audience. It was suggested that the impact of different types of communication products e.g. publications, video, personal communications was dependent on the target audience and more work could be done to assess these. Examples of impact monitoring were discussed at national (e.g. National marine institutes), regional (e.g. Regional Sea Convention) and European (e.g. European Marine Board) levels. It was suggested that the importance of impact monitoring should be highlighted at EU level and conducted by each European project to determine where messages are taken up in the framework programmes.

6. **Geographical Scale:** It was suggested there should be more coordination across geographical scales and particularly across regions (and sub-regions) to share and utilize best practice for MSFD implementation. The **sub-regional scale[30] was identified as an important scale for MSFD communication and knowledge exchange** that is currently lacking coordination and could be enhanced. The North Sea and Celtic Sea were provided as a good example of existing sub-regional level coordination where discussions have been very helpful for designing and implementing joint monitoring programs and increasing stakeholder interactions respectively. It was however noted that ecosystem services can largely differ between MSFD sub-regions, and the sub-regional level added another layer of interaction so was potentially only useful in context with other geographical scales. Participants suggested any development of **sub-regional SPI should be designed to promote information sharing and integration at the regional level.** It was also noted that at national level the exchange is already difficult, and may be more difficult to take a cross national approach. It was suggested that **stakeholders need to be engaged at the appropriate geographical scale** and that a stakeholder should be able to see the benefit of engagement e.g. having an influence on decision making, information access etc.

The sub-regional scale was identified as an important scale for MSFD communication and knowledge exchange that is currently lacking coordination and could be enhanced.

[30] *MSFD sub-regions of European seas and oceans defined to aid MSFD implementation and reporting at the sub-regional level (see also Annex I for MSFD Glossary of Terms).*

7. **Windows of Opportunity:** It was noted there is often a mismatch between the timing of the longer-term project knowledge acquisition/delivery process and the shorter-term needs of policy. The first round of MSFD projects cannot deliver all the information they were supposed to generate in time for the second round to build on them. **Timing of scientific outputs could aim to achieve maximum impact in relation to information use in the MSFD policy cycle.** Many projects are speeding up to produce tailor-made information for the ongoing MSFD process but more strategic planning **(e.g. by the EC) could be integrated into the scientific process.** To take advantage of windows of opportunity, the **policy process should be more iterative and more easily revised when new knowledge appears.**

7. Next steps for a future science-policy interface to support MSFD

The results of the stakeholder consultation and ongoing best practice study have informed the production of a set of Guiding Principles for a SPI to support MSFD implementation:

- Effective dialogue and transfer of knowledge
- Enhanced knowledge accessibility
- Promote uptake of relevant and timely knowledge
- Joint Construction and Co-evolution of knowledge
- Building on existing structures and initiatives
- Realistic, achievable, affordable

Many elements of the science-policy interface are already largely in place, but currently lack the coherence and coordination required for MSFD Stakeholders to fully benefit from advances in European science and technology and identifying future research needs. Other elements are in the planning stages (e.g. the MCC4GES[31]) or have been identified as emerging areas where new capacities are recommended e.g. Knowledge Brokering.

A Concept paper on the MSFD SPI[32] was produced by STAGES partners EMB and JRC for discussion at the MSFD Project Coordination Group (PCG) on 10 March 2014. This is being further developed based on results from the WP4 Stakeholder Consultation, ongoing best practice and discussions with potential key actors to inform the development of a proposal with recommendations for an enhanced MSFD SPI. This will be presented at the final STAGES Conference on 19 June in Brussels in June 2014 and will constitute STAGES Deliverable D4.2[33] .

8. Annexes

Supporting documents from the Stakeholder Consultation are available in Annex to this report:

Annex I: STAGES WP4 Online survey: Stakeholder Invitation, MSFD information sheet, Questionnaire, List of Stakeholders who responded.

Annex II: STAGES WP4 Workshop: Participant list, Agenda, breakout session briefing documents.

[31] The JRC is establishing a MSFD Competence Centre to scientifically and technically support implementation of MSFD.
[32] Concept paper for a science-policy interface to support MSFD implementation. Led by EMB and JRC on behalf of the STAGES project (February 2014).
[33] D4.2. Proposal and recommendations for a Science-Policy Interface (SPI) to support MSFD implementation. Final STAGES deliverables are available at www.stagesproject.eu

Annex I: STAGES WP4 Online survey: Stakeholder Invitation, MSFD information sheet, Questionnaire, List of Stakeholders who responded.

MARINE STRATEGY FRAMEWORK DIRECTIVE STAKEHOLDER SURVEY

Welcome to the STAGES survey on marine science-policy interfaces!

The Marine Strategy Framework Directive (MSFD) is a key European legislation with the aim of achieving Good Environmental Status (GES) across European seas and oceans by 2020 and beyond. This survey aims to assess Stakeholder needs and expectations for contributing to the MSFD science advisory process, leading to enhanced and more cost-effective implementation of the MSFD into the future.

The Survey is short and will take approximately 15 minutes. It is composed of 3 main sections:
A. Organization Information
B. Marine Knowledge Producers and Users for MSFD
C. The MSFD Science-Policy Advisory process

As a marine Stakeholder your views are important to us. These will be used to provide the European Commission with recommendations for future Stakeholder engagement, helping to build a more effective science-policy interface to support MSFD implementation.

Whether you produce scientific knowledge, work in the marine industry sector or use scientific knowledge in marine policy and advisory processes, STAGES would like to hear your views. We thank you in advance for your participation.

Individual responses to the survey will be kept confidential. Only summary information derived from multiple returns will be published.

Further information on MSFD and a glossary of terms has been sent to you by email to aid completion of the questionnaire. For any queries contact the European Marine Board Secretariat; Email: stageswp4@gmail.com Telephone: +32 59 34 01 56.

A. Organization Information

1a. What is the name of your organization/project? Response required.*

_____

1b. Which country is your organization located in? Response required.*

_____

2. What category does your organization/network belong to?
Tick one answer from the selection below. Response required.*

National Government Administration	
Regional Seas Administration	
European Administration e.g. EC	
Research/Science Funding Organization (RFO)	
Research/Science Performing Organization (RPO)	
Non-governmental Organization (NGO)	
European research project/network e.g. FP7, LIFE+, INTERREG	
Other research project/network	
Industry (SME)	
Industry (Other)	
Industry Association (National)	
Industry Association (Regional/EU/International)	
Other, please specify_____	

3. **Which marine sector(s) does your organization work in?** Tick all that apply. Response required. *

Conservation	
Marine Research and Technology	
Marine Policy	
Navigation & Shipping (incl. Ports & harbours)	
Marine Tourism & Leisure	
Fisheries & Aquaculture	
Energy (Renewables)	
Energy (Oil and Gas)	
Energy (Other)	
Extraction e.g. dredging	
Marine/Maritime Spatial Planning	
Other (please specify)_____	

B. MSFD Knowledge Producers and Users

Scientific Knowledge is crucial to the successful implementation of the MSFD, to define and track good environmental status and to achieve successful monitoring and implementation. We would like to assess the geographical range of your organization's role in MSFD and if your organization is a Knowledge Producer and/or User.

To assist with your response 3 definitions are explained below:

Regional Seas: These are the geographical regions and boundaries of European seas and oceans, namely the Baltic Sea, Black Sea, Mediterranean Sea and North-east Atlantic Ocean. For MSFD implementation these are also known as 'Marine Regions' with further division being defined at 'sub-regional' level.

MSFD Knowledge Producer: Marine Stakeholder that produces knowledge for MSFD such as datasets, products and services e.g. environmental status maps, predictions, reports.

MSFD Knowledge User: Marine Stakeholder that utilizes marine knowledge in MSFD reporting process, policy making and legislative process or whose organization is directly involved or impacted by the MSFD implementation process.

4a. What level of geographical scale best describes your organization's interest/involvement in the MSFD? Tick all that apply. Response required. *

European	
Regional Seas	
Sub-Regional Seas	
National	
All of the above	

4b. Which regional sea(s) or sub-regional sea(s) are of particular interest to your organization? Tick all that apply. Response required. *

Baltic Sea	
Black Sea	
Mediterranean Sea	
North-east Atlantic Ocean	
All of the above	
None of the above	
Sub-regional sea e.g. Adriatic sea (please specify) _____	

Knowledge Producers

5a. Does your organization produce scientific data and knowledge for the MSFD?
Select one answer for each type of Knowledge. Response required.

