



**THEME [SiS.2011.1.0-1] [Mobilisation and  
Mutual Learning (MML) Action Plans on  
societal challenges]**

Grant agreement for: Coordination and support action

**Annex I - "Description of Work"**

Project acronym: MARLISCO

Project full title: "MARine Litter in Europe Seas: Social Awareness and CO-Responsibility"

Grant agreement no: 289042

Version date: 2012-10-30

# Table of Contents

## Part A

A.1 Project summary .....	3
A.2 List of beneficiaries .....	4
A.3 Overall budget breakdown for the project .....	5

## Workplan Tables

WT1 List of work packages .....	1
WT2 List of deliverables .....	2
WT3 Work package descriptions .....	5
Work package 1.....	5
Work package 2.....	8
Work package 3.....	13
Work package 4.....	16
Work package 5.....	20
Work package 6.....	23
Work package 7.....	27
WT4 List of milestones .....	30
WT5 Tentative schedule of project reviews .....	33
WT6 Project effort by beneficiaries and work package .....	34
WT7 Project effort by activity type per beneficiary .....	35
WT8 Project efforts and costs .....	37

# A1: Project summary

Project Number <sup>1</sup> 289042 Project Acronym <sup>2</sup> MARLISCO

One form per project

## General information

Project title <sup>3</sup>	MARine Litter in Europe Seas: Social Awareness and CO-Responsibility
Starting date <sup>4</sup>	01/06/2012
Duration in months <sup>5</sup>	36
Call (part) identifier <sup>6</sup>	FP7-SCIENCE-IN-SOCIETY-2011-1
Activity code(s) most relevant to your topic <sup>7</sup>	SiS.2011.1.0-1: Mobilisation and Mutual Learning (MML) Action Plans on societal challenges

## Abstract <sup>9</sup>

Marine environments are central to human well being, but they are also extensively threatened by our activities. The MARLISCO proposal seeks to raise societal awareness of both the problems and the potential solutions relating to a key issue threatening marine habitats worldwide; the accumulation of marine litter. A major objective of this proposal is to understand and subsequently facilitate societal engagement in order to inspire changes in attitudes and behaviour. This proposal is a Mobilisation and Mutual Learning Action Plan with the aim of providing a series of mechanisms to engage key stakeholders with an interest in, or responsibility for, some aspect of reducing the quantity of litter entering the ocean. These will include: industrial sectors; users of coastal and marine waters; the waste management and recycling sectors; Regional Sea Commissions and EU representatives; local municipalities; citizens' groups, environmental NGOs, school children and the general public; social and natural scientists. MARLISCO recognises the need for a concerted approach to encourage co-responsibility through a joint dialogue between the many players. This will be achieved by organising activities across 15 European countries, including national debates in 12 of them, involving industry sectors, scientists and the public, a European video contest for school students, educational activities targeting the younger generation together with exhibitions to raise awareness among the wider public. MARLISCO will make use of innovative multimedia approaches to reach the widest possible audience, in the most effective manner. The proposal will develop and evaluate an approach that can be used to address the problems associated with marine litter and which can also be applied more widely to other societal challenges where there are substantial benefits to be achieved through better integration among researchers, stakeholders and society.

# A2: List of Beneficiaries

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## List of Beneficiaries

No	Name	Short name	Country	Project entry month <sup>10</sup>	Project exit month
1	PROVINCIA DI TERAMO	PROV.TE	Italy	1	36
2	Coastal & Marine Union	EUCC	Netherlands	1	36
3	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	Cefas	United Kingdom	1	36
4	UNIVERSITY OF PLYMOUTH	UoP	United Kingdom	1	36
5	EUROPEAN PLASTICS CONVERTERS	EuPC	Belgium	1	36
6	EUROPEAN PLASTICS RECYCLERS EUPR	EuPR	Belgium	1	36
7	MERTERRE ASSOCIATION	Mer Terre	France	1	36
8	REGIONALNI RAZVOJNI CENTER KOPER CENTRO REGIONALE DI SVILUPPO CAPODISTRIA	RRC Koper	Slovenia	1	36
9	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	NUIC-UCC	Ireland	1	36
10	ORGANIZATIA ECOLOGISTA NEGUVERNAMENTALA MARE NOSTRUM	Mare Nostrum	Romania	1	36
11	EUCC - DIE KUSTEN UNION DEUTSCHLAND EV	Kusten Union	Germany	1	36
12	ISOTECH LTD	ISOTECH	Cyprus	1	36
13	UNION OF BULGARIAN BLACK SEA LOCAL AUTHORITIES	UBBSLA	Bulgaria	1	36
14	PLASTICSEUROPE	PlasticsEurope	Belgium	1	36
15	FUNDAÇÃO DA FACULDADE DE CIÊNCIAS E TECNOLOGIA DA UNIVERSIDADE NOVA DE LISBOA.	FFCT UNL	Portugal	1	36
16	MEDITERRANEAN INFORMATION OFFICE for Environment, Culture and Sustainable Development	MIO-ECSDE	Greece	1	36
17	TURK DENIZ ARASTIRMALARI VAKFI	TUDAV	Turkey	1	36
18	KOMMUNENES INTERNASJONALE MILJOORGANISASJON	KIMO Danmark	Denmark	1	36
19	HONKYTONK FILMS SAS	HK	France	1	36
20	MEDIATOOLS	MT	France	1	36

# A3: Budget Breakdown

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

One Form per Project

Participant number in this project <sup>11</sup>	Participant short name	Ind. costs <sup>13</sup>	Estimated eligible costs (whole duration of the project)				Requested EU contribution
			Coordination / Support (A)	Management (B)	Other (C)	Total A+B+C	
1	PROV.TE	T	278,811.00	304,197.20	0.00	583,008.20	526,794.12
2	EUCC	T	405,939.00	9,272.40	0.00	415,211.40	378,646.04
3	Cefas	A	182,569.40	12,981.60	0.00	195,551.00	175,527.10
4	UoP	T	317,415.40	10,200.00	0.00	327,615.40	294,411.84
5	EuPC	T	59,962.80	9,272.40	0.00	69,235.20	61,734.72
6	EuPR	A	68,309.00	10,942.00	0.00	79,251.00	70,664.94
7	Mer Terre	S	203,326.70	6,150.90	0.00	209,477.60	192,377.46
8	RRC Koper	A	184,874.47	6,896.29	0.00	191,770.76	171,205.29
9	NUIC-UCC	T	265,405.60	9,272.40	0.00	274,678.00	247,756.30
10	Mare Nostrum	S	243,770.00	9,272.00	0.00	253,042.00	228,464.20
11	Kusten Union	F	384,992.80	10,200.00	0.00	395,192.80	359,417.58
12	ISOTECH	F	189,864.40	5,563.20	0.00	195,427.60	177,091.36
13	UBBSLA	T	225,842.80	9,272.40	0.00	235,115.20	212,479.47
14	PlasticsEurope	F	121,637.20	8,623.20	0.00	130,260.40	119,441.52
15	FFCT UNL	T	220,691.60	6,676.80	0.00	227,368.40	210,036.54
16	MIO-ECSDE	F	191,224.01	9,272.40	0.00	200,496.41	180,137.63
17	TUDAV	F	158,338.00	5,563.20	0.00	163,901.20	148,980.32
18	KIMO Danmark	T	151,743.80	10,200.00	0.00	161,943.80	148,027.43
19	HK	F	147,035.86	4,636.36	0.00	151,672.22	137,451.60
20	MT	S	79,892.32	4,636.36	0.00	84,528.68	78,712.48
<b>Total</b>			<b>4,081,646.16</b>	<b>463,101.11</b>	<b>0.00</b>	<b>4,544,747.27</b>	<b>4,119,357.94</b>

Note that the budget mentioned in this table is the total budget requested by the Beneficiary and associated Third Parties.

# Workplan Tables

Project number

289042

Project title

MARLISCO—MARine Litter in Europe Seas: Social Awareness and  
CO-Responsibility

Call (part) identifier

FP7-SCIENCE-IN-SOCIETY-2011-1

Funding scheme

Coordination and support action

# WT1

## List of work packages

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

### LIST OF WORK PACKAGES (WP)

WP Number <sup>53</sup>	WP Title	Type of activity <sup>54</sup>	Lead beneficiary number <sup>55</sup>	Person-months <sup>56</sup>	Start month <sup>57</sup>	End month <sup>58</sup>
WP 1	Scoping study of the sources, trends and policy background regarding marine litter	SUPP	3	34.10	1	14
WP 2	Processes and solutions – moving towards better practice	SUPP	12	64.00	2	34
WP 3	Webportal and dissemination platform of Marine Litter in European Seas	SUPP	11	36.43	1	36
WP 4	Empowering Society through Informed Debate	SUPP	9	126.00	1	35
WP 5	Views from European Youngsters	SUPP	2	76.59	1	36
WP 6	Education, Outreach and Synthesis	SUPP	16	160.40	1	36
WP 7	Project Management	MGT	1	60.00	1	36
Total				557.52		

# WT2: List of Deliverables

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## List of Deliverables - to be submitted for review to EC

Deliverable Number <sup>61</sup>	Deliverable Title	WP number <sup>53</sup>	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D1.1	Review of the current state of understanding of distribution, quantities and types of marine litter	1	3	12.00	R	PU	14
D1.2	Summary of current methods of monitoring and assessment for marine litter.	1	3	4.00	R	PU	12
D1.3	Review of existing policies that may be applied to mitigate the impact of marine litter	1	3	5.00	R	PU	12
D2.1	Baseline evaluation of stakeholder perceptions and attitudes towards issues surrounding marinelitter	2	4	5.00	R	PU	14
D2.2	Web-database of 50 short and 10 detailed best practices	2	11	18.00	O	PU	15
D2.3	Analysis of the processes and solutions involved in the best practices	2	12	13.10	R	PU	17
D2.4	Booklet for guidance "what-to-do: problem-processes-solution"	2	12	3.50	O	PU	34
D2.5	Evaluation of specific educational	2	4	10.00	R	PU	30



# WT2: List of Deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	WP number <sup>53</sup>	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
	and outreach activities related to marine litter						
D2.6	Report “How to communicate with stakeholders – a short guide to influencing behavioural change”	2	4	10.00	R	PU	32
D3.1	ML web portal, including educational pack publically available	3	11	2.00	O	CO	10
D3.2	Final Multimedia tool integrated in the web portal	3	11	4.00	O	PU	36
D4.1	Plan of action from each NP as the strategy for each forum event, based on a template.	4	9	22.00	O	CO	12
D4.2	Videos from each of the national events	4	2	7.50	O	PU	34
D4.3	Document of outcomes for each of the twelve national events and for all four regional seas	4	9	96.50	R	PU	34
D5.1	Rules of European Video Contest, in English	5	2	6.50	O	PU	10
D5.2	Final European Video edited, with English subtitles	5	19	69.05	O	PU	24
D6.1	Educational plan in the Web-portal, in 14 languages	6	20	34.00	O	PU	14

# WT2: List of Deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	WP number <sup>53</sup>	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D6.2	Concept for basis of national exhibition, in English	6	16	10.00	P	PP	6
D6.3	Plan on national educative activities to be conducted in the different regional Nodes	6	16	109.40	O	PP	6
D6.4	Brochure sectors-specific, in English	6	16	1.00	O	PU	18
D6.5	Programme for training sessions	6	16	5.00	O	PP	6
D6.6	Project synthesis: 'Recommendations for science and society interactions: a case study from ML'	6	16	1.00	R	PU	36
D7.1	Project Management Plan	7	1	3.00	O	RE	3
D7.2	Kick-off report package	7	1	6.00	O	RE	3
D7.3	Online project management system	7	1	33.00	O	CO	3
<b>Total</b>				490.55			

# WT3: Work package description

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP1	Type of activity <sup>54</sup>	SUPP
Work package title	Scoping study of the sources, trends and policy background regarding marine litter		
Start month	1		
End month	14		
Lead beneficiary number <sup>55</sup>	3		

## Objectives

### Objectives

1. To provide a review of the current state of understanding of: the distribution, quantities and types of marine litter in European Seas, by Marine Strategy Framework Directive (MSFD) region and when possible specified for participating countries, the type and relative importance of sources of marine litter, including regional differences and the land-based activities that may be implicated; and, the approaches and techniques required to monitor and assess the impact of marine litter. The directive (MSFD) was adopted in July 2008 by EC to achieve or maintain a good environmental status by 2020 at the latest. It is the first legislative instrument in relation to the marine biodiversity policy in the European Union, as it contains the explicit regulatory objective that "biodiversity is maintained by 2020", as the cornerstone for achieving good environmental status.
2. To provide a review of existing policies that directly or indirectly may be applied to mitigate the impact of marine litter, and identify potential policy gaps.

## Description of work and role of partners

The main rationale for WP1 is to provide an assessment of the present level of understanding regarding the sources, distribution, quantities and types of litter in Europe's Seas as an evidence base, for use within the project overall.

This will be achieved by a combination of traditional literature review, general assessment of the available data obtained from marine litter surveys/monitoring programmes and approaching national and regional bodies charged with either the management or monitoring of those activities leading to the release of marine litter, covering both land-based and maritime-based sectors (e.g. ports, coastal tourism, coastal municipalities). The review will take account of all forms of marine litter while recognising that plastics form the single largest category. Industrial partners will contribute to a compilation of trends of production, use and recycling of plastics and collate information on properties and environmental behaviour. National partners and representatives from industry will be responsible to identify national sources of information and help establishing the main types and sources of litter, recycling rates, loopholes and key weaknesses in the waste cycle. This output will enable the identification of the corresponding sectors and stakeholders, which will need to be actively engaged in the national activities, in particular in WP 4 and WP 2. Once the general sectors are clear, the national partner will then need to identify and encourage competent and representative specific bodies and entities in their country (e.g. national/regional or local authorities, associations related to the sector) to take part in the process of WP 4 and WP 2 but also as targets for the sectorial publications.

In turn this will help to define a coherent message of national relevance. The nodes and partners represented in Working Groups that deal with the subject (e.g. MSFD ML TSG) will be responsible for liaising with these and with the Regional Seas Commissions to obtain information on a regional scale, covering countries that are not included in the consortium and may be outside the European Union. This is especially important in the Mediterranean and the Black Sea. The work programme will include a brief summary of current assessment and monitoring techniques within Europe's Seas, based largely on the work of the MSFD ML TSG together with work within UNEP Med-POL and the Black Sea Commission on reducing the impact of land-based activities on the marine environment. The aim of these desk-based activities is to provide information that can be used in WPs 2, 3, 4, 5 and 6 to further the overall objectives of the Action Plan. In addition a review will be conducted of existing policy, legislation and sectoral practices at a global (e.g. MARPOL), regional, European (e.g. IMP,

# WT3: Work package description

MSFD, WFD) and national/local level, as supporting information for formulating potential solutions to reduce the amount of litter entering the marine environment (WPs 2 and 4). The WP1 leader will ensure effective communication between members throughout the operation of the WP, using a combination of electronic communications (e-mail, tele-conference, remote website) with a limited number of essential face-to-face meetings.

Task 1.1 Conduct a review on the current state of information and general interpretation on the existing data that may reflect trends in the distribution, quantities and types of marine litter in European Seas, by MSFD region and whenever possible specified to involved countries, including the current state of information on the type and relative importance of sources of marine litter, taking account of the output from relevant EU-funded pilot projects concerning marine litter, and – as far as available – National reports of Member States on the descriptor on marine litter under the MSFD and providing examples of regional differences and the land-based activities that may be implicated. To provide representative examples of the effects of litter on the marine environment, as illustrations, for use by WPs 3-6 as appropriate; for example, to help define the topics for debate within WP4. Interim products will be supplied to meet the timelines of the other WPs [Month 0-14] (Lead by Partner 4, Partners 1-3, 5-18)

Task 1.2 Provide a summary of current methods of monitoring and assessment for marine litter, taking account of MSFD TSG & regional differences [Month 0-12] (Lead by Partner 3, Partners 1,2, 4-18)

Task 1.3. Conduct a review of existing policies that directly or indirectly may be applied to mitigate the impact of marine litter, and identify potential policy gaps, taking account of the output from relevant policy reviews being conducted during 2012 [Month 0-12] (Lead by Partner 3, Partners 1, 2, 4-18)

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	6.50
2	EUCC	2.00
3	Cefas	8.50
4	UoP	2.00
5	EuPC	1.50
6	EuPR	1.50
7	Mer Terre	0.80
8	RRC Koper	0.80
9	NUIC-UCC	0.80
10	Mare Nostrum	1.50
11	Kusten Union	1.00
12	ISOTECH	0.80
13	UBBSLA	0.80
14	PlasticsEurope	1.50
15	FFCT UNL	1.00
16	MIO-ECSDE	1.50
17	TUDAV	0.80
18	KIMO Danmark	0.80
	Total	34.10

# WT3: Work package description

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D1.1	Review of the current state of understanding of distribution, quantities and types of marine litter	3	12.00	R	PU	14
D1.2	Summary of current methods of monitoring and assessment for marine litter.	3	4.00	R	PU	12
D1.3	Review of existing policies that may be applied to mitigate the impact of marine litter	3	5.00	R	PU	12
Total			21.00			

## Description of deliverables

D1.1) Review of the current state of understanding of distribution, quantities and types of marine litter: D1.1 Report. Review of the current state of understanding of: the distribution, quantities and types of marine litter in European Seas, by MSFD region; the type and relative importance of sources of marine litter, including regional differences and the land-based activities that may be implicated [month 14]

D1.2) Summary of current methods of monitoring and assessment for marine litter.: D1.2 Report. Summary of current methods of monitoring and assessment for marine litter. [month 12]

D1.3) Review of existing policies that may be applied to mitigate the impact of marine litter: D1.3 Report. Review of existing policies that directly or indirectly may be applied to mitigate the impact of marine litter, and identify potential policy gaps. [month 12]

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS1	WP meeting to agree aims, responsibilities and time-lines		3	2

# WT3: Work package description

Project Number <sup>1</sup> 289042 Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP2	Type of activity <sup>54</sup>	SUPP
Work package title	Processes and solutions – moving towards better practice		
Start month	2		
End month	34		
Lead beneficiary number <sup>55</sup>	12		

## Objectives

### Objectives

1. To provide a systematic stakeholder survey mapping perceptions and attitudes towards issues surrounding marine litter (problems and solutions).
2. To provide detailed examples of best practice that could be used to reduce quantities of marine litter.
3. To evaluate the effectiveness of specific outreach activities and educational materials to inform good practice for science-in-society interactions.
4. To enhance our understanding of the factors that determine stakeholder engagement in science-in-society interactions in order to provide recommendations for future activities.

