## Work Programme topics addressed:

Action Line 1: A more dynamic governance of the science and society relationship
SiS.2011.1.0-1 Mobilisation and Mutual Learning (MML) Action Plans on societal challenges
Specific Challenge 3: Marine resources, inland activities and sustainable development

#### **SEA FOR SOCIETY**

Proposal acronym: SFS

Funding scheme: Coordination and support actions (Supporting)

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## List of participants:

 ${\it Same participant numbering as that used in section A2 of the administrative forms.}$ 

Participant no.	Participant legal name	Country (initials)	Organisation type
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2	FundacaoEurOcean	PT	NON PROFIT
3	InstytutOceanologii – PolskiejAkademiiNauk	PL	PUBLIC RESEARCH
4	AquaTT UETP Limited	IE	SME
5	University of Gothenburg	SE	HIGHER EDUCATION
6	CiênciaViva – Agência Nacional para a Cultura  Científica e Tecnológica	PT	NON-PROFIT
7	Instituto Espanol de Oceanografia	ES	PUBLIC RESEARCH
8	Costa Edutainment S.p.A Acquario di Genova	IT	SME
9	Aquarium Finisterrae-Museos Científicos Coruñeses	ES	NON PROFIT
10	The Marine Institute	IE	PUBLIC RESEARCH
11	Hellenic Centre for Marine Research – Institute of Oceanography	EL	PUBLIC RESEARCH
12	Havforskningsinstituttet	NO	PUBLIC RESEARCH
13	Instituto Superior Tecnico	PT	HIGHER EDUCATION
14	Association Européenne des Expositions Scientifiques, Techniques et Industrielles	BE	SME
15	IUCN Bureau auprès de l'Union Européenne	BE	NON PROFIT
16	European Business and Innovation Centre Network	BE	SME
17	National University of Ireland, Galway	IE	PUBLIC RESEARCH
18	World Ocean Network	BE	NON PROFIT
19	Institut français de recherche pour l'exploitation de la mer – IFREMER	FR	PUBLIC RESEARCH
20	Studio K	FR	SME

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## **Proposal**

## 1. Scientific and/or technical quality, relevant to the topics addressed by the call

## 1.1 Concept and objectives

## Context

## Ocean - Common Heritage of Humankind

"The ocean remains one of the few domains in which humanity can exert a limited control of what happens there. On land, if an environmental problem affects the quality of life of the population, it will be a reaction by the citizens and eventually those responsible of the mismanagement will be thrown out and replaced. The Ocean lacks this ultimate citizen control. This gap of accountability needs to be closed by a tremendous effort to build a true citizenship for the world ocean."

Patricio Bernal, former executive secretary of the Intergovernmental Oceanographic Commission / UNESCO

From Preface to the <u>Atlas de l'océan mondial</u>, authors: Jean-Michel Cousteau, Philippe Vallette, Editions Autrement, France, 2007

## **Summary**

Sea for Society (SFS) engages stakeholders, citizens and young people in dialogue to share knowledge, forge partnerships, empower actors on societal issues related to marine science. In doing so, the project aims to develop and enrich the concept of the Blue Society and set in place on-going mechanisms for cooperation.

The project has brought together a multidisciplinary partnership of 20 partners from 10 countries representing marine research institutes, funding agencies, science museums and aquaria, CSO's, NGO's, higher education institutes, business networks, to implement a MMLAP to address Specific Challenge 3: Marine Resources, inland activities and sustainable development. SFS will mobilise researchers, marine and terrestrial actors, CSO's and individual citizens and youth in a mutual learning, consultation process and joint action to consider key questions, extract cross-cutting issues and propose challenge-driven solutions and ensure sustainable management of marine eco-system services by European citizens.

The project will engage stakeholders with conflicting perspectives in a face-to-face and web-based participatory dialogue with science and research. A Europe wide Consultation Process will convene economic stakeholders, environmental organisations, local authorities, the public-at-large, and youth to identify challenges and barriers of coastal and marine ecosystem services vis-à-vis societal needs.

Analysis of project activities will bring about co-authored recommendations for facing up to the challenge. Key questions will be considered in the context of 'ocean ecosystem services' with an emphasis on relating complex biodiversity to 'lived experiences' in order to bridge how everyday human behaviour interplays with science. This analysis will feed into the development of the Blue Society concept, to be launched towards the end of the project, which will serve as a new framework for public and stakeholder engagement in marine societal issues.

Mobilisation activities will lead to further empowerment of stakeholders and citizens to take action at local, national and European levels to tackle marine societal challenges. Given the partners' potential in mobilising stakeholders and the general public, the Consultation and Mobilisation Processes will have great impact on the citizens' capacity to take action. Via aquaria and museums, millions of European citizens will be exposed to SFS.

Public Engagement in Research (PER) as it relates to European maritime policy is at the core of the process. Sustaining the MMLAP will be important in designing the SFS mechanisms: for partnership, interaction, PER, empowerment and redressing marine societal challenges. SFS will provide feedback from consultation process both to RD governance and maritime governance, shaping a new concept of Blue Society and improving the governance of research related to the oceans and seas at regional, national and European level.

## 1.1.1 Background

## 1.1.1.1 Marine Policy and Strategy

The European marine and maritime research community collectively published the Ostend Declaration<sup>1</sup> in October 2010 that said,

"The Seas and Oceans are one of the Grand Challenges for the 21st Century."

In doing so, they acknowledged:

- the critical role of the oceans in the earth and climate systems;
- the importance of coasts, seas and oceans and their ecosystems to our health and well-being;
- the increasing impacts of global environmental change on the marine environment and the significant socio-economic consequences of those impacts;
- the on-going need for basic research to address major gaps in our fundamental knowledge of coasts, seas and oceans;
- the enormous opportunities for innovation, sustained wealth and job creation in new and existing maritime sectors such as aquaculture, renewable energy, marine biotechnology and maritime transport

Considering the role of the oceans for the development of humankind (food, health, employment, leisure, spatial planning...), there is an important need to engage all sectors of society in these challenges.

Furthermore, they underlined the crucial role of marine and maritime science and technology in providing knowledge and understanding of the seas and oceans and their biodiversity and in creating new opportunities and technologies which will support and progress:

- Implementation of the Integrated Maritime Policy for the European Union (2007), the European Research Area (EC Green Paper on ERA, 2007) and other policies such as the Common Fisheries Policy:
- Related grand challenges including food, energy and health, as identified in the Lund Declaration (2009).
- Good Environmental Status in Europe's marine waters by 2020 (Marine Strategy Framework Directive)
- Job creation through smart, sustainable and inclusive growth (Europe 2020).

The **Sea for Society (SFS)** project is aligned with the brand new declaration, and with other notable, significant policy papers that enforce the statements above including the Europe 2020 Strategy<sup>2</sup>, the European Strategy for Marine and Maritime Research<sup>3</sup> and the Marine Strategy Framework Directive<sup>4</sup>. Collectively, these set the scene and have inspired a multi-disciplinary consortium of 20 partners from ten countries to design a Mobilisation and Mutual Learning Action Plan (MMLAP) addressing Specific Challenge 3: Marine resources, inland activities and sustainable development.

## 1.1.1.2 Seas and Oceans as a Societal Challenge

The title of Specific Challenge 3 in its own right exemplifies the cross-disciplinary nature of our oceans and seas, linking them to land based activities and sustainable development. These three elements are interconnected. Human impact on the aquatic ecosystem is complex, and relationships are not always

<sup>&</sup>lt;sup>1</sup> http://www.eurocean2010.eu/declaration/

<sup>&</sup>lt;sup>2</sup> http://ec.europa.eu/eu2020/index\_en.htm

<sup>&</sup>lt;sup>3</sup> A European Strategy for Marine and Maritime Research, A coherent European Research Area framework in support of a sustainable use of oceans and seas - COM(2008) 534 final

<sup>&</sup>lt;sup>4</sup> DIRECTIVE 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

clearly defined. Marine ecosystems and biodiversity supply indispensable core services to planet Earth, as demonstrated by gas exchange and balance, climate control, carbon fixation, water purification, nutrient recycling, coastal protection, and many other examples. Humankind also extracts products from the marine ecosystem, relying on it for food, energy, minerals, chemicals and organisms every day. The maritime and marine sectors are also a source of employment to millions of people who are dependent on it for their livelihood in the fishing, aquaculture, tourism, energy and maritime transport industries.

To frame the level of services rendered by the seas and oceans to citizens, consider the following statistics:

- Europe alone has more than 70,000 km of coastline.
- 40% of Europe's GDP relies on maritime regions.
- 40% of petroleum and 60% of the gas consumed in Europe is generated by offshore operations.
- In 2004, the revenue from maritime tourism in Europe was estimated at €72 billion.
- 90% of the world's trade goods are transported by sea.

Maritime Facts and Figures European Commission Maritime **Affairs** Source: http://ec.europa.eu/maritimeaffairs/facts\_figures\_en.html

The interaction between humankind and the seas and oceans is enduring, and land-based activities also have a role to play in this relationship. Europe is a maritime continent and half of the European population lives close to the coastline. Inland habitants also benefit from the services rendered by the oceans and seas and can affect the marine environment directly and indirectly. European culture and identity is influenced by this privileged link with the seas and oceans and Europe's maritime territory represents major strategic and economic value. It can be argued that most economic sectors, such as trade, transport, tourism, and energy, rely on maritime activities. Virtually all major issues that affect European markets today have a marine or maritime dimension.

At the same time, humankind interaction with the oceans has resulted in increased pressure on the marine ecosystem. The loss of biodiversity, degradation of environments, pollution, and invasive species, over exploitation of natural resources, climate change and acidification of oceans are key challenges facing the marine environment now and into the future.

## Global Evidence suggests that:

- Two-thirds of all natural environments are seriously degraded and current species extinction rates could reach 1,000 times the "natural" rates.<sup>5</sup>
- 28 % of fish stocks are overexploited and 52 % are exploited to maximum levels.<sup>6</sup>
- The majority of the world's coastlines are affected by erosion.<sup>7</sup>
- 30% of shark and ray species are threatened, according to the "Red List" prepared by the International Union for Conservation of Nature (IUCN). 8
- 80% of the pollution arises from land-based sources: pollutants travel through the air or rivers and ultimately to the oceans and seas.9

Research and development has a major role to play in putting forward solutions to change the state of affairs, for the benefit of society.

The Europe 2020 Strategy for smart, sustainable and inclusive growth states, "Europe needs to focus on the impact and composition of research spending and to improve the conditions for private sector R&D in the EU," and goes onto say, "Innovation and research as one of the key components for smart growth."

<sup>&</sup>lt;sup>5</sup> Convention on Biological Diversity

<sup>&</sup>lt;sup>6</sup> La situation mondiale des pêches et de l'aquaculture 2008 - Département des pêches et de l'aquaculture de la FAO, Rome, SOFIA

<sup>&#</sup>x27;Status of the world's marine species. The 2008 Review of The IUCN Red List of Threatened Species. IUCN

 $<sup>^8</sup>$ Status of the world's marine species. The 2008 Review of The IUCN Red List of Threatened Species. IUCN

<sup>&</sup>lt;sup>9</sup> GESAMP (Group of Experts on Scientific Aspects of Marine Environmental Protection) Report 70 - A sea of trouble, 2001

In this light, the Specific Challenge 3 Call text refers to the European Strategy for Marine and Maritime Research highlighting the need for an "integrated approach as regards the marine system to support the development of a thriving maritime economy, in an environmentally sustainable manner. It also encourages capacity building, an increase in integration between established research disciplines and improved cooperation between all stakeholders concerned with seas, oceans and coasts."

SFS intends to contribute to the needs referred to above by developing processes and methodologies to support the "cooperation between all stakeholders concerned with seas, oceans and coasts through its Mobilisation and Mutual Learning Action Plan (MMLAP), including scientists from multiple disciplines and different levels of the research system, decision makers, marine stakeholder groups, non-marine land based stakeholder groups and the wider public through CSO's, NGO's and direct interaction with citizens and youth.

## 1.1.1.3 European Marine Research

The amount of European Research effort on the marine sector is significant. The European Union (EU) 6th Framework Programme (2000-2006) funded 458 marine research projects worth more than €848 million in grant-aid. A further 124 marine research projects (grant-aid €297 million) were funded under the FP7 (2007 – 2013) to date. If you consider that EC research is typically <7% of total research investment in Europe, the remainder being supported by Member states, then it is clear there is a considerable Marine Research Community and activity in Europe.

All this activity falls within the current development of the European Research Area (ERA) which is resulting in more interaction and cooperation between researchers and science institutions across Europe. As highlighted in the MASIS Report, the 2020 Vision (Council of the EU 2009) declared that the ERA is to be responsive to the needs and ambitions of citizens and it should build on mutual trust and continuous dialogue between society and the scientific/technological community (p. 65).

Furthermore the Marine Board (2002) Integrating Marine Science in Europe said "Marine research and its discoveries are of strategic significance to Europe and of importance to its citizens. In addition, effective governance requires the participation of informed citizens. The European marine scientific community is encouraged to become more proactive in public debates concerning the marine environment, and in disseminating scientific information and analysis in issues of societal concern..."

During the implementation of SFS, it is important to be aware of other European structures which play a role in Research governance in order to ensure that SFS can interact, take into account the proposals of relevant project and bodies and integrate its activities and results into the established systems for impact. For example, other MML projects, GAP 2, MARLISCO, National Research Councils, European Technology Platforms, European Research Area Networks and Joint Programming Initiative (JPI).

**European Technology Platforms (ETPs)** have been designed more recently as structures to support, prioritise, and coordinate research. They are frameworks for stakeholders, led by industry and help define research and development priorities on a number of strategically important issues: to achieve Europe's future growth depends upon major research and technological advances in the medium to long term. Leading marine-related ETPs include EATIP for aquaculture, EFTP for fisheries and Waterborne TP for maritime transport.

**European Research Area Networks (ERA-Nets)** step up the cooperation and coordination of research activities carried out at national or regional level in the Member States and Associated States. MARTEC for maritime technologies, and MarinERA, Ampera, Marifish and recently Seas-ERA, are the marine-related networks under this scheme.

The **Joint Programming Initiative (JPI)** is concerned with pooling national research efforts in order to make better use of European R&D resources and to tackle common European challenges more effectively in key areas. Major societal challenges will be more effectively addressed by a European research effort than nationally. Joint programming aims to improve effectiveness. The "Healthy and Productive Seas and Oceans" JPI is of most relevance to SFS.

The multidisciplinary partnership in SFS includes partners and networks that are closely linked and involved in the above mentioned structures and are therefore at the forefront of European marine policy, strategy and research. Thus, SFS has been designed to work in synergy with other initiatives/activities and programmes. The partnership will communicate new knowledge from SFS to other relevant activities and ensure that the SFS results will be integrated and sustained in Marine Research beyond the funded duration.

A key example is EurOcean - European Centre for Information on Marine Science and Technology, presently composed of twelve members, which are main national marine research or funding organisations in Europe: FCT (Portugal), GeoEcoMar (Romania), IEO (Spain), Ifremer (France), IMR (Norway), IOPAN (Poland), Marine Institute (Ireland), VLIZ (Belgium), MCST (Malta), FRCT-Azores (Portugal), NAUSICAÄ (France), Technopole Brest-Iroise (France). EurOcean also has signed agreements of cooperation with two European and international organisations (Intergovernmental Oceanographic Commission – IOC/UNESCO and Conference of the Peripheral Maritime Regions - CPMR). As such EurOcean has strong connections with national and international bodies related to policy, funding/development, scientific communication and networking.

## 1.1.1.4 Science-in-Society Policy

The link between Science and/in Society is not a new concept. Looking back as far as Agenda 21 RIO, 1992 - Section III: STRENGTHENING THE ROLE OF MAJOR GROUPS, the need was clearly identified as a priority for sustainable development.

"One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making. Furthermore, in the more specific context of environment and development, the need for new forms of participation has emerged. This includes the need of individuals, groups and organizations to participate in environmental impact assessment procedures and to know about and participate in decisions, particularly those which potentially affect the communities in which they live and work. Individuals, groups and organizations should have access to information relevant to environment and development held by national authorities, including information on products and activities that have or are likely to have a significant impact on the environment, and information on environmental protection measures."

Through recent key European policy [Lisbon Strategy & Vision 2020 of the European Research Area (Council of the EU 2009)], citizens have an increasing stake in the European Research Area and science in Europe in general. The envisaged role for citizens in research and development has changed; their role is now to support innovation and the Aho Report (Aho et al. 2006) calls for "fostering a culture which celebrates innovation", and continues: "Europe and its citizens should realise that their way of life is under threat but also that the path to prosperity through research and innovation is open if large scale action is taken now by their leaders before it is too late".

There has also been a shift in approach from FP6 "Science **AND** Society" to FP7 "Science **IN** Society" where there is now a framework for an inclusive perspective of research in its wider societal and policy context.

Where the old approach was more of a transmission approach to science communication;

**TRANSMISSION:** Sender (Science) via transmitter (education, media) to receiver (public)

The new approach is more of a transaction approach;

**TRANSACTION:** On-going exchange of information, debate and knowledge that becomes an interaction.

The informative "MASIS report – Challenging Futures of Science in Society, Emerging trends and cutting-edge issues" highlights a range of challenges and acknowledges that the processes and methodology for "Science IN Society" are not fully defined and therefore efforts in this area are exploratory and knowledge generating in themselves, hence the priority and attention given to the FP7 SIS programme. Public engagement has become an umbrella term covering public consultation, public discourse and public involvement. There is pressure to have more public engagement with science, definitely from the side of policy makers, and to have it at an early stage – sometimes referred to as 'upstream' public engagement,

referring to the time and place where new developments are still uncertain, immature, and adaptable (Wilsdon and Willis 2004). The challenge is that citizens themselves may be reluctant, not because they are not interested in participating in public discourse, but they do not feel their views will be taken up as part of the consultation process (Felt and Fochler 2008). SFS was conscious of this knowledge when designing the project, the MMLAP and building the consortium.