Knowledge types include:
- Scientific data (Raw and/or quality controlled)
- Scientific products and services (e.g. maps, model outputs, forecasts, derived data)
- Expert advice (verbal or written expert advice)

Select 'Not applicable' if your organisation does not produce/provide a type of knowledge. *

	Yes	No	Knowledge produced but not open access for MSFD (e.g. commercial restrictions)	Don't know	Not applicable
Scientific data (Raw and/or quality controlled)					
Scientific Data products and services					
Expert advice to the research community					
Expert advice to policy makers					
Expert advice to industry and other marine users					

5b. Please comment further on the types of marine knowledge and expert advice that your organization provides to the MSFD policy process and how you anticipate this could change into the future.

Knowledge Users

5c. What category best describes your organizations' role as a Knowledge User in the MSFD ?
Tick all that apply or specify other role. Response required. *

Competent Authority	
National Contact Point for MSFD	
Knowledge Broker	
Policy Advisor/Administrator	
Decision maker	
Research community	
Not applicable	
Other, please specify _____	

5d. What kind of knowledge does your organization use or require for your work within the MSFD? Select one answer for each type of knowledge. Response required. *

	Yes	No	Not used now but this would be useful	Don't know	Not applicable
Scientific Data (Raw and/or quality controlled)					
Scientific Data products and services					
Expert advice from the research community					
Expert advice from industry and other marine users					

Expert advice from administration/marine policy makers					

5e. Please comment further on the types of Marine Knowledge and expert advice that your organization uses/requires from the MSFD policy process and how you anticipate this could change into the future.

To help Member States interpret what **Good Environmental Status (GES)** means in practice, the MSFD sets out, in Annex I, eleven qualitative descriptors which describe what the environment will look like when GES has been achieved. For each of these, the European Commission produced (in 2010) criteria and indicators to help Member States determine what each descriptor means in practice and to help establish precise objectives for measuring progress.

We would like to assess how readily available this knowledge is to your organization and reasons why knowledge may not exist or be accessible.

6a. In your opinion how much scientific knowledge is currently available for to your organization for each MSFD descriptor? Select one option per descriptor. Required Response.

Please assess the availability/level of access to marine knowledge. This knowledge could be produced at National, Regional Sea or European level but must be available to your organisation e.g. online data portal, produced in-house etc. *

	Very low availability	Low availability	Medium availability	High availability	Very high availability	No opinion	Not applicable
1. Biological Diversity							
2. Non-indigenous species							
3. Populations of commercial fish/shellfish							
4. Elements of Marine Food webs							
5. Eutrophication							
6. Seafloor integrity							
7. Alteration of hydrographical conditions							
8.							

Contaminants							
9. Contaminants in fish and seafood for human consumption							
10. Marine Litter							
11. Introduction of energy, including underwater noise							

6b. In your opinion what are the barriers that prevent scientific knowledge for MSFD being available to your organization? Select at least one answer per MSFD descriptor. Required response.

- Gap in Knowledge (not enough research/data are produced)
- Access issue (data/products are not freely available)
- Communication issue (more dissemination is required to raise awareness of data available)
- No access issue (Data/products are fully accessible)
- Not applicable (your organisation does not use any scientific knowledge for MSFD e.g. data/products *

	Gap in Knowledge	Access issue	Communication issue	No access issue	No opinion	Not applicable
1. Biological Diversity						
2. Non-indigenous species						
3. Populations of commercial fish/shellfish						
4. Elements of Marine Food webs						
5. Eutrophication						
6. Seafloor integrity						
7. Alteration of hydrographical conditions						
8. Contaminants						
9. Contaminants in fish and seafood for human consumption						

10. Marine Litter						
11. Introduction of energy, including underwater noise						

6c. How could access to MSFD data/products be improved for your organization?
Tick all that apply. Response required.

More data on open access portals	
More communication on what knowledge and portals exist	
Incentives to share data	
Targeted research funding to fill knowledge gaps	
No opinion	
Not applicable	
Other (Please Specify)	

C.The MSFD Science-Policy Advisory Process

As the marine and maritime sectors grow, there is an increasing need for a new approach to "science advisory processes" that can bring science and policy communities closer together to exchange information in a relevant, timely and innovative way. This is particularly vital for MSFD implementation where a major challenge exists to obtain and make available the necessary scientific knowledge of the elements that define the state of the marine environment.

7. Which stage(s) of the MSFD policy process does your organization contribute to?
Tick one answer for each MSFD stage. Response required.

Marine Strategies developed by Member States will follow a 6-year cycle including target-setting, identification of measures, monitoring and ongoing evaluation and adaptation. Knowledge and advice from marine Stakeholders will be crucial to keep these Marine Strategies up-to-date and to ensure successful implementation. We would like to assess which stage(s) of the MSFD policy process your organization already contributes to or would like to contribute to in the future. *

	Yes (contribution is ongoing or planned)	No	No but would like to contribute	No opinion	Not applicable
Targets and Indicators					
Research Needs and Gaps					
Monitoring Programmes					
Programme of Measures					
Implementation					

European level

8a. What involvement does your organization have in the MSFD science-policy advisory process at European level? Tick all that apply. Response required. *

Active decision maker	
Invited Stakeholder/expert	
Observer	
MSFD Stakeholder meetings (2006-2007 prior to MSFD entry into force)	
Marine Strategy Coordination Group (MSCG)	
MSFD Working Group e.g. GES, DIKE, ESA	
Project Coordination Group	
Interaction/representation through National Contact Point for MSFD	
Interaction/representation through Regional Association/Network	
Interaction/representation through European Association/Network	
My organization is not informed about how to participate at EU level	
My organization is not willing/able to participate at EU level	
No opinion	
Not applicable	
Other (Please Specify)	

8b. What involvement does your organization have in the MSFD science-policy advisory process at Regional level? Tick all that apply. Response required. *

Active decision maker	
Invited Stakeholder/expert	
Observer	
Knowledge Provider to Regional Sea assessments (e.g. OSPAR Quality Status Report)	
Interaction/representation through National Contact Point or Association	
Interaction/representation through Regional Association/Network	
Interaction/representation through European Association/Network	
My organization is not informed about how to participate at Regional Sea level	
My organization is not willing to participate at Regional Seas level	
No opinion	
Not applicable	
Other (Please Specify)	

Sub-regional sea level

8c. What involvement does your organization have in the MSFD science-policy advisory process at sub-regional Sea level e.g. cross-border ? Tick all that apply. Response required. *

Active decision maker	
Invited Stakeholder/expert	
Observer	
Knowledge Provider to sub-regional sea assessments	
Interaction/representation through National Association/Network	
Interaction/representation through sub-regional sea Association/Network	
My organization is not informed about how to participate at sub-regional sea level	
My organization is not willing to participate at sub-regional Seas level	
No opinion	
Not applicable	
Other (Please Specify)	

National level

8d. What involvement does your organization have in the MSFD science-policy advisory process at National level ? Tick all that apply. Response required. *

Active decision maker	
Invited Stakeholder/expert	
Observer	
Knowledge Provider to National assessments	
Interaction/representation through National Contact Point for MSFD	
Interaction/representation through National Association/representative for my marine sector	
My organization is not informed about how to participate at a National level	
My organization is not willing to participate at a National level	
No opinion	
Not applicable	
Other (Please Specify)	

9. How effective do you think the current science-policy advisory process is for MSFD?
Please indicate your opinion for 4 geographical scales: European, Regional Sea, sub-regional sea and National level. Response required.

The existing MSFD science-advisory process includes dialogue between knowledge producers, wider Stakeholders and policy makers at National expert meetings, Regional Sea Convention meetings (e.g. OSPAR Intersessional Correspondance Group) and invitation to European level MSFD meetings e.g. Working Groups and the Marine Science Coordination Group.