## Description of work and role of partners

The rationale of this work package is to provide a clear view of social perceptions on the problem of marine litter, to identify examples of best practice that could reduce the quantities of marine litter and to evaluate the effectiveness of outreach and engagement activities within work packages 4, 5 and 6. In addition work package 2 will, in a generic manner, use the Action Plan on marine litter to help identify key factors that influence stakeholder engagement so as to inform future science and society interactions.

It is expected that the collection of best practices/measures associated with ML will serve as basis for exploitation of the project products, as it can be customised to accommodate the needs of other European coastal areas. Adequate examples related to the reality of the country/region will be presented during the national debates (WP 4), fostering its critical consideration by the involved stakeholders. These best practices/measures will also be integrated in other activities and resources developed throughout the project and can lead to the empowerment of different civil groups on their own range of action.

The above part of the work will be led by ISOTECH (Cyprus) working together with NPs. ISOTECH will develop and circulate two templates (and relevant guidelines on how to use them), which the NPs can use to record best practice examples. The first template, likely to contain a few examples available in literature in order to 'spark' people's minds, will involve capturing as many examples as NPs can think of, even unsuccessful ones, with a minimum amount of detail. ISOTECH will then add to this list other examples from literature and those resulting from WP1, sort through this initial list, narrow it down to at least 50 examples and refer back to the NPs who suggested them asking them to provide as much detail as possible, by filling in the second template. This process will help us capture examples from throughout the lifecycle of ML from production to use and disposal, and from all the regional nodes and/or countries represented in MARLISCO. It will also help ensure that examples that are unique in their nature, throughout European seas, are included in the final list of 50.

Following the development of the 50 best practice database, the practices will be analysed in terms of their strengths and weaknesses and a shorter list of those practices that seem to offer the greatest benefits will be developed and circulated for discussion during the national debates (WP4), the results of which will help narrow it down further, to the final list of 10 'best practices'. Through this process, we will not only capture all the solution oriented approaches that have the potential to have real impacts on reducing marine litter, but we will also ensure that this is done using a participatory process where even the stakeholders have a say in deciding the top 10 best practices. Such a process will increase stakeholder buy-in, and therefore the chances of putting the best practice examples into action.

# WT3: Work package description

Work on social perceptions will be led by UoP working together with NPs. UoP will pilot test and use methods (structured interviews and standardised surveys) to assess perceptions and attitudes relevant to marine litter for a range of stakeholders, which will be engaged throughout the project's activities (e.g. for a) and will include the general public in each regional node. In addition to the survey of perceptions, a substantial proportion of UoP person months within work package 2 will be used to work with the leaders of work packages 4, 5 and 6 and with NPs to evaluate a selection of specific activities.

Finally, given the high interaction expected between stakeholders – not only within such a diverse consortium but “external” stakeholders that will be engaged throughout the project's activities, these processes will be summarily recorded and analysed in order to identify strengths and pitfalls in sectorial interaction of such multi-sectorial and complex issue. This social approach, will provide the project with the dimensions of awareness, motivations, civic engagement and interaction process between stakeholders towards solutions of such a complex issue. Not only it will use engagement activities to draw information but also it will feed back into them, integrating social aspects that will become clear and tune subsequent approaches adequately. On the other hand, by plotting perceptions before and after events, WP 2 will contribute to the impact assessment of the activities of MARLISCO. Finally, the identification of key aspects arising from the interaction between relevant stakeholders will constitute part of MARLISCO's heritage, which can be further considered and exploited or even considered in approaches related to similar multi-sectorial issues.

WP 2 will use a range of methodologies to evaluate impact. The most rigorous of these involves comparing people who were engaged in the project with others who were not. There are two ways in which WP 2 will achieve this:

First, for engagement events that involve the general public, we will use a matching technique. This involves running the same survey in a general public sample that is recruited through existing panels, posters and local newspapers (as above), independently of the event. Then we can compare people with similar characteristics (e.g., age range, gender).

Second, for many of the educational events, groups will be recruited through schools. In this case, we will be able to compare classes that take part with classes that do not take part from the same school, or groups from one school that takes part with those from another school that does not take part."

Task 2.1 Create a web data base summarising information on up to 50 selected examples of 'best practices'. [Month 2-15] (Lead by Partner 12, Partners 1, 2, 5-18 and external expert)

Examples of potential solutions will be identified and compiled by Isotech through a “best practice” approach focusing on the processes, types of problems and the types of solutions, working with NPs and with input from work package 1 (to help provide potential examples and contact information). Examples will be selected from all regional nodes and will include various stages in the marine litter life-cycle, through production, use and disposal. A two stage approach will initially select some 50 examples and document these in a database with supporting information such as photographs and field data. The technical facilities to display the database on the MARLISCO portal will be developed by P11 (Kusten Union) as part of WP3

Task 2.2 Evaluate the effectiveness of specific outreach and educational activities from work packages 4, 5 and 6. [Month 6-30] (Lead by Partner 4, Partners 1, 2, 5-18)

Examples include assessing the impact 1) of using new technologies such as online debates (WP4), 2) of educational materials, such as video contests (WP5 & 6) and 3) of exhibitions (WP6) on visitor perception. In some cases responses from stakeholders will be compared before and after participation while in other cases comparisons will be between groups that participate and those that do not.

Task 2.3 Provide detailed descriptions of 10 examples of 'best practices' (out of the 50). For MARLISCO web site and use to inform “what-to-do: problem- processes- solution” guide.[Month 8-34] (Lead by Partner 12, Partners 1, 2, 5-18 and external expert)

The practices/approaches solutions that have been implemented will be evaluated in terms of their strengths and weaknesses. A subset of examples that offer greatest potential will then be considered in more detail and will be presented during the national events (WP4). They will be evaluated and the “best” 10 will be selected and analysed in more detail. The best practices and hints and tools that will be identified during the process of WP2 will form the basis for the development of the “what-to-do” guide. The guide will be user friendly tool for decision making authorities to increase their effectiveness in managing and reducing marine litter.

Task 2.4 Conduct systematic stakeholder surveys regarding problem awareness, perceived responsibilities and solutions and their acceptability [Months 5-12, subsequently assess changes over time Month 28-32] (Lead by Partner 4, Partners 1, 2, 5-18)

# WT3: Work package description

These methods will be applied in Month 10 to assess baseline problem awareness (causes, extent and impacts) and perceived responsibilities, solutions and their acceptability (e.g., changes in policy or individual behaviour). The methods will be applied again in Month 30 to assess any changes.

Task 2.5 Determine factors, strengths and pitfalls in stakeholders' engagement and interaction regarding a multi-sectorial issue. . [Month 12-34] (Lead by Partner 4, Partners 1, 2, 5-18)

Beyond the specific topic of marine litter insights from work packages 2, 4, 5 and 6 will serve to examine the general process of science and society interactions thereby informing our understanding of the best ways to engage stakeholders, and in particular the public, in order to inspire behavioural change.

The evaluation of internal stakeholder processes will be undertaken by asking WPs to keep a simple log of interactions and outcomes within the consortium and identify barriers and facilitators in moving towards solutions. This will be based on a recording template to be developed at the onset of the Project and agreed with the Consortium.

The evaluation of external stakeholder processes will be done in a more standardised fashion by documenting the full process, starting at first contact. A protocol will be developed to record acceptance/refusal rates and successes/problems of engaging stakeholders, including initial expectations, which can then be compared with the actual experience of taking part in these events. This will allow the identification of shortcomings of the process or instances where expectations were exceeded and provide a basis to further exploit them in the future.

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	1.50
2	EUCC	1.50
3	Cefas	1.50
4	UoP	24.50
5	EuPC	1.50
6	EuPR	1.50
7	Mer Terre	1.50
8	RRC Koper	1.50
9	NUIC-UCC	1.50
10	Mare Nostrum	1.50
11	Kusten Union	1.50
12	ISOTECH	16.00
13	UBBSLA	1.50
14	PlasticsEurope	1.50
15	FFCT UNL	2.00
16	MIO-ECSDE	1.50
17	TUDAV	1.50
18	KIMO Danmark	0.50
	Total	64.00



# WT3: Work package description

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D2.1	Baseline evaluation of stakeholder perceptions and attitudes towards issues surrounding marinelitter	4	5.00	R	PU	14
D2.2	Web-database of 50 short and 10 detailed best practices	11	18.00	O	PU	15
D2.3	Analysis of the processes and solutions involved in the best practices	12	13.10	R	PU	17
D2.4	Booklet for guidance “what-to-do: problem- processes- solution”	12	3.50	O	PU	34
D2.5	Evaluation of specific educational and outreach activities related to marine litter	4	10.00	R	PU	30
D2.6	Report “How to communicate with stakeholders – a short guide to influencing behavioural change”	4	10.00	R	PU	32
<b>Total</b>			59.60			

## Description of deliverables

D2.1) Baseline evaluation of stakeholder perceptions and attitudes towards issues surrounding marinelitter: D2.1 Report. Baseline evaluation of stakeholder perceptions and attitudes towards issues surrounding marine litter - problems and solutions (M 14). [month 14]

D2.2) Web-database of 50 short and 10 detailed best practices: D2.2 A web-data base of 50 short and 10 detailed best practices (M 15) [month 15]

D2.3) Analysis of the processes and solutions involved in the best practices: D2.3 Report. Analysis of the processes and solutions involved in the best practices [month 17]

D2.4) Booklet for guidance “what-to-do: problem- processes- solution”: D2.4 Guide-booklet (based on D2.3), “what-to-do: problem- processes- solution” [month 34]

D2.5) Evaluation of specific educational and outreach activities related to marine litter: D2.5 Report. Evaluation of specific educational and outreach activities related to marine litter (M 30) [month 30]

D2.6) Report “How to communicate with stakeholders – a short guide to influencing behavioural change”: D2.6 Report (supplement to the development of 2.1). Perceptions and interaction process between stakeholders, which will include a summary section on “How to communicate with stakeholders – a short guide to influencing behavioural change” for industry, third sector, research and government organisations, summarising best practice. [month 32] [month 32]

# WT3: Work package description

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS2	Templates for descriptions of best practices prepared and circulated to appropriate stakeholders	4	5	
MS3	Methods tested and finalised for survey to examine stakeholder perceptions	4	8	
MS4	Collection of the 50 best practices case studies completed	12	13	
MS5	Initial stakeholder survey finished; data accessible in spreadsheet in English	12	10	
MS6	End of evaluations of effectiveness of specific outreach and educational activities	4	26	
MS7	Second stakeholder survey finished; data accessible in spreadsheet in English	12	30	

# WT3: Work package description

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP3	Type of activity <sup>54</sup>	SUPP
Work package title	Webportal and dissemination platform of Marine Litter in European Seas		
Start month	1		
End month	36		
Lead beneficiary number <sup>55</sup>	11		

## Objectives

### Objectives

To provide ensuring transparency and a comprehensive picture.

1. To provide a transparent and comprehensive picture on the problem of ML in European seas (sources, trends, challenges)
2. To provide information on solutions and best practices in European countries
3. To provide information on results and outcomes of the MARLISCO project
  - a. information on the outcomes of national stakeholder fora and workshops
  - b. information on the international educational video contest (possibly displaying winner videos provided that legal rights of web use are given)
  - b. information on the international educational video contest (possibly displaying winner videos provided that legal rights of web use are given)

## Description of work and role of partners

In this WP a web portal will be set up as a publicly accessible website. The main intention of the portal is to provide an overview and a basic resource for information on the topic of marine litter in European seas. Besides displaying and representing the current state of understanding (WP 1), it will include a wide set of references (links) to related external sources of more detailed information to permit a long-life cycle of the portal beyond the duration of the project. The portal will inform about key stakeholder perceptions and results of national dialogue processes (WP 4) and further provide technical facilities to display a web based collection of documents and best-practise examples (output of WP 2), and a range of videos on aspects of ML which will be conducted during the project by schools on a national level (output of WP 5). The portal will connect people of the European Seas and beyond, and invite its users to participate and actively contribute, bringing in own experiences and perspectives, and enable mutual learning. As a worldwide accessible tool, together with other MARLISCO tools it will stimulating the public debate on the societal concern 'Marine Litter', engage relevant stakeholders and thereby help to initiate joint societal actions.

Technical possibilities to integrate a multimedia-visual tool on the ML problem in each regional area as well as the integration of the produced educational packs (WP 6) will enhance the variety of means of raising awareness and public attention.

The World Wide Web is a central and flexible tool to share, to exchange and to communicate information, and internet users come across an abundance of information. Thematic web portals such as the Web Portal and Dissemination Platform of Marine Litter in European Seas to be developed for MARLISCO can work as 'clearing-house' systems, pointing relevant sources of information and transmitting a clear message for different target groups and grouped in regional areas. The MARLISCO Web Portal will consolidate data from different sources, in different forms and formats and present them through a single access point. By this, it will transport a variety of impacts of other fundamental MARLISCO work packages and outputs, and will provide some guidance to users in a universe of fragmented and dispersed information.

Task 3.1 Designing and maintaining the web portal. The WP leader, in consultation with other WP leaders (WP 1, 2, 4, 5, 6) will decide what the necessary requirements for the portal from their WPs perspectives. [Month 2](Lead by Partner 11, with input from Partner 19 and all other partners). Based on this input, the WP 3 leader will conceptualise the structure and functions of the portal (output: conceptual document). [Month 1-4] (Partner

# WT3: Work package description

11, 4 and 19). Based on the concept, the WP leader will design and set up a pilot website and send its URL to all WP leaders and national partners for comments and additional suggestions. [Month 3-6] (Partner 11, 4, 16 and 19).

After refining the pilot portal, the adjusted web portal will be launched, including the educational pack, accompanying and uploading the outputs, products from other WPs, throughout the duration of the project. [Month 6-36] (Partner 11, 16 and 19)

The website will also feature an internal area (intranet) to be used for project communication. In addition, the portal will include a specific project calendar as well as a larger calendar with Europe-wide events on the topic of marine litter. Offering additional web 2.0 features such as twitter, facebook, youtube etc will help to accomplish a maximum outreach, especially to the generation inheriting the problem of marine litter.

Overall language of the portal will be English. Chosen national products (project results) will also be made available for download in national languages (including an English summary). Specific MARLISCO templates will guarantee consistency and recognition value of all produced information documents. The templates will be created by partner 1.

Task 3.2 An interactive web-documentary will be designed produced tested and integrated in the portal during the project implementation [Month 3-36] (Partner 19).

This multimedia tool will be composed of visual elements, recorded throughout the project and will allow the user to navigate between the different European Regions and have contact with the activities carried throughout MARLISCO. It is not a static but interactive journey into the project results and final inputs.

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
4	UoP	1.00
11	Kusten Union	17.00
16	MIO-ECSDE	4.00
19	HK	14.43
Total		36.43

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D3.1	ML web portal, including educational pack publically available	11	2.00	O	CO	10
D3.2	Final Multimedia tool integrated in the web portal	11	4.00	O	PU	36
Total			6.00			

## Description of deliverables

D3.1) ML web portal, including educational pack publically available: D 3.1 ML web portal, including educational pack publically available. (It will include restricted access areas and procedures for internal communication) [month 10]

D3.2) Final Multimedia tool integrated in the web portal: D 3.2 Final Multimedia tool integrated in the web portal [month 36] [month 36]

# WT3: Work package description

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS8	Meeting on the technical concept and responsibilities of WP3 partners	11	2	
MS9	Design of a basic version of the website based on collected requirements and feedback from WP Leader	11	6	
MS10	Implementing adjustment, integration of educational pack and launch of adjusted web portal	11	10	
MS11	Upload of project products, integration of multimedia tool and maintenance for project duration	11	36	

# WT3: Work package description

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP4	Type of activity <sup>54</sup>	SUPP
Work package title	Empowering Society through Informed Debate		
Start month	1		
End month	35		
Lead beneficiary number <sup>55</sup>	9		

## Objectives

### Objectives

1. To provide society with the necessary scientific information in a readily accessible format so that they can appreciate both the scale of the marine litter issue and the difficulties in providing long-term solutions given varying levels of public perception of the problem and the technical, economic and waste management policy constraints on industry.
2. To afford the opportunity for stakeholders to become more informed on the issues associated with marine litter and its impacts at the national and regional sea level, and to provide an opportunity for them to participate in the surrounding debate and actively contribute to providing viable solutions to this serious societal problem.

## Description of work and role of partners

Multi-lateral exchange will be enabled by the organisation of a series of fully-facilitated debates at national level in twelve countries across Europe (Italy, Netherlands, UK, France, Slovenia, Ireland, Romania, Germany, Cyprus, Bulgaria, Portugal and Turkey). These will discuss the current scientific, technological and societal positions with respect to Marine Litter and bring together the relevant actors to consider how to address the current Marine Litter problems. It is intended to provide a non-confrontational forum and, as part of an inclusive approach fostered under the project, participants will include industry representatives, the public, environmental concern groups, NGO and national / regional policy makers and decision makers. The key stakeholders to be involved in each debate will depend on the features of the issue on ML (e.g. when main sources have been identified – WP 1) for each region. By working collectively with members of the scientific community the outcomes from these debates can be used constructively to address the detrimental impact at both national levels and on our regional seas.

The analysis of the current status of the marine litter problem (WP1) will be presented to highlight the extent of the problem across our regional seas. The perceptions and attitudes toward the marine litter problem (WP2) would be debated and identified examples of best practice (WP2) and their applicability to a specific location discussed as would be the role of society, industry and the scientific community in combating the marine litter problem. Educational material developed or presentations of some of the results from those activities (WP6) will be utilised to inform the debates and the outcomes will be used to update subsequent educational and awareness raising campaigns.

Events would be held at central locations and live-streamed over the internet to ensure maximum participation with remote participants able to table questions, comment or provide suggestions during the debates. Edited versions of the debates would be archived for review via the dedicated Portal (WP3) for those who were unable to participate in the live debates but remain interested in the outcomes.