Mobilisation and Mutual Learning Action Plans (MMLAPs) are a specific type of action, called for under the first action line of the Science in Society work programme, which highlights core issues of governance of science-in-society. Chapter 4 of the MASIS Report defines governance as the principles of openness, participation, accountability, effectiveness and coherence. It goes on to say that for science, there is also the need to assure the productive functioning of its endeavours, and the maintenance of scientific integrity. It is in this light that SFS is concerned with moving from the functioning of science to its interfaces (and grey zones) between science, policy and society. In the context of the Marine, SFS is well positioned to address this "Grey Zone" given the design of its consortia which includes multiple organisations and networks already operating at this crucial interface (see Section 2).

## 1.1.1.5 Marine Science in Society

The *Ocean, Our Future* Report of the Independent World Commission of the Oceans (1998), agrees; "Beyond the basic 'right to know' a number of channels also exists for civil society to exercise the 'right to be heard' - as well as the 'right to complain' – in international ocean affairs. These channels should be activated and strengthened, with a view to defusing conflicts and facilitating the interaction of non-state entities with the intergovernmental system." It seems apparent that in the 13 years since this recommendation, there is still a lot to be done.

In answer to this, the European teenagers involved in the Ecsite "See your future" workshop presented their proposals to the Independent World Commission of the Oceans:

"Information about the state of the oceans and how to use their resources in a sustainable way is a critical matter. We, as students, and furthermore, citizens, will try to get information on these issues and to inform as many people as possible. We think more about nature and the effect of human activities should be taught in school, especially through field projects. We also ask the scientists to increase their sensitization activities. Aquariums, museums and science centres also have their part in this effort.

All citizens have the right for complete and understandable information: but we also need appropriate information on what to do if we want to improve our own behaviour. Then:

- As consumers, we can choose,
- As professionals / workers, we can act differently,
- As citizens, we can put pressure on / influence decision-makers, and,
- As communities, we can act collectively."

Rising to this challenge, Nausicaá and partners:

- organised the first International Meeting of aquaria, museums and science centres "New Behaviour Towards the Ocean: An Objective for the Future" in 1999 under the aegis of the Intergovernmental Oceanographic Commission of UNESCO
- conducted the OCEANICS survey, an FP5 funded project (2003-2005)
- created the international association asbl, World Ocean Network (WON)

These efforts have been endorsed by the Global Forum on Oceans, Coasts and Islands (Global Ocean Forum) who commissioned World Ocean Network to convene education outreach/media efforts in support of international ocean governance.

WON further mobilised information multipliers such as aquariums and science museums professionals to empower stakeholders and the public in support of the integrated maritime policy.

European Youth citizens were also mobilised during the Blue Planet Forum co organised by World Ocean Network and the Committee of the Regions of the EC in Brussels in November 2007. This is an extract of the youth citizens' contribution;

"We, the participants of the  $1^{st}$  Blue Planet Forum, from all over Europe, have come together to express our thoughts, concerns and recommendations on the state of the ocean.(...)

We agree that the ocean has gone well beyond its operating capacity and therefore ask the European community to step up to the commitments it has taken, to take action and protect the ocean, its resources and environment, for future generations.(...)

We want to encourage:

- Information by **Internet** with complete transparency; (e.g. website, portal, forums for the general public, access to raw data)
- More media information on the sea, for example street interactive presentations, educational games, television sea programs;
- Celebration of the World Ocean Day on June 8 all over European Union countries;
- Eco café: easy going meeting places;
- Educational programme to include all people from the coast to inland
- Actions that allow direct contact with the ocean; excursions to aquariums and sea life centres;
- European contests involving young pupils;
- Commitment of volunteers (beach clean-up activities, nature camps);
- Involvement of celebrities in information campaign."

The Integrated Maritime Policy function aspires to adopt "Better regulation principles [that] will guide the Commission policy-making on maritime issues from an early stage: identification of major maritime-related initiatives in the annual planning and programming instruments, consultation of civil society and interested parties, impact assessments and inter-service working groups will help to ensure that the Commission is able to design and deliver genuinely integrated proposals."

## 1.1.2 The Sea For Society (SFS) Approach

## 1.1.2.1 Ecosystem Services

SFS has tried to provide a framework to contextualise "specific challenge 3". SFS has used the concept of **Ecosystem Services** to help manage a complex system and relate it to "Lived Experiences" of stakeholders and citizens.

Marine ecosystem services refer to benefits that people obtain in their everyday lives from marine ecosystems, including the Open Ocean, coastal seas, and estuaries. The oceans are essential for life-supporting food, health, transportation, climate, and oxygen and are abundant in biodiversity. Effectively, seas and oceans are the basis of global ecological balance and can have a positive environmental, social and economic impact.

Land-based activities are essential for the socio-economic development of coastal regions. However they have detrimental impacts on the marine ecosystem services (environment, biodiversity) and on coastal areas and can affect tourism, aquaculture or coastal fishing activities.

In coastal zones and our Oceans many different stakeholders co-exist, often with different and sometimes conflicting perspectives. Conflicts between users are for example; between the development of tourism and preserving nature, between maritime traffic and leisure activities or between the setting up of offshore wind farms and fishing activities. Ocean governance aims at higher efficiency and better value for marine and maritime activities and towards sustainable use of Europe's marine resources.

To face up to these complex issues, six "Issues" around Ecosystems services will frame how SFS will address Specific Challenge 3. These issues will relate to "lived experiences" of stakeholders and citizens throughout the project process. Previous surveys (OCEANICS, FP5 funded project and The Ocean Project work) have shown that European citizens are not fully aware of the daily link they have with marine ecosystem services they benefit from and how their daily behaviours are potentially threatening these services.

In order for the consultation process to be manageable and focused, the SFS will use the following **6 subtopics (in the context of SFS called "Issues")** pertinent to all citizens;

- 1. Food supply
- 2. Human health
- 3. A place to live
- 4. Transport
- 5. Employment
- 6. Leisure and tourism

In relation to the six issues listed above, participants will be challenged to think about the following issues;

- How is man linked to marine ecosystem services from the point of view of his daily needs?
- What services are concerned and how do they "function"?
- How does humankind impact these marine ecosystem services that help maintain the good health of the planet?
- How can we better manage this interaction to continue to benefit from these services in our everyday life?

## 1.1.2.2 The Blue Society Concept

A second key theme running across the SFS design is the **Blue Society concept** in relation to ocean sustainability. This is a new concept developed that will be refined by the consortium in the frame of the project. It is inspired by the Green Economy concept developed at a global UN level. It is based on the premise that there are two imperatives that society should integrate 1) satisfying the needs of our planet's inhabitants today and 2) the preservation of means of subsistence for the generations to come, especially in this project the resources and services provided by the Ocean. Therefore we must place "Man" back at the heart of questions related to the Ocean and take into account the entirety of demands related to sustainability:

- From an economic point of view: the profitable yet sustainable exploitation of ocean and oceanrelated resources as well as taking into account the economic benefits of sustainable management of ocean life (cost of non-action)
- From an ecological point of view: preserving the marine eco-system that will fulfil its various major functions: biodiversity, oxygen production, climate regulation, etc.
- From a social point of view: equal access to resources so as to cover the dietary needs of the more fragile populations as well as preserving their health, their security and their income
- From a cultural point of view: preservation of traditional cultures linked to the sea and searching for good quality of life.
- From a political point of view: good governance of the Ocean, equity between different populations, different countries and between generations.

The Blue Society concept places humankind at the centre. It is an answer to a systemic crisis. It encourages citizens to take action and it makes them take part in the implementation of solutions. It revolves around sustainable development policies and green economy, and it includes spatial and temporal dimensions.

The concept of Blue Society takes its place in the question of sustainable development which is discussed in international Summits (UN) since the Stockholm Conference in 1972 and especially the Rio Conference in 1992. The Green Economy will be a central issue to be discussed at the next Rio Conference, in June 2012. The concept of Blue Society takes into account aspects of the Green Economy applied to the sustainable exploitation of marine resources and the preservation of the marine ecosystem, but by integrating social and cultural dimensions.

Ultimately it challenges Society that is citizens, stakeholders and decision makers to identify a Blue Society that is acceptable and ensures a future for the next generations.

Therefore SFS will present and debate on the concept of Blue Society solutions. This will help stakeholders, researchers and citizens co-authoring "Blue Society inclusive solutions" to marine challenges.

Therefore SFS will have key Blue Society discussion points for consultation process participants;

- What is Blue Society's political and social vision?
- What are Blue Society's main features?
- What are Blue Society's implementation conditions?
- How can we promote the development of a Blue Society?
- What can ordinary citizen do to implement Blue Society concept in their daily life?
- What research themes does the Blue Society inspire?

The Blue Society concept will be disseminated at various opportunities to influence policies on maritime issues.

## 1.1.2.3 The SFS MMLAP

The SFS innovative Mobilisation and Mutual Learning Action Plan (MMLAP) is characterised by four elements:

- Adapt: Identification, collection and "translation" of scientific information relevant to citizens, stakeholders and CSOs;
- Acquire: Holding a Consultation Process across Europe, engaging citizens and stakeholders, to
  discuss the questions related to ecosystem services and explore the concept of Blue Society. To
  express their opinions (perceptions, values, knowledge, ideas) and together to co-author new
  knowledge (challenges, barriers, needs, potential inclusive solutions, empowerment actions).
- Action: Spreading co-authored messages, ideas, and needs resulting from new knowledge generated in the consultation process to a broader range of different audiences (including research, marine and non-marine stakeholders, CSO's and NGO's and the wider public) through specific target actions
- Advice: Developing the first concrete concept of the Blue Society and guidelines for a possible implementation. Feeding back on the learning acquired on the process and methodology of SFS. Sustaining the SFS activities

## 1.1.2.4 Building on Past Experience and Integrating into active systems

**Existing Initiatives:** Leveraging and adding value to previous and existing funded projects is an important Commission principle, and so SFS will integrate MMLAP activities into existing systems wherever possible. This will include engaging with other FP7 projects, including the 3 or 4 projects funded under the current call, other FP7 SIS projects (e.g. Gap2, ACCENT), other projects with stakeholder engagement related to the marine world(e.g. Co-Exist, AquaMed, AqASEM). As well as FP7 there are efforts at member state level and again the Geographical Areas will engage and share experiences with such initiatives to build upon best practice.

**Technology Platforms:** Related European Technology Platforms, such as the European Aquaculture Technology and Innovation Platform (EATiP), the recently formed European Fisheries Technology Platform (EFTP), and the Waterborne ETP, will be key channels for engagement in Europe. Representatives will be invited to participate in relevant activities.

**International Cooperation:** it is important to remember that the marine challenges are global. The partnership already has extensive links with international organisations and will transmit and exchange advice and results.

## 1.1.3. S&T Objectives and how they relate to the Call Topic

#### The SFS Vision:

A sustainable marine environment meeting societal needs including smart growth whilst protecting the resource and ecological potential for future generations: a Blue Society.

#### The SFS Mission:

Marine European researchers and stakeholders partnering and working together with society at multiple levels (individual, community, populations) to understand and address societal challenges by developing and implementing sustainable inclusive solutions: **Blue Society Solutions.** 

## **Strategic Objective:**

To implement a MMLAP to help address Specific Challenge 3: Marine Resources, inland activities and sustainable development.

## **Primary Objectives:**

Five primary objectives have been set for the SFS project within the overall objective. To support these, there are also operational objectives at the Work Package level that are set out in 1.2(iii). References to Milestones set out in Table 1.2.c.

- 1. To bring together different actors (research, stakeholders, societal) with complementary knowledge and experiences and forge new partnerships using a participatory approach resulting in Public Engagement in Research (PER).
- 2. To set up a Consultation Process across Europe to facilitate dialogue and cooperation among different stakeholder actors and directly with citizens/youth to contribute to the research process and to develop collective efforts to try and address key challenges.
- 3. To share the co-authored knowledge arising from the Consultation Process broadly and effectively in order to empower actors and citizens to take action to tackle the societal challenges identified.
- 4. To develop and enrich the concept of Blue Society as a basis for improved governance of the Oceans in the future and disseminate this concept towards RD governance, industries and decision-makers.
- **5.** To sustain the process developed in SFS so that there is a non-going mechanism for partnership, interaction, public-research engagement and empowerment actions to address marine societal challenges.

# Objective 1: To bring together different actors (research, stakeholders, societal) with complementary knowledge and experiences and forge new partnerships using a participatory approach resulting in Public Engagement in Research (PER)

The Call Topic asks MMLAPs to pool partner experiences and knowledge and better focus on their respective efforts to develop a common approach to the issues at stake. The SFS consortium includes the relevant expertise and experience to implement the planned actions and can efficiently manage the whole Action Plan. This is established firmly in Section 2.1 and 2.2 here within.

The Call Topic also asks MMLAPs to develop forms of dialogue and cooperation between science and society at different stages of the research process. SFS will interact through its design, partnership and communication strategies with several stages/levels of research, such as planning, funding, producing, diffusion and use. It will enable both societal actors representing the public interests (CSO's, NGO's) as well individual and collective groups of citizens to interact through defined processes.

WP1, WP2, WP5

# Objective 2: To set up a Consultation Process across Europe to facilitate dialogue and cooperation among different stakeholder actors and directly with citizens/youth to contribute to the research process and to develop collective efforts to try and address key challenges

The call requests an integrated, systemic and trans-disciplinary approach to address the questions raised under each specific challenge. SFS has based its design around the 6 issues identified in Section 1.1.2.1 of this document, related to Ecosystem services, to frame the consultation process and relate complex issues to lived experiences. To carry out the dialogue SFS will develop and implement a Consultation Process across Europe (WP2) which will then be compared and analysed on a transnational basis in order to identify commonalities and differences across the different regions and cultures in Europe (WP5). Training will be provided to Area leaders to ensure consistency in methodology.

The Consultation Process has two strands: one for Stakeholders, and one for Citizens and Youth.

The aim of the first strand, for Stakeholders, is to engage and bring together, around the same table, research and industry, civil society, public sector institutions, local politicians, universities, science outreach and promotion sector and other experts for a two-way dialogue on each of the six Issues identified by the project in section 1.1.2.1 of this document.

The parallel strand of the Consultation Process will engage citizens and young people in a two-way dialogue. This strand will first explain the "issue" to the participants, before inviting expressions by participants of their initial thoughts/perceptions/values related to the Issues. There will be an opportunity for interaction and exchange with stakeholder actors, and citizens and youth will express collective opinions, values and proposals.

The results of the consultation will then be fed back to the participants for consideration and ultimately lead to actions being taken at a regional/national level (WP3, 4) to demonstrate the benefit of being involved in the participative process.

The process will adhere to the principles of good governance, openness, participation, accountability, effectiveness and coherence.

A specific emphasis in the project has been placed on providing feedback from each phase of the project to all consultation process participants (WP5) in order to reinforce the partnerships and maintain an on-going participatory approach with a view to ensuring the geographical hubs created by the Consultation Process have the participant buy-in, to continue to be open channels for Ocean Governance during the Mobilisation phase of the project.

WP1, WP2

# Objective 3: To share the co-authored knowledge arising from the Consultation Process broadly and effectively in order to empower actors and citizens to take action to tackle the societal challenges identified

The Call Topic asks MMLAPs to share innovation more widely and efficiently and to optimise the role of research and technology in tackling Specific Challenge 3: Marine resources, inland activities and sustainable development.

The new knowledge arising from the Consultation will be analysed by two specialist teams, 1) social scientists analysing the consultation process from a social perspective (Task 2.5) 2) a Blue Society expert group team analysing the results of the consultation (WP5). The results will be fed back to the participants of the Consultation process for consultation and validation.

The new knowledge will then be taken forward to a mobilisation and empowerment phase (WP3, 4) where a plan will be constructed to broaden the transfer of knowledge to a much larger and broader audience with a focus on empowering actors and citizens to take tangible actions to help address the identified challenges.

As part of the mobilisation phase, activities will include training for capacity-building in science communicating organisations, multipliers and potential champions (CSOs, science museums/aquaria, journalists, marine institute communication departments etc.) through a "Sea Academy" programme (Task

3.6).

Given the importance of communication WP6 is dedicated to supporting all aspects of communication in the project ensuring that the latest and most innovative forms of communication are used in order to ensure impact.

WP3, WP4, WP6

## Objective 4: To develop and enrich the concept of Blue Society as a basis for improved governance of the Oceans in the future

In order to help achieve the Europe 2020 strategy for "Smart, sustainable and inclusive growth" SFS intends to develop the concept of Blue Society. To do this a Blue Society Expert Group will manage the process (WP5) and feed into all other WP's in the project.

The concept will be presented to stakeholders, CSO's and citizens (WP2) and their input will enrich and define the concept and identify where research is needed to inform policy/decision making in order to achieve Blue Society solutions. It will be a framework to enable partners to work together and develop a common approach to addressing the issues at stake.

The concept will be piloted within the project by taking the new knowledge developed from the Consultation (WP3) and mobilising stakeholders and target audiences (WP4) to work together to bring about needed change to address the identified challenges (WP4). The concept will be used to inform and inspire decision makers and RD governance.

WP5 + WP2, WP3, WP4

# Objective 5: To sustain the process developed in SFS so that there are on-going mechanisms for partnership, interaction, public-research engagement and empowerment actions to address marine societal challenges

The SFS project has been designed with sustainability in mind. The teams behind the Consultation Process in each Geographical Area will be set up with a view to maintaining them as an on-going channel for dialogue, on-going cooperation and interaction between researchers, stakeholders and the public, both during the Mobilisation phase of the project and after the project has ended.

The partnership includes a variety of partner profiles covering: national funding agencies, research institutes, policy advising organisations, facilitating networks and associations and science communicating organisations ensuring the processes will be sustained beyond the project duration.

The learning acquired in the project by carrying out the processes and methodology will also be transferred to the SIS programme in order to aid the successful implementation of "Science IN Society" in Europe. As well as the extensive mobilisation and engagement activities planned in WP4, it is also intended to run a major international conference at the end of the project to present all aspects of SFS and propose the way forward for a sustained process.

All WP's

## 1.2 Quality and effectiveness of the support mechanisms, and associated work plan

## i) Overall strategy of the work plan

The project is divided into seven work packages, set out on the following pages.

As presented in Figure 1: Peas and Pods Diagram, the project is broadly divided into three parts.