	Very effective	Effective	Somewhat effective	Not effective at all	Not aware of this process	No opinion
European						
Regional Sea						
Sub-regional sea						
National						

10. Please comment further on your organization's experience in the MSFD advisory process at European, Regional Sea, sub-regional sea and National levels in terms of:

- **Effectiveness of current processes**
- **Benefits of being involved**
- **Improvements that could be made**

10a. European level

10b. Regional Sea level

10c. Sub-regional level

10d. National level

Mechanisms should stimulate exchange of information and knowledge between marine stakeholders. *

	1	2	3	4	5
Stakeholder Workshops					
Cross-sector funding for MSFD research e.g. research community with industry					
Regional Sea Commissions as a hub for information exchange					
Consultations and surveys					
Remote meetings e.g. videoconference					
Science Policy Briefs / other written communication					
Facilitation through a Knowledge Broker					
Individual person-person contact					
Scientific peer review of MSFD data, products, reports					
Sub-regional seas as a hub for information exchange e.g. cross-border platforms					
Online forum/message board					
Advisory/Evidence Groups					
Online data/knowledge portals					

11b. What other mechanisms/platforms could be considered to build an effective, long-term science-policy interface to support MSFD implementation?

12. How often would your organization be interested to participate in MSFD science-policy processes?
Select one answer per geographical scale. Response required.

This question refers to attendance at meetings (other forms of science-policy e.g. data access, online communication could be an ongoing process).

-*Ad hoc* indicates irregular involvement based on the need for specific expert advice (top-down approach).
-Targeted involvement indicates a specific Stakeholder request (bottom-up approach). *

	Ad hoc	Very Regular (meetings > 1 / year)	Regular (meetings 1/year)	Infrequent (< 1/year)	Targeted to Stakeholder interest
European					
Regional Sea					
Sub-regional Sea					
National					

Giving Stakeholders active decision-making power in the MSFD process	
Providing funding for Stakeholders to attend MSFD meetings	
Opportunity to contribute knowledge and/or expert opinion to the MSFD policy process	
Access to marine data, products and services	
Reducing the cost of MSFD implementation to your organization	
No incentives required	
No opinion	
Other, please specify_____	

14. What mechanisms do you think would help engage neighbouring countries (non EU countries) in the MSFD process? Tick all that apply. Response required. *

Provide non-EU countries with decision-making powers to promote Good Environmental Status of the marine environment	
Engage a wider selection of Stakeholders in the MSFD science-policy process	
Widen the existing Regional Sea Convention mandates	
Engage non-EU countries in MSFD science-policy platforms e.g. consultations, workshops	
Promote sub-regional sea interaction e.g. cross-border communication/collaboration	
Other, please specify_____	

Please provide contact details for any follow-up questions (optional)

Name : _____

E-mail address : _____

Telephone No. : _____

Organisation : _____

Position : _____

Thank you for completing this stakeholder questionnaire.

Please submit your answers by 10 July 2013 in 2 ways:

1. Online: http://www.esurveyspro.com/Survey.aspx?id=22ad6a3f-778b-4499-9e4c-2dd180911e46
2. Return this word document by email to stageswp4@gmail.com

GLOSSARY OF TERMS

Criteria and Indicators (for MSFD): To help Member States implement MSFD a set of criteria, indicators and methodological standards were proposed by the European Commission (Commission Decision 2010/477/EU).

Descriptor (for MSFD): The MSFD lists 11 ecosystem descriptors to guide evaluation of GES e.g. biological diversity, marine litter[1].

Good Environmental Status (GES): The MSFD defines GES as "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive".

Integrated Maritime Policy (IMP): An European Commission initiative seeking to provide a more coherent approach to maritime issues, with increased coordination between different policy areas.

Knowledge Broker: An intermediary (organization or person) that facilitates a two-way or multi-way exchange of information between knowledge producers e.g. scientists and knowledge users e.g. policymakers, the general public, or people working in the health domain.

Knowledge Producer/Provider (for MSFD): supplier of knowledge relevant to MSFD e.g. marine datasets, scientific syntheses, environmental status maps, predictions.

Knowledge User (for MSFD): A marine or maritime Stakeholder that utilizes marine knowledge in the MSFD policy process or whose organization's business is directly influenced by the MSFD.

Marine Sub-region: sub-regions of European seas and oceans defined to aid MSFD implementation and reporting at the sub-regional level.

MSFD: The Marine Strategy Framework Directive (also known as the Marine Directive) is the environmental pillar of the EU's Integrated Maritime Policy with the aim of achieving Good Environmental Status (GES) across European waters by 2020 (see information sheet below).

Regional Sea: In the European context these are geographical divisions of European seas and Oceans, namely the Baltic Sea, Black Sea, Mediterranean Sea and North-east Atlantic. For MSFD these are also termed **Marine Regions** and are defined to aid MSFD implementation and reporting.

Science-Policy Interface (SPI): An interface or platform stimulating interaction between Stakeholders. The aim of a successful SPI is to enhance the dialogue across marine sectors, increase accessibility of scientific knowledge and advice to policy makers and the wider public and to improve linkages between policy needs, research programmes and marine activities.

Stakeholder (MSFD): People or bodies working within the marine field with interest or direct involvement in the MSFD policy process. **Level 1 Stakeholder** (MSFD): Stakeholders invited by the European Commission to attend meetings of the European-level Working Groups and/or Marine Strategy Co-ordination Group. **Level 2 Stakeholder** (MSFD): Other Stakeholders that can feed views on MSFD through the level 1 groups or through National contact point.

MARINE STRATEGY FRAMEWORK DIRECTIVE Information Sheet

The Marine Strategy Framework Directive (MSFD) is a European Directive that requires Member States to take measures to achieve or maintain Good Environmental Status (GES) of their seas by 2020 (Figure 1). 11 Descriptors have been identified to assess GES (e.g. biological diversity, contaminants, population of commercial fish/shellfish). For each of these, the European Commission produced (in 2010) criteria and indicators to help Member States determine what each descriptor means in practice and to help establish precise objectives for measuring progress.

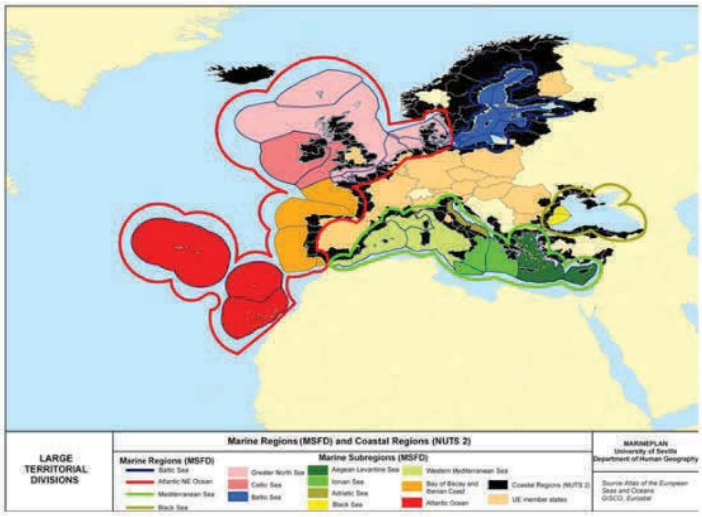

Figure 1: Marine Regions (MFSD) and Coastal regions (NUTS 2)

The implementation of MSFD follows a series of steps designed to aid each Member State develop Marine Strategies and make them operational, with a 6 year review cycle (Figure 2 below):

In 2012 Member States determined the characteristics of what GES means for their own marine waters and set targets accordingly.

Scientific Knowledge is now crucial to define and track the state of the marine environment, enable quantitative assessment of GES indicators and assess relationship between pressures and impacts.

In addition, **an effective, long-term interface between science and policy is required** to allow such knowledge to be fed into the science advisory process on a regular and timely basis.

Figure 2: MSFD Implementation steps (courtesy, DG Environment, European Commission).

Further information on MSFD and GES is provided by the **European Commission, DG Environment**[2].

The **STAGES** project (FP7 CSA, 2012-2014) will help bridge the science-policy gap and improve the current scientific knowledge base to allow Member States to achieve GES in marine waters[3].