A consensus approach will be adopted which will focus on the societal reasons for litter and the litter-life cycle rather than attempting to apportion blame for littering. These debates will be tailored to their location and will attempt to contrast national attitudes to litter across Europe through open discussion of the impact on national and regional seas. The outcomes of all the national debates will be recorded and cross referenced at a regional sea level for subsequent inclusion in a report focussed on providing integrated solutions to the current marine litter problems.

A key outcome of these debates will be the development of long-lasting cross-sectoral working relationships

# WT3: Work package description

focused on tackling marine litter issues. The events will achieve this by showcasing the benefits of involving society in a multi-disciplinary approach to dealing with a common problem and initiating the establishment of national (and later regional) working-groups to discuss potential solutions. The debates should have an immediate impact on those who participated directly, those who joined in on-line and others who see the significant media coverage organised to report both the events and their outcomes. WP2 will help evaluate this impact using the online facilities. A summary of the outcomes of the events will be produced and integrated in D6.7 (WP 6) and associated with the video podcasts in the Web-portal (WP3).

To fulfil the objective and aims of this WP will require the successful completion of the following tasks:

Task 4.1: Plan twelve national events at each of the designated locations. This will be co-ordinated by the WP leader around an agreed format but will be tailored to, and facilitated in a manner, that is sensitive to the national culture [Months 1-18] (Partner 9, WP Leaders, Node Leaders and Partners 1, 2, 4, 7, 8, 10-13, 15-17). Produce an over-arching debate structure that enables comparison between the national events but is flexible enough to be adapted to take into account local sensitivities [Months 1-9] (Partner 9, WP Leaders, Node Leaders and Partners 1-3, 7, 8, 10-13, 15-17). Investigate the most effective method to broadcast the debates to as wide an audience as possible and provide the technical support required for the National Events. [Month 1-30] (Partner 2). Run the national debates at 12 sites using the agreed structure (4.2) and technologies (4.3) including the provision of experienced facilitators and effective recording of all outcomes of the events [Months 19-32] (Partners 1-3, 7-13, 15-17)

Task 4.2: Integrate all the video outputs from the national debates on the Marine Litter Portal [Months 19-32] (Partner 2). Produce a summary covering main experiences and agreed outcomes from the national events integrated approach to litter management in the Atlantic, Baltic, Black and Mediterranean Seas [Months 19-35] (Lead by Node Leaders and involving Partners 1-3, 7-13, 15-17). Produce a final overview document covering all the experiences and agreed outcomes from the national events integrated approach to litter management in the Atlantic, Baltic, Black and Mediterranean Seas, which will be integrated as a section of D 6.7 [Months 31-35] (Partner 9 and Node Leaders)

Task 4.3: Facilitate the establishment of national (regional) working groups so that debate can continue after the events are over and sustained beyond the length of the project. This will be done by involving sector associations and local networks, such as tourism boards and costal networks and partnerships.[Months 19-35] (Partner 9 and involving partners 1-3, 7, 8, 10-13, 15-17)

The immediate impacts of WP2 will be a more informed society with enhanced capacity to both understand and effectively contribute to the management of our marine litter issues. The delivery of up to date information and identification of best practice, coupled with the multi-sectoral dialogue process fostered by the project and facilitated by this work package, will lead to a mutual appreciation between stakeholders of their respective issues.

The facilitated debates will drive home the need to work as a society to tackle the problem of Marine Litter, their on-line broadcast will ensure that stakeholders who are unable to attend will still be able to view and contribute to the ensuing debate thus increasing understanding by maximising participation. Furthermore, by archiving these debates on-line this work package will contribute to overall legacy impact of the project with the citizens of Europe, and beyond, able to refer to the subject matter presented and review the subsequent debates. This will ensure that the decision making process that led to any agreements is both transparent and available for others to learn from in the future.

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	10.80
2	EUCC	15.50
3	Cefas	6.50
4	UoP	1.50
5	EuPC	4.50

# WT3: Work package description

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
6	EuPR	4.50
7	Mer Terre	5.00
8	RRC Koper	8.00
9	NUIC-UCC	14.00
10	Mare Nostrum	8.50
11	Kusten Union	7.70
12	ISOTECH	8.00
13	UBBSLA	8.00
14	PlasticsEurope	3.00
15	FFCT UNL	10.75
16	MIO-ECSDE	0.50
17	TUDAV	8.75
18	KIMO Danmark	0.50
Total		126.00

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D4.1	Plan of action from each NP as the strategy for each forum event, based on a template.	9	22.00	O	CO	12
D4.2	Videos from each of the national events	2	7.50	O	PU	34
D4.3	Document of outcomes for each of the twelve national events and for all four regional seas	9	96.50	R	PU	34
Total			126.00			

## Description of deliverables

D4.1) Plan of action from each NP as the strategy for each forum event, based on a template.: D 4.1 A plan of action from each NP as the strategy for each forum event, based on a template. It will include a definition of the main aspects to address, main sectors and intervenient to be involved, location, date, etc. (M 12 [month 12])

D4.2) Videos from each of the national events: D 4.2 A series of videos from each of the national events for inclusion in the Marine Litter Portal (M 34) [month 34]

D4.3) Document of outcomes for each of the twelve national events and for all four regional seas: D 4.3 Document of outcomes for each of the twelve national events and for all four regional seas (M 34) [month 34]



# WT3: Work package description

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS12	Successful organisation of twelve national events		9 32	
MS13	The formation of twelve national working groups on marine litter problems		9 32	
MS14	Dissemination of the outcomes from the events across the European Union		9 35	

# WT3: Work package description

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP5	Type of activity <sup>54</sup>	SUPP
Work package title	Views from European Youngsters		
Start month	1		
End month	36		
Lead beneficiary number <sup>55</sup>	2		

## Objectives

Objectives:

1. To launch an European Video contest targeting schools or youth associations in which participants prepare a short video on the issue of marine litter considering one of a few themes, e.g. why is marine litter a concern; what can be done; what has been done in our school/local community to deal with it. The National Partners will support a limited number of participants with services (e.g. transportation, audio-visual and other material) needed for the development and production of their videos.
2. To select a few videos from each country, which can be disseminated nationally with the support of national “ambassadors”.
3. To produce a compilation of the best videos Europe-wide, as the views of youngsters on ML, and disseminate it during relevant national or European events.

## Description of work and role of partners

A European Video Contest will be conceptualised, defined and launched in 14 European Coastal Countries (IT, NL, UK, FR, SI, IE, RO, DE, CY, BG, ES, PT, TR and DK). WP Leader will be responsible for conceptualising the timeframe, rules and guidelines of the contest. Professional teachers from network of consortium will be consulted during the process, to validate coherence of contest features with pedagogic objectives and compatibility with school-system. Each of the National Partners will translate contest information and disseminate it in their countries, while representing the national contact point, responsible for attributing for the supporting services to participants and assembling a Jury. This will require that each NP is familiarised with the school-system and framework in their countries in order to conduct an efficient dissemination and procedure of service-allocation. By supporting schools, interested in taking part, the MARLISCO will foster the participation of groups of youngsters, on the basis of equal-opportunities, in different regions of Europe. It is expected that between 5 to 20 schools will receive this support in each country involved. National Partners will also try to identify a national celebrity that embraces the goals of the project and the WP that can follow the process of the contest, facilitating and promoting engagement with the media and the general public. For each country up to 3 videos will be selected and integrate the Final Video, a compilation of videos from young people all over Europe. Both the national and final videos will be disseminated in relevant national and European media and events. WP 2 will evaluate the impact the contest had on children that participated with those who did not, for a subset of countries.

Task 5.1: To define the timeframe, rules, technical guidelines and criteria of selection of the contest and applicants that will be supported, and prepare its communication to be disseminated nationally [Month 1-10] (Partner 2 and 19); To translate the communication regarding the contest into the different national languages: Italian, Dutch, French, Slovenian, Romanian, German, Bulgarian, Spanish, Portuguese, Greek, Turkish and Danish [Month 10] (Partners 1, 2, 7, 8, 10, 11, 12, 13, 14, 15, 17 and 18).

Task 5.2: To disseminate the video contest and implement the process of attribution of supporting services for a limited number of participants, in each of the represented countries, directly with schools or throughout the competent National Ministries or Institutes, once necessary legal approval has been granted [Month 10-20] (Partners 1, 2, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 and 18).

Task 5.3: To set up a national Jury, which should include the National Partner, the WP Lead Partner and the

# WT3: Work package description

“national ambassador”, select up to 3 short videos from each country [Months 18-22] (Coordination by Partner 2 and involving Partner 1, 4, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17 and 18); To organise a ceremony of awards in participating countries to present the candidate videos and announce the selected ones [Months 21-24] (Partners 1, 2, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 and 18).

Task 5.4: Edition of the national videos and production of the final European Video – a compilation of all the awarded national videos [Months 21-24] (Partner 19) and translation to incorporate English subtitles (Partners 1, 2, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 and 18).

Task 5.5: To disseminate the national videos and the European video compilation in national events and media, and relevant European Events (e.g. European Maritime Day Celebrations) [Months 24-36] (Partners 1, 2, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 and 18).

Person-Months per Participant		
Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	1.00
2	EUCC	13.00
3	Cefas	0.00
4	UoP	4.00
5	EuPC	0.00
6	EuPR	0.00
7	Mer Terre	5.00
8	RRC Koper	5.00
9	NUIC-UCC	5.00
10	Mare Nostrum	5.00
11	Kusten Union	6.00
12	ISOTECH	4.00
13	UBBSLA	5.00
14	PlasticsEurope	4.50
15	FFCT UNL	2.00
17	TUDAV	5.00
18	KIMO Danmark	8.00
19	HK	4.09
	Total	76.59

List of deliverables						
Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D5.1	Rules of European Video Contest, in English	2	6.50	O	PU	10

# WT3: Work package description

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D5.2	Final European Video edited, with English subtitles	19	69.05	O	PU	24
Total			75.55			

## Description of deliverables

D5.1) Rules of European Video Contest, in English: D 5.1) Rules of European Video Contest, in English: Description of the European Video Contest as will be disseminated, including dates for launch and deadline for submitting videos, rules and criteria for participation, guidelines for themes and technical production of the video; conditions and process description for selection of participants that will be supported by National Partners . (M10) [month 10] [month 10]

D5.2) Final European Video edited, with English subtitles: D5.2) Final European Video edited, with English subtitles: Final European Video, as a compilation of all selected videos in participating countries, with English subtitles. (M24) [month 24] [month 24]

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS15	Launch of the European Video Contest in the 14 European countries represented in the Consortium	2	16	
MS16	Selection of up to 3 national videos for each of the participating country	2	22	
MS17	Presentation of the final European video compilation during the European Maritime Day Celebrations	2	24	

# WT3: Work package description

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP6	Type of activity <sup>54</sup>	SUPP
Work package title	Education, Outreach and Synthesis		
Start month	1		
End month	36		
Lead beneficiary number <sup>55</sup>	16		

## Objectives

### Objectives

- To “translate” the scientific outcomes and messages (e.g. sopping study of WP1, best practices of WP2, etc) to a “format” readily to be used by professional educators, trainers, and youth leaders that wish to sensitise and promote behaviour changes to their target audiences (e.g. children) on ML issues
- To inform and sensitise the general public and youth in particular on marine litter issues, by implementing a series of appropriate educational and awareness raising activities (e.g. compiling an educational pack, organising national exhibitions & train-the-trainer seminars, compiling thematic brochures, etc)
- To ensure the future transferability of the MARLISCO achievements and results, by compiling a synthesis report.

## Description of work and role of partners

Task 6.1 Preparation of the educational material: It will combine some updated ML scientific information (as identified by WP1 & WP2) and some practical tips for young consumers, hands-on and reflection activities on ML. It will be designed using a fresh language, (target age is 12-18 yrs) and will be flexible and adaptable to used either at the formal education setting (schools) or the non-formal one (NGOs, Museums, youth groups & associations, etc). The information will be translated to the different languages represented in the consortium. [Month 1-7] (Lead by Partner 16, with contributions from Partner 4 and 20)

Task 6.2 Conception and development of the Educational Pack as a Multimedia Communication Tool: the information produced on Task 6.1 will be integrated into multimedia “serious game”, as a innovative teaching tool along the lines of Edutainment - modern forms (of communication tools) which use entertainment to attract and maintain an audience, while incorporating deliberate educational . This interactive web-game will be available in several different languages and will be an effective and attractive tool to educate young Europeans about Marine Litter issue and complexity. [Month 7-11] (Partner 20 with contribution from Partner 16)

Task 6.3 National awareness activities: Based on the characteristics of the ML issue in each country, a series of awareness activities will be undertaken to raise public awareness. The NPs are responsible for the implementation of such activities and can constitute short workshops with youngsters in many possible formats that will lead, in an interactive, fun, creative but informative way, to a better awareness of the issue of marine litter and waste in general and trigger these young consumers to have a say and a role in the process of minimising it. Subsequently, the outcomes of such workshops (e.g. hand-crafted works made with ML items, ML collected in a beach clean-up session presented and interpreted in their own way) can be used as a message communicated to a wider audience during WP 4, associated to the national exhibitions, disseminated through media, etc. Not only the future generation will be informed, motivated and empowered but is also well known that the youngsters can work as channels of the message absorbed in educational mediums, such as schools, and able to influence directly the habits of their close family members and their peers. [Month 1-34] (Lead by Partner 16 and conducted by Partners 1, 2, 4, 7-13, 15 and 17)

Task 6.4 Preparation of the exhibition materials in English, translation and adaptation to National language: Tasks 6.1 – 3 together with input from other WPs will be used to inform the choice of materials for national exhibitions to raise awareness of ML issues. Some key national artists have agreed to help facilitate these events using film and sculpture. Specific key challenges and messages on ML will be identified, in a “core” general text, which can then be used and adapted by NPs.

# WT3: Work package description

Each NP will be responsible in each country to find the location/opportunity to host the exhibitions. For instance, the Greek Partner aspires to combine the exhibition with the national awareness activities). Efforts will be made to combine the exhibition with a national or international day that relates to marine environment, responsible citizenship, etc, in order to maximise visibility. [Month 1-34] (Lead by Partner 16 and conducted by Partners 1, 2, 4, 7-13, 15 and 17)

Task 6.5 Communication to targeted sectors: Design and production of brochures targeting at least 4 specific sectors, translated and printed for several nationalities. This material will be disseminated among the key stakeholders identified and engaged in WP 1 and 4, mediated by the national partners but also through the consortium networks and sectorial coverage (e.g. the plastic industry associations can disseminate it through their members and also relevant events within their sector). Additionally, we will make use of the opportunities of participation of relevant events (conferences, meetings, seminars, etc) that any of the partners will take part in or are able to intervene throughout the duration of the project as chances to disseminate the material. Last, this material will also be publically available in the web- portal for consultation, download or print. [Month 13-20] (Lead by Partner 16 and involving Partner 3, 4 and 12)

Task 6.6 Training on ML: To conduct up to 4 workshops (1-2 days long) targeting formal and non-formal educators and aiming to build their capacities on how to use the educational material and reach their audiences on the ML issues. These trainings will have a regional relevancy, and will be carried in one of the partner countries of each region respectively. The trainings can be combined with other national outreach activities. These are train-the-trainer seminars on how to make proper use of the educational material developed (Task 6.1). The trainers are provided by the partner that has developed the material (ideally the authors themselves) (P16), who has an extensive experience in delivering such seminars. The trainings are organized (facilitation, secretariat, travels, hotels, etc.) by the referring NP where it takes place, each time. The target group of the trainings is the formal (in schools) and the non-formal (in museums, NGOs etc.) educational community. [Month 8-24] (Partner 16 in collaboration with NPs)

Task 6.7 Project synthesis: This task will bring together deliverables and conclusions from WPs 1-6 presenting a MARLISCO project synthesis as 'Recommendations for science and society interactions: a case study from ML'. [Month 27-36]

This report will summarise the project as a whole with key recommendations. This will be prepared in a format designed to be accessible to a wide range of stakeholders and will have two aims 1) to summarise actions and strategies to raise awareness and engagement in order to reduce ML 2) to summarise recommendations in a generic manner so as to inform other topics where science and societal interactions are fundamental to achieving change (Partner 16 and WP leaders)

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	13.80
2	EUCC	11.00
3	Cefas	0.50
4	UoP	6.30
5	EuPC	0.00
6	EuPR	0.00
7	Mer Terre	11.00
8	RRC Koper	12.00
9	NUIC-UCC	11.50
10	Mare Nostrum	13.50
11	Kusten Union	8.50
12	ISOTECH	9.00

# WT3: Work package description

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
13	UBBSLA	12.00
14	PlasticsEurope	1.50
15	FFCT UNL	11.75
16	MIO-ECSDE	16.80
17	TUDAV	11.25
18	KIMO Danmark	3.50
20	MT	6.50
Total		160.40

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D6.1	Educational plan in the Web-portal, in 14 languages	20	34.00	O	PU	14
D6.2	Concept for basis of national exhibition, in English	16	10.00	P	PP	6
D6.3	Plan on national educative activities to be conducted in the different regional Nodes	16	109.40	O	PP	6
D6.4	Brochure sectors-specific, in English	16	1.00	O	PU	18
D6.5	Programme for training sessions	16	5.00	O	PP	6
D6.6	Project synthesis: 'Recommendations for science and society interactions: a case study from ML'	16	1.00	R	PU	36
Total			160.40			

## Description of deliverables

D6.1) Educational plan in the Web-portal, in 14 languages: D6.1 The educational Pack launched in the Web-portal in 14 languages (M 11) [month 14]

D6.2) Concept for basis of national exhibition, in English: D6.2 Concept for basis of national exhibition, in English (M 6) [month 6]

D6.3) Plan on national educative activities to be conducted in the different regional Nodes: D6.3 Plan on national educative activities to be conducted in the different Nodes based on reporting templates (M 4) [month 6]

D6.4) Brochure sectors-specific, in English: D6.4 Brochure sectors-specific, in English, ready to be printed and translated (M 18) [month 18]

D6.5) Programme for training sessions: D6.5 Programme for training sessions (M10) [month 6]

# WT3: Work package description

D6.6) Project synthesis: 'Recommendations for science and society interactions: a case study from ML': D6.7 Final report and project synthesis as 'Recommendations for science and society interactions: a case study from ML' (M 36) [month 36]

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS18	Meeting to discuss Educational Pack concept	16	6	
MS19	Educational information as a basis for the Educational Pack	16	10	
MS20	Series of national exhibitions and educational activities successfully carried	16	20	
MS21	Four training events successfully carried	16	24	
MS22	Workshop to define production of the final report-Guidelines	16	30	



# WT3: Work package description

Project Number <sup>1</sup> 289042 Project Acronym <sup>2</sup> MARLISCO

## One form per Work Package

Work package number <sup>53</sup>	WP7	Type of activity <sup>54</sup>	MGT
Work package title	Project Management		
Start month	1		
End month	36		
Lead beneficiary number <sup>55</sup>	1		

## Objectives

### Objectives

1. To ensure that the overall objects of the project are met by managing the project effectively in order that all Deliverables are produced within budget, on time and to the quality required.
2. To ensure that the reporting standards and requirements of the funding programme are observed at project and partner level.
3. To ensure the full participation of all partners in the project.
4. To develop and maintain a good working relationship between the Commission desk officer and the project.