- There are two work packages dedicated to Planning and Carrying out the Consultation Process
  - o WP 1: Planning Consultation Process

- o WP 2: Implementation of Consultation Process
- There are two work packages dedicated to **Mobilisation**, engagement and empowerment activities
  - o WP 3: Development of Action Plan for Mobilisation
  - o WP 4: Implementation of Action Plan for Mobilisation
- Three work packages which are cross cutting;
  - o WP 5: Blue Society Expert Group Coordination
  - WP 6: Communication
  - o WP 7: Project Management
- In addition to the WP's the MMLAP will be implemented using Geographical Areas as described in detail in section 2.1.

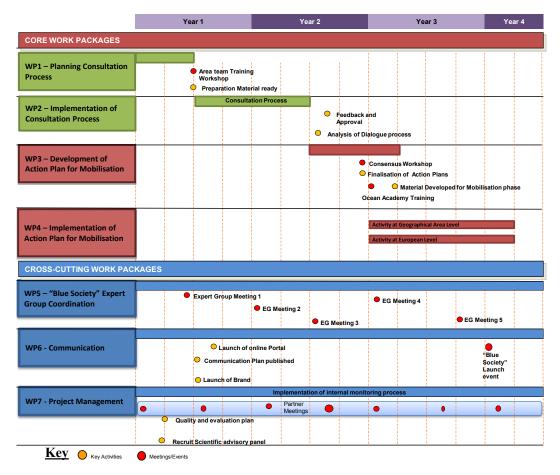


Figure 1: A Peas and Pods Diagram showing the overall structure of the SFS project.

## ii) Timing of the different WPs and their components (Gantt chart)

	-	Year 1 Year 2					Yea	Year 3							
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Task	WP1 – Plannir	ng Co	nsulta	ition I	Proce	ss (W	P LEA	DER =	Aqu	аТТ)					
1.1	Examine the current State of the Art of marine science research														
1.2	Identify and map the types of key stakeholders across Europe to involve in the Consultation Process														
1.3	Review of perceptions on key issues for stakeholders/citizens/youth														
1.4	Prepare information materials for the Consultation Process														
1.5	Develop Consultation guidelines and tools														
1.6	Train the Area Teams														
Task	WP2 – Implement	ation	of Co	nsult	ation	Proce	ess (W	/P LE	ADER	= Ecsi	ite)				
2.1	Application of WP1 situational analysis, review of knowledge and identification of actors in order to develop plans and materials for the Consultation Process														
2.2	Implementation of Consultation Process across nine Geographical Areas, in two strands: for stakeholders, and for citizens/youth														
2.3	Production of "Issue Reports"														
2.4	Analysis of Consultation Process from a marine science perspective														
2.5	Analysis of Consultation Process from asocial science perspective														
2.6	Feedback of Consultation results to Consultation participants														
Task	WP3 – Development o	of Act	ion Pl	an fo	r Mob	ilisat	ion (\	VP LE	ADER	= Na	usica	a)			
3.1	Select the most common cross-cutting challenge from the consultation process and identify the knowledge and empowerment needs, end-users, relevant actors and attitude change required														
3.2	Identify existing activities of the consortium partners and other actors/institutions related to the main challenge identified in order to create synergies														
3.3	Design a European Action Plan for Mobilisation, describing the necessary actions to empower stakeholders and citizens towards a Blue Society														

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3.4	Plan advocacy and promotion of activities that can empower												
3.5	Design and create resources and tools for the Action Plan for Mobilisation												
3.6	Train partners for Action Plan for Mobilisation												
Task	WP4 – Implementati	on of	Actio	n Pla	n for	Mobi	lisatio	on (W	P LEA	DER =	EBN)	<u> </u>	
4.1	Applying European Action Plan to a national/local context to develop individual Action Plans												
4.2	Implement the planned activities on the cross-cutting challenge to a broad audience												
4.3	Analysis of Mobilisation activities from a marine science perspective												
4.4	Analysis of Mobilisation activities from a social sciences perspective												
Task	WP5 – Blue Socie	ty Exp	ert G	roup	Coor	dinat	ion (V	VP LE	ADER	= IUC	N)		
5.1	Creation of the Blue Society Expert Group												
5.2	Analysis of the WP1 review of knowledge, State of the Art document and stakeholder mapping in the context of the Blue Society												
5.3	Expert group analysis of Issue Reports, to feed vision of Blue Society												
5.4	Analysis of Mobilisation activities and feedback												
5.5	Presentation of the Blue Society concept at the Blue Society Launch Event												
5.6	Finalisation of Terms of Reference for the Blue Society												
Task	WP6 – Co	ommı	unicat	tion (	WP LI	ADE	R = EL	JROCE	AN)				
6.1	Define the European and national communication strategy and project branding												
6.2	Set up a Communication Task Force (Partners and External Experts) to provide expert advice and direction for the Consultation and Mobilisation Phases												
6.3	Develop a multilingual Web portal as a central repository for knowledge collection, debate and dialogue for the duration of the project												
6.4	Develop Project Promotional Material												
6.5	Scale-up the communication of the cross-cutting challenge in order to reach a broad European audience												

6.6	Organise an international Blue Society Launch Event to present the activities, results and future actions											
Task	WP7 – Project Management (WP LEADER = Nausicaa)											
7.1	Steer the project, organise steering committee and consortium meetings											
7.2	Internal communication and administrative project management											
7.3	Recruit and engage a Scientific Advisory Panel											
7.4	Implementation of Internal Monitoring Process											
7.5	Quality and evaluation plan											

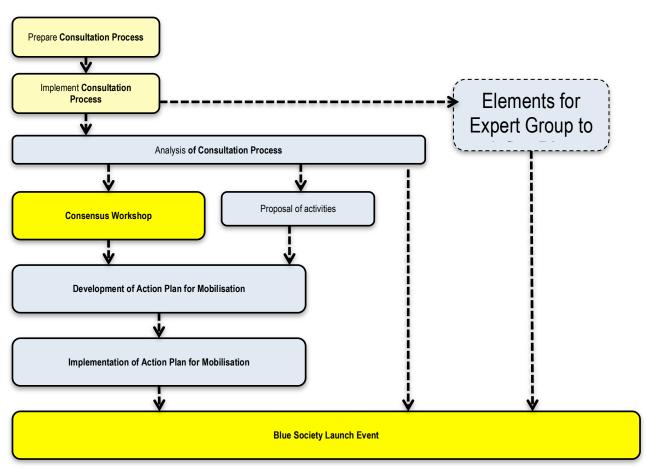


Figure 2: Workflow

## iii) Work description broken down into work packages

## Deliverable list (Table 1.2b)

Del. No. <sup>10</sup>	Deliverable Name	WP	Nature <sup>11</sup>	Dissemination level <sup>12</sup>	Delivery date <sup>13</sup>
		No.		ievei	date
D.1.1	Report on State of the Art of marine science research	1	R	RE	M4
D.1.2	Report on identification and mapping of types of stakeholders to engage	1	R	RE	M6
D.1.3	Report on perceptions and expectations on key issues for stakeholders and citizens/youth	1	R	RE	M6
D.1.4	Background material and guidelines for Consultation Process	1	R	RE	M6
D.1.5	Training Workshops on the Consultation Process methodology	1	0	RE	M6
D.2.1	Consultation Process plan and adapted materials	2	R	RE	M9
D.2.2	Individual reports of each Consultation Process for stakeholders and citizens/youth		R	RE	M19
D.2.3	Six "Issue reports" analysing the results of the Consultation Process	2	R	PU	M21
D.2.4	Global analysis of the Consultation Process from a social sciences perspective	2	R	RE	M21
D.2.5	Global analysis of the Consultation Process from a marine sciences perspective	2	R	RE	M21
D.3.1	European Action Plan for Mobilisation, identifying the cross cutting challenge and advocacy activities	3	R	RE	M24
D.3.2	Resources, tools and identified existing activities for the Mobilisation phase	3	0	RE	M28
D.3.3	"Sea Academy" training programme	3	0	RE	M25
D.4.1	National and local Action Plans for Mobilisation	4	R	RE	M28

1

<sup>&</sup>lt;sup>10</sup>Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

<sup>&</sup>lt;sup>11</sup>Please indicate the nature of the deliverable using one of the following codes: R = Report, P = Prototype, D = Demonstrator, O = Other

<sup>&</sup>lt;sup>12</sup>Please indicate the dissemination level using one of the following codes: PU = Public PP = Restricted to other programme participants (including the Commission Services). RE = Restricted to a group specified by the consortium (including the Commission Services). CO = Confidential, only for members of the consortium (including the Commission Services).

<sup>&</sup>lt;sup>13</sup>Measured in months from the project start date (month 1).

Del. No. <sup>10</sup>	Deliverable Name	WP No.	Nature <sup>11</sup>	Dissemination level <sup>12</sup>	Delivery date <sup>13</sup>
D.4.2	Report on Mobilisation activities at Area& EU level	4	R	RE	M39
D.4.3	Analysis of Mobilisation activities from a social sciences perspective	4	R	RE	M39
D.4.4	Analysis of Mobilisation activities from a marine sciences perspective		R	RE	M39
D.5.1	Terms of reference for the Blue Society expert group		R	RE	M2
D.5.2	State of the art of the Blue Society concept	5	R	RE	M12
D.5.3	.3 Feedback Report on the results of the Consultation Process		R	RE	M22
D.5.4	.4 Feedback Report on the results of the mobilisation phase		R	RE	M39
D.5.5	Definition of the Blue Society	5	R	RE	M36
D.6.1	Communication plan and project branding	6	R	RE	M6
D.6.2	Project Promotional Materials	6	0	PU	M6
D.6.3	Launch of the Web Portal	6	0	PU	M9
D.6.4	Annual Communication Report 1	6	R	RE	M12
D.6.5	Annual Communication Report 2	6	R	RE	M24
D.6.6	Annual Communication Report 3	6	R	RE	M36
D.6.7	Blue Society Launch Event Report	6	R	RE	M40
D.7.1	Quality plan	7	R	RE	M3
D.7.2	Terms of reference document for the evaluation	7	R	RE	M3
D.7.3	Mid-term evaluation report	7	R	RE	M21
D.7.4	Internal Monitoring Process report	7	R	RE	M42
D.7.5	Final evaluation report	7	R	RE	M42

## List of milestones (Table 1.2c)

Milestone number	Milestone name	Work package(s) involved	Expected date <sup>14</sup>	Means of verification <sup>15</sup>
MS1	Launch of the Blue Society Expert Group	WP5	M2	Terms of Reference for Expert Group completed
MS2	Completion of Consultation Process preparation	WP1	M6	Guidelines are in place, training has occurred, material is ready,
MS3	Launch of Web Portal	WP6	M9	Web portal is live
MS4	Completion of Consultation Process	WP2	M19	Consultation reports all submitted to WP5
MS5	Completion of Analysis of Consultation Process	WP5	M22	Feedback reports from WP5, Social analysis
MS6	Selection of the cross- cutting challenge	WP3	M24	Consensus workshop completed and report produced
MS7	Launch of Mobilisation activities	WP3,5,6	M28	"Sea Academy" training complete, material developed, web portal ready for WP4 activities
MS8	Completion of Mobilisation activities	WP4	M40	Reports from all Area Teams on implementation. Report on Europe wide actions.
MS9	Principles of Blue Society defined	WP5	M40	Definition of Blue Society
MS10	Project completion	WP6, 7	M42	Blue Society Launch Event Report, external evaluation report, final reporting

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<sup>&</sup>lt;sup>14</sup>Measured in months from the project start date (month 1).

<sup>&</sup>lt;sup>15</sup>Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype completed and running flawlessly; software released and validated by a user group; field survey complete and data quality validated.

## Description of each work package, and summary (Table 1.2d)

Work package number	1	Start date or starting event:	M1-M6
Work package title	Planning Cons	sultation Process	

## **Objectives**

- Carry out a comprehensive review of the existing knowledge in marine science relevant to SFS project
- 2. Identify and analyse groups of key actors to involve in the Consultation Process
- 3. Carry out a situational analysis in order to "set the scene" for the Consultation Process
- 4. Develop suitable scientific based material to frame the challenges to be presented in the Consultation Process
- 5. Define common guidelines and provide training for all Area Teams

## Description of work (broken down into tasks), and role of participants

This is the first of four consecutive work packages (WP1-4) which feed into one another chronologically. WP1 begins in the first month of the project, alongside WP5, WP6 and WP7, the three transversal work packages which are across all 42 months of the project.

In terms of initial background research, there are three main tasks: to review the current state of the art of marine science research, to determine the current expectations and perceptions of stakeholders and citizens/youth; and to map the types of stakeholder that can be engaged in the Consultation Process. This will then allow WP1 to create materials, guidelines and tools to train the Area Teams who will lead the Consultation Process.

## Task 1.1: Examine the current State of the Art of marine science research

The current European strategy for marine and maritime research highlights the need for a marine ecosystem that supports a thriving marine/maritime economy in an environmentally sustainable manner.

This scoping study will take the six Sea for Society Issues identified by the project in Section 1.1.2.1 (Food supply, Human health, A place to live, Transport, Employment, Leisure and tourism) and address the following:

- Outlining main points of the current scientific consensus on the various aspects of this issue.
- Identifying aspects of marine science relevant to this issue on which researchers are currently working.
- Determining some of the activities related to this issue, and their current applications in Europe.
- Validating and adapting the six key Issues identified for the Consultation Process.

## Task 1.2: Identify and map the types of key stakeholders across Europe to involve in the Consultation Process

A stakeholder mapping will take place to identify the marine/maritime and non-marine/maritime stakeholder groupings related to each of the six Issues identified by the project in Section 1.1.2.1 (Food supply, Human health, A place to live, Transport, Employment, Leisure and tourism). This will define the types of key actor (representatives of industry, professional associations, consumer associations, leadership positions, decision makers etc.)necessary to ensure representation and input by all stakeholders into the Consultation process. Special effort will be made to ensure non-marine stakeholder representation. (e.g. inland sectorial groups/local, industrial sectors (e.g. chemical), local authorities and agencies/CSO and NGO's including citizens associations and

environmental organisations). As previously mentioned (section 1.1.1,3 European Marine Research) it is important to be aware of other European structures which play a role in Research governance in order to ensure that SFS can interact and integrate its activities and results into the established systems for impact.

In addition a stakeholder analysis will take place to;

- identify and profile primary and secondary stakeholders; their associated values and priorities, current areas of activities, tools and techniques, challenges and potential areas of conflict
- o Develop a map showing the interconnections amongst stakeholders
- o Identify incentives for participation for each of these groups of stakeholders, to ensure solid participation in the Consultation Process.
- Identification of salient stakeholder groups in relation to harm being done by maritime and non-maritime networks, via a stakeholder audit.

Conduct a harm chain analysis throughout stakeholders pre-production, production, consumption and post-consumption activities.

## Task 1.3: Carry out a comprehensive review of perceptions and expectations on key issues for stakeholders and citizens/youth related to Marine Science in Society (European and international).

An existing body of work has previously been carried out related to the many and complex facets of "Marine Science in Society" both in Europe and internationally. This task intends to review the work to date in order to inform the Consultation process, on each of the six Issues identified by the project in Section 1.1.2.1 (Food supply, Human health, A place to live, Transport, Employment, Leisure and tourism). It will be based on the groups of stakeholders identified by Task 1.2. Knowledge will be collected on past work that has identified 1) the values, attitudes, behaviours and perceptions of citizens to the marine/maritime and the challenges of relating the individual human activity to the current marine challenges; 2) stakeholder priorities, concerns, barriers and examples of engagement related to major challenges 3) experiences and existing mechanisms for stakeholder engagement. A survey of the consortium members may also be deemed necessary to provide further insight.

## Task 1.4: Prepare information materials for the Consultation Process

SFS has decided to frame the complexity in Specific Challenge 3 by using an ecosystem approach to explain the challenges and then posing questions that are pertinent to all citizens;

- How is man linked to marine ecosystem services from the point of view of his daily needs?
- What services are concerned and how do they "function"?
- How does humankind impact these marine ecosystem services that help maintain the good health of the planet?
- How can we better manage this interaction to continue to benefit from these services in our everyday life?

In order for the consultation process to be manageable and focused, the above questions will address the six Issues identified in Section 1.1.2.1 pertinent to all citizens;

- 1. Food supply
- 2. Human health
- 3. A place to live
- 4. Transport
- 5. Employment

## 6. Leisure and tourism

In order to "set the scene", the partnership will develop appropriate materials (printed information and videos) to explain the above concepts and relate the complex issues to "lived experiences". The material will be impartial and based on the latest scientific evidence. This material will then be provided to the consultation participants in advance. Translation where necessary will take place to cater for the needs of the different Geographical Areas.

## Task 1.5: Develop Consultation guidelines and tools

There will be Consultation Processes running in two strands (stakeholders and citizens/youth) across nine Geographical Areas. Each Area has an Area Leader and typically at least one Area partner. Together they are the Area Team and will work together to implement the Consultation Process. Given the scope of the Consultation, it is essential that careful planning takes place to ensure that there are common methodologies and processes implemented across the Geographical Areas. Therefore common guidelines will be drafted for consideration by experts within the partnership who have experience of Consultation processes and multi-stakeholder engagement. The draft will then be distributed across the partnership for feedback and enrichment and lead to task 1.6 – training.

Work package leaders will work closely with partners to select software and tools in order to analyse the Consultation Process data. The guidelines will be carefully adapted to ensure that the Consultation Process data are supplied in the necessary quantity and format to feed into the analysis tools.

#### Task 1.6:Train the Area Teams

In task 1.5 the partnership has provided input into the guidelines. In this task a practical training workshop will be run to demonstrate the processes and methodologies provided in the guidelines. The training will provide for capacity building in the partnership and all Area Partners will participate. It will also ensure that the common methodology is implemented across all nine Geographical Areas of the Consultation Process. Two members of each Area Team will be trained on the methodology and the expected results regarding the Consultation Process. The training process will be defined according to the finalised consultation methodology.