STAKEHOLDER CONSULTATION ON THE MSFD SCIENCE-ADVISORY PROCESS

Dear Marine Stakeholder,

We kindly request the assistance of your organization to help shape the future science-policy advisory process for the Marine Strategy Framework Directive (MSFD). As the environmental pillar of the EU's Integrated Maritime policy, the MSFD is a key example of a European Framework legislation that requires integrated decision making and cross-sectoral co-operation. **Marine Stakeholders are at the heart of providing the knowledge and expertise needed to achieve or maintain Good Environmental Status (GES) in European marine environments by the year 2020 and beyond**. Significant advances are being made in marine research that can (and will) underpin environmental assessments such as the MSFD. However, the **full uptake of this marine knowledge is being hindered by the lack of effective interfaces between science and environmental policy**.

The **STAGES** project[1] (Science and Technology Advancing Governance on Good Environmental Status) is an EC-funded FP7[2] project that will directly address this knowledge gap through a series of targeted activities. With support from the European Commission, STAGES invites you to respond to a **Stakeholder Consultation.** This has been designed as an online survey to assess Stakeholder views on the current MSFD science advisory process and define ways to enhance knowledge uptake into the future. We are interested to hear about the most effective structures and mechanisms for MSFD science-policy dialogue that in your view would benefit your business/organization and would lead to more efficient implementation of the MSFD. Stakeholder identification has been conducted by the STAGES Consortium with collaboration and input from related European projects, particularly the ODEMM[3] project. The survey has also been designed to complement ongoing related surveys such as the STAGES survey on MSFD projects and a wider Consultation by the JPI-Oceans[4] Coordination and Support Action.

We kindly ask you to complete this survey by 10 July 2013. This is a short survey and will take approximately 15 minutes to complete. Individual responses to the survey will be kept confidential. Only summary information derived from multiple returns will be published. Stakeholder views and expectations from the full Consultation process will feed into a proposal on recommendations for a long-term science-policy interface. This will be presented to the European Commission in the form of a Position Paper in Autumn 2014.

Thank you,

Niall McDonough, Executive Scientific Secretary, European Marine Board
For the STAGES Consortium

[1] www.stagesproject.eu
[2] European Commission Seventh Framework Programme http://cordis.europa.eu/fp7/home_en.html
[3] Options for Delivering Ecosystem-Based Management http://www.liv.ac.uk/odemm/
[4] Joint Programming Initiative on Healthy and Productive Seas and Oceans http://www.jpi-oceans.eu

STAGES WP4 MSFD SPI Survey: List of Stakeholders who responded

NB. Organization status is based on the responses provided by individual Stakeholders.

International

Name of Organization	Organization status
International Council for the Exploration of the Sea (ICES)	Research/Science Performing Organization
International Fund for Animal Welfare	Non-Governmental Organization

European

Name of Organization	Organization status
DG ENV	European Administration e.g. European Commission
European Commission	European Administration e.g. European Commission
COEXIST	European research project/network e.g. FP7, LIFE+, INTERREG
PERSEUS	European research project/network e.g. FP7, LIFE+, INTERREG
AZTI-Tecnalia (project DEVOTES)	European research project/network e.g. FP7, LIFE+, INTERREG
Province of Teramo, Lead Beneficiary MARLISCO Project	European research project/network e.g. FP7, LIFE+, INTERREG
AQUO	European research project/network e.g. FP7, LIFE+, INTERREG
INTERREG IVA 2 Seas Programme	European research project/network e.g. FP7, LIFE+, INTERREG
ODEMM project, University of Liverpool	European research project/network e.g. FP7, LIFE+, INTERREG
European Boating Industry	Industry Association (Regional/European/International)
PlasticsEurope AISBL	Industry Association (Regional/European/International)
Europêche	Industry Association (Regional/European/International)
Marine Mammal Observer Association	Industry Association (Regional/European/International)
COCONET	National Government Administration
Seas At Risk	Non-Governmental Organization
European Bureau for Conservation and Development (EBCD)	Non-Governmental Organization
EurOcean Foundation	Non-Governmental Organization
EuroGOOS AISBL - European Global Ocean Observing System	Non-Governmental Organization
WWF - WWF Europe network response.	Non-Governmental Organization
Surfrider Foundation Europe	Non-Governmental Organization
European Federation of Marine Science and Technology Societies	Non-Governmental Organization
JPI Oceans	Other (Please Specify)

Regional

Name of Organization	Organization status
OSPAR Commission	Regional Seas Administration
PLAN BLEU	Regional Seas Administration
Black Sea Commission	Other (Please Specify)
Black Sea NGO Network	Non-Governmental Organization
BSERC	Non-Governmental Organization
UNEP/MAP MEDPOL	Regional Seas Administration
North Atlantic Marine Mammal Commission (NAMMCO)	Other (Please Specify)
Helsinki Commission (HELCOM) – Baltic Marine Environment Protection Commission	Regional Seas Administration
Agence de l'eau rhone méditerranée corse (agency Rhone Mediterranean Corsica water)	Regional Seas Administration
Mediterranean Information Office for Envir., Culture and Sust. Dev. (MIO-ECSDE)	Non-Governmental Organization

National – sorted by organization status

Name of Organization	Country	Organization status
ScottishPower Renewables	United Kingdom	Industry (Other)
International marine and Dredging consultants	Belgium	Industry (Other)
C-Power	Belgium	Industry (Other)
CDIEM sl	Spain	Industry (SME)
Spanish Federation of Sea Entrepreneurs	Spain	Industry Association (National)
NOGEPA (Netherlands Oil and Gas Exploration and Production Association)	Netherlands	Industry Association (National)
VisNed	Netherlands	Industry Association (National)
KVNR	Netherlands	Industry Association (National)
National Federaion of Fishermen's Organisations	United Kingdom	Industry Association (National)
Asociación Cluster del Naval Gallego (ACLUNAGA)	Spain	Industry Association (Regional/European/International)
Scottish Fishermen's Federation	United Kingdom	Industry Association (Regional/European/International)
SHOM	France	National Government Administration
FPS Health, Food chain safety and Environment	Belgium	National Government Administration
INSTITUTO ESPAÑOL DE OCEANOGRAFÍA	Spain	National Government Administration
Swedish agency for water and marine management	Sweden	National Government Administration
Finnish Meteorological Institute	Finland	National Government Administration
Defra	United Kingdom	National Government Administration
The Crown Estate	United Kingdom	National Government Administration
Ministry of the Environment	Estonia	National Government Administration
Croatian Environment Agency	Croatia	National Government Administration
Hellenic Center for Marine Research	Greece	National Government Administration
Danish Nature Agency	Denmark	National Government Administration
French MPAs Agency	France	National Government Administration
Institute for Nature Conservation and Forests	Portugal	National Government Administration
German Federal Environment Agency	Germany	National Government Administration
Swedish Transport Agency	Sweden	National Government Administration
Department of Fisheries and Marine Research	Cyprus	National Government Administration
Dutch Government	Netherlands	National Government Administration
Israeli Marine Mammal Research & Assistance Center (IMMRAC)	Israel	Non-Governmental Organization
The RSPB (UK Partner of BirdLife International)	United Kingdom	Non-Governmental Organization
WWF-UK/Celtic Seas Partnership project	United Kingdom	Non-Governmental Organization
SAROST. SA	Tunisia	Other (Please Specify)
Marine Universities of France network	France	Other (Please Specify)
Port of Rotterdam Authority	Netherlands	Other (Please Specify)
AquaTT	Ireland	Other (Please Specify)
Swedish Institute for the Marine Environment	Sweden	Other (Please Specify)
PTEPA - SPANISH TECHNOLOGY PLATFORM FOR FISHERIES AND AQUACULTURE	Spain	Other (Please Specify)
Regional Fisheries Directorate (Azorean Regional Government)	Portugal	Other (Please Specify)
AquaBiota Water Research	Sweden	Other (Please Specify)
Estonian Academy of Sciences	Estonia	Other (Please Specify)
The Centre for Environment, Fisheries and Aquaculture Science (Cefas)	United Kingdom	Other (Please Specify)
Spanish Platform for the Protection of the Coast and the Marine Environment (PROTECMA)	Spain	Other (Please Specify)
Joint Nature Conservation Committee (JNCC)	United Kingdom	Other (Please Specify)
Marine Environmental Data and Information Network (MEDIN)	United Kingdom	Other (Please Specify)
Deltares	Netherlands	Other research project/network
The Regional Directorate for Maritime Affairs, Governo dos Açores	Portugal	Regional Seas Administration
The research Council of Norway	Norway	Research/Science Funding Organization
DFG - Deutsche Forschungsgemeinschaft	Germany	Research/Science Funding Organization
Instituto Español de Oceanografía	Spain	Research/Science Funding Organization
University of Gothenburg (and Marine Genomics for Users (FP7))	Sweden	Research/Science Performing Organization
IFM	Denmark	Research/Science Performing Organization
Ruđer Bošković Institute	Croatia	Research/Science Performing Organization
UNIVERSITAT POLITECHNICAL OF VALENCIA	Spain	Research/Science Performing Organization
National Institute for Marine Research and Development "Grigore Antipa"	Romania	Research/Science Performing Organization
Heriot-Watt University	United Kingdom	Research/Science Performing Organization
Ifremer	France	Research/Science Performing Organization
National Research Council of Italy	Italy	Research/Science Performing Organization
conisma	Italy	Research/Science Performing Organization
Recreationa and Tourism Department, Klaipeda University	Lithuania	Research/Science Performing Organization
Centre of IMAR of the University of the Azores	Portugal	Research/Science Performing Organization
Institute for Environmental Solutions	Latvia	Research/Science Performing Organization
Oceanography Center, University of Cyprus	Cyprus	Research/Science Performing Organization
Institute of Oceanology PAN	Poland	Research/Science Performing Organization
Institute of Marine Research (IMR)	Norway	Research/Science Performing Organization
Marine Alliance for Science and Technology for Scotland (MASTS)	United Kingdom	Research/Science Performing Organization
Marine Institute	Ireland	Research/Science Performing Organization
University of Bergen	Norway	Research/Science Performing Organization
Ryan Institute for Environmental, Marine & Energy Research, NUI Galway	Ireland	Research/Science Performing Organization
Natinal University of Ireland – Galway: FP7 CoralFISH project	Ireland	Research/Science Performing Organization
IMARES	Netherlands	Research/Science Performing Organization
Institute of market problems and economic&ecjljgical research NAS of Ukraine	Ukraine	Research/Science Performing Organization
OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale)	Italy	Research/Science Performing Organization
AP marine Environmental Consultancy Ltd	Cyprus	Research/Science Performing Organization
Institut de recherche pour le développement (IRD)	France	Research/Science Performing Organization
Centro Tecnológico del Mar - Fundación CETMAR	Spain	Research/Science Performing Organization
National Oceanography Centre	United Kingdom	Research/Science Performing Organization
GEOMAR Helmholtz Centre for Ocean Research Kiel	Germany	Research/Science Performing Organization
Latvian Institute of Aquatic Ecology	Latvia	Research/Science Performing Organization
University of Sirling	United Kingdom	Research/Science Performing Organization