## Description of work and role of partners

In this WP the participants will assure that the project is managed according to the Grant Agreement in terms of Deliverables, reporting, quality assurance and financial management.

### Activities

Task 7.1 Co-ordination and monitoring of the Project [Month 1-36] (Lead by Partner 1)

The Lead Participant will be the scientific lead and will employ a trained project manager, responsible for financial and technical project management and all secretariat functions. It will do the overall project coordination. It will act as intermediary between participants and EC. Coordination of the project includes: ensuring the timely provision and quality of all Deliverables defined in the Annex I of the Grant Agreement; Managing the financial EC Contribution and Ensuring reliable accounting of funds; Preparing and reporting on the Consortium Bodies meetings; Maintaining the Annex I and the Consortium Agreement; Facilitate the Work of the Independent Scientific Advise Panel; Coordinating all common administrative tasks, etc. The project manager undertakes to transfer, in accordance with the EC contract and the budget allocation decided by the General Assembly, the appropriate sums to the respective parties.

The progress of the project will be monitored at all stages. Monitoring will be followed up by the Steering Group. The monitoring activities will be as part of the project management procedures (part of the project management plan), to supply guidance and assistance in all related aspects of the monitoring. In particular, 2 levels of monitoring will be considered to allow a proper on going evaluation to adopt the best solutions to increase project effectiveness. Firstly, the project will activate mechanisms of financial and administrative monitoring to appraise project progress in terms of procedures, to ensure consistency between actions and programme and to allow the Project Leader to check expenses and consistency of financial resources destination. Secondly, the project will define the procedures for physical monitoring to verify the progress of activities, the timing of the project and temporal relation between correlated activities, commitment of each partner in implementing the relevant activities.

Task 7.2 Internal Communication Strategy [Month 1-3] (Lead by Partner 1)

This will be assured by using the principal mean of interpersonal communication: email. But a project intranet function (hosted on the project website) will also be used for group communications, online project management system, a project calendar, and for storing core documents. Participants will be encouraged to use VoIP technology (i.e. Skype) although large organisations are often unable to use this.

In addition, WP leaders will ensure the effective transmission of information about the project to end-users and other stakeholders. MARLISCO will avoid a "one-size-fits-all" approach of newsletters etc. Accordingly the Project Manager will prepare a communications procedure as part of the project management procedures (for agreement at Project Meeting 1), to ensure that appropriate diversity is achieved. Communications internal to the project will be undertaken in English.

# WT3: Work package description

Task 7.3 Reporting to the EC [Month 1-36] (Lead by Partner 1)

The Lead Participant will be responsible for the production and timely submission of all reports required by the EC including regular technical and financial reports. All participants will be provided with progress and financial templates to ensure that information is collated efficiently before submission to the project secretariat. The Lead Participant will establish internal quality control on all deliverables.

## Person-Months per Participant

Participant number <sup>10</sup>	Participant short name <sup>11</sup>	Person-months per participant
1	PROV.TE	33.00
2	EUCC	1.50
3	Cefas	1.50
4	UoP	1.50
5	EuPC	1.50
6	EuPR	1.50
7	Mer Terre	1.50
8	RRC Koper	1.50
9	NUIC-UCC	1.50
10	Mare Nostrum	1.50
11	Kusten Union	1.50
12	ISOTECH	1.50
13	UBBSLA	1.50
14	PlasticsEurope	1.50
15	FFCT UNL	1.50
16	MIO-ECSDE	1.50
17	TUDAV	1.50
18	KIMO Danmark	1.50
19	HK	0.75
20	MT	0.75
Total		60.00

## List of deliverables

Deliverable Number <sup>61</sup>	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature <sup>62</sup>	Dissemination level <sup>63</sup>	Delivery date <sup>64</sup>
D7.1	Project Management Plan	1	3.00	O	RE	3
D7.2	Kick-off report package	1	6.00	O	RE	3
D7.3	Online project management system	1	33.00	O	CO	3
Total			42.00			

# WT3: Work package description

## Description of deliverables

D7.1) Project Management Plan: D7.1 Project Management Plan (M1). [month 3]

D7.2) Kick-off report package: D7.2 Kick-off report package, including project procedures manual, reporting template (M1). [month 3]

D7.3) Online project management system: D7.3 Online project management system in place (M1). [month 3]

## Schedule of relevant Milestones

Milestone number <sup>59</sup>	Milestone name	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS23	Kick-off meeting (M 1)	1	2	
MS24	1st Steering Group Meeting	1	6	
MS25	2nd Steering Group Meeting	1	12	
MS26	Progress meeting	1	18	
MS27	3rd Steering Group meeting	1	26	
MS28	Final meeting (M 36)	1	36	

# WT4: List of Milestones

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## List and Schedule of Milestones

Milestone number <sup>59</sup>	Milestone name	WP number <sup>53</sup>	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS1	WP meeting to agree aims, responsibilities and time-lines	WP1	3	2	
MS2	Templates for descriptions of best practices prepared and circulated to appropriate stakeholders	WP2	4	5	
MS3	Methods tested and finalised for survey to examine stakeholder perceptions	WP2	4	8	
MS4	Collection of the 50 best practices case studies completed	WP2	12	13	
MS5	Initial stakeholder survey finished; data accessible in spreadsheet in English	WP2	12	10	
MS6	End of evaluations of effectiveness of specific outreach and educational activities	WP2	4	26	
MS7	Second stakeholder survey finished; data accessible in spreadsheet in English	WP2	12	30	
MS8	Meeting on the technical concept and responsibilities of WP3 partners	WP3	11	2	
MS9	Design of a basic version of the website based on collected requirements and feedback from WP Leader	WP3	11	6	
MS10	Implementing adjustment, integration of educational pack and	WP3	11	10	

# WT4: List of Milestones

Milestone number <sup>59</sup>	Milestone name	WP number <sup>53</sup>	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
	launch of adjusted web portal				
MS11	Upload of project products, integration of multimedia tool and maintenance for project duration	WP3	11	36	
MS12	Successful organisation of twelve national events	WP4	9	32	
MS13	The formation of twelve national working groups on marine litter problems	WP4	9	32	
MS14	Dissemination of the outcomes from the events across the European Union	WP4	9	35	
MS15	Launch of the European Video Contest in the 14 European countries represented in the Consortium	WP5	2	16	
MS16	Selection of up to 3 national videos for each of the participating country	WP5	2	22	
MS17	Presentation of the final European video compilation during the European Maritime Day Celebrations	WP5	2	24	
MS18	Meeting to discuss Educational Pack concept	WP6	16	6	
MS19	Educational information as a basis for the Educational Pack	WP6	16	10	
MS20	Series of national exhibitions and educational activities successfully carried	WP6	16	20	
MS21	Four training events successfully carried	WP6	16	24	

# WT4: List of Milestones

Milestone number <sup>59</sup>	Milestone name	WP number <sup>53</sup>	Lead beneficiary number	Delivery date from Annex I <sup>60</sup>	Comments
MS22	Workshop to define production of the final report-Guidelines	WP6	16	30	
MS23	Kick-off meeting (M 1)	WP7	1	2	
MS24	1st Steering Group Meeting	WP7	1	6	
MS25	2nd Steering Group Meeting	WP7	1	12	
MS26	Progress meeting	WP7	1	18	
MS27	3rd Steering Group meeting	WP7	1	26	
MS28	Final meeting (M 36)	WP7	1	36	

# WT5: Tentative schedule of Project Reviews

Project Number <sup>1</sup> 289042

Project Acronym <sup>2</sup> MARLISCO

## Tentative schedule of Project Reviews

Review number <sup>65</sup>	Tentative timing	Planned venue of review	Comments, if any
RV 1	19	100000,00	After the conclusion of the first reporting period it is natural and also useful to program a project review
RV 2	30	200000,00	Six months before the closure of the project it is already natural and useful to put another project review

## 1. Project number

The project number has been assigned by the Commission as the unique identifier for your project. It cannot be changed. The project number **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

## 2. Project acronym

Use the project acronym as given in the submitted proposal. It cannot be changed unless agreed so during the negotiations. The same acronym **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

## 53. Work Package number

Work package number: WP1, WP2, WP3, ..., WPn

## 54. Type of activity

For all FP7 projects each work package must relate to one (and only one) of the following possible types of activity (only if applicable for the chosen funding scheme – must correspond to the GPF Form Ax.v):

- **RTD/INNO** = Research and technological development including scientific coordination - applicable for Collaborative Projects and Networks of Excellence
- **DEM** = Demonstration - applicable for collaborative projects and Research for the Benefit of Specific Groups
- **MGT** = Management of the consortium - applicable for all funding schemes
- **OTHER** = Other specific activities, applicable for all funding schemes
- **COORD** = Coordination activities – applicable only for CAs
- **SUPP** = Support activities – applicable only for SAs

## 55. Lead beneficiary number

Number of the beneficiary leading the work in this work package.

## 56. Person-months per work package

The total number of person-months allocated to each work package.

## 57. Start month

Relative start date for the work in the specific work packages, month 1 marking the start date of the project, and all other start dates being relative to this start date.

## 58. End month

Relative end date, month 1 marking the start date of the project, and all end dates being relative to this start date.

## 59. Milestone number

Milestone number: MS1, MS2, ..., MSn

## 60. Delivery date for Milestone

Month in which the milestone will be achieved. Month 1 marking the start date of the project, and all delivery dates being relative to this start date.

## 61. Deliverable number

Deliverable numbers in order of delivery dates: D1 – Dn

## 62. Nature

Please indicate the nature of the deliverable using one of the following codes

**R** = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

## 63. Dissemination level

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)



- **Restreint UE** = Classified with the classification level "Restreint UE" according to Commission Decision 2001/844 and amendments

- **Confidentiel UE** = Classified with the mention of the classification level "Confidentiel UE" according to Commission Decision 2001/844 and amendments

- **Secret UE** = Classified with the mention of the classification level "Secret UE" according to Commission Decision 2001/844 and amendments

**64. Delivery date for Deliverable**

Month in which the deliverables will be available. Month 1 marking the start date of the project, and all delivery dates being relative to this start date

**65. Review number**

Review number: RV1, RV2, ..., RVn

**66. Tentative timing of reviews**

Month after which the review will take place. Month 1 marking the start date of the project, and all delivery dates being relative to this start date.

**67. Person-months per Deliverable**

The total number of person-month allocated to each deliverable.

Proposal Full Title: **MAR**ine **LIT**ter in Europe **Seas**: **S**ocial Awareness and **CO**-Responsibility

Proposal Acronym: **MARLISCO**

Type of funding: Coordination and Support Action – Supporting Action (CSA-SA)

Work programme topic addressed: 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

Name of the coordination person: Mrs Doriana Calilli – Provincia di Teramo

List of participants:

<b>Participant no.</b>	<b>Participant organisation name</b>	<b>Country</b>
1 (Coordinator)	Provincia di Teramo	Italy
2	Coastal & Marine Union (EUCC)	Netherlands
3	Centre for Environment, Fisheries & Aquaculture Science	United Kingdom
4	University of Plymouth	United Kingdom
5	European Plastics Converters	Belgium
6	European Plastics Recyclers	Belgium
7	MerTerre	France
8	Regionalni Razvojni Center Koper	Slovenia
9	University College Cork, National University of Ireland	Ireland
10	Mare Nostrum	Romania
11	Die Küsten Union Deutschland e.V.	Germany
12	IsoTech Ltd	Cyprus
13	Union of Bulgarian Black Sea Local Authorities	Bulgaria
14	Plastics Europe AISBL	Belgium
15	New University of Lisbon	Portugal
16	Mediterranean Information Office for Environment, Culture and Sustainable Development	Greece
17	Turkish Marine Research Foundation	Turkey
18	Kommunernes Internationale Miljøorganisation	Denmark
19	Honky Tonk Film	France
20	Media Tools	France

## Table of content

<b>TABLE OF CONTENT</b> .....	<b>2</b>
<b>LIST OF ACRONYMS</b> .....	<b>3</b>
<b>1. SCIENTIFIC AND/OR TECHNICAL QUALITY, RELEVANT TO THE TOPICS ADDRESSED BY THE CALL</b> ....	<b>4</b>
1.1 CONCEPT AND OBJECTIVES.....	4
1.2 QUALITY AND EFFECTIVENESS OF THE SUPPORT MECHANISM, AND ASSOCIATED WORK PLAN .....	11
1.2.1 Overall strategy .....	11
1.2.2 (i) Project Components (PERT Diagram).....	12
1.2.2 (ii) GANTT Chart: timing of different WPs and their components.....	13
1.2.3e Summary of staff effort.....	14
1.2.3f Risks and Contingency Plans.....	15
<b>2 IMPLEMENTATION</b> .....	<b>18</b>
2.1 MANAGEMENT STRUCTURES AND PROCEDURES .....	18
2.1.2 Elements that ensure a well managed project.....	19
2.2 INDIVIDUAL PARTICIPANTS.....	23
Participant 1: Provincia di Teramo, ITALY.....	23
Participant 2: Coastal & Marine Union (EUCC), Netherlands .....	24
Participant 3: The Secretary of State for Environment, Food and Rural Affairs, United Kingdom.....	25
Participant 4: University of Plymouth, United Kingdom .....	26
Participant 5: European Plastics Converters, Belgium.....	27
Participant 6: European Plastics Recyclers, Belgium.....	28
Participant 7: MerTerre, France.....	29
Participant 8: Regionalni razvojni center Koper, Slovenia.....	30
Participant 9: UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, Ireland .....	31
Participant 10: Mare Nostrum, Romania.....	32
Participant 11: Die Küsten Union Deutschland e.V., Germany.....	33
Participant 12: ISOTECH LTD, Cyprus.....	34
Participant 13: UBBSLA, Bulgaria.....	35
Participant 14: PlasticsEurope AISBL, Belgium.....	36
Participant 15: Foundation of Faculty of Sciences and Technology of New University of Lisbon, Portugal.....	37
Participant 16: Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), Greece.....	38
Participant 17: Turkish Marine Research Foundation (Turk Deniz Arastirmalari Vakfi), Turkey .....	39
Participant 18: KIMO Danmark (Kommunernes Internationale Miljøorganisation), Denmark.....	40
Participant 19: MediaTools, France.....	<b>Errore. Il segnalibro non è definito.</b>
2.3 CONSORTIUM AS A WHOLE.....	43
2.4 RESOURCES TO BE COMMITTED.....	48
2.4.1 Budget of MARLISCO.....	48
2.4.2. Budget per participant and per cost category .....	48
<b>3 IMPACT</b> .....	<b>51</b>
3.1 EXPECTED IMPACTS LISTED IN THE WORK PROGRAMME .....	51
3.2 SPREADING EXCELLENCE, EXPLOITING RESULTS, DISSEMINATING KNOWLEDGE .....	57
Purpose of dissemination.....	57
Objective.....	57
Project stakeholders and dissemination targets.....	57
Dissemination strategy.....	57
<b>4 ETHICAL ISSUES</b> .....	<b>60</b>
<b>5 BIBLIOGRAPHY</b> .....	<b>61</b>

## List of Acronyms

AP	Action Plan
ESD	Education for Sustainable Development
EU	European Union
GES	Good Environmental Status
HELCOM	Helsinki Commission – Baltic Marine Environment Commission
IMO	International Maritime Organisation
MARPOL	International Convention for the Prevention of Pollution From Ships
MEDPOL	Marine Pollution Assessment and Control Component of the Mediterranean Action Plan
WFD	Water Framework Directive
ML	Marine Litter
MS	Member States
MSFD	Marine Strategy Framework Directive
NGO	Non-Governmental Organisation
NPs	National Partners (i.e. the partners representing a country and responsible for implementing the national activities under WP 4, 5 and 6)
OSPAR	Oslo and Paris Conventions for the protection of the marine environment of the North-East Atlantic
POP	Persistent Organic Pollutant
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
UNEP	United Nations Environment Programme

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

### 1.1 Concept and objectives

Marine environments are central to human well being, but they are also extensively threatened by our activities. On a global scale more than 70% of our planet's surface is covered by seawater, supporting a wide range of habitats and a great diversity of life. Humans rely heavily on the seas for their natural resources including food (fish and shellfish), transport and recreation, and more than half of the world's population now live close to the sea. Unfortunately the marine environment is also extensively used as a convenient dumping ground for domestic and industrial waste, both directly and via river and atmospheric inputs, leading to potential negative ecological and economic impacts. These conflicting pressures are increasing in parallel with economic and population growth, which is expected to lead to increased consumption and waste production, if society follows a business-as-usual approach. Hence there is an urgent need to better manage and regulate our use of the marine environment in a sustainable manner in order to safeguard the maritime economy for future generations. Such considerations are central to the development and implementation of the Europe 2020 Strategy to promote Smart, Sustainable and Inclusive growth<sup>1</sup>. Understanding human perceptions, choices and behaviours is central to addressing this complex issue. The MARLISCO project seeks to raise societal awareness of both the problems and the potential solutions relating to marine litter. This issue currently presents substantial and growing challenges to the marine environment. There are potential solutions and a major objective of this project is to understand and subsequently facilitate societal engagement with these in order to inspire changes in attitudes and behaviour amongst all stakeholders.