## **Deliverables**

- D.1.1 Report on State of the Art of marine science research M4
- D.1.2 Report on identification and mapping of types of stakeholders to engage M6
- D.1.3 Report on perceptions and expectations on key issues for stakeholders and citizens/youth— M6
- D.1.4 Background material and guidelines for Consultation Process-M6
- D.1.5 Training Workshops on the Consultation Process methodology- M6

Work package number	2	Start date or starting event:	M7-M21		
Work package title	Implementation of Consultation Process				

## Objectives

- 1. To organise and plan a Consultation Process around 6 key "Issues" mobilising stakeholders, and citizens/youth using a methodology focused on participatory dialogue
- 2. To carry out this Consultation Process across nine Geographical Areas
- 3. To present the results of the Consultation Process to all participants and obtain feedback and validation on an on-going basis
- 4. Through the Process, to develop new partnerships, new co-authored knowledge and ideas for inclusive solutions to address Key Challenge 3
- 5. To create a consultation process across Europe that can show demonstrable benefit and be sustained beyond the project

## Description of work (broken down into tasks), and role of participants

This WP covers the Consultation phase of the project, based on the principles of participatory dialogue. The objective is to engage stakeholders, citizens and young people on the six key Issues of the project in order to ensure a participatory approach to project activities. There will be two strands to the Consultation;

Phase 1: Multi-stakeholder Consultation

Phase 2: Citizen and Youth Consultation

In order to carry out the Consultation Process, SFS has assigned nine Geographical Areas (GA) distributed across Europe to ensure that there is a sufficient dialogue encompassing geographical and cultural differences and engaging a broad amount of stakeholders, citizens and youth on key "Issues".

Each Geographical Area has an **Area team** consisting of an **Area Leader** to manage and coordinate the activities and supported by **Area partners.** The composition of each **Area Team** will be typically a research organisation + science communicating body + a civil society organisation to ensure there is a balance and expertise present in each team to successfully carry out the consultation process.

SFS has designed 6 "issues" to be tackled in the project. It is anticipated that each Geographical Area will tackle at least 2 "issues" in the process. The 6 issues are related to services rendered by the sea to man: nutrition, health, transport, living space and habitat, leisure and employment. These issues will be addressed under the four aspects of sustainable development (economy, ecology, social and cultural). Given the framing of the 6 "issues" there will be interrelationships made between all the different elements covered across all Geographical Areas. Each issue will be assigned an "Issue Leader" by the Steering Committee, who has responsibility for managing the interaction between all the Area teams who are addressing the same issues to ensure that methodologies are compatible so that results can be comparable.

## Task 2.1: Application of WP1 situational analysis, review of knowledge and identification of actors in order to develop plans and materials for the Consultation Process in each Geographical Area

In WP1, at least two of the six "Issues" will be assigned to each Geographical Area (9), thereby ensuring that each issue will be tackled in at least 2 geographical areas across Europe:

- The Steering Committee will ask the nine Area leaders to make a choice in order of priority among the six Issues proposed; so as to do a ranking.
- The Area Leaders will provide arguments to justify their choice. For example: previous research conducted by the Area Team concerned, easy mobilization of experts, documents

already published on the issues, etc.

• Based on the wishes of all the Area Leaders, the project Steering Committee will decide which issues will be addressed by which Geographical Area, respecting territorial balance.

Task 2.1 requires each Area leader to define a plan and adapt materials for the process for each "Issue" (D2.1). These materials should be developed by taking the European situational analysis, review of knowledge and identification of actors performed in WP1 and applying them to the context of a specific Geographical Area.

Guidelines and training will have been carried out in WP1 to ensure consistency in methodology and knowledge capture. Each Area Team will need to customise their plan to local conditions, decide where Consultations take place and at what scale (local, regional, national) depending on the "Issue" being addressed; facilitate the geographical distribution and availability of key actors within stakeholder groupings; use existing structures for consultation (e.g. industrial forums, regional multistakeholder forums, research forums) and/or organise new forums; design the type of forums for consultation (meetings, debates, workshops, facilitated events) based on past experience of carrying out successful multi-stakeholder/public engagement etc.); design forums to match cultural preferences and access to technology (e.g. ability and openness to use streaming, surveys, web 2.0 and interactive tools on the portal); finalise budget, timeline and action plan for implementing Consultations. Partner organisations with space to accommodate public events, most notably the science museum and aquarium partners, will plan for the use of these facilities in order to host project activities. The plans will also apply the stakeholder incentives for participation, identified in WP1, in order to ensure solid participation from stakeholders in each Geographical Area. Two types of documents will be produced:

- Documents related to the methodology that is relevant to Area Teams.
- Documents to provide information on the 6 issues to the Consultation participants and the public:
  - o Documents (such as short videos on 6 issues) that address all audiences
  - o More detailed documents targeted more specifically at stakeholders

# Task 2.2: Implementation of Consultation Process across nine Geographical Areas, in two strands: for stakeholders, and for citizens/youth

The Team of each of the nine Geographical Areas will each organise and carry out the Consultation Process on at least 2 of the 6 "Issues", following the common methodology defined in WP1, focused around the principles of participatory dialogue.

This implementation will take place in three phases. In the **Preparation phase**, participants will be prepared and briefed in advance of the Consultation Process. The **Participation** phase will bring together stakeholders for one strand of the Consultation, and, in parallel, citizens and youth for the second strand of the Consultation. The final **Follow-up phase** will feed back the results of the Consultation Processes to the participants for their reflection and feedback. The Consultation Processes in all Geographical Areas will be uploaded to the Web Portal in order to share and allow input from stakeholders who were unable to participate.

## **Consultation of Stakeholders**

Each Area Team will invite key actors within stakeholder groups identified in WP1. The amount of actors will depend on the Geographical Area and issue being covered, with a minimum of 15-30 per issue. Around each "issue" related researchers (all disciplines), stakeholders (direct and indirect), marine and non-marine, will be targeted, in order to maximise the opportunity for mutual learning and co-authorship.

## **Consultation of Citizens/Youth**

A parallel strand of the Consultation Process is targeted at citizens and youth and will cover the same 6 "issues". The Teams in each of the nine Geographical Areas will organise a Citizen and Youth

Consultation process. A neutral facilitator will manage the process.

#### **Consultation Process**

We will take great care to run the Consultation Process so that all participants can have their say and so that the Consultation generates an output of quality, in accordance with the principles of participatory dialogue. The Process will bring together groups of people, many of whom have no experience of working together: it is this diversity which guarantees shared ownership of the output.

The latest techniques and methodologies will be used to facilitate the Consultation Process (through the training and guidelines in WP1) so that all participants can express their views, share with others, learn and contribute to collective development and co-authorship. Area Teams will be invited to work with professional convenors to moderate the Consultation Processes. These convenors could be in-house specialists or hired professionals.

The anticipated outcome of the Consultation Process is new co-authored knowledge on;

- Scientific knowledge related to the six issues.
- The principles of working together to define and implement a Blue Society
- The mobilisation and partnering of the science community with other stakeholders to focus on addressing the six issues.
- The sharing, capture and pooling of experiences and knowledge.
- Needs, values, perceptions, attitudes, priorities, barriers, and gaps across stakeholder groups, and across citizens and youth for each of the Geographical Areas and for each of the six issues.
- Reasons behind current behaviour versus adapted behaviour related to the six issues.
- Ideas for Blue Society solutions to the six issues, and identification of the barriers and inhibitors that prevent these solutions.
- Examples of good practice where Blue Society exists at an Area or international level related to specific issues
- Identify stakeholders', scientists', citizens' and young people's perceptions, values and needs with regards to public engagement in marine science

At the end of the Consultation, each Area Leader will produce a report using guidelines provided in WP1 to present the results of the consultation on each issue. Area leaders will each translate their Consultation Report into English for analysis. Therefore 18reports will be provided. The output from the Consultation Process will feed into the work of the Blue Society Expert Group (WP5), and of Tasks 2.3 and 2.4 of WP2.

The Area Teams will receive training to hone their event management skills and so they understand the nature and form of the output expected.

## Task 2.3: Production of "Issue Reports"

Knowledge management will be a crucial task in SFS given the amount of activities taking place in parallel. Hence it will be essential to ensure that there are good systems for "knowledge capture" from the Consultations so that co-authored new knowledge is captured and analysed. Each of the six "Issue" leaders working with Area leaders will consolidate the results and outputs of the Consultation Process into 6 "issue reports". Each issue report will give a Europe-wide view of the issue in question, bringing together the perceptions, values and needs of both stakeholders and citizens/youth as well as summarising the new co-authored knowledge on evidence based science, Blue Society principles, necessary mobilisation and partnerships, needs, values, perceptions, attitudes, priorities, barriers, and gaps, reasons behind current behaviour versus the desired behaviour, ideas for Blue Society solutions and identification of the barriers, and examples of good

practice.

## Task 2.4: Analysis of Consultation Process from a marine science perspective

The Consultation Process will be subject to an overarching analysis from a marine science perspective, in order to further develop the work done by WP1 in Task 1.1 and by the Expert Group in Task 5.2. This report will take the initial State of the Art established in Task 1.1 and expand on the various aspects of the scientific consensus, current research and activities from the perspective of the new co-authored knowledge from the Consultation Reports.

## Task 2.5: Analysis of Consultation process from a social sciences perspective

This task will be led by NUIG who have extensive experience in analysing consultations and examining the process and the level of engagement of the different participants. They will be tasked with monitoring the Consultation Processes across the nine Geographical Areas and analysing the process from a thematic narrative social sciences perspective, using NVivo and other suitable tools. It is expected that their knowledge will provide insight into the interaction process and help the Area Teams overcome any barriers they may encounter. They will identify the strengths and weaknesses of the process and feed that back to the WP5 Blue Society expert group as well as to the Area Teams. Overall they will help to refine the processes taking place in order to help arrive at a successful model for SFS in the future and the guidelines developed in WP1 will be refined from the learning achieved.

## Task 2.6 Feedback of Consultation results to Consultation participants

In order to validate and elaborate on the various analyses of the Consultation Process, Area Leaders will summarise the results of Tasks 2.2 and 2.3 and feed the results back to the Consultation Participants in their Geographic Area. Participants will be invited to analyse and comment on these findings. The results of the feedback will be incorporated into these documents before they are finalised, serving three purposes:

- to ensure the various reports are an accurate reflection of the stakeholders' and citizens' perceptions, values and needs;
- to allow feedback from citizens/youth to reflect on the perceptions, values and needs of stakeholders, and vice versa;
- to allow participants from each Geographical Area to be informed about and to comment on the overall results of the Consultation Process across Europe.

#### **Deliverables**

- D.2.1 Consultation Process plan and adapted materials M9
- D.2.2 Individual reports of each Consultation Process for stakeholders and citizens/youth M19
- D.2.3 Six "Issue reports" analysing the results of the Consultation Process by issue M21
- D.2.4 Global analysis of the Consultation Process from a social sciences perspective M21
- D.2.5 Global analysis of the Consultation Process from a marine sciences perspective M21

Work package number	3	Start date or starting event:	M21-M28	
Work package title Development of Action Plan for Mobilisation				

## **Objectives**

- 1. To select the most common cross-cutting challenge resulting from the Consultation Phase adequate to transfer, mobilize and empower stakeholders and civil society at local and European level
- 2. To identify and mobilise the relevant stakeholders to strengthen the mobilisation/empowerment activities on the selected cross cutting challenge
- 3. To develop an Action Plan for Mobilisation which defines activities, methods and tools for the mobilisation and empowerment campaign
- 4. To design and produce innovative resources and tools to support activities defined in the implementation plan
- 5. To train consortium partners and other multipliers to lead the empowerment activities

## Description of work (broken down into tasks), and role of participants

It is anticipated that a significant body of new knowledge (co-authored knowledge on challenges/barriers/solutions) will have been developed in the Consultation Process. Although the project intends to transfer new co-authored knowledge to specific sectors (scientists, policy makers, CSOs) through WP5, a Europe wide campaign/action is only possible on the most relevant and common societal challenge, to be used and evaluated as a demonstration of the effectiveness of the Sea for Society concept. The multidisciplinary and multi sectorial partnership will then use its collective expertise and influence to bring about such change through tangible actions and results.

WP3 will bring together representatives from the Area teams (WP2), the Blue Society expert group (WP5), the Advisory Panel and other stakeholders at a European level to select one cross cutting challenge (and sub-challenges within) from all the co-authored knowledge identified in WP2 and WP5. The final societal challenge will be decided through a **Consensus Workshop** where representatives of the stakeholders present at the consultation process will have the final decision. From the results of the workshop, and in accordance with the action plan new innovative tools and actions will be developed. This work package aims to ensure a deep and wide-ranging engagement of stakeholders from across Europe in WP4, with a particular focus on industry and policy makers. We will involve other European bodies engaged in similar work: for example the international business network, World Business Council for Sustainable Development, which has members in different countries and also involves national and European authorities.

# Task 3.1: Implementation of the Consensus Workshop, selecting the most common cross-cutting challenge from the dialogue phase and identifying the knowledge and empowerment needs, endusers, relevant actors and attitude change required

The consensus workshop will be organised once the consultation process is achieved to select the most common cross-cutting challenge so as to design the European action plan (Task 3.3). The consensus workshop will allow that opinions from different parties, possibly contradictory, will be built into a consensus through a comprehensive process. The participants of the consensus workshop will discuss the various outcomes of the Consultation Process and their analyses, based on the results of the Consultation Process (WP2) and the Expert Group analysis in Task 5.3. A crosscutting challenge will be extracted from this, and will be aligned with new resources and tools with the capacity to empower the target audiences.

Consortium partners will gather: GA teams members, members of the Blue Society Expert Group members, members of the Advisory Panel and third parties involved in WP2 among others.

This challenge will meet the following criteria: (1) link with the 6 topics discussed during the consultation process and with the Blue Society concept; (2) lead to empowerment of the target audiences; and (3) allows for feedback to researchers and decision makers.

Following the identification of the cross-cutting challenge, the Consensus workshop will allow to start identify the target audiences that will be matched to the most fitting messages to bring about change, and the most appropriate communication channels selected to successfully reach these target audiences. They will be further defined in Task 3.2 & 3.3.

## Task 3.2. Identify existing activities of the consortium partners and other actors/institutions related to the main challenge identified in order to create synergies.

To reduce the risk of repetition and to build upon existing efforts, this task will identify the activities already being implemented by consortium partners and other organisations that are related to the selected cross cutting challenge. An analysis of several sources of information (marine related databases and projects; Maritime BIC; Ecsite, WON and IUCN networks and others) on successful tools and methodologies used to tackle the selected challenge will be maximised.

Where appropriate, existing activities will be include in the European Action Plan for Mobilisation (see Task 3.3) to build upon successful best practice examples and increase the impact of activities in WP4.

Each partner will be responsible in collecting information on existing activities conducted in their respective country. Many members of the consortium have already organised different activities such as training sessions, lectures, exhibitions. Some of these could be related to the cross-cutting challenge identified. In order to be more efficient, the Action Plan will include as many activities as possible. The project coordinator will propose a model of activity sheet in order to harmonize the presentation. While working in the conception of the Action Plan, the WP leader with the project coordinator will select the most relevant activities. The communication officer will post the activity sheets on the project website.

# Task 3.3. Design a European Action Plan for Mobilisation, describing the necessary actions to empower stakeholders and citizens towards a Blue Society and to promote it towards decision makers.

The European Action Plan will:

- 1. Include actions that will allow knowledge transfer and empowerment of target groups. In some cases existing mechanisms/tools will be included and maximised (e.g. forums, proven web tools, exhibitions and interactive tools). See Task 3.2.
  - A set of local actions, to address the cross-cutting challenge, will be designed for a broad audience so as to engage these audiences in practical solutions driven from the consultation process and in accordance with the Blue Society identified principles.
  - A collective action will be designed to endorse a major proposal related to the cross-cutting challenge and to promote it toward specific relevant target groups, authorities and decision makers.
- 2. Define the level of stakeholder and public engagement expected from WP4.
  - That will specify the nature and the number of stakeholders to be mobilised to assist in carrying out the activities to achieve the desired solution. Messages will then be tailored to match each target group; a call-to-action will be at the heart of the messages, so that SFS can have a real impact in terms of addressing the cross cutting challenge.
- 3. Design a feedback mechanism for WP4, so that opinions from stakeholders and the public are efficiently transferred to researchers and to decision makers:

SFS will engage with a large audience in aquariums and museums and via the web on priority actions related to the cross-cutting challenge. The public will express priority concerns. All the propositions collected will bring new elements to be added in the Blue Society solutions and fed back to researchers and decision makers. The results will help define and develop concrete proposals for research and maritime governance. Researchers will have an accurate picture of the representation of the public opinion on the cross-cutting challenge.

The design of the Action Plan will be guided by our aim of transformational change. With this outcome in mind we will:

- ensure that the Action Plan benefits from Blue Society expert input (WP5);
- ensure that the Advisory Panel plays a role in the process;
- take into account a number of the proposals for activities formulated by participants of the Consultation Process
- obtain the views of Work Package leaders and of members of beneficiary organisations.
- define quantitative indicators such as the numbers of users who participate in an interactive activity, the number of participants who contribute to a public debate, and the number of people involved in the consultation and action phase. Visitors of aquariums and museums will be requested to complete questionnaires, and online feedback forms will be provided on the website to evaluate the impact regarding transfer knowledge and empowerment actions.
- Define tangible indicators of short, medium and long term impact. These will be
  measurements of whether the intended solution has taken place or the activities that have
  been successfully implemented leading towards the solution being realised. For example,
  how SFS results have fed back into different levels of Research and impacted research policy
  or strategy or how citizen empowerment activities have led to a behaviour change in
  product consumption or recreational activities.
- Focus the communication strategy on the fact that the issue reports produced are the result
  of a dialogue between various stakeholders. The decision makers should be interested to
  discover point of views and proposals of the "society". In addition, we will identify national
  and European events that address ocean issues in order to present the results of the
  consultation process and Blue Society solutions.

## Task 3.4. Design and create resources and tools for the Action Plan for Mobilisation

Resources and tools will be designed and produced, in accordance with the Action Plan, to be made available to WP4 to the implementation phase. The design and development of tools will specifically be tailored for empowering stakeholders and the public-at-large, to be involved in the activities. Tools like films and leaflets (to be used at local meetings and education activities); high-impact short documentary (to be screened in aquariums and science centres) or internet-based attractions, are potential tools to be used.

Educators, communication experts, technical designers and webmasters will contribute to this design and production task.