National – sorted by country

Name of Organization	Country	Organization status
International marine and Dredging consultants	Belgium	Industry (Other)
C-Power	Belgium	Industry (Other)
FPS Health, Food chain safety and Environment	Belgium	National Government Administration
Croatian Environment Agency	Croatia	National Government Administration
Ruđer Bošković Institute	Croatia	Research/Science Performing Organization
Department of Fisheries and Marine Research	Cyprus	National Government Administration
Oceanography Center, University of Cyprus	Cyprus	Research/Science Performing Organization
AP marine Environmental Consultancy Ltd	Cyprus	Research/Science Performing Organization
Danish Nature Agency	Denmark	National Government Administration
IFM	Denmark	Research/Science Performing Organization
Ministry of the Environment	Estonia	National Government Administration
Estonian Academy of Sciences	Estonia	Other (Please Specify)
Finnish Meteorological Institute	Finland	National Government Administration
SHOM	France	National Government Administration
French MPAs Agency	France	National Government Administration
Marine Universities of France network	France	Other (Please Specify)
Ifremer	France	Research/Science Performing Organization
Institut de recherche pour le développement (IRD)	France	Research/Science Performing Organization
German Federal Environment Agency	Germany	National Government Administration
DFG - Deutsche Forschungsgemeinschaft	Germany	Research/Science Funding Organization
GEOMAR Helmholtz Centre for Ocean Research Kiel	Germany	Research/Science Performing Organization
Hellenic Center for Marine Research	Greece	National Government Administration
AquaTT	Ireland	Other (Please Specify)
Marine Institute	Ireland	Research/Science Performing Organization
Ryan Institute for Environmental, Marine & Energy Research, NUI Galway	Ireland	Research/Science Performing Organization
Natinal University of Ireland – Galway: FP7 CoralFISH project	Ireland	Research/Science Performing Organization
Israeli Marine Mammal Research & Assistance Center (IMMRAC)	Israel	Non-Governmental Organization
National Research Council of Italy	Italy	Research/Science Performing Organization
conisma	Italy	Research/Science Performing Organization
OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale)	Italy	Research/Science Performing Organization
Institute for Environmental Solutions	Latvia	Research/Science Performing Organization
Latvian Institute of Aquatic Ecology	Latvia	Research/Science Performing Organization
Recreationa and Tourism Department, Klaipeda University	Lithuania	Research/Science Performing Organization
NOGEPA (Netherlands Oil and Gas Exploration and Production Association)	Netherlands	Industry Association (National)
VisNed	Netherlands	Industry Association (National)
KVNR	Netherlands	Industry Association (National)
Dutch Government	Netherlands	National Government Administration
Port of Rotterdam Authority	Netherlands	Other (Please Specify)
Deltares	Netherlands	Other research project/network
IMARES	Netherlands	Research/Science Performing Organization
The research Council of Norway	Norway	Research/Science Funding Organization
Institute of Marine Research (IMR)	Norway	Research/Science Performing Organization
University of Bergen	Norway	Research/Science Performing Organization
Institute of Oceanology PAN	Poland	Research/Science Performing Organization
Institute for Nature Conservation and Forests	Portugal	National Government Administration
Regional Fisheries Directorate (Azorean Regional Government)	Portugal	Other (Please Specify)
The Regional Directorate for Maritime Affairs, Governo dos Açores	Portugal	Regional Seas Administration
Centre of IMAR of the University of the Azores	Portugal	Research/Science Performing Organization
National Institute for Marine Research and Development "Grigore Antipa"	Romania	Research/Science Performing Organization
CDIEM sl	Spain	Industry (SME)
Spanish Federation of Sea Entrepreneurs	Spain	Industry Association (National)
Asociación Cluster del Naval Gallego (ACLUNAGA)	Spain	Industry Association (Regional/European/International)
INSTITUTO ESPAÑOL DE OCEANOGRAFÍA	Spain	National Government Administration
PTEPA - SPANISH TECHNOLOGY PLATFORM FOR FISHERIES AND AQUACULTURE	Spain	Other (Please Specify)
Spanish Platform for the Protection of the Coast and the Marine Environment (PROTECMA)	Spain	Other (Please Specify)
Instituto Español de Oceanografía	Spain	Research/Science Funding Organization
UNIVERSITAT POLITECHNICAL OF VALENCIA	Spain	Research/Science Performing Organization
Centro Tecnológico del Mar - Fundación CETMAR	Spain	Research/Science Performing Organization
Swedish agency for water and marine management	Sweden	National Government Administration
Swedish Transport Agency	Sweden	National Government Administration
Swedish Institute for the Marine Environment	Sweden	Other (Please Specify)
AquaBiota Water Research	Sweden	Other (Please Specify)
University of Gothenburg (and Marine Genomics for Users (FP7))	Sweden	Research/Science Performing Organization
SAROST. SA	Tunisia	Other (Please Specify)
Institute of market problems and economic&ecjljgical research NAS of Ukraine	Ukraine	Research/Science Performing Organization
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National Federaion of Fishermen's Organisations	United Kingdom	Industry Association (National)
Scottish Fishermen's Federation	United Kingdom	Industry Association (Regional/European/International)
Defra	United Kingdom	National Government Administration
The Crown Estate	United Kingdom	National Government Administration
The RSPB (UK Partner of BirdLife International)	United Kingdom	Non-Governmental Organization
WWF-UK/Celtic Seas Partnership project	United Kingdom	Non-Governmental Organization
The Centre for Environment, Fisheries and Aquaculture Science (Cefas)	United Kingdom	Other (Please Specify)
Joint Nature Conservation Committee (JNCC)	United Kingdom	Other (Please Specify)
Marine Environmental Data and Information Network (MEDIN)	United Kingdom	Other (Please Specify)
Heriot-Watt University	United Kingdom	Research/Science Performing Organization
Marine Alliance for Science and Technology for Scotland (MASTS)	United Kingdom	Research/Science Performing Organization
National Oceanography Centre	United Kingdom	Research/Science Performing Organization
University of Sirling	United Kingdom	Research/Science Performing Organization