There has been growing awareness of the problem of marine litter in recent years by scientists, industry, policy makers and environmental NGOs. There has been considerable recent media attention and associated interest from the general public. Marine litter can have significant impacts on both coastal and maritime economic activities and on sensitive coastal and marine habitats and organisms. For example, 260 species worldwide have been reported to ingest or become entangled in marine debris. The scale of the problem is sufficient that for some species a major proportion of the population is affected. For instance in the North Sea, long-term coastline sampling of dead northern Fulmars has shown that over 95 % contain plastic debris in their gut (van Franeker et al. 2005; van Franeker et al. 2004). There have been several studies showing the scale of economic impacts on the coastal and maritime sectors. For example, marine litter has been estimated to cost the Scottish fishing fleet €11.7 - 13 million per year, representing 5% of the total revenue of the affected fisheries (Mouat et al. 2010). This is due to contamination of the catch and damage to vessels such as fouled propellers, which may require intervention by the coastguard. In 2008 there were 286 rescues to vessels with fouled propellers in UK waters alone, at a cost of up to €2.2 million. The annual cost of beach clean-ups in the Netherlands and the UK has been estimated to be €10.4 and 17 million respectively. When these costs are scaled up to include all European waters it becomes apparent that there is a very significant economic imperative to reduce the amount of litter entering the marine environment.

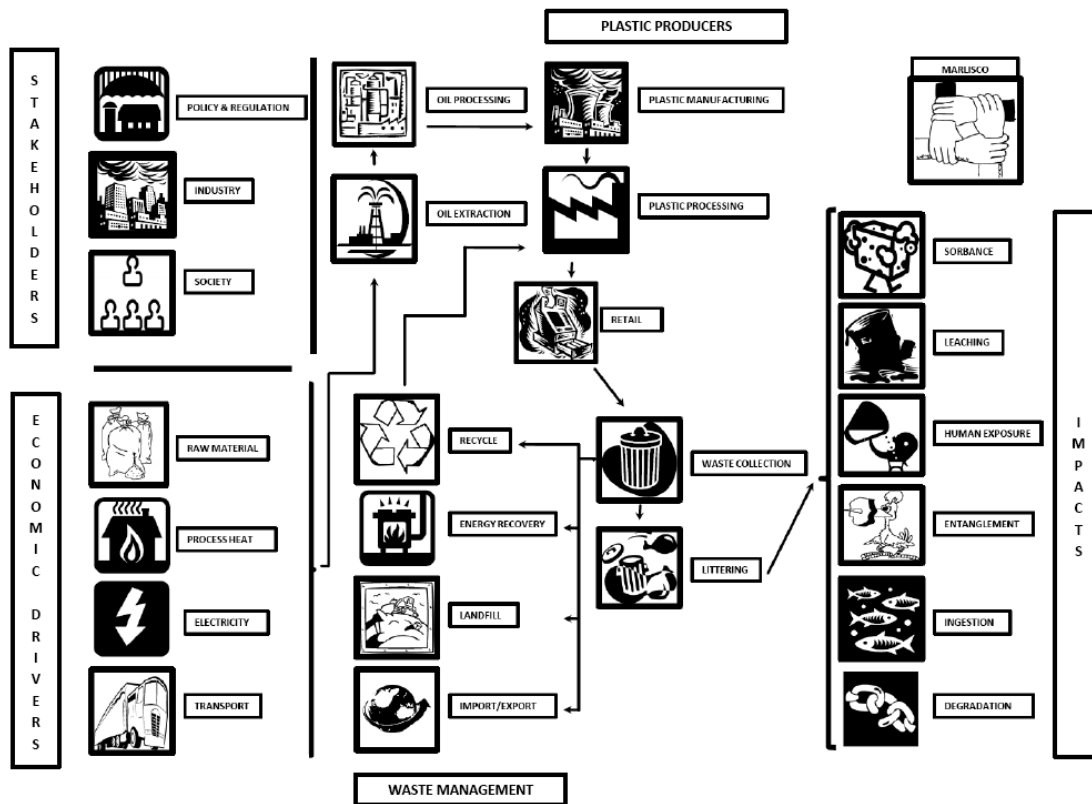
A recognition of the scale of the problem has resulted in a number of formal and informal initiatives at global, regional (e.g. OSPAR<sup>2</sup>, UNEP Regional Seas Programme), European (e.g. MSFD<sup>3</sup>), national and local scales. Evidence about the sources, types, distribution and fate of marine litter is far from complete, but data from beach surveys suggest that up to 70% of marine litter is plastic, with metal, wood, glass, fabric and building materials making up most of the remainder. Much of this material is derived from land, either directly or via rivers and other watercourses that connect to the sea. A significant proportion of litter also comes from maritime activities, such as fishing and merchant shipping. Although these activities take place at sea there is a connection with shore-based facilities and practises such that most examples of marine litter are related to some form of land-based activity. There are significant regional and local differences in the types and quantities of waste entering the marine

<sup>1</sup> [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)

<sup>2</sup> <http://qsr2010.ospar.org>

<sup>3</sup> EC 2008. The Marine Strategy Framework Directive (2008/56/EC)

environment. This usually reflects the relative importance of key factors such as urbanisation, tourism, shipping and fishing activities. For example, the number of items of consumer waste (drinks bottles, food wrappers, cigarette butts) is much higher near urban centres and along tourist beaches, such as in parts of the Mediterranean<sup>4</sup>. In contrast, along the Dutch coast there is a higher proportion of fishing- and shipping-related material reflecting the importance of these sectors in this region. Marine litter is widespread globally and European seas and coasts are no exception, with widespread reports of debris on shorelines and in the water column. Several common plastics, such as polyvinyl chloride, are denser than water so will tend to sink and even buoyant plastics such as polypropylene and polyethylene may sink as a result of bio-fouling. Hence substantial quantities of debris have also accumulated over the seafloor including areas of the deep sea within European jurisdiction (Barnes et al. 2009; Galgani et al. 1995; Galgani et al. 2000). Below the sea surface plastics are out of sight but they may still cause damage to organisms and impact human activities.



**Figure 1.1** Schematic showing the links between Drivers, Pressures, State changes and Impacts in the generation of marine litter.

Plastics enter the marine environment from a wide variety of sources. Direct inputs from land include: poorly managed sewage systems and storm drains; wind-blown debris from agricultural land, industry, land-fill and urban areas near the coast; tourism and recreational use of the coast including tourism (discarded food wrappers and drinks bottles) and recreational fishing (loss of mono-filament lines and hooks); coastal erosion (building materials); urban and industrial development along major rivers with poorly managed waste disposal. In some cases discreet sources can be identified, allowing the introduction of mitigation measures relatively easily. For example, greater investment in waste water treatment may allow larger items of debris to be removed before entering storm drains. However, such hard-engineering solutions can be very expensive, at a time when funding is scarce. A more cost-effective solution would be to reduce the quantities of litter entering the waste stream. This means changing attitudes and behaviours of those sectors and sections of the population who allow litter to enter drainage systems. Sanitary waste is often found on coastlines close to urban centres, having been flushed down toilets. This can have implications for public health and tourism, requiring municipalities to spend scarce resources

<sup>4</sup> International Coastal Clean-up; [www.oceanconservancy.org](http://www.oceanconservancy.org)

on beach clean-ups. This is where education of the public becomes critical. Hence communicating the problems associated with marine litter more widely within society, via educational activities, has a key role in resolving some aspects of the problem. An example of good practice here is the UK Marine Conservation Societies 'bag it and bin it' campaign<sup>5</sup>.

An important indirect source of marine litter comes from merchant shipping. Discarding of plastics and many other forms of material is controlled under MARPOL Annex V<sup>6</sup>. Dumping of plastics is banned altogether and ships have to maintain waste logs. But, the Convention is difficult to enforce and litter is often discarded over the side. This source of marine litter also has a land-based component because implementation depends on having effective shore-side facilities to receive waste. If these are inadequate, or if the port imposes a high fee for use, then there is less incentive for ships' officers to comply. In addition the ship's crew may not understand the consequences of their actions. Providing and using waste reception facilities may depend on improving communication with the local municipality or recycling industry, as well as improving education in the shipping sector from ship's cook to shipping magnate. This provides a good example of why a more joined-up approach could achieve considerable benefits. An example comes from the fishing sector. Providing shore-side reception facilities has allowed schemes such as Fishing for Litter to develop. This voluntary scheme encourages fishers to land litter they pick up in their nets. The scheme originated in Scotland and has since been taken up by that sector and its geographical range is extending.

One category of plastic waste found on beaches and in the ocean is plastic resin pellets, with a diameter of the order of a few millimetres, sometimes referred to as 'Mermaid's Tears'. These are used by the industry as a feed-stock in the production of everyday plastic items. They occur in the marine environment as a result of accidental loss at sea and poorly controlled handling on land. Industry has responded by introducing good practice guidelines to reduce loss of resin pellets to the environment, under the 'Operation Clean Sweep'<sup>7</sup> initiative. The quantity of pellets found in the marine environment is now declining. Hence, improved land-based industrial management can help reduce inputs of litter to the sea. Resin pellets are one type of small particles of plastic found in the ocean. These have become known as micro-plastics (Thompson et al. 2004), defined as any fragment less than 5 µm. Although not strictly microscopic this definition includes the size range most likely to be ingested by a wide range of organisms, from filter-feeding shellfish to zooplankton (Arthur et al. 2009). Most micro-plastics are fragments of larger items broken down by UV photo-oxidation and physical abrasion. They are carried by ocean currents and a proportion become concentrated in gyres, or convergence zones, in the Atlantic, Indian and Pacific Oceans. These phenomena have variously been described in the media as 'garbage patches' or 'islands of litter', with areas of 'twice the size of France'. In reality most of the material belongs in the micro-plastic category, consisting of polypropylene and polythene, with particle numbers in excess of 50 000 per km<sup>2</sup> (Law et al. 2010). The actual impact of these fragments on marine organisms is very poorly understood. There is the potential for particles to be ingested, physically blocking or otherwise damaging the digestive tract or other organs (Browne et al. 2008; Thompson et al. 2004). However, of more concern is the tendency for plastics to absorb persistent organic pollutants (POPs) that could subsequently be transferred to and accumulate in many marine organisms, particularly those at higher trophic levels (i.e. top predators), especially in fat and oil (e.g. marine mammals, oily fish). These chemicals are widespread in the ocean, at very low levels, as a result of human activity on land and at sea. Absorption into plastic particles can result in a million-fold increase in concentration and this offers a potential vector for increasing the concentration of POPs in biota (Mato et al. 2001; Ogata et al. 2009; Teuten et al. 2007; Teuten et al. 2009). There is also concern that chemicals incorporated into plastic products during manufacture to increase functionality might also be released to wildlife if the plastic is ingested (Oehlmann et al. 2009). The potential for chemical transfer has implications for the breeding success of populations of some marine species and for human health in communities dependent on a seafood diet (Teuten et al. 2009). A third category of micro-plastics that are released into the ocean are particles that are deliberately created to produce products used for a

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<sup>5</sup> [www.mcsuk.org/what\\_we\\_do/Clean+seas+and+beaches/Litter+campaigns/Bag+it,+Bin+it](http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Litter+campaigns/Bag+it,+Bin+it)

<sup>6</sup> International Convention for the Prevention of Pollution from Ships (MARPOL 73/78 – Annex V garbage

<sup>7</sup> <http://www.opcleansweep.org/>

variety of cleaning processes. These range from sand-size pellets used in industrial cleaning (e.g. ‘sand-blasting’ the outside of buildings) to micro- and nano-sized particles used in a range of toothpastes, hand cleaners and facial scrubs. The fate and impact of these nano-polymers in the marine environment is largely unknown.

Attitude and behaviour change across sectors is central to the issues surrounding marine litter. As the analysis above has shown, many different actors contribute to the problem. Industry employees need to act in compliance with production guidelines; managers make investment decisions; sea captains implement waste policies with their crew and individuals purchase products and throw away waste every day. Psychological research has identified the most powerful determinants of behaviour change: attitudes towards the issue and potential solutions; perceived control and feasibility of solutions; perceived responsibilities and social norms (e.g., Darnton, 2008; Maio et al., 2007). Raising problem awareness and suggesting solutions are optimal conditions for behaviour change, although barriers need to be considered. Problem awareness on its own is problematic because it can trigger denial and avoidance, especially when the problem is very complex and involves multiple actors. Similarly, messages that are too emotional (e.g., by triggering fear) can prevent engagement right from the start.

Managing human impacts on the marine environment presents challenges quite different to those on land. The seas are a ‘commons’ lacking the explicit natural boundaries that are a fundamental part of management on land; the problems associated with this lack of boundaries have been long recognised by fisheries scientists. In terms of spatial extent the vast majority of the marine environment is ‘hidden’ beneath the sea surface and so the damage that can be caused by the dumping of waste and the extraction of resources is not readily visible either. Hence while there is a substantial body of scientific evidence on extent to which marine habitats are challenged and threatened by the actions of mankind (e.g. Thompson et al. 2002) there is a substantive disconnect between the perceptions of individuals about their actions at a local scale and the potential for subsequent harm to the marine environment which infrequently occurs at a regional scale (Polunin 2008). Recent evidence suggests, however, that simple educational and information interventions can increase marine awareness regarding marine litter and fish sustainability (e.g., Wyles, Pahl et al., 2010)

The continuing problem of damage by litter to the marine environment has multiple and complex causes that will require imaginative and innovative solutions, utilising both the technical and social spheres. Introducing more legislation, financial punishments or rewards, is not, in itself, an adequate response. The current situation mainly results from our continuing inclination to treat the ocean as a convenient place to dispose of unwanted materials. A range of measures is needed to help reduce the quantity of litter entering the oceans, including actions by manufacturing industry (for example Operation Clean Sweep), by industrial end users (for example fishing for litter) and by the general public (to dispose of litter properly). On the whole these measures are currently applied at relatively local scales within the EU and there is a clear need to illustrate examples of good practice and to share them.

At present the problems associated with marine litter are exacerbated by a combination of : i) a lack of awareness of the extent of the problem amongst the various stakeholders, including the general public; ii) a lack of awareness of potential solutions for addressing the problem; iii) a lack of communication mechanisms between the different sectors, and in particular between scientists and wider society; iv) a lack of consistent and harmonised production, waste management and re-cycling processes; v) a lack of effective enforcement of legislation (e.g. MARPOL); and, vi) differing national policies and regional and local practises – these can restrict the introduction of innovative waste management solutions at appropriate scales, due to the imposition of administrative responsibilities and boundaries.

The development of ‘modern’ plastics such as polystyrene began in the first half of the 19<sup>th</sup> Century but plastics only started to be used on an industrial scale from midway through the 20<sup>th</sup> century (Thompson et al., 2009). Global production increased from 1.5 million tonnes in 1950 to 245 million tonnes by 2008, at a growth rate of 9 per cent,



with Europe producing 25 per cent<sup>8</sup>. Per capita use of plastics is expected to reach 140 kg per year in Europe by 2015, with approximately 40 per cent being used for packaging (Barnes et al., 2009). There are many advantages of using plastics over alternatives such as metal, glass and timber (Andrady & Neal, 2009). The increasing use of plastics in road vehicles and aircraft has brought about significant reductions in weight and hence reductions in the emissions of CO<sub>2</sub>. Single-use plastic shopping bags have a lower environmental impact than equivalent paper bags, based on product life-cycle analysis, in terms of energy and resource use (PWC/Ecobilan, 2004). The problem arises when the plastic bag is allowed to escape into the environment. There are very significant differences across Europe in the rates of plastic re-cycling and re-use. For example in 2008, more than 80 per cent of waste plastic was recovered (i.e. re-cycled or used for energy generation) in 7 EU countries, Norway and Switzerland, whereas the UK and several other EU countries recovered 25 per cent or less (EuPC, EPRO, EuPR & PlasticsEurope, 2009). Approximately 4.4 million tonnes of waste plastic was collected for recycling in the EU in 2006, with 12 per cent being exported to Asia. There are significant differences in production and use of plastics in different sectors. According to DG ENV<sup>9</sup>, packaging accounts for >63% of plastic waste, with the second ranked being building and construction at 6%. Plastic bottles have relatively high recycling rates, with 40 per cent of PET (polyethylene terephthalate) bottles being recycled. Sorting mixed wastes for recycling can be problematic but there are many examples of innovation that offer hope of significant improvement Hopewell et al., 2009). Clearly there is the potential for recognising where and how solutions have been developed and putting in place mechanisms for sharing this best practice across Europe.

This project is a Mobilisation and Mutual Learning Action Plan (MMLAP) with the aim of providing a series of mechanisms for bringing together representatives of key stakeholders with an interest in, or responsibility for, some aspect of reducing the quantities and unwanted items that reach the ocean. These will include: industrial sectors involved in the production and use of materials and goods (e.g. plastics production, packaging, retail, fisheries, shipping, tourism); users of coastal and marine waters (e.g. tourists, recreational fishers, surfing and diving groups); the waste management and recycling sectors; Regional Sea Commissions and EU representatives; local municipalities; citizens' groups, environmental NGOs, school children and the general public; and social and natural scientists of varying disciplines who can help to put together the evidence base relating to the extent of the problem, its impacts and potential solutions. The Action Plan (AP) will ensure that different countries and regions of Europe will be represented, reflecting regional differences in sources of waste and the need to arrive at solutions that can be implemented locally. Marine litter knows no frontiers hence there is a clear need for a regional and an EU level approach to tackle the problem. We also recognise that in some cases the sources of marine litter found in Europe's Seas may lie outside the jurisdiction of EU member states. The impact of non-EU countries bordering Europe's Seas will be accounted for, as far as possible, by close liaison with the Regional Seas Commissions.