Ecsite, the World Ocean Network, IUCN and EBN will make the most of their existing structures (such as e.g. the Ecsite Thematic Groups) adapting the tools and resources developed in the framework of Sea for Society and engaging existing groups of experts to ensure Sea For Society activities reach as broad a network as possible through key professionals in science communication, research and business, but also to obtain expertise from the key experts within these networks in order to enrich the project outcomes. **Task 3.5. Train partners for Action Plan for Mobilisation** 

To share knowledge, capacities and reach a broader audience, other multipliers, than the ones inside

the consortium must be mobilised. This includes science communicators, educators, teachers, association leaders, journalists, third parties, and other relevant contacts from partner networks. Training these multipliers is critical and can be partially completed through E-learning. A 'Sea Academy' will be organised with training modules on the cross cutting challenge, and demonstrations of communication methods, tools and animation methods will be available. Scientists and experienced trainers will help to train multipliers. Keynote speakers will be invited to engage with the trainees. This task will improve the ability of each multiplier to organise information activities, interact with target audiences and complete dissemination activities.

## **Deliverables**

- D.3.1 European Action Plan for Mobilisation, identifying the cross cutting challenge and advocacy activities M24
- D.3.2 Resources, tools and identified existing activities for the Mobilisation phase M28
- D.3.3 "Sea Academy" programme M25

Work package number	4	Start date or starting event:	M26-M39	
Work package title				

## **Objectives**

- 1. To implement the planned activities to address the cross-cutting challenge selected in WP3 and reach a broader audience.
- 2. To use the tools conceived in WP3 to transfer knowledge and facilitate mutual learning activities.
- 3. To receive further feedback from the larger public and stakeholders on some aspects of the cross-cutting challenge and ideas on Blue Society solutions.
- 4. To involve broad audience in a consultation, personal action and common action.
- 5. To measure impact of the activities as defined in WP3 and WP7.

## Description of work (broken down into tasks), and role of participants

WP4 will implement Mobilisation activities of the results of the Consultation Process as planned in WP3, enlarging the scope of the Geographical Areas to a Europe wide audience, mobilising simultaneously stakeholders, scientists and the general public to take part of the actions planned, empowering them to be catalysers of the necessary change of attitudes and habits on their daily life.

Each Geographical Area will be assigned a **Mobilisation Leader** – in most cases, these should be the same institutions as the Area leaders defined in WP2. This institution will act as a hub for mobilisation and engagement activities taking place in its Geographical Area.

The mobilisation, mutual learning, involvement and engagement of targeted audiences (e.g. researchers and stakeholders) will be carried out through a series of interactive activities, facing activities and online activities. WP4 will mobilise specific partners (aquaria and science centres) and associated networks, as permanent support to the previously trained multipliers (WP3).

A first set of principles on the concept of Blue Society will be additionally disseminated to a broader audience to test the validity/accuracy of those. A consultation will be organised to gather the point of view of a broad audience on some questions related to the cross-cutting challenge.

Mobilisation of the media is crucial for raising more attention to Ocean vs. Society issues and creating a bigger impact of the implemented actions and tools (e.g. short spectacular film, posters, leaflets, web resources, and other customized tools). WP4 will have to assess the impact of the activities using the indicators recommended in WP3, according to Task 7.4.

The actions to be conducted include several aspects: information / education, contributions of a larger public, consultation, concrete commitments and collective action.

## Task 4.1 Applying European Action Plan to a national/local context to develop individual Action Plans

Following the guidelines defined in WP3 to mobilise and to involve stakeholders and civil society, each partner will take the general methodology and adapt it to its local/regional/national context. The strength of the partnership is the amount of networks and science museums/aquaria involved which will enable cost effective knowledge transfer to a variety of end-users. At the same time new networks and vehicles of messaging were developed through the consultation process which will be used to tackle different audiences:

 The Geographical Areas active in WP2 will become active information multipliers for the results of the consultation process and for disseminating the main cross-cutting challenge, under the coordination of each Mobilisation Leader. They will ensure coordination of activities in each country, thus facilitating further contacts between local/national scientists, Industry, Governmental agencies, Educators, etc.

- Scientific partners and networks EurOcean, EBN, ECSITE, IUCN and World Ocean Networkhave permanent dissemination channels (databases, newsletters, networks) that reach a wide array of European researchers, stakeholders and decision makers. They will also reach other information multipliers.
- Aquariums, Science Centres and third parties contributing to SFS will transfer knowledge on the cross-cutting challenge. They will include the cross cutting challenge in a large array of activities, as detailed in Task 4.2.

All these activities will be implemented by the trained multipliers (WP3). They will select the best channel of information and type of activity according to their public.

## Task 4.2. Implement the planned activities on the cross-cutting challenge to a broad audience

The tools created in WP3 will support the transfer of knowledge and illustrate the cross cutting challenge.

- Project partners could be encouraged to put the actions envisaged under the "cross-cutting challenge" into practice internally and/or by involving their staff. In this way we will be leading by example: practicing ourselves what we are asking citizens to do.
- We could harness the commitment of and examples set by certain citizens. Citizens can bring their stories and experiences, their perspectives and the actions they have undertaken or are involved in to our project.
- We will study the idea of Citizens' Panels: groups, whose experience we can monitor from the outset of the public engagement phase. Such a panel would provide us with:
  - o Content to communicate
  - Stories and experiences to showcase
  - Material for the evaluation process
- Citizens Panel members could be encouraged to become spokespersons for the project, in other words, act as project ambassadors. This could use a strategy of peer to peer communication, with young people speaking to the youth audience, for example.
- We could also highlight the European dimension of the project as this will constitute a factor
  of motivation for all: citizens on one country would know that citizens in other European
  countries are getting involved.
- SFS will engage with an audience of millions in aquariums in museums and via the web on priority actions related to the cross-cutting challenge. Feedback collected will bring new elements to be added in the Blue Society solutions and fed back to researchers and decision makers. The results will help define and develop concrete proposals for research and maritime governance. Researchers will have an accurate picture of the representation of the public opinion on the cross-cutting challenge.
- A set of local actions, to address the cross-cutting challenge, will be developed to a broad audience: debates, interactive educational activities, exhibition displays, film projections and debates, others interactive activities with explainers. They will be invited to engage practical solutions driven from the consultation process and in accordance with the Blue Society identified principles.
- A collective action will be undertaken to endorse a major proposal related to the crosscutting challenge and to promote it toward specific relevant target groups, authorities and decision makers.

• Ecsite, the World Ocean Network, IUCN and EBN will mobilise their networks of professionals as detailed in Task 3.4, to ensure Sea For Society activities reach as broad a network as possible through key professionals in science communication, research and business, but also to obtain expertise from the key experts within these networks in order to enrich the project outcomes.

Area Leaders will each report on the activities in their Geographical Area, detailing the Mobilisation activities in a format established by the European Action Plan in Task 3.3. The WP leader will then compile a European Report on the Mobilisation activities, giving an overview of the broader impact. This report will highlight the results of the input during the Mobilisation phase of citizens, youth and stakeholders.

## Task 4.3. Analysis of Mobilisation activities from a marine science perspective

During the Mobilisation Phase, citizens, professionals and stakeholders will be engaged to share their experiences and express their views on the cross-cutting challenge defined in WP3. They will also be invited to give ideas on the principles of the Blue Society concept.

All the contributions collected by Area Leaders, reported on in Task 4.2 both on area level and European level, will be analysed for the Blue Society Launch event. Propositions/ideas collected will also bring new elements to be added in the Blue Society concept and fed back to researchers and decision makers. The results will help define and develop concrete proposals for research and maritime governance.

Researchers and decision makers will thus have an accurate picture of the representation of the public opinion on the cross-cutting challenge.

## Task 4.4. Analysis of Mobilisation activities from a social sciences perspective

Outcomes of the Mobilisation phase will be measured and analysed to specify their impact, providing analysis from a social sciences perspective which can serve as valuable input to future continuation of Blue Society activities by all stakeholders engaged in the project.

## **Deliverables**

- D.4.1 National and local Action Plans for Mobilisation M28
- D.4.2 Report on Mobilisation activities at Area& EU level –M39
- D.4.3Analysis of Mobilisation activities from a social sciences perspective M39
- D.4.4Analysis of Mobilisation activities from a marine sciences perspective M39

Work package number	5	Start date or starting event:	M1-M42
Work package title	Blue Society E	Expert Group Coordination	

#### **Objectives**

- 1. To set up and steer the project's Blue Society Expert Group
- 2. To provide guidance following the outcomes of the Consultation Process
- 3. To define and propose principles and guidelines for the concept of Blue Society

## Description of work (broken down into tasks), and role of participants

The fulfilment of the needs of Earth's inhabitants and the preservation of the resources for a more equitable society and the existence of future generations are two imperatives that societies must address and integrate in their fundamental principles.

Among all the "services" and resources that the planet Earth provides to mankind, those related to the Ocean are the most needed and the most badly managed unless the principle of sustainability is fully included in the management procedures of this huge resource by the official entities or by the citizens at large in their daily lives.

In this context, this work package coordinates the "expert group" of the Seas for Society Project, analysing and integrating the common outcomes of each phase of the project (consultation and mobilisation phases) in the construction of a concept of Blue Society, identifying the principles and suggesting guidelines for its societal implementation.

The framework for the Blue Society concept is outlined in Section 1.1.2.2 of this document. This work package focuses on the work of the Expert Group who will oversee the development of this concept throughout the project.

#### Task 5.1. Creation of the Blue Society Expert Group

This task will be composed of two stages: the elaboration of the terms of reference for the group and a second stage inviting members according to its expertise. This expert group should have no more than 10 members.

The WP leader will propose terms of reference to the Project coordinator, the Project manager and the Steering Committee. WP leaders and Area Teams will suggest members for the Blue Society Expert Group. The Steering Committee will make the final selection.

The Blue Society Expert Group is composed of experts selected from partner organisations and guests, taking into consideration the internal skills and expertise in the consortium and also, when needed, requesting external experts to be part of it. It will include maximum 10 experts from different fields related to the ocean, especially: oceanography, economics, sustainable development, medicine, geography, spatial and land-use planning and nutrition. The Blue Society Expert Group will support WP on the analyses of the 6 Issue Reports, help to bring out the policy recommendations issued from the Consultation Process and with the selection of the cross cutting challenge. This will be followed by the drafting of proposals in relation to the Blue Society concept. The Expert Group will supervise the communication documents aimed at different target publics.

## Task 5.2. Analysis of the WP1 review of knowledge, State of the Art document and stakeholder mapping in the context of the Blue Society

The work done in WP1, tasks 1.1, 1.2 and 1.3 will feed into the Expert Group, ensuring that the outcomes of these tasks benefit from the Group's external expertise in marine sciences. This analysis will, in turn, feed into the Consultation Guidelines and Tools developed in Task 1.5. This should ensure that the Consultation process is outward-looking and adapted for the specific issues on which

it will focus.

#### Task 5.3. Expert group analysis of Issue Reports, to feed vision of Blue Society

The Expert Group will take part in the Consultation Process detailed in WP2 and thentake the six Issue Reports, the marine science analysis and social science analysis produced in Tasks 2.4 and 2.5, analyse them in depth, and interpret them, analysing and identifying the major "societal challenges" in the form of shared concerns (among the different stakeholders and civil society actors). From this process are expected three major results:

- 1 Identification of common societal concerns and expectations related with "ecosystems services" and the ocean throughout the dialogue case studies;
- 2 Identification of the major(s) and most co-authored "issue(s)" to be addressed by the mobilisation phase at National and European level;
- 3- Identify common/shared principles to be used in the Blue Society concept.

This work will then feed into the Consensus Workshop to select the cross-cutting challenge in Task 3.1.

## Task 5.4 Analysis of Mobilisation activities and feedback

The Expert Group will take the Area Reports and European Report produced in WP4, Task 4.2, and use the findings to further develop the Blue Society concept. Of particular relevance will be the broader input of citizens, young people and stakeholders via the Mobilisation activities. The results of this analysis will be presented at the Blue Society Launch Event as part of Task 5.5.

## Task 5.5 Presentation of the Blue Society concept at the Blue Society Launch Event

The contributions of the citizens, professionals and stakeholders mobilised in WP4, Task 4.3, will be analysed for the Blue Society Launch event and fed back to researchers and decision makers. The results will help define and develop concrete proposals for research and maritime governance.

At the time of the Launch Event, the Blue Society concept will be approaching its finalisation. The Event therefore provides an opportunity to present of the draft concept, and to incorporate feedback on the concept from the Event's participants. The outcomes will feed into Task 5.6.

## Task 5.6. Finalisation of Terms of Reference for the Blue Society

As the final result of the several tasks of this work package: collection of existing knowledge on Blue Society, analysis of the results of the phase one of the dialogue and inputs and suggestions of phase two of the dialogue, the Expert Group will propose a final concept of "Blue Society," its principles and some guidelines for successful societal implementation.

We will communicate on the Blue Society concept with specific tools and through appropriate channels to business and industry and policy makers.

We can also present the Blue Society concept on different occasions. For example, at European events devoted to research and/or the ocean. The goal is to influence maritime research policy.

#### **Deliverables**

- D5.1 Terms of reference for the Blue Society expert group M2
- D5.2 State of the art of the Blue Society concept M12
- D5.3 Feedback Report on the results of the Consultation Process M22
- D5.4 Feedback Report on the results of the mobilisation phase M39
- D5.4 Definition of the Blue Society-M36

Work package number	6	Start date or starting event:	M1-M42
Work package title	Communicati	on	

## Objectives

- 1. To ensure an integrated and effective communication of the project, its objectives, activities and results
- 2. To develop the Multilingual Project Web Portal
- 3. To monitor and measure all the communication activities in the project in order to assess impact
- 4. To organise a major international conference to present the results of the SFS project and to gather ideas on the sustainability of the consultation process

## Description of work (broken down into tasks), and role of participants

The Sea for Society Project is composed of three major components (Consultation, Mobilisation and Analysis), and each one of these components has different interfaces with different stakeholders. Simultaneously the three major project components will have to establish an internal way to share the results of each component work. This multitude of levels (several stakeholders and actors vs. internal and external communication) leads to the necessity of having more than a simple communication/dissemination work package. The role of this work package is to provide the general guidelines for all types of communication and ensure the real and correct integration throughout the referred different levels. WP6 is thus a cross cutting WP which a) supports and monitors the communication activities in other WP's b) carries out the communication promoting the project.

A strength of the **SFS Project** is the strength of the partnership in effective scientific communication tailored to different audiences, both trough the communication departments of several research institutions (participating in the EurOcean network and others) as well as through the several science museums and aquariums that composed Ecsite and World Ocean Network.

In order to ensure correct integration and coherence an experienced Communication Officer will be assigned to the project responsible for centrally coordinating communication activities.

#### Task 6.1. Define the European and national communication strategy and project branding

A project communication plan will be drafted at the beginning of the project and approved by the partnership at the first partnership meeting. The project communication officer will be responsible for ensuring implementation. It will outline the strategy for ensuring that there is sufficient and consistent communication to support the projects activities at different levels (Case Study, Europe, and International).

#### The plan will cover:

- a) dissemination for awareness on the project and objectives,
- b) targeted communication to ensure mobilisation and participation of key actors within stakeholder groups in the Consultation process
- c) Promotion of the Consultation and Mobilisation Branding (enhancing its recognition and sustainability)
- d) dissemination on the progress of the project
- e) feedback mechanisms from participants and interested parties
- f) Coordination of the partners extensive existing communication channels
- g) Measurement of the impact of the communication plan

The project intends to embrace new technology to reach a maximum audience. Therefore where appropriate for the different phases of the project Social Media, Web 2.0, widgets, RSS feeds, phone App's and streaming will be used to reach a large audience cost effectively. The partnership has experience of using all of the tools effectively for communication and will only use them where appropriate to target audiences.

The plan will be reviewed on an annual basis by the partnership at each partner meeting and adjustments will be made where required to ensure effectiveness.

## Task 6.2. Set up a Communication Task Force (Partners and External Experts) to provide expert advice and direction for the Consultation and Mobilisation Phases

A communication task force, with representatives of all stages of the project will be organised, and will act as advisors on the communication process and actions to the consortium in general and to the Communication Officer in particular. This task force is internal to the consortium but different experts may be invited to advice on different stages of the project. This group will provide recommendations on:

- The overall communication strategy to be developed on task 6.1;
- On the Branding of the Consultation and Mobilisation process

It is also the role of this group, assisted by the Communication Officer, to prepare a report on the impact of the communication activities. The Communication Task Force will assist the Communication Manager.

## Task 6.3. Develop a multilingual Web PORTAL as a central repository for knowledge collection, debate and dialogue for the duration of the project

The project has many elements taking place across several case studies. To support the range of activities in each phase of the project a Web portal will be designed and built.

The portal will play multiple roles;

- A communication resource to promote the project, its objectives and partnership
- A communication resource to update interested parties on progress, results and outcomes and a repository for key deliverables.
- A repository of contributions and reactions from the Consultation which expresses how participants relate their "personal experiences" to the "societal issues" presented.
- A location for customised tools and services to support the operation of the three stages of the project (Preparation Phase, Consultation Phase, Mobilisation Phase)
- A venue for debate and dialogue during and beyond the project on Blue Society issues

The portal will be multilingual and use the latest technologies to enable user friendliness. A yearly report on the portal development, upgrades and usage will be delivered.

## Task 6.4. Develop Project Promotional Material

The project will develop a **logo** and **project brochure** (Print and electronic) which will be used by partners to promote the project. In addition, a **bi-annual newsletter** will be published electronically and distributed by using all the networks in the partnership (Ecsite, World Ocean Network, EurOcean, AquaTT, EBN, IUCN) in order to show the evolution and activities of the project. When relevant some of the information in the newsletter can be transformed into press releases to inform on specific achievements and distributed to key communication channels (press & media).

## Task 6.5. Scale-up the communication of the cross-cutting challenge in order to reach a broad European audience (e.g. consultation media events and advocates)

A larger scale communication campaign will be set up with the support of "champions" which will highlight the cross cutting challenge during specific key events and support the empowerment

process. Champion-supported messages and actions may have a positive impact on attracting public engagement. A public relations campaign will generate media coverage from specialised journalists and communication officers. This will include press releases, advance releases, exclusive interviews, web-based and face-to-face press conferences. "Champions" themselves may attract a larger media turnout, and this in turn will publicise the "societal message", the implemented online tools, consultation process, the set of actions and the collective action.

## Task 6.6. Organise an international Launch Event to present the activities, results and future actions

A final International Blue Society Launch Event will be organised to present the main results of the project in its three components: dialogue, action and analysis as steps to the implementation of a Blue Society, and to present ideas on the possibility of sustaining the consultation process and action for further refinement with inputs from the participants.