Annex II: STAGES WP4 Workshop: Participant list, Agenda, breakout session briefing documents

Breakout Session Supporting Document: Choosing the best SPI tools

*"**Science–policy interfaces** are defined as **social processes** which encompass relations between scientists and other actors in the policy process, and which **allow for exchanges, co-evolution, and joint construction of knowledge with the aim of enriching decision-making**"* [Van de Hove, 2007, *Futures* Vol 39, p. 807-826]

Science is just one part of the extensive knowledge-base drawn upon in environmental policy making. It is therefore crucial to find innovative mechanisms to make available updated and ongoing scientific knowledge to underpin the decision-making process. An effective SPI draws on a diverse Stakeholder community. Mechanisms and tools make it possible to exchange and construct knowledge between scientists, policy makers and other stakeholders in the decision-making process. New tools are needed to make Stakeholder dialogue and knowledge exchange more efficient, iterative and timely (see Figure 1).

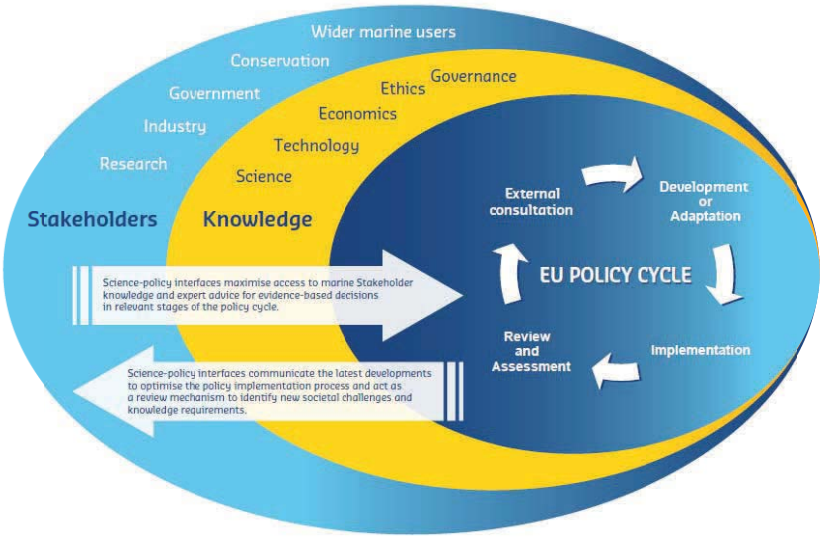

Figure 1: Components of an effective Science-Policy interface showing the important role of Stakeholders and Knowledge and the need for multi-way dialogue to promote evidence-based decision making.
Source: NFIV, Chapter 13, Marine SPI, European Marine Board 2013, p.168]
http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

Participants are invited to discuss **'Choosing the best SPI tools',** in the context of the Marine Strategy Framework Directive, focusing on 2 topics:

1. Maximizing Stakeholder interaction in the MSFD process.
2. Enhancing scientific knowledge transfer and uptake into MSFD policy.

At all times, keep in mind the following cross-cutting issues:

a) **Multiple geographical scales** (e.g. National, Sub-Regional, Regional, European)
b) **Timing** and the need to maximize the interplay between the research (longer-term) and policy (shorter-term) time-frames.

Key questions are provided below to stimulate discussion:

1. Maximizing Stakeholder interaction in the MSFD process.

Focus on which SPI mechanisms work best and should these be targeted for specific Stakeholder groups.

Q1: Is the current stakeholder engagement fit for purpose? What is your experience of the MSFD Stakeholder involvement?

Q2: What barriers are there to Stakeholder engagement and how do we overcome them?

Q3: How can we enhance the MSFD Stakeholder interaction? Discuss what SPI mechanisms could be used at different geographical levels and across marine regions.

Discuss the results of a STAGES Stakeholder Consultation survey (2013) where Stakeholders rated the impact of various SPI mechanisms and tools (Figure 1).

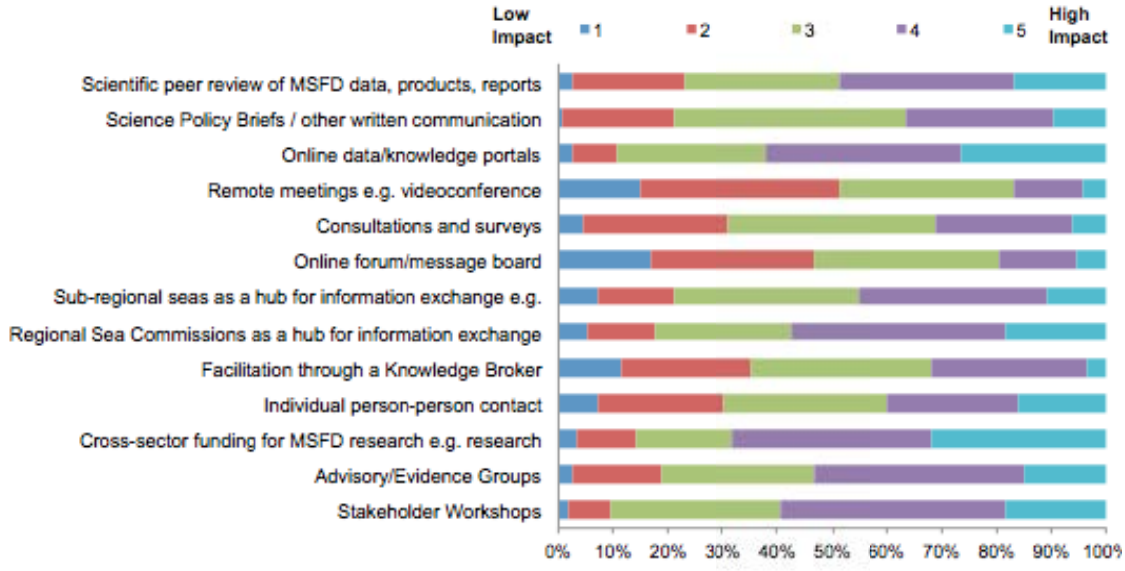

Figure 1: Results from STAGES Stakeholder Consultation survey (2013) assessing which SPI mechanisms and tools are considered the highest to lowest impact. x axis shows the percentage (%) of Stakeholder responses (n=113).

Q4: Should specific SPI tools be targeted for different stakeholders e.g. industry, NGOs, academic research community?

Is the frequency and timing of such mechanisms also sector-specific?

2. Enhancing scientific knowledge transfer and uptake into MSFD policy.

This topic takes a more in-depth look at existing and new mechanisms for knowledge transfer.

In other related environmental policies such as the Water Framework Directive (WFD), recommendations for improving the SPI include using more **Knowledge Brokers** as an independent person/organization to help transfer knowledge more effectively.

Q1: What innovative tools and mechanisms could enhance the MSFD SPI to deliver updated and ongoing uptake of scientific knowledge? What is currently effective (enhancing knowledge exchange), legitimate (accepted by all stakeholders) or efficient (low cost/high benefit)?

Q2: Should Knowledge Brokers be used more to increase the transfer and impact of knowledge relevant to MSFD? Who would be the key actors and can you give examples (people, organizations etc)?

Q3: What other new capacities are required e.g. online portals, expert groups etc?

Breakout Session Supporting Document: Which Knowledge and When?