MARLISCO recognises the need for a concerted approach to encourage co-responsibility through a joint dialogue between the many players. This will include organising national debates (WP4) in each country represented in the consortium, involving industry sectors, scientists and the public. Part of the Plan will focus on the younger generation (WPs 5 & 6) as this is an effective way of testing current attitudes of future consumers and decision makers and issuing a challenge to them to help identify innovative ways of dealing with the issues, at the same time challenging the older generation to initiate change now. MARLISCO will examine many aspects of how we use the Earth's resources of energy and materials, covering production and use of goods, packaging, waste management and societal attitudes and choices. Choices have consequences, some of which can be unintended with either negative or positive outcomes. Identifying the 'knots' in the process chain will help to encourage innovative solutions and suggest areas where further effort is required, from the various stakeholders with responsibilities in these areas.

MARLISCO will take account of a range of relevant International and European Conventions and Directives. It will be aligned with the development of indicators of good environmental status for marine litter under the MSFD,

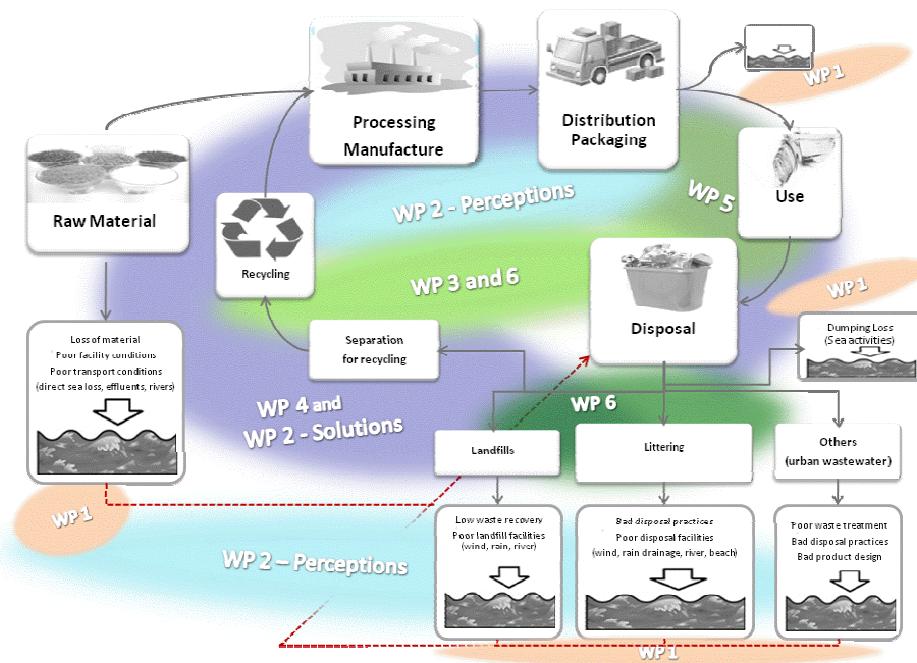
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<sup>8</sup> [www.plasticseurope.org](http://www.plasticseurope.org)

<sup>9</sup> Soledad Blanco, DG Environment, 8<sup>th</sup> October 2010, Amsterdam

and will take account of other relevant legislation such as MARPOL Annex V, and EC Directives on waste<sup>10</sup>, port reception facilities<sup>11</sup>, and packaging<sup>12</sup>.

The work package structure has been designed to address the main elements described above, and these have been mapped together schematically in Figure 1.2. Information about trends in ML in Europe’s Seas will be gathered (WP1), together with an evaluation of the relevant policy background. Examples of good practice will be identified (WP2) and this will help to identify and inform the stakeholders from a wide range of industrial, commercial and civil sectors in a structured dialogue (WP4). A web portal will provide information about the findings of the project (WP3). A challenge will be issued to the younger elements of society in the form of a video competition (WP5) to raise societal awareness and potentially suggest innovative solutions. A range of educational and other materials will be generated to inform and engage the various stakeholder groups, and disseminate the results of MARLISCO to the widest possible audience (WP6).



**Figure 1.2** Schematic showing the MARLISCO work packages mapped onto the main elements involved in the generation marine litter.

<sup>10</sup> COM (2005) 666 final. Thematic Strategy on the prevention and recycling of waste.

<sup>11</sup> EC, 2002. Directive on port reception facilities for ship-generated waste and cargo residues (2000/59/EC)

<sup>12</sup> EC 1994. Directive on packaging and packaging wastes (1994/62EC, and revisions)

## Objectives

**The main objectives of the MARLISCO project is to increase the awareness of the consequences of societal behaviour in relation to waste production and management on marine socio-ecological systems, to promote co-responsibility among the different actors, to define a more sustainable collective vision, and facilitate grounds for concerted actions through the successful implementation of the MMLAP.**

The main focus is to provide and evaluate mechanisms to enable society to perceive the impact of litter on the marine environment, to identify the land-based activities that are involved and collectively arrive at solutions to reduce that impact – in particular solutions that can be implemented locally but have a regional effect.

### **Specific objectives:**

1. To provide a **review of current understanding** of the sources, type, distribution and fate of marine litter in Europe's Sea. This will provide an evidence base to support appropriate actions and to provide a baseline against which change can be measured.
2. To provide an **evaluation of key stakeholder perceptions** of marine litter, assess current practices and potential solutions, and measure the effectiveness of the Action Plan at changing attitudes and perceptions.
3. To develop a **web based portal** to promote the Action Plan, provide a source of information on marine litter, stimulate discussion and disseminate the results of the Co-ordination Action.
4. To provide a **platform for structured dialogue** among the key stakeholders from industry, end users, science and society, in 12 European countries. This will help to identify and resolve barriers that currently retard the adoption of good practice.
5. To develop a **video contest** in schools in 14 countries around the European Seas in which children will be encouraged to develop short videos about the issue, embodying a multi-disciplinary process of getting in touch with the problem and addressing potential solutions as they see them.
6. To **identify good practice** and facilitate its adoption via a range of disseminating materials aimed at specific sectors and present them to evaluation during the stakeholder fora.
7. To **increase awareness** and **empower general** public and children through a series of national educational activities and innovative communication tools, while facilitating the integration of their views in the platforms of dialogue.

### 1.2.1 Overall strategy

MARLISCO will be organised in 7 individual work packages (Figure 1.3), designed to achieve the objectives outlined above and deliver the expected results. WP 1 and 2 will work as the “think-tank” of the project, on the one hand by setting a clear picture of ML in each of the regional seas, in terms of the main drivers and trends (WP 1) and on the other hand by evaluating the perceptions of different stakeholders in the various regions towards the problem and their vision towards solving it. This will be supported by examples of best practice selected from across Europe, described in detail so that they can be adopted elsewhere (WP 2). WP 1 will not only provide clear evidence regarding the scope and features of the problem but also contribute to define the key sectors that may have major responsibility for the issue. For example, evidence indicates that in the North Sea, a considerable part of ML comes from maritime activities (e.g. fishing and shipping). In this case, these sectors (and other associated, such as ports) would be key participants in the forum conducted in The Netherlands. WP 2 will select, describe and document measures that are considered successful in addressing those sectors’ impacts, examples that could be taken for discussion during the forum. WP 2’s stakeholder survey will identify different perspectives on the key issues that will be the focus of the fora. These debates will be broadcasted live on the web and allow for a controlled and structured level of participation of the audience online, that can follow the debate without being physically present and contribute with questions, views and suggestions. WP 2 will also provide before-after evaluations of some of these debates, using the online facilities. A comprehensive stakeholder survey of attitudes and perceptions will be conducted near the beginning and end of the project, both to steer the structured dialogue (WP4) and provide a means of evaluating the impact of the MMLAP. Evaluation of the various approaches will take place throughout the project with internal and external stakeholders. Internal stakeholders refer to the MARLISCO consortium and Advisory Panel. External stakeholders are the people targeted in the outreach and engagement activities, in particular the ones conducted under WP 4. The outcomes of these two work packages will be communicated using the web portal (WP3) and feed into the preparation and implementation of WPs 4, 5 and 6. WP 4 will hold a series of fora events that will take place at the national level to facilitate dialogue among the key sectors and stakeholders that have been identified and associated with ML in WP 1.

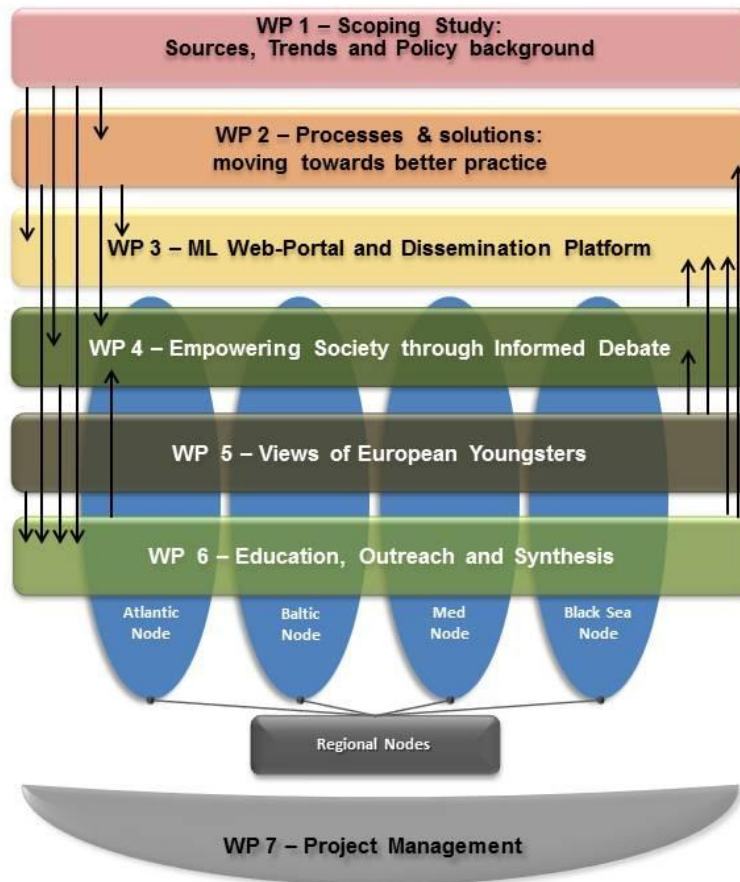
WP 6 will use the picture defined under WP 1 and translate it into a clear communication towards the general public, through the web-portal (WP 3). The portal does not intend to be an exhaustive source of all existing information on ML but will present the most relevant and up-to-date evidence-based knowledge, while linking to other sources of data and information, as a “clearing-house” system in a universe of scattered information. WP 6 also includes a series of other national activities (such as educative exhibitions), to the younger generation (through an interactive and appealing web-based educational tool) and professionals that deal with education (through a series of training-of-trainees workshops), specific sectors (in the form of brochures). All these supporting materials will be available in the different national languages. WP2 will help evaluate a selection of these materials to inform good science-in-society practice.

Most of the partners represented in the consortium will also be responsible for conducting a series of experiential educational activities with children, the products of which will then be used for outreach activities. WP 5 will design and launch the challenge for youngsters to present their views, vision or practical measures put in place in respect to ML in their region, in the form of short videos prepared and submitted to a European Video Contest. WP 2 will provide an evaluation of this activity by comparing a subset of school classes that took part with some that did not take part. The countries where the national activities described above will take place are indicated in the work programme and shown graphically in section B2.

Though most of the described actions are intended to address the issue in a very practical manner, the main results from this project will be made available as guidelines and the basis for efficiently and robustly continuing to tackle this complex issue, in each of Europe’s regional seas, highlighting their specificities and unique elements. The lessons learned from its implementation can be used as guiding elements and further collaboration to be built upon the achieved general understanding, the relations established and recognised common ground between sectors and stakeholders.

A scheme of its structure, as well as the linkage between them, is represented in Fig. 1.3 (Pert diagram).

**1.2.2 (i) Project Components (PERT Diagram)**



**Figure 1.3 - PERT diagram: structure of project and inter-relationship between Work Packages**

## 1.2.2 (ii) GANTT Chart: timing of different WPs and their components

Month	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
<b>WP 1</b>																																					
1.1 Review of current state of information and general interpretation of data on type and sources at Regional Seas and involved countries		M1.1												DL1																							
1.2 Provision summary of monitoring and assessment methods												DL2																									
1.3 Conduct review of policies that may be applied to mitigate ML												DL3																									
<b>WP 2</b>																																					
2.1 Creation of a data-base with up to 50 examples of best practices				M2.1										D2.1	D2.2																						
2.2 Evaluate the effectiveness of specific outreach and educational activities from work packages 4, 5 and 6																									M2.5				D2.5								
2.3 Detailed description of 10 examples of best-practices												M2.3				D2.3																		D2.4			
2.4 Systematic stakeholder survey on awareness, perceived responsibilities, solutions and their acceptability							M2.2			M2.4																			M2.6								
2.5 Determine factors, strengths and pitfalls in stakeholders' engagement and interaction regarding a multi-sectorial issue																														D2.6							
<b>WP 3</b>																																					
3.1 Design and maintenance of web portal; incorporation of educational pack		M3.1				M3.2																														M3.4	
3.2 Development and integration of an interactive web-documentary																																				D3.2	
<b>WP 4</b>																																					
4.1 Plan twelve national events at each of the designated locations													D4.1																								
4.2 Integrate all the video outputs from the national debates on the Marine Litter Portal																																					
4.3 Facilitation of establishment of national/regional working groups to engage in the debate and continue work beyond the project																																					
<b>WP 5</b>																																					
5.1 Definition and translation for communication of timeframe, rules, guidelines and criteria for selection of videos, service providers and receivers																																					
5.2 Dissemination and launch of video contest and support attribution process																M5.1																					
5.3 Setting-up of national Juries, selection of national videos and organisation of national ceremonies of awards																																					
5.4 Production of a video compilation of national awarded																																					
5.5 Dissemination of national videos and the European video compilation in national and European events and media																																					
<b>WP 6</b>																																					
6.1 Preparation of educational material for educational pack							M6.1																														
6.2 Conception and development of Educational Pack as a multimedia communication tool																																					
6.3 National awareness/educational activities																																					
6.4 Preparation of exhibition materials in english, adjustment and translation to national languages; conduction of exhibitions																																					
6.5 Communication to targeted sectors																																					
6.6 Training workshops on marine litter																																					
6.7 Project synthesis "Recommendations for science and society interactions: a case study from ML"																																					
<b>WP 7</b>																																					
7.1 Coordination and monitoring of the project of the project		M7.1					M7.2																														
7.2 Internal communication strategy			D7.1/D7.2																																		
7.3 Reporting to the EC																																					

### **1.2.3e Summary of staff effort**

Summary of staff effort

Participant short name	WP1	WP2	WP3	WP4	WP5	WP6	WP7	Total PM
Prov.Te	6.5	1.5	0	10.8	1	13.8	33	<b>66.6</b>
EUCC	2	1.5	0	15.5	13	11	1.5	<b>44.5</b>
Cefas	8.5	1.5	0	6.5	0	0.5	1.5	<b>18.5</b>
UoP	2	24.5	1	1.5	4	6.3	1.5	<b>40.8</b>
EuPC	1.5	1.5	0	4.5	0	0	1.5	<b>9</b>
EuPR	1.5	1.5	0	4.5	0	0	1.5	<b>9</b>
MerTerre	0.8	1.5	0	5	5	11	1.5	<b>24.8</b>
RRC Koper	0.8	1.5	0	8	5	12	1.5	<b>28.8</b>
NUIC-UCC	0.8	1.5	0	14	5	11.5	1.5	<b>34.3</b>
Mare Nostrum	1.5	1.5	0	8.5	5	13.5	1.5	<b>31.5</b>
Kuesten Union	1	1.5	17	7.7	6	8.5	1.5	<b>43.2</b>
ISOTECH	0.8	12.5	0	8	4	9	1.5	<b>39.3</b>
UBBSLA	0.8	1.5	0	8	5	12	1.5	<b>28.8</b>
Plastics Europe	1.5	1.5	0	3	4.5	1.5	1.5	<b>13.5</b>
FFCT UNL	1	2	0	10.75	2	17.75	1.5	<b>29</b>
MIO-ECSDE	1.5	1.5	4	0.5	0	18.8	1.5	<b>25.8</b>
TUDAV	0.8	1.5	0	8.75	5	11.25	1.5	<b>28.8</b>
KIMO Danmark	0.8	0.5	0	0.5	8	3.5	1.5	<b>14.8</b>
Honky Tonk	0	0	10,45	0	3.05	0	0.75	<b>19.27</b>
Media Tools	0	0	0	0	0	6.5	0.75	<b>7.25</b>

### 1.2.3f Risks and Contingency Plans

<b>Risk</b>	<b>Description</b>	<b>WP affected</b>	<b>Counter measure</b>
<b>Risk 1</b>	Withdrawal of a participant from the Consortium	WP 7	Ex ante a M&E plan will try to detect in advance possible failures. Ex post the General Assembly will approve the settlement and the conditions of the withdrawal, considering if a) the tasks developed by the withdrawing participant can be covered by the remaining participants or b) a new participant needs to be involved. In that case the project coordinator should request an amendment to the European Commission Grant Agreement and, if appropriate, a request will be made to the participant to return any unallocated funds.
<b>Risk 2</b>	Delays in timely provision and quality of deliverables	All	Annex I of the Grant Agreement defines the timely provision and quality of all Deliverables. All participants will be provided with standardised templates to ensure that information is submitted following quality criteria. The Lead Participant will establish internal quality control on all deliverables. Where unavoidable delays are encountered the Lead Participant together with the project coordinator will ascertain the reasons for any delay and determine (in consultation with the Project Officer) if these are acceptable. In the case of unacceptable delays or poor quality of deliverables, a mechanism of external review and control process measured by a peer-group review will be established. For unacceptable delays the responsible participant(s) will be requested to strictly adhere to an agreed revised timetable, for unacceptable quality the other participants to ensure that the amended version is to the requisite standard will provide support.
<b>Risk 3</b>	Lack of budget - restricting activities	All	The project has a finite budget with all actions being carefully planned and resourced. However as the project evolves, there may be instances where either unforeseen costs mean that the budget becomes restrictive or where additional resources could greatly enhance the output. If this occurs efforts will be made to reallocate any surplus resources from completed actions. In addition, synergies with parallel projects will be sought and, if practical, costs shared. If neither of the above is possible then as a last resort, actions will be scaled back in consultation with the Lead Partner and Desk Officer.
<b>Risk 4</b>	The scoping study is not comprehensive enough; relevant actors in the national content related topics	WP 1, 3, 4, 5 and 6	The project partners define the framework and structure together, consulting with experts in the field; skilled and experienced experts will input into the study; authors of the studies should have a good insight regarding the topics to be analysed in the respective countries. Clear and extensive communication strategy towards the relevant actors and their inclusion in the course of the study; wide base for selection of actors in the studies.