According to the cross-cutting challenge and the mobilisation process, all the relevant organisations at national and European levels will be invited. The aim of the event is to share results of the Consultation Process and the Mobilisation activities, and to share the definition of the Blue Society and to enrich it.

The Launch Event will ensure the communication of the all consultation and mobilisation methodology so the process can be reproduced in the future.

#### **Deliverables**

- D6.1 Communication plan and project branding M6
- D6.2 Project Promotional Materials M6
- D6.3 Launch of the Web Portal M9
- D6.4 Annual Communication Report 1 M12
- D6.5 Annual Communication Report 2 M24
- D6.6 Annual Communication Report 3 M36
- D6.7 Blue Society Launch Event Report M40

Work package number	7	Start date or starting event:	M1- M42
Work package title	Project Manag	ement	

#### **Objectives**

Experience has shown that as the number of partners in a proposal increases, exceeding 20 in the case of SFS, the organisational aspects of the proposed work and strong management capabilities from the coordinating entity become critical factors in the likely success of the project. This aspect is described in more detail in Section 2.1, but the operational considerations have been set out here within.

- 1. To create and maintain coherence across Work Packages
- 2. To select and support a Steering Committee, Scientific Advisory Panel and to liaise between these strategic groups as well as the Blue Society Expert Group (WP5), the Communication Task Force (WP6) and the Work Package leaders.
- 3. To allow for efficient internal communication across partner representatives.
- 4. To monitor & evaluate actual project activities against the MMLAP proposed, and redress problems and divergences if and when they arise.
- 5. To coordinate and complete the official EC periodic reports and financial statements in accordance with contractual obligations and deadlines.

## Description of work (broken down into tasks), and role of participants

#### Task 7.1: Steer the project, organise steering committee and consortium meetings

Considering the size of the consortium, a Steering Committee will be set up to ensure that the smooth running of the project is overseen. The Steering Committee will be made up of no more than eight members and will be responsible for planning the work schedule and delegate operational responsibilities. The work plan will be agreed at each Consortium Meeting and then the Steering Committee will be responsible for ensuring that deadlines are met, and that any necessary changes to the work plan are enacted and followed up.

Another key responsibility will be to ensure that the project vision is shared among the consortium. The concept of the Blue Society is central to this vision, as outlined in Section 1.1.2.2 of this document. The kick-off meeting will be the opportunity for project partners to come together and discuss this vision, ensuring the consortium is fully engaged.

Representatives from all partner organisations will be required to attend six consortium meetings over the course of the project: a kick-off meeting, four progress meetings, and a final meeting. The kick-off meeting will agree to a communication plan, and this will be updated at each of the following meetings. Project co-ordination and quality assurance protocols will be presented at the kick-off meeting, and these will also be set out by way of a consortium agreement. Progress meetings will review reporting requirements, review activities already undertaken, plan up and coming activities, check that resources can be mobilised as needed, recommend matters to be brought to the Scientific Advisory Panel, Blue Society Expert Group, and Communication Task Force.

Between the face-to-face meetings set out above, members will make use of telecommunication (email, conference call, etc.) wherever possible to minimise the travel and subsistence expenses.

Ten Steering Committee meetings will be held, some through teleconferences. Work package meetings will be also organised to plan activities, either back to back with a consortium meeting or via teleconference.

All WP leaders and participants have person-months to liaise with the project coordinator and likewise the project coordinator has some person-months available in the other WPs in order to liaise with all participants and to ensure a quality coordination and implementation of the project.

## Task 7.2: Internal communication and administrative project management

An online project management system will be designed to ensure a sturdy exchange and communication flow between the partners. This online tool will allow for sharing files, posting messages, commenting on ideas, previewing publications, understanding timelines, delegating tasks, plotting milestones, and coordinating periodic and financial reports. In this framework, Nausicaá will upload reference documents with respect to internal procedures, protocols for data management, reporting templates and quality assurance.

Contractual obligations with the European Commission will be flagged well in advance of official deadlines, using the online project management system and will be tabled for discussion at progress meetings.

- For the key stages of the project, partners will be able to mobilise members of their staff, who are skilled in a range of disciplines, for events such as Citizens Forums, the Youth Parliament, etc. The provisional budget does not take into account their contribution, yet it will not be negligible;
- For the European Launch event, partners could engage with a body which has the logistical resources (buildings, staff, etc.).
- The Area leaders and the WP leaders will be partly responsible for project coordination and monitoring. The time they devote to the project is included in their respective WP budget allocation.
- The Project Coordinator will recruit a Project Manager who will work closely with the Communication Manager.
- We are studying the possibility of co-locating the Project coordinator and communication manager.
- Tools such as a collaborative platform will facilitate coordination work and some coordination meetings will be held via video-conference (time and resource savings and fewer CO<sup>2</sup> emissions).
- If partners are able to respect the provisional project timetable, this will save time for everyone.

## Task 7.3: Recruit and engage a Scientific Advisory Panel

A Scientific Advisory Panel will give strategic direction to the Steering Committee. It will be composed of ten experts from ocean, sea and land-based activities, and experienced EU project coordinators. Two members of the Advisory Panel will be invited to attend every Consortium Meeting of the project in order to provide foresight and help to align the project with up and coming European priorities.

The ten members of the Scientific Advisory Panel (experts external to the SFS consortium) will work with the coordination team and WP leaders. The AB will be composed of qualified persons from key organisations from different fields. For instance:

- on policy development: the Global Forum on Oceans, Coasts and Islands or DG Mare
- on ocean related science: UNESCO International Oceanographic Commission and the European Science Foundation Marine Board,
- on public communication: media person or one Ocean champion,
- on business and industries: the World Business Council for Sustainable Development, for example.

The role of the Scientific Advisory Panel will be to advise the project manager, the consortium and the steering committee at key stages of the project (development of strategy, project

implementation, communication strategy, and organisation of the Launch event, dissemination towards RD governance, evaluation and improvement).

The WP leader will consult the project consortium in order to identify suitable candidates based on a list of pre-identified criteria, and a shortlist will be drawn up, with reserve choices where appropriate, and this list will be approved by the consortium. The WP leader will then contact the individuals identified, to find out their availability and confirm the Panel to the consortium.

#### Task 7.4: Implementation of Internal Monitoring Process

This task is concerned with impartially assessing the actions implemented, throughout the duration of the project, in relation to their objectives and expected impact. The consortium will circulate the "terms of reference" spelling out the SFS objectives and expected impact, target audiences, action plans, project management structure, and policies and procedures, linking each to the technical audit evidence that will be requested by internal evaluators annually.

For every Task of the project, work package leaders will establish objectives, expected impact and indicators for implementation. After each task is completed, work package leaders will assess to what extent the targets have been achieved. Where target indicators have not been reached, the work package leader will undertake remedial action, under the supervision of the project coordinator, until the indicators have been achieved.

This activity is particularly significant for key tasks such as Task 2.2 for the Consultation Process and Task 4.2 for the Mobilisation activities, where indicators are established as part of a preliminary Task, and the result of the monitoring gives crucial feedback as to the impact of the project.

The results of the monitoring process will be reported at the end of the project, giving an overview of the action that was taken in order to ensure target indicators were met.

## Task 7.5: Quality and evaluation plan

In addition to the monitoring process, a quality plan will be established to ensure that the project deliverables maintain a high standard of quality. A review team consisting of members of the consortium will be established by work package leaders for each deliverable and deadlines set in order to ensure that there is time to take feedback into account before the finalisation of each deliverable.

The Consultation Process, reactions to Blue Society concept, Mobilisation activities and tools, and Launch Event will all be subject to external evaluation, as well as the internal monitoring detailed in Task 7.4. An **External Evaluator** will be recruited to track the project progress and provide annual reports on performance and recommended adjustments. Success will be measured against quantitative and qualitative indicators. All evaluation reports will address the issue of sustainability and plans for the future. The evaluators will circulate interim and final reports to consortium members, and a redress procedure will be put in place.

#### **Deliverables**

- D.7.1 Quality plan M3
- D.7.2 Terms of reference document for the evaluation M3
- D.7.3Mid-term evaluation report M21
- D.7.4 Internal Monitoring Process report M42
- D.7.3 Final evaluation report M42

# iv) Graphical presentation of the components showing their interdependencies (Pert diagram or similar)

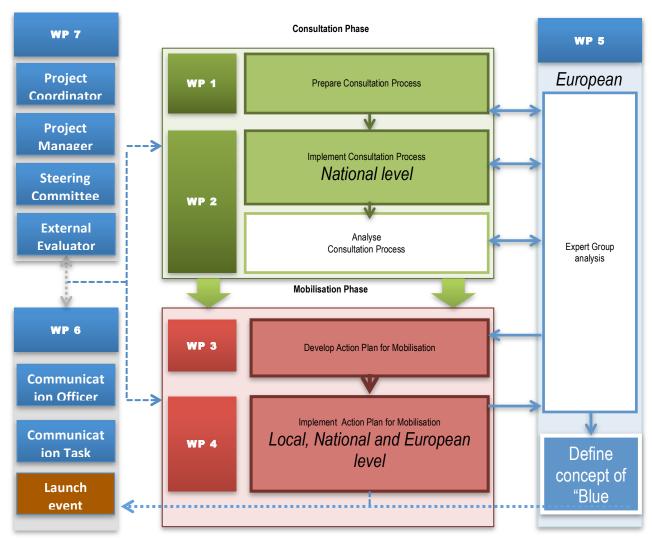


Figure 3: Graphical presentation of the components showing their interdependencies

## v) Significant risks, and associated contingency plans

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk. The ambitious SFS MMLAP will bring stakeholders, citizens and youth closer to marine and land-based sciences, researchers, and policy decisions. This will be achieved through dialogue, mutual learning and joint actions.

While well thought out, this is a complex process, subject to the participation of project partners, non-partner stakeholders, and society-at-large. The process provides open and equal access to different cultures, educational abilities, and age groups. As a result, there are some uncertainties that have been set out below, and matched with a mitigation control. Risk analysis and management will be tabled for discussion throughout the course of the project, at meetings described in Work Package 7.

 Table 1.2f. Description of the Contingency Plan

Operational Risk	Contingency Plan
Geographical distance	The Consortium will use teleworking; e.g. email, telephone conference, Skype, videoconference, public website, and private intranet. Where face-to-face meetings and events are more appropriate, the budget includes a provision for travel and subsistence expenses provided for beneficiaries, third parties and non-partner end users.
Cultural differences	The Consortium will adopt a professional, formal approach to all project activities so as not to offend any other party. The majority of partners have previous experience with European and international projects, and in so doing, have a sincere appreciation for the importance of respectful behaviour and working within the boundaries of expected norms and expectations.
Conflict between partners	In case of conflict between partners, the consortium will prioritise consensus decision-making and negotiation in the first place. In the rare event that any conflict cannot be settled through discussion and consensus, a two-level mediation will be implemented. At the first level the Steering Committee may conduct the mediation. At the second level a group of experts, appointed as judge referees, will be requested. This will be precised in the Consortium Agreement.
Generational & gender differences	The Consortium will adapt a respectful, professional, formal approach to all Project activities so as not to offend any other party, regardless of age or gender.
Loss of personnel	With 20 participating organizations, it is natural that human resources may be subject to a degree of changes in personal over the course of the project. There is no indication at this moment that any of the key staff leading Work Packages will be leaving their institutions. However, should this occur, alternative staff, meeting the same level of qualifications, are most likely to be contracted as replacements. In the worst case, should a partner decide to withdraw as a result of changes to personnel, the coordinator, with the support of the Steering Committee, can arrange a redistribution of tasks across the remaining partners.
Unequal levels of partner engagement & sub-standard services and deliverables by responsible partners	The budget has been devised by linking partners to tasks. This approach ensures that those partners with the most resources are awarded with the resources necessary to deliver on the proposal. Partners and third parties will have the option of how best to meet their responsibilities through intranet, email, teleconference, telephone, webbased meetings, and face-to-face working groups. A "one-size-fits" all mandate will not be imposed, so long as partners meet deadlines, and deliver products and services up to the standard set out in the description of work. The Steering Committee will complete regular evaluations to anticipate where any one partner may be struggling, and can work together with that partner to put in place a plan to get back on track. Disciplinary and redress policies and procedures will be in place as a last resort. SFS relies on the professionalism of its Partners. Where necessary, tasks, and the financial resources associated with that work, will be redistributed.
Linguistic differences	The working language of SFS is English. Partners have agreed to this on signing up to the consortium. However, the Consultation Process (WP2) and national campaigns will be targeted at stakeholders, citizens and youth from different nationalities. Where resources permit, information materials will be translated in cases where doing so would allow for dissemination to an important audience. Where resources do not permit, recommendations will be made to multipliers to translate materials using their own resources.

Operational Risk	Contingency Plan
Flawed, project- authored publications, including reports	Internal and publicly available project-authored documents will be subject to peer-review by project partners, the Advisory Panel and expert group.
The availability of experts	SFS will incentivise the participation of experts on the Advisory Panel and expert group, and as keynote speakers at meetings, workshops and events by budgeting for their travel and subsistence expenses. Wherever possible, dissemination and project promotion activities will name these experts in order to raise their European profile.
Information- overload driven by technology, making target audiences indifferent to SFS messages	SFS will integrate opportunities for interpersonal exchange during the Consultation Process (WP2), Blue Society Launch event (WP6), and workshops and working group meetings. Web-based interactions in this context will have a greater relevance. Using appropriate communication channels (WP3) for the target audience will also mitigate the risk that web-based communications are used inappropriately.
Lack of interest	It is possible that SFS will want to engage with stakeholders, organisations, networks, programmes, and on-going projects that are not willing to participate in the consultation and mobilisation process. Efforts will be made to convince such parties of the mutual advantages of collaboration. However, it might be unrealistic to expect that it will be possible to team-up with all of these targets. In most situations, where one particular body is reluctant to engage, it is likely that there is a similar body that can be approached to fill a similar role. In cases where the unwilling target is a 'one-of-a-kind,' the body will be approached again at a later stage, when the project has realized more of its results; it may be more appealing for them to participate at a later stage, once the project profile has had time to mature.
Unrealistic expectations	Consultation participants will be informed from the outset that only the most common threads arising from the consultation process will be progressed by SFS in order to manage unrealistic expectations.
Lock-step delays	The Consultation Process must be completed in the nine Geographical Areas in WP2 to start other project activities (WP3 & WP4). Should there be delays, there will be a knock-on effect on progressing the MMLAP. To reduce the likelihood of this, Consultation leaders will work closely with, and will be monitored by, the leaders of the development of the Consultation Process (WP1). Deadlines will be non-negotiable, and where a consultation is thought to be falling behind the agreed timeline, human resources will be multiplied to bring the implementation up-to-speed.
Limited financial resources	An EU-wide mobilisation and empowerment campaign will require a considerable financial investment. This consideration is reflected in the budget proposed, which includes production costs for high-impact, spectacular, calls to action. Subcontracting costs have been duly avoided by bringing on board a media partner (Studio K) who has the required production capacity. Generally speaking, project expenditure will be monitored by WP7 and WP1, with any high-value items subject to pre-approval. Policies and procedures with respect to financial guidelines and financial statements will be published on the partner-only access intranet.

Operational Risk	Contingency Plan
Sub-par outreach efforts	SFS is expected to interact with many stakeholders and citizens. This will need to be verified by evidence to prove that quantitative indicators have been met. If performance in this area is lacking, WP1 will introduce new measures into the existing plans to maximise the use of partner museums and aquariums, characterized by a steady stream of visitors, to optimize the number of interactions.

## 2. Implementation

## 2.1 Management structure and procedures

#### Structure

The organisational structure considers three levels of focus: management, strategic and monitoring and operational.

#### Management

The project coordinator will be Manuel Cira, Head of Cultural Activities and International Partnerships in Nausicaá. Mr Cira has extensive experience in international cooperation and currently manages a team creating exhibits and awareness activities, in link with other scientific museums and aquariums. He is the current coordinator of the World Ocean Network and previously was co-ordinator of the EU funded project OCEANICS (2003-2005). He is also a member of the Steering Committee of the Global Forum on Oceans, Coasts and Islands.

Given the size of the partners and ambitions of the work plan, Nausicaá will assign a senior **Project Manager (PM)** on a full time basis to oversee the day to day implementation of the project. The PM will have experience in European projects and specifically multi-stakeholder dialogue processes. The PM will report to the overall coordinator.

The Coordinator shall be the intermediary between the Partners and the European Commission and shall perform all tasks assigned to it as described in the Grant Agreement and the Consortium Agreement.

In particular, the Coordinator shall be responsible for:

- monitoring compliance by the Partners with their obligations
- keeping the address list of members and other contact persons updated and available
- collecting, reviewing and submitting information on the progress of the Project and reports and other deliverables (including financial statements and related certifications) to the European Commission
- preparing the meetings, proposing decisions and preparing the agenda of partner meetings, chairing the meetings, preparing the Minutes of the meetings and monitoring the implementation of decisions taken at meetings
- transmitting documents and information connected with the Project, including copies of Accession documents and changes of contact information to the Partners
- administering the Community financial contribution and fulfilling the financial tasks
- Providing, upon request, the Partners with official copies or originals of documents which are in the sole possession of the Coordinator when such copies or originals are necessary for the Partners to present claims.

Given the important role that Communication plays in the project, SFS will also recruit a **Communication Officer (CO)** will also be assigned to the project from P1, Nausicaá. They will be in charge of centrally coordinating communication activities. The CO will be supported by a Communication Task Force composed of Partners and External Experts to provide expert advice and direction for the Consultation and Mobilisation Phases.

Given the size of the SFS partnership, a **Steering Committee** will be operated in SFS. The Steering Committee will be made up of no more than eight members selected from the partnership including a representative from each WP Leader organisation. They will be responsible for planning the work schedule and delegating operational responsibilities. They will also be responsible for trouble shooting any operational issues that may arise. Where major issues are encountered they will bring it to the attention of the **partnership**.