*"SPIs are implemented to **promote the interplay between the science and policy domains**, **fostering exchange** between [1]**knowledge producers** (e.g. the research community) **and** [2]**knowledge users** (e.g. policy makers)."* [[3]NFIV, Chapter 13, European Marine Board 2013, p.167]

Knowledge forms the foundation of evidence-based decision-making and there is a growing wealth of information available to MSFD policy makers. Harnessing existing knowledge from a diverse stakeholder community is crucial to make this knowledge available and the packaging of information and level of detail provided should be appropriate to the target user and the geographical scale. Finding efficient ways for defining science needs through a science advisory process is also key to drive new knowledge that is relevant to policy going forward (see Figure 1).

Participants are invited to discuss **'Which Knowledge and When?'** in the context of the Marine Strategy Framework Directive (MSFD), focusing on 3 main topics:

1. Packaging relevant knowledge outputs for MSFD.
2. Harnessing knowledge: Maximizing the impact throughout the research cycle.
3. Targeting windows of opportunity for exchange between research and MSFD policy.

At all times, keep in mind the following cross-cutting issues:

a) **Multiple geographical scales** (e.g. National, Sub-Regional, Regional, European)
b) **Timing** and the need to maximize the interplay between the research (longer-term) and policy (shorter-term) time-frames.

For each topic, key questions are provided below to stimulate discussion:

1. Packaging relevant knowledge outputs for MSFD.

Q1: What types of knowledge does MSFD policy require and is there currently a mismatch between knowledge produced and policy needs? Using Figure 1, discuss if the current MSFD science-policy interface promotes production and transfer of relevant knowledge required to support MSFD implementation. Are there recommendations for types of knowledge and packaging of Knowledge Outputs?

Q2: How could the 'packaging' of information be targeted for different geographical scales? e.g. A National example of synthesizing and packaging knowledge for policy is the UK Charting Progress Report.

[1, 2,] See supporting document 'MSFD information sheet' for glossary of terms
[3]http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

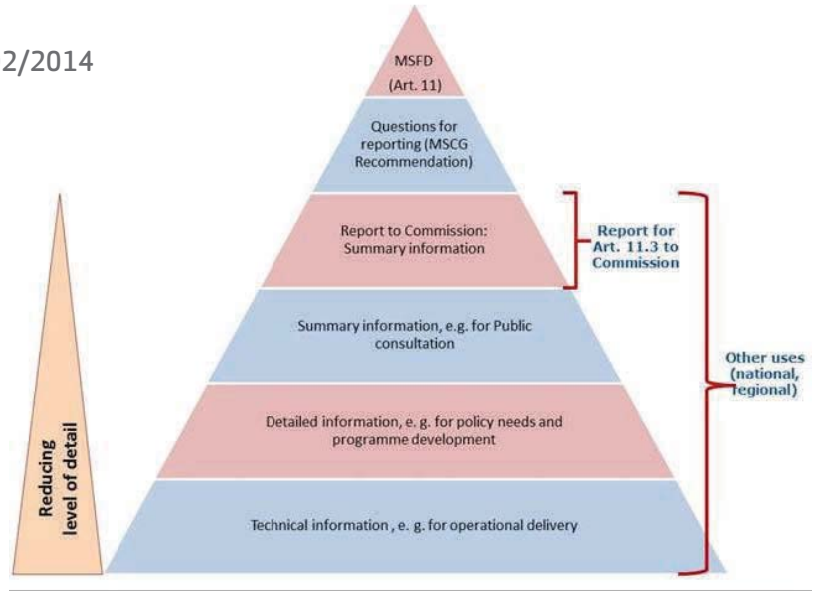

Figure 1: Knowledge must be targeted to the users needs and the level of detail required will vary depending on the user and geographical scale. Source: WG DIKE, July 2013 (David Connor, DG ENV)

2. Harnessing new knowledge: Maximizing knowledge impact throughout the research cycle.

Q1: How can we maximize the impact of knowledge throughout the full research cycle and ensure new research is addressing knowledge gaps relevant to policy needs?
The full research cycle can be broadly divided into 3 stages (Figure 2):
- Identification of knowledge gaps and research needs e.g. How can the SPI help the process of identifying and funding new research to be more efficient/relevant?
- Project Implementation e.g. who's role is it to maximize the impact of a research project whilst ongoing? Is it the project itself, the funder e.g. EC, independent Knowledge Broker?
- Dissemination of Knowledge after the project end e.g. How should project information and Knowledge Outputs be stored/made available after the project ends? What infrastructure/portals exist that could do this? Do we need a new capacity for this?

Q2: How does knowledge production (process and timing) vary across Stakeholder communities e.g. industry etc?

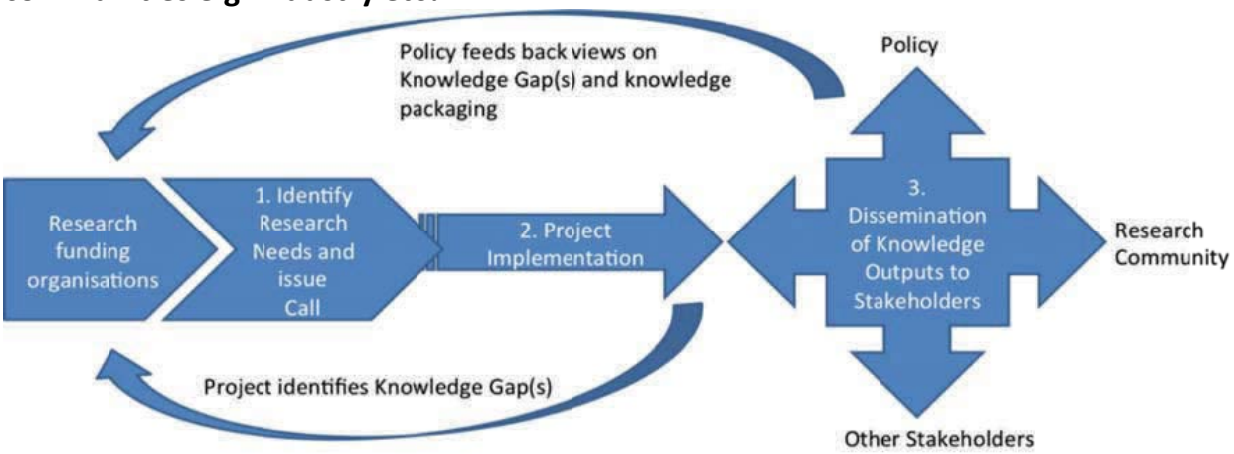

Figure 2: Schematic illustrating a simplified research cycle and highlighting some opportunities for dissemination of knowledge and identification of knowledge gaps (EMB, 2014).

[1, 2,] See supporting document 'MSFD information sheet' for glossary of terms
[3]http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

3. Targeting windows of opportunity for exchange between research and policy.

Q1: What are the windows of opportunity for exchange between research and MSFD policy?

-Using Figure 3, discuss the current MSFD science advisory process at different geographical levels e.g. National, Regional, European.
-Are there any best practice/ lessons learned from this process so far in terms of timing of research feeding into these assessments?

National: Member States have a obligation for MSFD reporting on Initial Assessments (Art. 8), GES (Art.9), environmental targets and associated indicators (Art. 10) as part of a marine strategy for its marine waters (marine region and/or sub-region). How can the process of scientific knowledge collection and synthesis be made more efficient?
Sub-Regional: Is this geographical scale currently under-utilized as a channel for knowledge transfer into MSFD policy?
Regional: Could knowledge input be coordinated better across marine regions to give more coherence to Regional Sea assessments e.g. OSPAR Quality Status Report? How could the evolving Regional Sea science agendas help to maximize ongoing uptake of knowledge into MSFD policy?
European: How could the European MSFD science advisory process be enhanced to include timely, relevant knowledge input?