	system are not informed about the study.		
<b>Risk 5</b>	Production of information that is not sufficiently relevant to feed into the other activities of the project and/or cannot be used in powerful communication tools.	WP 1, 2 and 6	It will be addressed by the broad expertise within the consortium and the careful selection of other experts as sources of information, who will not only input and contribute to their production but, together with the Advisory Panel, will critically evaluate its relevance and utility throughout its development.
<b>Risk 5</b>	Redundancy of activities/efforts; Similar learning material is elaborated by other institutions.	WP 1, 2 and 6	There will be constant monitoring of accessible material produced concerning the project topics. Relevant material/activities will be identified and MARLISCO will be implemented in such a way that will avoid replication of efforts and redundancies. Instead, the project will try to learn and build from existing experiences and on-going activities, channelling efforts whenever possible and create synergies with other organisations, projects and programmes. Regional focus will be set and agreed on with other relevant institutions, through the Advisory Panel.
<b>Risk 6</b>	Poor media attention in project related activities	WP 4	Develop reference group of journalists that have already professionally linked with marine litter for media strategy
<b>Risk 7</b>	Ineffective engagement of key stakeholders	WP 4	The partner affected may request support from other partners related to their experience on how to approach and engage specific reluctant individuals/stakeholders. Within the network of the consortium it may be possible to identify an individual that may facilitate/mediate that contact. At the end, if this is still unsuccessful, it will be recorded as a weak point/obstacle to be taken into account in future approaches.
<b>Risk 8</b>	Poor public access to the project portal	WP 3	Public access will be monitored from the onset of the website launch. If access is poor or very limited, WP leader will evaluate the possible reasons and consortium will act accordingly (e.g. by intensify or adjust dissemination strategy of the portal)
<b>Risk 9</b>	Lack of sufficient number of	WP 2	The stakeholder survey relies on recruiting a sufficient number of responses both at baseline and at follow-up. A potential risk is that

	responses during surveys		some stakeholders are not willing to take part in the survey, or that some agree but then pull out later on. A standard solution to this is to 'over-recruit' i.e. invite more people than needed, to account for drop-outs and refusals.
<b>Risk 10</b>	Lack of sources of information and/or documentation of processes regarding best practices/measures available	WP 2	The collection of best practices assumes that relevant parties are willing to share their processes and have these documented for public access. Potentially some parties want to keep their approach confidential or might not want to disclose all the detail. In this case they will only be contained in the general database not the detailed analysis of ten best practice cases. The partners responsible will carefully negotiate all instances with any confidentiality issues and offer anonymity if necessary.
<b>Risk 11</b>	Lack of participants in the Video Contest	WP 5	There may be lower interest and participation of schools than foreseen. This may be related to several reasons. In the case it may be mainly related to poor dissemination of the contest, similar response as for Risk 8. The conception of the project has anticipated this potential risk and therefore has reserved budget to stimulate participation in the Video Contest, not only by rewarding the selected national videos but also to allow the provision of supporting services needed during the conception and development of the video production for a certain nr of groups in each represented country. The timing and method of allocation of these supporting services will be flexible enough to allow adjustments in case an adaptive plan is needed to stimulate further participation in a certain country

## 2 Implementation

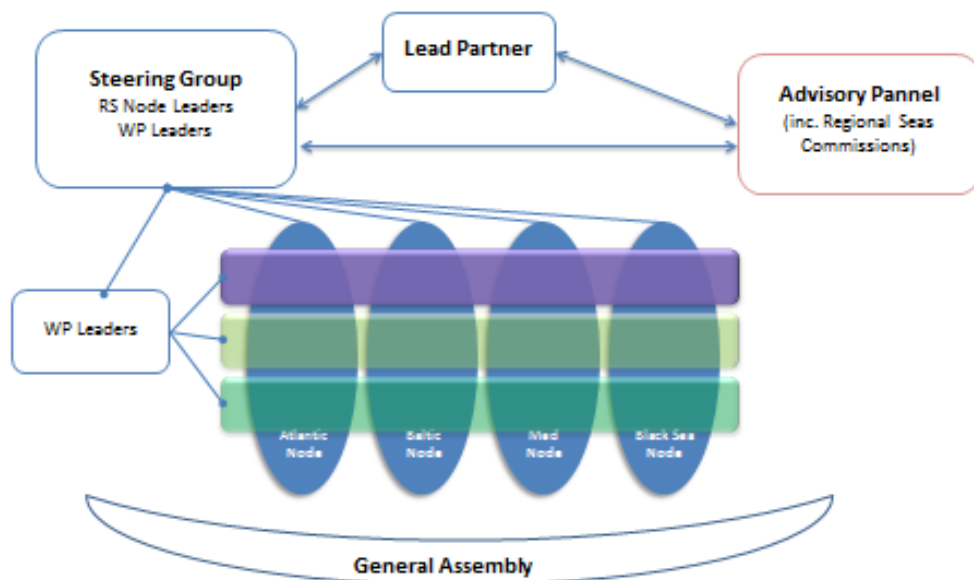
### 2.1 Management structures and procedures

The structure of the project has been deliberately designed to be robust in order to ensure the achievement of the general objectives of the project: the increase of the awareness of the impacts of societal behaviour for waste production and management on marine socio-ecological systems, the promotion of co-responsibility among the different actors, the definition of a more sustainable collective vision for the society, and facilitate grounds for concerted actions towards it.

This is a considerable challenge as it involves a wide range of actors, often with conflicting interests. This represents also a challenge that is inherent to the consortium itself, as the number of partners if high, includes representatives from diverse sectors and from a wide geographical range but all are fully committed towards achieving the goals of the project. Furthermore, the consortium acknowledges the need for recognising the specificities of the marine litter issues in the different European Regional Seas.

The Management and Decision-Making Structure of MARLISCO reflects all these considerations, and comprises elements that not only ensure a good management of the project but also that allow bringing in external expertise and strategies being developed at other levels (*e.g.* all Regional Seas Conventions are represented in the Advisory Panel) – see Figure 2.1 below.

A full Consortium Agreement will be prepared by the Lead Participant and agreed and signed by all participants before the entering into force of the Grant Agreement.



**Figure 2.1:** Management structure of MARLISCO

### **2.1.2 Elements that ensure a well managed project**

The following elements comprise the formal management structure of the project, i.e. the elements that ensure that the project respects the timetable, budget, deliverables and generally the activities specified in the Description of Work. Please note that participants intend that the project will be strongly managed, the lead participant therefore taking a proactive approach.

The project will be managed on the **Lead Participant principle**. Thus it is the Lead Participant, who provides the key staff for the project management, the Secretariat and support the Consortium Bodies. The Lead Participant (Coordinator) has casting vote in major Consortium Bodies. In order to reduce the probability of occurrence of risks related to project management (including settlement of disputes, severe conflicts, etc) a contingency plan (see 1.2.5) will be prepared. Those which cannot be solved amicably shall be finally settled under the rules of arbitration of the International Chamber of Commerce.

**The General Assembly** is the ultimate decision-making body. The General Assembly is composed of one representative of each participant (total 20) and is chaired by the Coordinator.

It has a formal accountability role for overseeing the project. It will receive 3 progress reports from the Steering Group. It agrees upon the proposals made by the Steering Group and it is in charge of adopting major decisions regarding financial, content, intellectual property rights (IPR) and the evolution of the Consortium, which will be detailed in the Consortium Agreement:

- Content: Proposals for changes of Annex I of the Grant Agreement and to the Consortium Plan.
- Evolution of the Consortium: entry of new Party to the Consortium, withdraw of a Party, declaration and termination of a Defaulting Party, proposal to the EC to change the coordinator and suspension of all or part of the Project.
- Financial: decision upon any change of budgets (and tasks) between work packages.
- IPR: decision upon background made available to participants and background excluded from access rights, etc.

The Assembly will meet at least once a year during the life of the project. Each participant will have one vote. Decisions will be taken by a majority of two-thirds of the votes with the Coordinator having casting vote. The General Assembly shall not deliberate and decide validly unless a quorum of two-thirds of its members is represented.

The **Steering Group** is the executive decision-making body and will comprise the individuals responsible for managing the various aspects of the project. It represents a second level of management, between the Lead Partner and the overall consortium. Specifically it will comprise:

- the Lead partner (who will chair the committee)
- the WP Leaders
- Regional Nodes Leaders

An innovative aspect of MARLISCO is the establishment of the **Regional Nodes**.

From a total of 20 partners, 15 of them will be ultimately responsible for conducting national-level activities, associated to WP 4-6, *i.e.* the national platform event, the national coordination of the video contest and a series of educational, awareness and outreach activities. Each Regional Node includes the partners from countries bordering one of the 4 European Regional Seas (NE Atlantic, Baltic, Mediterranean and Black Sea) and one of them has taken the role of coordinator for each Regional Node. While the WP Leaders are responsible for the general coordination of the different activities foreseen under that group of actions, the Node Leaders will be responsible for steering them from a regional perspective, integrating transnational aspects and making sure that regional partners are not working in isolation. Though the issue of ML will require implementation mainly at local and national levels, the issue itself does not respond to political frontiers.

The Node Leaders will also report back to the management team and will be in direct contact with the Regional Seas Conventions that integrate the Advisory Panel.

The Steering Group shall seek the consensus but when this is not possible, decisions will be taken by a majority of two-thirds of the votes.

The function of the Steering Committee is:

- To monitor the effective and efficient implementation of the project.

- To be responsible for the proper execution of the decisions of the General Assembly.
- To prepare the meetings, propose decisions and prepare the agenda of the General Assembly and
- To collect information and annually report progress to the General Assembly.

The Steering Group will meet six times during the life of the project. The Steering Group meetings will take place during the general meetings, where they will precede the General Assembly, and during three additional meetings. The Steering Group will also work on a remote basis (email, skype, etc).

The **Coordinator** is the intermediary between the participants and the European Commission and will be responsible for ensuring that the scientific and technical work of the project is delivered according to the specified standards and timing. The Coordinator of MARLISCO will be Dr. Mrs Doriana Calilli. She will

- Chair the General Assembly and the Steering Group.
- Provide executive support to the General Assembly.
- Nurture the working relationships with the Advisory Panel.

The **WP Leaders** are reporting to the Coordinator and the Steering Group for the proper delivery of the work specified in the Description of Work, both organisationally (i.e. within deadlines and budget) and technically (i.e. to the agreed scientific standards) during the entire project implementation.

The **Project Manager** is responsible for the organisational effectiveness of the project. (S)he will be a person with substantial experience of working on international projects, and will also be employed by the lead participant. (S)he will ensure that the necessary management systems are in place. These will include: financial management, project coordination and progress monitoring, internal communications, dissemination. (S)he will also ensure that all participants undertake the necessary project management tasks in terms of reporting to the EC, accountability, budget-management etc, and is thus responsible for the delivery of WP 7.

The **Advisory Panel** is composed of technical and research experts of high international standing and relevance appointed by the project. The Panel will comprise a panel of experts who have showed high interest in the implementation of MARLISCO and have agreed to be available to advise on different aspects of the project. It includes representatives of all the Regional Seas' Commissions, the Venice Platform and Group of 10. Working with and through the Panel will act as an evaluator of the project work, facilitate the engagement with other stakeholders but mainly maximising synergies with other programmes and strategies being carried out in respect or relevant to the issue of ML, in particular the process of implementation of the MSFD.

*Regional Seas' Commissions.* As stated in the MSFD, the Regional Seas' Commissions, in order to achieve the coherence needed on targets, monitoring and measures in such geographic scale, will coordinate the implementation of this European policy. As it will be highlighted in section 3.1, MARLISCO will run in parallel with the timeframe of determinant phases of the MSFD implementation, in particular the definition of targets and the establishment of the monitoring programme but possibly anticipating contributions to the programme of measures. Since the project will have such regional focus and be tailored to regional specificities it is important to liaise with these regional bodies (OSPAR, HELCOM and Black Sea Commission) to maximise synergies, *i.e.* incorporate the knowledge and dynamics of their regions in the project, facilitate the identification and engagement of relevant stakeholders in the area and the outputs of the project into political high levels of the member states, from which their implementation of relevant EU Directives can benefit from. Furthermore, as already mentioned in section 1.1, it is also a pathway to reach Non-European countries that share regional seas with Europe.

In the case of the Barcelona Convention Commission, the appropriate component of the Mediterranean Action Plan that deals with Marine Litter (MEDPOL) has been invited to take part in the Advisory Panel.

Additionally, OSPAR has been actively involved in addressing the issue of ML, in particular by defining guidelines of beach monitoring, which are a reference in Europe. It is imperative, therefore, to include their experience and expertise in the project.

*Venice Platform and Group of 10.* Both represent platforms of key maritime, marine and coastal stakeholder entities, from authorities, to business, NGOs and scientific organisations. These include relevant sectors for the issue of marine litter (*e.g.* fisheries associations, tourism agencies, marine industries, etc.) and the participation in the Advisory Panel is in line with the goals that served as basis to the establishment of these platforms, *i.e.* promoting a high level dialogue in respect to the maritime policy and foster cooperation and sharing of knowledge between the European communities of maritime, marine and coastal professionals and stakeholders.

MARLISCO's Advisory Panel will be invited to participate in each of the three Project meetings and/or the Steering Group meetings and encouraged to input into the planning and decisions process, to ensure synergies between the project and their represented entities and on-going programmes. On the other hand, it will serve as interface to disseminate project activities and outputs to their spheres and facilitate engagement of their members and networks.

All members of this Advisory Panel without receiving any salary.

Travel and accommodation expenses are provided in the budget by the Lead Partner, Province of Teramo, to participate in the 3 project meetings.

The following experts have already expressed clear interest in integrating the Panel:

George Kamizoulis (MEDPOL), Violeta Velikova (Black Sea Commission), Samuli Korpinen (HELCOM Habitat), Lex Oosterbaan (OSPAR), Adi Kellerman (ICES), Johan Vande Lanotte (Group of 10), Niall McDonough (European Science Foundation), Pierpaolo Campostrini (Venice Platform), Jan Kappel (European Anglers Association and European Fishing Tackle Trade Association).

### **Internal project co-ordination**

The internal project co-ordination will be assured not only by well-prepared and task-oriented coordination meetings of the participants, but especially by using contemporary management mechanisms complemented by conventional contacts to the individual participants on subjects of concern. Communication will strongly rely on e-mail and telephone conferences and periodical meetings of the work groups and the entire consortium. Several of the participants involved in this proposal collaborated on previous projects so that the mutual acquaintance and experiences gained during these collaborative efforts shall be of benefit to MARLISCO. The single most effective method of a sound project management is to maintain control over project activities at all points in the project process. The Lead Participant (Project Manager) will install an efficient and effective project control mechanism that will be used by all participants in order to track and measure progress against milestones and deliverables within the various work areas; and project-participants commit to using it.

**Communications internal** to the project will be undertaken in English. The principal medium will be email, but a project intranet function (hosted on the project website) will also be used for group communications, online project management system, a project calendar, and for storing core documents. Participants will be encouraged to use VoIP technology (eg Skype) although large organisations may be unable to use this. In addition, WP leaders will ensure the effective transmission of information about the project to end-users and other stakeholders. On this we do not want to use a "one-size-fits-all" approach of newsletters etc. Accordingly the Project Manager will prepare a communications procedure as part of the project management procedures (for agreement at Project Meeting 1), to ensure that appropriate diversity is achieved.

The **Project Meeting** is the organisational forum at which the project-participants and the end-users will be able to exchange views and discuss progress.

In order to ensure regular progress-monitoring and consistent decision-making, the following Project Meetings and General Assembly are scheduled:

Month 0

Month 18

Month 36

The last meeting will be conceived not only for project partners but organised to present project results to a wider community.

### **Monitoring**

At the beginning of the project, a detailed monitoring plan in line also with Grant contract requirements will be drawn up.

The M&E approach will be based on the following activities:

- Detect and analyse the level of achievement of project objectives, identifying deviations from the expected effects and the occurrence of any unexpected events (a mid-term assessment meeting of all participants, representatives of the Commission is proposed for Month 18. At this stage of the project the expected outputs and outcomes will be becoming visible, and it will be important to review the strategic direction of MARLISCO to ensure that it achieves best value for money through excellent management. Given the

involvement of many stakeholders, some results of implementing the activities will be clearly visible at this stage. Also potential obstacles and barriers may be much more clearly defined. Therefore, the mid-term assessment will be a supportive and – if necessary – a corrective tool).

- For each WP, investigate and analyse the level of implementation and the achievement WP objectives, identifying deviations from the WP objectives set in the planning stage and the occurrence of new issues not initially planned
- Investigate and analyse the level of satisfaction or "expected quality / perceived" by the client system: project partners, target groups, end users, etc, in relation to the objectives and deliverables of each WP.
- Promote an organizational learning process that will lead the partnership to enhance the strengths and to reduce the effects of possible weaknesses along the project implementation
- Support, if needed, a prompt rescheduling of WP activities, the improvement of the decision making system through a sharing and participatory approach in the analysis of qualitative and quantitative project data
- Support the constant identification of new project needs and the subsequent adaptations needed at different levels (project management, methodology, reformulate tasks, decision making process, etc.)

## 2.2 Individual participants

### **Participant 1: Provincia di Teramo, ITALY**

**Description of Organisation:** The province of Teramo, established by Royal Decree of 1921, is a Local Authority and one of the four Provinces of Abruzzo Region. Some of his competences are : environment and energy, marine waters, waste water, rivers, agriculture, hunting and fishing, viability, roads, employment policies, culture and social, schools, tourism. On these issues coordinate the activities of the 47 Municipalities that insist on its territory. The Province of Teramo is the majority shareholder of the Agency for Energy and the Environment (AG.EN.A) of the province. Absolves the role of presidency of the Arch Adriatic Ionic Association is a non-profit organization, established in 2005 by the 13 Italian coastal Provinces of the Middle- southern Adriatic and Ionian seas, belonging to the NUTS III level. Arco is aimed at realizing's actions in the European policy domain, knowing that the values of respect, objectives and basically promoted rights and protected by the European Union, can be better guaranteed through the action of shared its members. The administrative organization is structured into 12 Sectors, and the total personnel amounted to 360 units. The Province of Teramo has significant experience in coordinating and contributing to European-funded projects, covering many aspects of human impacts on the marine environment. The Province of Teramo staff work at a national, European and international level supporting the development of environmental policy. It has well established and secure financial, personnel and IT systems, and is committed to providing equal opportunities.