The **Partnership** will be composed of each member of the consortia and have rights as such a member regarding decision-making in the project. At the start up meeting terms of reference will be presented to the partnership for acceptance outlining how decision making processes will take place. Decisions will be taken by discussion and finding consensus, and not through majority rule. There will be 6 **partnership meetings** over the duration of the project. Representatives of the partner shall be deemed to be duly authorised to deliberate, negotiate and decide on all matters that will be listed in the Consortium Agreement at these meetings. The Coordinator shall chair all meetings of the Partnership, unless decided otherwise by the Partnership. The Partners will agree to abide by all decisions reached by consensus and agreed at the Partnership Meetings. This does not prevent the Partners to submit a dispute to resolution in accordance with the provisions of settlement of disputes that will be agreed on in the Consortium Agreement.

## **Strategic & Monitoring**

A **Scientific Advisory Panel** will give strategic direction to the Steering Committee. It will be composed of experts from ocean, sea and land-based activities, and experienced EU project coordinators, recruited by the project coordinator. The WP leader will consult the project consortium in order to identify suitable candidates based on a list of pre-identified criteria, and a shortlist will be drawn up, with reserve choices where appropriate, and this list will be approved by the consortium. The WP leader will then contact the individuals identified, to find out their availability and confirm the Panel to the consortium. This board will provide foresight and help to align the project with up and coming European priorities. Two members of the Panel will be invited to every Consortium Meeting.

The **Blue Society Expert Group** (WP5) will also play a role in strategic activities within the consortia as the guardians of knowledge in the project. They will feed into the other WP's and report to the Steering Committee and the Partnership. This Expert Group should have no more than 10 members.

Within the project structure there are several layers of monitoring set up, overall coordinator, PM, CO, Steering Committee, Scientific Advisory Panel, Blue Society Expert Group.

Additionally an **External Evaluator** will be recruited to track the project progress and provide annual reports on performance and recommended adjustments. Success will be measured against quantitative and qualitative indicators. All evaluation reports will address the issue of sustainability and plans for the future. The evaluator will circulate interim and final reports to consortium members, and a redress procedure will be put in place.

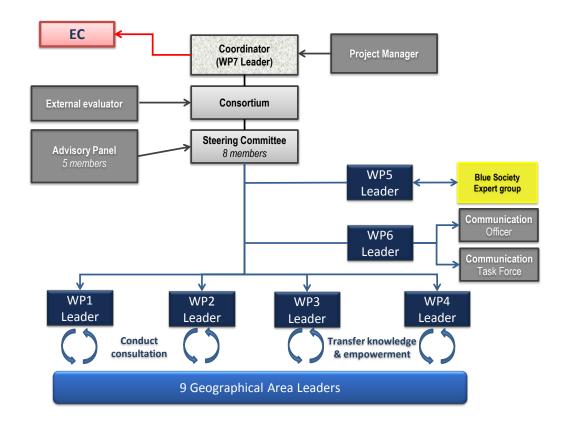


Figure 4: An outline of the Management structure in SFS

#### Operational

#### **Work Packages**

Each Work Package has a **WP Leader**. The Leaders have been selected based on their expertise in the subject areas covered by the WP but also their proven track record in managing past EC projects. The WP leaders will be members of the Steering Committee and report regularly to the coordinator. The WP leaders will manage all the partners who have a role in implementing the WP. They will ensure that the project adheres to its timeline and deliverables.

## **Consultation Process**

In order to operate the MMLAP at a regional/national level, SFS has constructed nine Geographical Areas. Each GA has an Area leader as outlined in Table 2.1.athat will be responsible for implementing the MMLAP through Consultation and Mobilisation activities defined in WP1-4. The Area leader will be supported by partners or third parties involved in SFS to ensure each GA has the competence and profile to carry out the actions.

Geographical Areas	Area Leader
1. Poland	P3: IOPAN
2. Sweden	P5: UGOT
3. Norway	P12: IMR
4. Ireland	P4: AQUATT
5. France	P1: NAUSICAÁ
6. Spain	P7: IEO and P9: MC2

7. Portugal	P6: CIENCIA VIVA
8. Italy	P8: ADG
9. Greece	P11: HCMR-IO

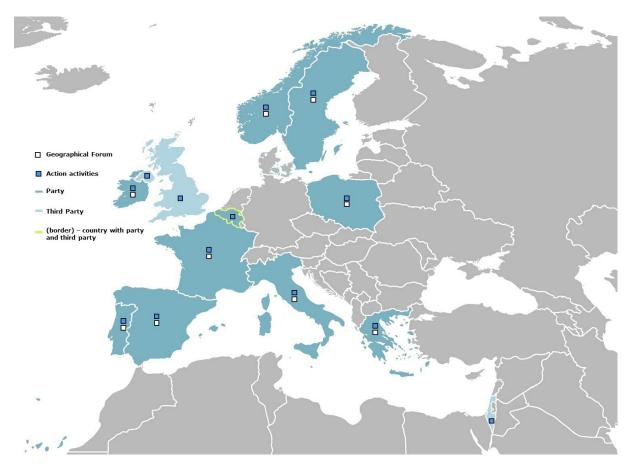
Table 2.1a: Geographical Areas and Leaders

The geographical area teams will be supported by partners and third parties located in the same country. Specific budget has been assigned to make this possible. The third parties will have a different background from the GA leader in order to help build a multidisciplinary team. Third parties include members of Ecsite, EurOcean and IUCN.

#### 2.3 Consortium as a whole

#### 2.3.1. A Multidisciplinary Partnership

The SFS consortium is a multi-disciplinary partnership of 20 leading organizations in their own domains from 10 different European countries. Together they represent a very significant group of marine actors in Europe with coverage in all geographical regions of Europe. The Seas for Society project has been carefully constructed to ensure a well-balanced network of organisations with a broad experience in the field of marine research, dissemination, training/education, communication and information management.



The repartition of these partners per profile is the following:

- 6 Marine research organisations (MI, IMR, Ifremer, IEO, IOPAN, HCMR-IO) with experience and willing to share information to society and stakeholders;
- 2 networks (ECSITE and World Ocean Network) able to involve in the project a significant number of multipliers and science ambassadors.
- 3 science museums / aquaria (Nausicaá, Acquario di Genova, Aquarium Finisterrae), experts on education and dissemination activities;
- 3 Higher Education organisations (IST, NUIG, and UGOT) able to mobilize engagement in the future marine/maritime professionals and to adequate education curricula to the outcomes of the project.
- 1 European Centre for Information on Marine Science and Technology (EurOcean Foundation), a European network of marine research and funding organisations that manages an electronic platform for efficient communication with all actors interested in marine research.
- 1 European not for profit company (AQUATT) aiming to bridge the knowledge gap between the dynamic R&D environments and the progressive commercial sector with skills on knowledge transference;

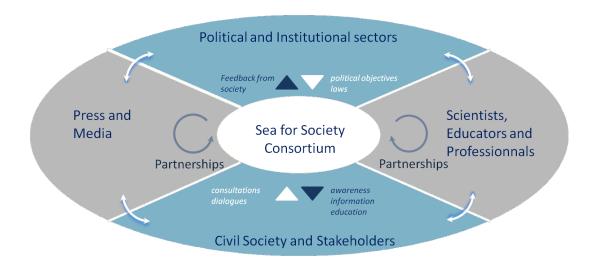
- 1 Business Company (STUDIO K), experts on multimedia shows and films productions specially tailored to the museums audiences that will develop the multimedia tools to be used on the dialogue and mobilisation/empowerment phase;
- 1 Environmental International Union (IUCN), that is skilful in finding pragmatic solutions to the most pressing environment and development challenges.
- 1 Governmental Agency (Ciência Viva) for the promotion and funding of the scientific and technological culture among the Portuguese population. This agency manages a network of more than 10 science centres being able to mobilize a large audience for dialogue and empowerment activities.
- 1 European Business & Innovation Centre Network (EBN) a leading non-governmental pan-European network bringing together 200+ Business & Innovation Centres (BICs), and similar organisations that will facilitate the dialogue with and the engagement of industrial stakeholders at local and European level.

It is also possible to categorise partners under several categories to demonstrate the broad coverage of roles contained within the team.

Mei   2   Fun   3   Inst   Aka   4   Aqu   5   Uni   6   Cièi   para   Tec   7   Inst   Oce   8   Cos   Acq   9   Aqu   10   The   11   Hell   Res   Oce   12   Hav   13   Inst   14   Assi	usicaá Centre National de la er ndacaoEurOcean tytutOceanologii – Polskiej ademiiNauk uaTT UETP Limited iversity of Gothenburg encia Viva – AgênciaNacional ra a CulturaCientífica e coológica titutoEspanol de eanografia sta Edutainment S.p.A quario di Genova uarium Finisterrae-Museos entíficos Coruñeses e Marine Institute	x x x x x x x x	x	X X X	X			X X	X X X X	X	X X
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	orld Ocean Network		x		Х						Х
	titut français de recherche	Х						Х	Х		
20 Stud	url'exploitation de la mer				l	Х	X			1	

## 2.3.2. Far-reaching networks

The SFS partnership is already committed to work together and contribute their diverse but complimentary skills and capacities to help improve research governance and in turn develop solutions to address societal challenges. The partnership itself has already mobilised and it is expected that mutual learning will take place both within the partnership as well as the project activities. The diagram below illustrates the linkages within the partnership that will help ensure that it effectively implements its MMLAP and in turn impacts Research governance.



To further demonstrate the strong linkages within the partnership, letters of support (See Annex II) have already been obtained from other organisations relevant to the MMLAP including; Italian Marine and Maritime Technology Platform, European Cruise Council, French Maritime Cluster, DEFISMED, European Aquaculture Technology Platform (EATiP), Portuguese council for environment and sustainable development (CNADS), Maison de la Research Environment Naturel (MREN), Centre national de la recherche scientifique(CNRS), Global Forum on Oceans, Coasts and Islands

Another key strength of the partnership is the involvement of the science museums, aquaria and their networks, ECSITE and World Ocean Network. Given their mandate they present an impressive resource to both facilitate dialogue (WP2) but also to transfer knowledge and empower citizens and stakeholders.

## 2.3.3. Profile of outreach capacity

Type of organisation	Name of the organisation	Target Audience
	Nausicaá	620,000 visitors / year
Science Museums & Aquaria	Acquario di Genova (Costa Edutainment)	1.3 million visitors / year
	Aquarium Finisterrae	675,000 visitors / year
Networks	ECSITE	400 institutions / 50 countries  → 30 million people
	WON	150 participating organisations in

		Europe		
		Around 150 in French outermost regions		
		Among WON founding members: European Union of Aquarium Curators,		
		Overall 450 organisations / 60 countries		
European Centre for Information on Marine Science & Technology	EUROCEAN	35,000 web visitors in 2010		
	Royal Belgium Institute on Natural Sciences	320,000 visitors / year		
	Natural History Museum of	2.5 million visitors / year		
	London	(4.5 million in 2010)		
Third parties with outreach capacities	Israel National Museum of Science, Technology & Space of Haifa	200,000 visitors / year		
	Natural History Museum of Paris	> 2 million visitors / year		
	W5	250,000 visitors / year		

## 3. Impact

## 3.1 Expected impacts listed in the work programme

## 3.1.1. Contribution towards the 'Expected Impacts' listed in the work programme

• "In the MML Action Plans, the **governance** of research and technological development will be **adapted** to facilitate sustainable and inclusive **solutions** to key challenges facing European society."

The SFS MMLAP will lead to new ways of doing research and developing technologies that respond to societal needs and public concerns. To successfully deliver this MMLAP, SFS has been designed to adhere to and contribute to "good governance" as defined by the Masis Report, "good governance refers to the principles of openness, participation, accountability, effectiveness and coherence, and for science, there is also the need to assure the productive functioning of its endeavours, and the maintenance of scientific integrity."

A 'Public Engagement in Research' (PER) approach will impact the research system at different levels, in different ways and at different times over the course of the project. Overall the SFS MMLAP will contribute to helping the European Research Area carry out research that results in innovation that contributes to the current challenges faced by society.

One way will be by encouraging channels of communication and partnerships between research organisations, stakeholders and societal actors representing the public's interest. With the assistance of social science experts and facilitators the Consultation Process will be an open and transparent process where all actors have an equal opportunity to voice their perceptions, issues and concerns in relation to many different aspects of Research (planning, funding, producing, diffusion and use). The Process will help break down barriers between the different actors, enable mutual learning and over time solidify partnerships for on-going interaction.

 "The MML Action Plans will contribute to further incorporating science in society issues into the systems of research (public engagement, ethics, gender perspectives, young people's participation, two-way communication)."

Any good engagement activity should involve two-way aspects of listening and exchange. In recent years there has been a growing recognition in government and the scientific community of the need to move away from an old model of the public understanding of science to one that involves public engagement in science and dialogue between scientists and the public. This paves the way for the research sector to work closely with stakeholders and citizens alike. Researchers will benefit from the expertise of these groups, and may influence priority areas for research; in return, members of society may come to better understand and appreciate role of research for the protection and sustainable management of ocean resources.

The SFS Action Plan will help to create a European culture where the research sector and researchers themselves value public engagement as an important activity, and where an awareness of social and ethical issues informs research decisions. SFS will promote the importance of higher education institutes to adopt "third missions" and bodies of researchers to define codes of conduct that include responsibilities to the public at large. By involving and listen to stakeholders, citizens and youth, research in should be more responsive to society, and more likely to have a positive impact in return for the investment. By disseminating the outputs of marine-related research, society will share in the benefits of that knowledge, whether for their health (e.g. seafood), and environmental practices.

The SFS actions put forward a round of open dialogue to improve public engagement's role in systems of marine-related research. Choices about new technologies have to be related to what kinds of risks people are willing to take and what sorts of social world people want to live in. Relying on scientific and academic knowledge and regulation alone to structure research may be insufficient and inappropriate. The participation of public and private research and higher education institutions that engage the public in debates is one of the means adopted by SFS to help deal with these challenges.

The importance of young people's participation in systems of research is demonstrated by the success of EU-financed "Researchers' night" that bring the researchers closer to young people, allowing for direct exchanges, meetings and interactive activities. This kind of activity gives them the opportunity to meet researchers within the context of festive and fun activities and to highlight the appeal of pursuing a research career. SFS will take this participation a step further by engaging young people in the Consultation Process across nine Geographical Areas. Web-based activities and making use of social media will extend the process to those participants who might not be able to attend the events in person, but whose voices still deserve to be heard. SFS will encourage researchers to interact with youth to enrich their experiences, and in doing so can help improve the supply of skilled people to the research base and the EU economy.

"They [MMLAPs] will also contribute to an improved transnational cooperation."

The SFS MMLAP intends to work at local, regional and national level across nine Geographical Areas, and will always plug into this transnational dimension through efficient knowledge management and feedback systems ensuring. Sharing and exchange will not be limited to the Geographical Area level, but will extend across the broader European community through effective dissemination activities. MMLAP planning activities (WP1) and project general assemblies (WP7) will be informed by partners from 11 countries, partners from three other countries, and international partner networks.

The questions for dialogue and debate are relevant at an international and European level, and can be acted on locally, regionally, and nationally. Dissemination and exploitation measures (WP6, and Section 3.2) will reach a broad audience through the project symposium, and web-based applications have no boundaries. Ground-level activities will be organized to mobilise stakeholders and the public. The web-repository (WP6) and EU media channels will have no boundaries in terms of the potential for far-reaching cooperation.

Mobilisation and mutual learning will take place at several scales: within the partnership during implementation across all of the work packages described, and between Consultation participants – stakeholders, citizens, youth, researchers, and politicians. Beyond this, a broad audience of each of these

groups will be attracted to have their say, and this will be achieved by knowledge transfer and invitations to participate in creative empowerment actions, grounded in the results from the Consultation process.

All European maritime areas will have the opportunity to contribute, and this includes the peripheral maritime regions.

## 3.1.2. Contribution towards redressing Specific Challenge 3

The result of the Consultation will be "Collectively built responses to the various questions raised in the selected Challenge." SFS has classified this as co-authored knowledge and it is a key result of the Consultation process. This co-authored knowledge will be based upon mutual understanding and strive to lead to "inclusive solutions" to issues within Challenge 3. To enable this to be possible in relation to such a complex and broad challenge, SFS will use the principle of 'ecosystem services' and frame the dialogue around 6 issues relevant to all citizens (food, health, living space, leisure, employment and transport). Furthermore it will introduce the principle of Blue Society so that even stakeholders with initially totally opposing views can work together to try and achieve inclusive solutions.

Citizens have always benefited from direct and indirect marine ecosystem services, but may not be aware of this or of their impact. SFS will build on efforts of the past ten years to integrate marine issues in society and bring the citizens to work and act together with the researchers and professionals. This new form of citizenship opens up new ways to better manage the ecosystem.

The concept of services rendered by the sea to man is recent. This approach allows society to realise by way of first-hand experiences the importance of the marine ecosystem for human life, whether in economic, social, ecological or cultural dimensions. This approach shows the strong ties that bind man to the ocean and the necessity to preserve marine environment and to exploit in a sustainable way its resource. According to OCEANICS, The Ocean Project, human beings are more receptive to ocean matters when they can relate to them in their everyday life. The choice of marine ecosystem services vis-à-vis societal needs by SFS is a way to ensure interest and participation of stakeholders and the public.

The SFS approach will introduce the principle of Blue Society so that even stakeholders with initially opposing views can work together to try and achieve inclusive solutions. Blue Society is a new concept that we will define in the frame of the project. "Ocean Literacy" and "Ocean Citizenship" will be promoted and will make a contribution to mobilise the general public toward sustainable development in general, including specific objectives such as Millennium Development Goals and the marine targets of the 2002 World Summit on Sustainable Development. The Global Forum on Oceans, Coasts and Islands has indicated their support of SFS (see Annex II) and will participate on the Scientific Advisory Panel to link SFS actions to ocean sustainability efforts.

According to the OCEANICS working group, citizens tend to consider the ocean as limitless and often do not see their impact. They feel disempowered, as if decisions were not in their hands (cf. surveys on water pollution). This is why creating a "lived relation" by highlighting the services rendered by marine ecosystem services is so important.

## 3.1.3. Contribution towards governance and science-in-society

Chapter 7 of the Masis report discusses a European model for SIS. "The European dimensions of trends, cutting edge issues and especially the wide variety of different forms of governance helped to refine and/or define the European model of science in society. A challenge for the EU FP7 SiS Programme and its hoped for successor(s) is to draw on developments in science-in-society and support further experiments and improved approaches."