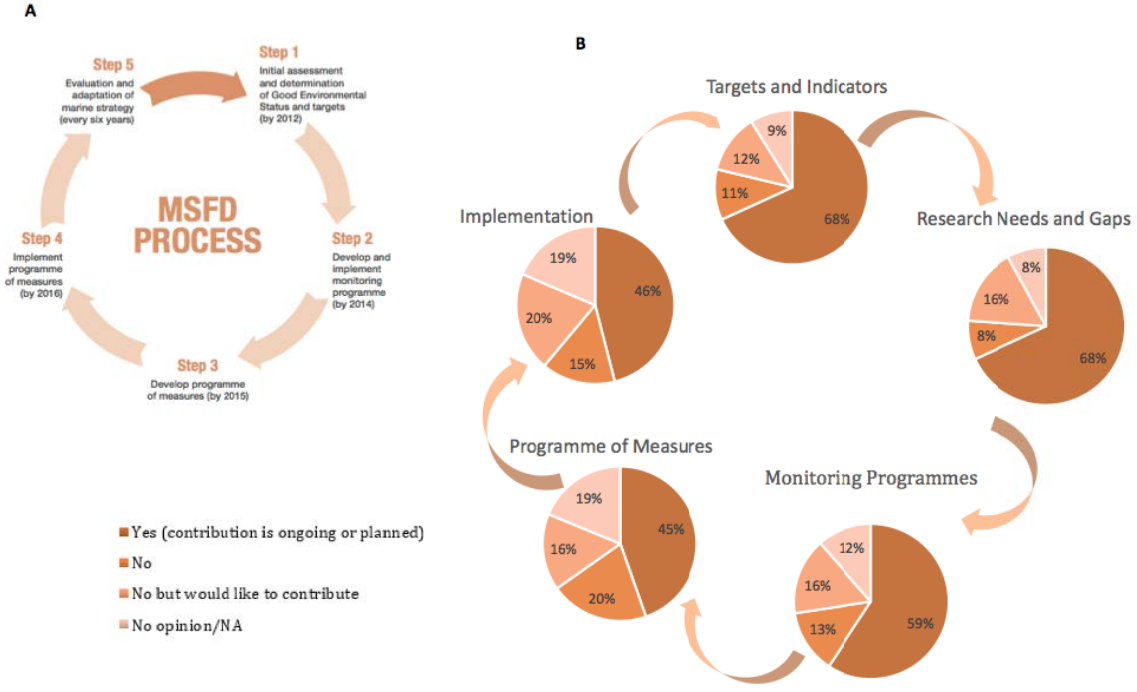

Figure 3: Stakeholder response to STAGES MSFD consultation when asked which stage(s) of the MSFD policy process their organization currently contributes to, or would like to contribute to in the future (N=113). NB. For each stage, 12-20% of Stakeholders responded they did not currently contribute but would like to in the future.

[1, 2,] See supporting document 'MSFD information sheet' for glossary of terms
[3]http://www.marineboard.eu/images/publications/Navigating%20the%20Future%20IV-168.pdf

STAGES WP4 MSFD SPI Workshop Participants List

Expert Name	Affiliation	Country
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Expert Name	Affiliation	Country
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Bernard Vanheule	International Association of Oil and Gas Producers *OGP*	Belgium
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Isabelle Terrier	Ministry of Ecology, Sustainable Developpement and Energy *MEDDE*	France
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Tim O'Higgins	Scottish Association for Marine Science *SAMS*	UK
Lyndsey Dodds	WWF-UK	UK
Marisa Fernandez	Centro Tecnologico del Mar- CETMAR Foundation	Spain
Wendy Bonne	Joint Programming Initiative for Healthy and Productive Seas and Oceans *JPI-Oceans*	Belgium
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Gert Verreet	OSPAR Commission	United Kingdom

Kate Larkin

From: stages-owner@marineboard.eu on behalf of Dina Eparkhina [deparkhina@esf.org]
Sent: donderdag 12 december 2013 9:02
To: stages@marineboard.eu
Subject: Invitation: FP7 STAGES Stakeholder Consultation Workshop, 12/02/2014, Brussels

Dear Marine Stakeholder,

FP7 STAGES Stakeholder Consultation Workshop, 12 February 2014, Brussels

To secure your place, register online by Friday 20 December 2013

The EU FP7 **STAGES** project (Science and Technology Advancing Governance on Good Environmental Status) is designed to improve the transfer of scientific knowledge to those with responsibility for implementing the Marine Strategy Framework Directive (MSFD). One of the key outputs of STAGES will be a concept for a durable but flexible European Science Policy Interface (SPI) to support MSFD implementation in the long-term. A successful SPI requires the input not just of scientists and policymakers, but of all those with a stake in the protection and sustainable use of the marine environment in Europe.

STAGES is conducting a **Stakeholder Consultation** to collect the views and needs of a broad range of MSFD stakeholders from science, industry, civil society, NGOs, and the national MSFD competent authorities and implementing agencies. An extensive on-line questionnaire stakeholder survey has already been completed. With the support from the European Commission, STAGES now invites you to participate in a **Stakeholder Consultation Workshop which will be held on February 12, 2014 at the Regus Centre in Brussels** (Rue de Colonies 11, next to Central Station). The workshop is planned as a joint activity with the FP7 DEVOTES project.

A workshop programme will be circulated to registered participants in January 2014. The event will include some short presentations to provide context but will mostly involve structured discussion, addressing issues such as optimum SPI mechanisms, extracting MSFD-relevant knowledge and dealing with geographical scale. The discussions and views collected will be used to directly inform the development of a STAGES proposal for a durable long-term European SPI to support implementation of the MSFD.

We would very much welcome your participation in this event. Please let us know if you can participate by completing the on-line registration at the following link: http://www.marineboard.eu/stagesregistration. The number of spaces at the workshop is limited to 50 and places will be offered on a first-come-first served basis. **Participants will be sent confirmation of their place in early January**.

If you have any queries regarding the workshop, please contact Niall McDonough of the European Marine Board (Workshop Convener) at nmcdonough@esf.org. Thank you in advance for your interest and we very much look forward to hearing from you.

Yours faithfully,

Niall McDonough (European Marine Board – STAGES SPI Work Package Leader)
Marisa Fernandez (CETMAR, Spain – STAGES Coordinator)

Science and Technology Advancing Governance of Good Environmental Status

In association with the DEVOTES project:
DEVelopment Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status

Building a Science Policy Interface to Support MSFD Implementation

Joint Stakeholder Consultation Workshop

12 February 2014, Regus Brussels Central Station Centre, Brussels

Programme

09.00	Welcome and plan for the day
09.10	The STAGES & DEVOTES projects
09.30	STAGES MSFD Survey: Stakeholder needs and expectations
10.00	General discussion
10.30	*Tea/Coffee* 
	Participants split into three breakout groups
11.00	**Breakout Session 1**
	Group 1: Which knowledge and when?
	Group 2: Choosing the best SPI tools
	Group 3: DEVOTES topic 1 (*tbc*)
12.30	*Lunch* 
13.30	**Breakout Session 2**
	Group 1: Choosing the best SPI tools
	Group 2: Which knowledge and when?
	Group 3: DEVOTES topic 2 (*tbc*)
15.00	*Tea/coffee* 
15.30	Reports of the breakout moderators
16.00	**Plenary Brainstorming**
	Future options for an optimum MSFD Science Policy Interface
17.00	End of workshop

Notes

Notes

STAGES
CONNECTING SCIENCE TO POLICY FOR HEALTHY SEAS

PROJECT PARTNERSHIP

The **STAGES** partnership has been constructed to ensure effective delivery of the ambitious project objectives. It comprises European and international organisations such as ICES and JRC, who were fundamental in developing MSFD Scientific Task Groups, as well as national organisations (IMR, IFREMER, CETMAR) that are responsible for supporting research and providing advice on MSFD implementation at Member State level. The partnership also includes AquaTT and EurOcean, both very experienced in marine science information management and knowledge transfer, and the European Marine Board as a primary marine science-policy think tank in Europe.

PROJECT PARTNERS

- Centro Tecnologico del Mar – Fundacion (CETMAR)
- European Center for Information on Marine Science and Technology (EurOcean)
- Institut français de recherche pour l'exploitation de la mer (Ifremer)
- AquaTT UETP Ltd (AQUATT)
- International Council of the Exploration of the Sea (ICES)
- Joint Research Centre (JRC)
- European Marine Board (EMB)
- Institute of Marine Research (IMR)

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