SFS will contribute to the SIS programme by applying existing approaches to Specific Challenge 3 but also piloting new processes, methodologies and tools where appropriate to implement the MMLAP. The new knowledge generated will be captured by the multiple monitoring systems in the project and widely disseminated to the SIS programme, its participants and interested parties.

## 3.1.4. A step-by-step approach

To achieve the impacts set out, an integrated series of mechanisms will include Consultation rounds, interactive webinars, and learning stations at aquaria. The mechanisms have been chosen for their likelihood to be self-sustaining beyond the project duration, so that there will be no end to the dialogue, partnering, co-authoring of new knowledge and collective action.

The proposed MMLAP needs to:

- 1. Address Societal Challenges where science and technology are involved;
- 2. Bring together as partners different actors;
- 3. Pool partners' knowledge and experience;
- 4. Develop mutual understanding and joint solutions;

The Consultation will also allow for the pooling of experiences and knowledge in specific research domains. More and more scientists are realising the value of working with other scientific disciplines to address complex challenges in multidisciplinary teams but also the benefit of working with other stakeholders and the public to feed into research. An example is the knowledge fisheries scientists are obtaining from fisherman once barriers have been removed as discovered by the GAP project.

The parallel strand of the Consultation goes a step further and engages directly with citizens and youth. It allows the different actors to frame the challenges identified in relation to their "lived experiences" thereby allowing the participants to understand and the often differing views of the actors, helping them appreciate the complexity of the problems presented. The citizen and youth Consultations will create a new channel for researchers and stakeholders to engage with the public and obtain their input on societal challenges. After the Consultations, the consensus workshop will bring together representatives of Geographic Areas, the advisory panel, the Expert Group and the communication task force. The objective is to compile the output of all groups and produce a report endorsed by all participants. This production will be distributed to all those who participated in Consultations and it will be accessible via the web, to any Internet users.

Arising from the Consultations new co-authored knowledge (values, priorities, challenges, ideas, and solutions) will be generated. Then in WP3 and WP4 the new knowledge relevant to the research system will be identified and actions will be planned in order to penetrate the system. E.g. Where research needs have been identified this can be fed back to inform research planning; Where funding is not available, actions can be taken to influence policy/decision makers to support research that is crucial to address major societal challenges (e.g. collective communication of need, broad citizen endorsement); Where diffusion of latest research knowledge (Best practice) is needed for policy making or public empowerment, WP3/4 will transfer the knowledge using effective mediums to identified target audiences. Therefore the MMLAP will contribute to sharing innovation more widely and efficiently and ensuring public engagement in Research at multiple levels.

#### 3.1.5. Importance of a European Approach

As set out in The Masis Report (2009), The European Commission's approach to governance and the role of science-in-society can be linked with the model of deliberative democracy, which emphasises public debate, collective reasoning, and reflection as imperative elements in a legitimate political community. This approach cannot be achieved by individual member states in isolation, and meeting the criteria for a strong MMLAP necessitates a European approach.

A transnational partnership is necessary and required to address "Specific Challenge 3 - Marine resources, inland activities and sustainable development" given the crucial role marine ecosystems services play in regulating the whole planet and the fact that it is an open system. The systems are complex and in the past have been dealt with separately and ineffectively. There is a requirement to better focus and pool efforts to try and address the challenges. Stakeholders concerned with seas, oceans and coasts, in particular, must deal with spatial boundaries that are not always clearly defined, and so States must work together to ensure seamless and consistent regulation. All Member States will have to report on the environmental status of their seas to reach a 'good environmental status' and so the sharing of action plans and best practice between national implementation teams is of real value.

The SFS consortium is made up of 20 partner organisations from 10 countries, which meets the Call criteria, ensures broad geographical outreach. The multidisciplinary profile of the partnership is one a major

strength; by way of anecdote, even as the Action Plan proposal was prepared for submission, 'mobilisation and learning' across the partnership has contributed to the project design, which is a melting pot of diverse perspectives of the partner organisations. This will only be enhanced in the project implementation phase.

The process as a whole will enable interaction and dialogue at a local, regional, national level around "lived experiences" through geographical areas, enabling cross fertilisation through collective cross-analysis and overall conclusions around the six key issues. Importantly, the results will be brought back to the local, regional and national scale through structured feedback mechanisms between Work Package 2 and Work Package 5. Ultimately, action and empowerment arising from the new co-authored knowledge will then take place at all levels from local to EU-wide, and this will demonstrate how the SFS dialogue model results in concrete stakeholder and citizen actions which redress the Specific Challenge.

## 3.1.6. Taking account of other national or international research activities

The actions proposed will be built on existing knowledge and expertise. "Guidelines on Science and Health Communication" were produced as part of the MESSENGER (Media, Science & Society – Engagement & Governance in Europe) project, and more than 200 people were consulted to develop these guidelines. The policy brief, "Representing Diversity in Participatory Approaches," was based on material developed under the PATH (Participatory Approaches in Science & Technology) project. It examines recent thinking and practice on the issues of representation and public participation, especially in the area of science and technology. The authors use the term 'deliberative panels' to refer to a range of approaches and initiatives that attempt to involve citizens in understanding complex and far-reaching policy issues, and 'deliberative institutions' to refer to the way that these processes have become more formalised.

PlayDecide (www.playdecide.eu) is targeted at small organisations and individuals that want to develop participatory programs for the development of scientific culture at the local level. Play Decide can be customised, and is a simple and effective starting point to introduce deliberation and participation. It was produced under the DECIDE (Deliberative Citizens' Debates in European science centres and museums) project, which also offers a range of kits to help create structured and informed decisions on a range of subjects, including climate change and controversial life science issues.

Please see Annex II for the letters of support, and in particular the endorsement from the European Aquaculture Technology and Innovation Platform (EATIP).

## 3.1.7. Assumptions and external factors

A potential risk is the willingness of stakeholders, CSO's, citizens and youth to take part in the Consultation process. The partnership has tried to address this in the composition and balance in the consortium. Each Geographical Area will be led by a team which includes a research organisation, a science museum or aquaria, and one other partner such as a business or facilitator. This risk will also be controlled by carefully planning how messages are articulated and communicated to target audiences and will promote the benefits of participating in the dialogue process. Attracting the target audiences will also be more accessible with the proven credibility of aquariums and museums and their role as an interface.

The consortium has assumed that it has the ability, through the organisation structures and work plan described, to recognise, manage and articulate knowledge. This could be complicated by the fact that some knowledge is hard to illustrate and visualise in practice when dealing with such complex issues. To counter this risk, partner research organisations can provide the latest scientific information, and partner aquaria and museums have the ability to translate complex research results and marine issues to suit the public appetite. A multimedia production company is part of the consortium and has the skills to capture an audience and bring to life complex issues using the latest technology.

Still, there are some inherent external challenges to knowledge transfer, including but not limited to the following factors:

- Geography / distance
- Language
- Personalities of management
- Risk appetite

- Technology
- Language
- Cost of transfer
- Incentives
- Cultural norms
- Generational differences
- Misconceptions
- Faulty information
- Lack of trust
- Cost of exploitation

SFS intends to overcome the above challenges with a suitable communication plan encompassing knowledge management processes relevant to all Work Packages, knowledge transfer, dissemination and exploitation plans. This includes stakeholder consultation, end-user uptake capacity, customisation of delivery of knowledge, and benchmarking activities against performance indicators. Additionally the project will specifically recruit a communication manager to oversee the management of a crosscutting communication plan and support the communication activities taking place within each WP.

#### 3.2 Spreading excellence, exploiting results, disseminating knowledge

The success of the MML Action Plans depends heavily on successful communication in order to ensure that the participants in the process see benefits from their involvement and cooperation. In the context of SFS, "Communication" is used as a broad term that encompasses: knowledge transfer/ marketing/ dissemination/ feedback. One of the strongest points of the SFS consortium is the amount of organisations who carry out communication/dissemination and knowledge transfer as part of their core operations;

- 6 Marine research organisations (MI, IMR, Ifremer, IEO, IOPAN, HCMR-IO) with experience and willing to share information to society and stakeholders;
- 2 networks (ECSITE and World Ocean Network) able to involve in the project a significant number of multipliers and science ambassadors.
- 3 science museums / aquaria (Nausicaá, Acquario di Genova, Acquario Finisterrae), experts on education and dissemination activities;
- 3 Higher Education organisations (IST, NUIG and UGOT) able to mobilize engagement in the future marine/maritime professionals and to adequate education curricula to the outcomes of the project.
- 1 European Centre for Information on Marine Science and Technology (EurOcean Foundation), a European network of marine research and funding organizations that manages an electronic platform for efficient communication with all actors interested in marine research.
- 1 European not for profit company (AQUATT) aiming to bridge the knowledge gap between the dynamic R&D environments and the progressive commercial sector with skills on knowledge transference;
- 1 Business Company (STUDIO K), experts on multimedia shows and films productions specially tailored to the museums audiences that will develop the multimedia tools to be used on the dialogue and action/empowerment phase;
- 1 Environmental International Union (IUCN), that is skilful in finding pragmatic solutions to the most pressing environment and development challenges.
- 1 Governmental Agency (Ciência Viva) for the promotion and funding of the scientific and technological culture among the Portuguese population. This agency manages a network of more than 10 science centres being able to mobilize a large audience for dialogue and empowerment activities.
- 1 European Business & Innovation Centre Network (EBN) a leading non-governmental pan-European network bringing together 200+ Business & Innovation Centres (BICs), and similar organisations that will facilitate the dialogue with and the engagement of industrial stakeholders at local and European level.

Together the multidisciplinary and multi-sector partnership will work together to carry out effective communication for a variety of different target audiences thereby enabling SFS to be effective in reaching its objectives. In addition SFS has carefully designed tasks to monitor and measure both successful

implementation but also impact of activities. This is important; as demonstrating the success of the SFS approach will be crucial in ensuring sustainability through buy-in from the partnership, Consultation participants and wider society.

Knowledge sharing, exchange and dissemination will be core elements across the SFS MMLAP taking place at different stages and for different intended audiences and purposes. In order to successfully coordinate the different tasks an experienced Communication Officer (CO) will be recruited to the project and a specific work package is dedicated to communication - WP6: Communication.

## 3.2.1. Key elements to advance dissemination & exploitation

A Project Communication Plan (Task 6.1) will be drafted at the beginning of the project and approved by the partnership at the first partnership meeting. The CO will be responsible for ensuring implementation. It will outline the strategy for ensuring that there is sufficient and consistent communication to support the projects activities at different levels (Geographical areas, Europe, International). The plan will cover:

- h) Dissemination for awareness on the project and objectives,
- i) Targeted communication to ensure mobilisation and participation of key actors within stakeholder groups in the Consultation process
- j) Promotion of the Dialogue and Mobilisation Branding (enhancing its recognition and sustainability)
- k) Dissemination on the progress of the project
- I) Feedback mechanisms from participants and interested parties
- m) Coordination of the partners extensive existing communication channels
- n) Measurement of the impact of the communication plan

A Communication Task Force containing partners and External experts (Task 6.2), with representatives of all stages of the project will be organised, and will act as advisors on the communication process and actions to the consortium in general and to the Communication Officer in particular. This task force is internal to the consortium but different experts may be invited to advice on different stages of the project. This group will provide recommendations on the overall communication strategy to be developed on task 6.1, and on building an attractive brand for the dialogue and mobilisation processes.

A 2.0 Web site will be developed as a central repository for knowledge collection, debate and dialogue for the duration of the project. The project has many elements taking place across several case studies. To support the range of activities in each phase of the project the site will play multiple roles;

- A communication resource to promote the project, its objectives and partnership
- A communication resource to update interested parties on progress, results and outcomes and a repository for key deliverables
- A location for customised tools and services to support the operation of the three stages of the project (Preparation Phase, Consultation Phase, Mobilisation Phase)
- A venue for debate and dialogue during and beyond the project on Blue Society issues

The site will be multilingual where possible and use the latest technologies to enable user friendliness. The project intends to embrace new technology where it provides a new way of doing things that is more effective. Where appropriate for the different phases of the project Social Media, widgets, RSS feeds, phone App's and streaming will be used to reach a large audience of target end users cost effectively. The partnership has experience of using all of the tools effectively for communication and will only use them where appropriate to target audiences.

SFS intends to develop a project brand in order to raise awareness of SFS activities, dialogues and empowerment/mobilisation activities. It is intended that the branding will help to raise awareness of the SFS processes, results and impact as well as becoming a foundation in which to sustain the initiative beyond the funded period.

A Consensus Workshop will take place at the start of WP3 just after the conclusion of the Consultation phase. The workshop will have representatives of the geographical areas (WP2), the Blue Society Expert

Group (WP5), the external steering panel and other stakeholders at a European level to select one cross cutting challenge (and sub-challenges within) from all the co-authored knowledge identified in WP2 and WP5.

WP3 and WP4 are dedicated to transferring knowledge in order to mobilise and empower different actors towards blue society solutions. It is anticipated that extensive new materials will be developed to enable actions to take place both at a local/national scale coordinated by the Geographical Area partners but also at a trans-European level. To this end a significant budget has been assigned to be able to develop such materials. The exact specification of the materials is not known since the Consultation process and new knowledge is not yet known. However from past experience the partnership expects that for a trans-European approach top quality campaign material will need to be developed and it is likely that multimedia and video/film could be cost effective mediums. That is why the partnership has a specialist multimedia partner in the consortia – Studio K.

Towards the end of the project a major international conference is planned to present the results of SFS. It will be organised to present the main results of the project in its three components: dialogue, mobilisation and analysis as steps to the implementation of a Blue Society, and to present ideas on the possibility of sustaining the dialogue process and action for further refinement with inputs from the participants.

## 3.2.2. Integrating with the work plan

In addition to the above key elements and communication WP6, effective dissemination, exploitation, and knowledge management activities cross cut all WP's, specifically:

#### Consultation Phase (WP1 & 2)

- Carrying out a situational analysis in order to set the scene
- Carrying out a comprehensive review of existing knowledge in Marine Science relevant to SFS planned activities
- Developing customised materials as common background for the consultation phase
- Ensuring that the SFS processes and methodologies are also analysed from socio perspective to contribute learning to the SIS Programme
- Sharing the results of each Consultation Process with other Geographical Areas to demonstrate barriers, commonalities, differences and ideas for solutions
- Setting up internal procedures for knowledge management within the project

## Mobilisation Phase (WP3, 4)

All tasks in WP3 & 4 are related to planning and then carrying out activities that ensure the transfer of knowledge and promotion of best practice and excellence in order to empower different organisations in the Research system, industrial sectors, CSO's/NGOs and the wider public to take action on the challenges identified in the consultation process.

- Selecting the cross cutting challenge to pilot
- Identify the knowledge transfer and empowerment needs
- Identify best practice activities taking place already related to the challenge
- Designing an Action plan to define the collective actions that will take place to help address the challenge
- Developing materials to meet the needs of different target groups to respond to challenges identified in the Consultation
- Training of partners and multipliers through training to carry out actions
- Implement the planned activities on the crosscutting challenge to a broad audience, using the consortium networks and new developed Geographical Areas
- To receive further feedback on some aspects of the cross-cutting challenge and ideas on Blue Society solutions
- Advocate and promote activities that can empower

- Setting up a Blue Society Expert group to help manage and interpret the knowledge from all phases of the project
- Developing new knowledge on the Blue Society concept
- Providing detailed analysis on all Consultation activities, results and outcomes to participants and the wider community

## **Communication (WP6)**

- Scale-up the communication of the cross cutting challenge in order to reach a broad European audience (e.g. consultation media events, champions and advocates)

## Monitoring (Part of WP7)

- Ensure special attention to setting up, monitoring and measuring the effective implementation of the project activities internally and also externally by operating an advisory panel

#### 4. Ethics issues

## **ETHICS ISSUES TABLE**

(Note: Research involving activities marked with an asterisk \* in the left column in the table below will be referred automatically to Ethics Review)

	Research on Human Embryo / Foetus	YES	Page
*	Does the proposed research involve human Embryos?		
*	Does the proposed research involve human Foetal Tissues / Cells?		
*	Does the proposed research involve human Embryonic Stem Cells (hESCs)?		
*	Does the proposed research on human Embryonic Stem Cells involve cells in culture?		
*	Does the proposed research on Human Embryonic Stem Cells involve the derivation of cells from Embryos?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	х	

	Research on Humans	YES	Page
*	Does the proposed research involve children?		
*	Does the proposed research involve patients?		
*	Does the proposed research involve persons not able to give consent?		
*	Does the proposed research involve adult healthy volunteers?		
	Does the proposed research involve Human genetic material?		
	Does the proposed research involve Human biological samples?		
	Does the proposed research involve Human data collection?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	х	

Privacy	YES	Page
Does the proposed research involve processing of genetic information or personal data		
(e.g. health, sexual lifestyle, ethnicity and political opinion, religious or philosophical		

	conviction)?		
	Does the proposed research involve tracking the location or observation of people?		
Ī	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	Х	

	Research on Animals <sup>16</sup>	YES	Page
	Does the proposed research on animals?		
	Are those animals transgenic small laboratory animals?		
	Are those animals transgenic farm animals?		
*	Are those animals non-human primates?		
	Are those animals cloned farm animals?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	Х	

Research Involving ICP Countries <sup>17</sup>	YES	Page
Is the proposed research (or parts of it) going to take place in one or more of the ICP Countries?		
Is any material used in the research (e.g. personal data, animal and/or human tissue samples, genetic material, live animals, etc.):		
a) Collected in any of the ICP countries?		
b) Exported to any other country (including ICPC and EU Member States)?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	х	

Dual Use	YES	Page
Research having direct military use		
Research having the potential for terrorist abuse		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	х	

<sup>16</sup>The type of animals involved in the research that fall under the scope of the Commission's Ethical Scrutiny procedures are defined in the Council

Directive 86/609/EEC of 24 November 1986 on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes Official Journal L 358, 18/12/1986 p. 0001 - 0028 <sup>17</sup>In accordance with Article 12(1) of the Rules for Participation in FP7, "International Cooperation Partner Country (ICPC) means a third country

which the Commission classifies as a low-income (L), lower-middle-income (LM) or upper-middle-income (UM) country. The list of countries is given in annex 1 of the work programme. Countries associated to the Seventh EC Framework Programme do not qualify as ICP Countries and therefore do not appear in this list.