**Main tasks in the project:**

Assumes the role of Lead Partner of the project. Participate in the activities of WP1 and provide links to European and international initiatives regarding marine plastics, with particular attention to the Adriatic Sea; WP2 - Research and identify best practices; WP3 - for the preparation of the portal; WP4 - for the creation and dissemination of the debate; WP5-the translation and dissemination of national media and organizations working with schools; WP6- the Creation, and Dissemination Educational Act; WP7 - General Management Steering Group, project meetings, reporting etc.

**Relevant experience:**

The Province of Teramo is involved in a number of European activities related to sustainable development, which is the focus of its regional policy. including, in the last five years, the following projects:

1) INTERREG IV C – “S U S T A I N - A s s e s s i n g s u s t a i n a b i l i t y a n d s t r e n g t h e n i n g o p e r a t i o n a l p o l i c y” - is

a 3-year project aiming to develop a universal tool to help deliver sustainability on Europe’s coasts; 2) SOUTH EAST EUROPE “ Wide The See by Succ Mod” (Lead Partner) is a project aiming to develop the use of solar energy; 3) INTERREG III A “ MARINAS”; 4) INTERREG III A – “OASIS” (Lead Partner) - 5) INTERREG IIIC – “ GRISI” ; 6)INTERREG III B – “PARKS & ECONOMY” (Lead Partner) – 7) INTERREG III C "ECO-TURISM" ;8) LIFE- ETICA - EMAS for tourism internal and

**Profile of participating staff:**

**Leo Di Liberatore** – Executive of Community Policies B7 Sector, also Responsible for Finance, administration and IT -He has managed many of the projects described above.

**Doriana Calilli** – Attorney, Responsible for the Service Community Policies in the Province of Teramo. Has managed, as a coordinator, many community projects, including “INTERREG IVC “SUSTAIN”.



## **Participant 2: Coastal & Marine Union (EUCC), Netherlands**

### **Description of Organisation:**

The Coastal & Marine Union (EUCC) ([www.eucc.net](http://www.eucc.net)) is an association with members in 40 countries, both particulars and organizations/institutions. Founded in 1989 with the aim of promoting a European approach to coastal conservation by bridging the gap between scientists, environmentalists, site managers, planners and policy makers, it has grown since then into the largest network of coastal practitioners and experts in Europe, with 14 National Branches and offices in seven countries.

EUCC's mission is to promote coastal and marine management that integrates biodiversity conservation with those forms of development that sustain the integrity of landscapes, the cultural heritage and the social fabric of our coast. EUCC advocates best practice by developing coastal and marine policies, mobilising experts and stakeholders, providing advice and information, and implementing demonstration projects. EUCC's activities range from innovative policy advice (e.g. ICZM progress indicators) to involvement in initiatives aiming at the improvement of access to coastal information, and field projects combining coastal and marine biodiversity conservation and sustainable development.

### **Main tasks in the project:**

EUCC will lead WP 5, be responsible for conducting the national activities and associated tasks within WP 4,5 and 6 in The Netherlands and provide the technical expertise to webcast all the debates in WP 4.

### **Relevant experience:**

EUCC plays a major role in encouraging stakeholder engagement in a wide range of pan-European projects and encouraging a cross-disciplinary approach to investigating and resolving coastal issues. EUCC have delivered communication and stakeholder involvement tasks for the following EU framework projects: MOTIIVE (FP6), ENCORIA (FP6), COASTBASE (FP5), SPICOSA (FP6) and facilitation of best practice transference in respect to coastal management in CoPraNet, Sustain (Interreg) and OURCOAST (DG Env. Tender).

### **Profile of participating staff:**

**Joana Mira Veiga** holds a MSc in Marine Biology and Fisheries, with specialisation in Marine Pollution. Working for EUCC since 2008, under the Policy Unit, she has contributed to several EU-funded international projects and tenders related to coastal and marine environment management (e.g. IMCORE, KnowSeas, OURCOAST) and coordinated audit programmes on educational business worldwide. She's been appointed to integrated the MSFD-Technical Subgroup on Marine Litter set-up in 2010.

**Hanneke Mesters** holds a MSc degree in Ecology. The last 20 years she worked in the field of nature and environmental education and communication for, among others, EUCC and one of the Dutch National Parks (The dunes of North Holland). From 2004 until 2010 she was general manager of a visitors' centre. She has a broad experience in educational programmes and products (websites, activities, exhibitions), eco-recreation and tourism. Since 2011 she is head of Kust & Zee, the Dutch branch of the EUCC, and responsible for the K&Z information centre at the Pier.

**Maria Ferreira** holds a MSc degree in Physical Geography and Environmental Studies and since January 2008 has been responsible for EUCC Communication and Information activities. She has experience in managing ICZM related projects such as CoPraNet (Coastal Practice Network), CoastBase (virtual European coastal and marine data warehouse), EUROSION (European initiative on sustainable coastal erosion management), COASTWATCH, and Coastlearn (multimedia distance training package on ICZM).

**Albert Salman** (PhD) is the Director General of EUCC and an experienced senior executive with fifteen years international management experience. He is a senior expert with a broad orientation in coastal matters, specialising in Integrated Coastal Zone Management (ICZM, ICM), spatial planning, coastal erosion management and coastal ecology.

### **Participant 3: The Secretary of State for Environment, Food and Rural Affairs, United Kingdom**

#### **Description of Organisation:**

Cefas is an Executive Agency of the UK Department for Environment, Food and Rural Affairs (Defra), employing over 550 staff, engaged in research and monitoring on many aspects of the sustainable use of marine resources, providing services and advice to a wide UK and international customer base.

#### **Main tasks in the project:**

To lead WP1 and provide links to European and International initiatives regarding marine plastics (MSFD, UNEP, IOC, GESAMP)

#### **Relevant experience:**

Cefas has significant experience in coordinating and contributing to European-funded projects, covering many aspects of human impacts on the marine environment. Cefas staff work at a national, European and international level supporting the development of environmental policy. It has well established and secure financial, personnel and IT systems, and is committed to providing equal opportunities.

#### **Profile of participating staff:**

**Dr Peter John Kershaw** is a principal research scientists with more than 25 years experience leading multi-disciplinary marine research on ecosystem processes and the impact of human activities, and has published extensively. He has been a WP leader in a number of EU projects (e.g. REMOTRANS, COBO, ELME) and currently is in the Core Group of FP7 Knowseas (Knowledge-based management of Europe's Seas). He has worked with ICES, OECD-NEA, IAEA, UNEP and IMO, and currently is co-Chair of GESAMP (UN Joint Group of Experts on the Scientific Aspects of Marine Protection). He helped organise the GESAMP Workshop on marine micro-plastics in June 2010 at UNESCO-IOC Paris, and contributed to the 2<sup>nd</sup> NOAA International Workshop on marine micro-plastics in November 2010. He chaired a writing group to prepare a section on marine plastic debris as an emerging issue for the 2011 UNEP Year Book.

**Mr Thomas Maes** is the National & International Marine Monitoring Co-ordinator for England, acting on behalf of Defra. This has included the design and implementation of a marine litter monitoring programme, as well as the review and analysis of data on the distribution of litter on the seabed collected during annual fisheries monitoring cruises over the past 18 years. He is a member of the MSFD Task Team on Marine Litter, with the responsibility to assess and recommend methods for the collection and analysis of marine litter, and setting standards to describe Good Environmental Status.

#### **Participant 4: University of Plymouth, United Kingdom**

**Description of Organisation:** The University of Plymouth (UoP) is one of the UK's most prominent and dynamic universities. Consistently ranked as one of the top three modern universities in the UK, UoP attracts significant funds to support research by staff and PhD students and has recently invested more than £110 million in state-of-the-art facilities. UoP will contribute to the project from three perspectives: marine ecology, psychology and education. Marine ecology work will be based in the Marine Biology and Ecology Research Centre which comprises of 14 full time academic staff ([www.plymouth.ac.uk/research/mberc](http://www.plymouth.ac.uk/research/mberc)) active in all fields from rivers through, estuaries and salt marshes to the open coast and the deep sea. Psychology work will be based the university's internationally recognised Centre for Research in Brain, Cognition and Behaviour ([www.plymouth.ac.uk/research/cbcb](http://www.plymouth.ac.uk/research/cbcb)). Psychology research was rated as 5 in the RAE 2001 and 2008 RAE. Full-time staff include 9 Professors and 5 post-docs, and around 25 PhD students.

**Main tasks in the project:** UoP will lead social surveys in WP2. Dr. Pahl and Professor Thompson have collaborated previously on related topics and here they will investigate stakeholder perceptions on issues surrounding marine litter (problems and solutions) in WP 2 and will conduct evaluations of outreach and educational activities (WPs 3-6) such as exhibitions, the video contest and debates and contribute to scoping studies in WP 1.

**Relevant experience:** Participating staff have considerable experience with EU funded projects including THESEUS, EUROROCK, DELOS and MARBEF. Prof Thompson is an expert on marine debris, has published widely on the topic and advised on relevant policy at national and international levels; he contributed to the MSFD task on marine litter. Prof. Thompson and Dr Fisher are accredited STEMNET ambassadors (<http://www.stemnet.org.uk/>) who have received training to work as science ambassadors and have participated in the delivery of a wide range of science showcase events for public audiences (e.g. Weird Worlds, Blue Mile, Wild about Plymouth). Dr Pahl works extensively on understanding perceptions and behaviour change in relation to social dilemmas. Prof Thompson and Dr. Pahl currently have a joint ESRC/NERC studentship on the interplay of human and biological factors regarding use of the marine environment.

**Profile of participating staff:**

Richard Thompson is Professor of Marine Biology. He supervises a team of 2 post docs and 5 PhD students. He has more than 80 publications and research funding in excess of 2M Euro. The main focus of his research is on accumulation and impacts of ML with papers in major international journals (e.g. Thompson *et al.* Science 2004). He advises on national and international policy and contributed to MSFD Task 10, Marine Litter and in was lead editor of a volume for *Philosophical Transactions of the Royal Society* covering all aspects relating to Plastics, the environment and human health (Thompson *et al.* 2009. volume 838, 197pp.). He has considerable experience in directing large collaborative research projects and is currently on the Management Board of the FP7 THESEUS project. He has worked extensively on science outreach and dissemination activities including exhibitions, educational videos for schools and industry and platform debates with industry and the public (e.g. Plastics Europe 2010, [www.plasticseurope.org/event/polytalk10.aspx?page=EVENTS](http://www.plasticseurope.org/event/polytalk10.aspx?page=EVENTS)).

Dr Sabine Pahl is an early career Lecturer in Psychology with international-level publications and research funding of more than 600k Euro. With a team of 6 PhD students and 2 post-docs she is investigating three main issues: a) risk perception and determinants of sustainable behaviours (e.g., for marine litter, energy use); b) Risk and science communication methods (e.g., visualisation; future scenarios); and c) the effects of marine environments on health and well-being. Collaborations include the National Marine Aquarium, the Eden Project; outreach includes the Carbon Action Network and local governments.

Dr Jodie Fisher is the UoP Schools Liaison Officer for Science and Technology, she utilises her research background and educational training to run schools activities on current research. She has attracted considerable funding to support these activities and has published on them.

## **Participant 5: European Plastics Converters, Belgium**

### **Description of Organisation:**

EuPC is the EU-level Trade Association representing plastic converters within Europe. EuPC focuses its activities on market development and managing issues that affect plastics converters in Europe - including Health and Safety, Environment, Trade, and Communication – to ensure that the industry’s interests are being both defended and promoted.

### **Main tasks in the project: Contribution to WP 1, 2, 3 and 4**

EuPC will bring in the Plastic Converters Industry and Packaging perspectives into the overall project. Specifically it will contribute with production data and trends (WP 1), provide best practice and identify gaps in the sector (WP 2) and link MARLISCO to its members, in particular for WP 2, WP 4 and WP 6.

### **Relevant experience:**

EuPC has a vast experience in both EU and industry funded projects. These range from developing new methods and resources, training tools, and platforms for learning for the development of the plastics industry in Europe to environmental issues related to raw materials and wastes. As a matter of fact, this organisation has been following projects covering all the aspects targeting as an objective the move towards a recycling society. For instance, a key project being funded directly by the industry targets the issue of Marine Litter (plastics) in our oceans and methods for the collection and recycling of this waste. Several projects also include the improvement of the PET bottles design for recycling, the advancement in the use of plastic composites, the monitoring of the plastics recycling in Europe, the humanisation of auditing scheme for recyclers, as well as the dissemination and communication of best practices.

### **Profile of participating staff:**

**Padraig Nolan** joined EuPC in November 2010 as EU Projects Manager and is managing all FP7 funded projects. He is responsible for the dissemination and coordination of information under the BioStruct and WOODY project. He is also looking after several interest groups and providing legal assistance to members. Padraig will also be assisting with the coordination of 3DPIM, PolySolve and MicRep. Additionally, he will be working on industry funded projects.

## **Participant 6: European Plastics Recyclers, Belgium**

### **Description of Organisation:**

EuPR represents National Associations and Individual Member Companies covering 80% of the European market. We focus on the promotion of plastics recycling and the creation of conditions which enable profitable and sustainable business.

Furthermore we try to help business development by initiating recycling projects and promote the use of recycled plastics.

### **Main tasks in the project:**

EuPR will bring in the Recycling Industry perspective into the overall project. Specifically it will contribute with recycling data and trends (WP 1), provide best practice and identify gaps (WP 2) and link MARLISCO to its members, in particular for WP 2, WP 4 and WP 6.

### **Relevant experience:**

EuPR represents National Associations and Individual Member Companies covering 80% of the European market. It focuses on the promotion of plastics recycling and the creation of conditions which enable profitable and sustainable business.

Furthermore it tries to help business development by initiating recycling projects and promote the use of recycled plastics.

### **Profile of participating staff:**

Antonino Furfari began working for EuPC in 2007 as Project Manager for EuPR, and is also collaborating with Recovinyl. He is responsible for data collection concerning recycling, statistical data and trade policy and economic surveys. He is also Energy Project Manager, as well as Coordinator for the EU-funded projects such as 3DPIM, EuPlastVoltage and EuCertPlast.

## **Participant 7: MerTerre, France**

**Description of Organisation:** MerTerre was created in 2000. It has as main object to contribute to the reduction of the pollution of marine litter in the aquatic environments and on the coastal areas. It created the ODEMA (Observatory of Debris in Marine Environment) in 2006, in continuation of its work of applied research in the field of the evaluation of pollution by the marine litter like tool of knowledge, decision-making support and sensibilisation.

The activities of association develop around 4 axis:

- the research and the development on tools of knowledge of pollution by the marine litter and of decision-making aid for the managers;
- the council near the Local government agencies in construction and the implementation of plan of management concerted of the marine litter ;
- the animation, the coordination and the valorisation of the collaborative social network which carries out cleanings of portions of the littoral or banks of river;
- sensitizing and education with the reduction of pollution by the marine litter

**Main tasks in the project:** MerTerre, the French partner will be responsible for conducting the various work packages proposed for France (WP 4, 5 and 6) and bring in knowledge and data related to marine litter (WP 1) and best practice in this region (WP 2).

**Relevant experience:** MerTerre conducted many studies on the topic of the marine litter.

- a study on marine litter in 2008, with the Girus Research Department, within the framework of the bay contract of the roads of Toulon on behalf of the General Council of the Var;
- study on the marine litter for the town of Marseilles in 2009;
- study for an integrated management of the *Posidonia* on the beaches of Six-Fours (Var) with the Conservatory of the Littoral;
- participation in the development of the indicators for the Marine Strategy Framework within the work of the Task Group 10 on Marine Litter;
- convention over 3 years of 2011 to 2013, with the Community of Commune Marseilles Provence Metropolis to accompany them in the implementation of a control program concerted of the marine litter.
- study of the marine litter in front of and on the beaches of Antibes for Véolia and the town of Antibes for improving their management

MerTerre coordinates *Clean-up the Calanques* operation since 2008 which gathers in 2010, 1350 people resulting from 70 structures the 1st we of June to clean up the littoral.

MerTerre takes part in many local clean-ups of beach and encourages its partners to evaluate the waste collected using a method developed during the thesis of Isabelle Poitou.

MerTerre carries out many interventions of sensibilisation and awareness. For instance, it produced a musical show which constitutes an element of a complete program on the marine litter.

### **Profile of participating staff:**

**Isabelle POITOU**, Dr in Urban and Regional Planning, specialist on marine litter, author of a thesis on marine litter entitled “Marine debris : an empiric public management. Study of the littoral of the region Provence-Alpes-Côte d’Azur“ published in December 2004.

She creates MerTerre in 2000 during its thesis then develops association since the beginning of 2005, convinced that France needs a specialized company dedicated to the fight against this chronic pollution.

## **Participant 8: Regionalni razvojni center Koper, Slovenia**

### **Description of Organisation:**

The Regional Development Centre Koper (RDC Koper) was founded in 1993 as the local centre for small enterprise and trade promotion by the Municipality of Koper, Employment Service of Slovenia (Unit at Koper) and the Chambre of commerce and industry of Primorska. In 2001 RDC Koper gained the status of the Regional Development Agency South Primorska (RDA) for 8 municipalities.

RDC Koper coordinates preparation of programmes (Regional development programme 2007-2013), supports implementation of the programme, provides monitoring and reporting to Regional Development Council and implements selected projects defined in the Regional Development Programme, related to Business promotion, Human resources and employment development, Environmental protection and Spatial planning.

### **Main tasks in the project:**

To conduct all national activities in Slovenia (WP 4,5 and 6), input to WP 1 and 2.

### **Relevant experience:**

RDC Koper coordinated preparation of CAMP Slovenia, Coastal area management programme (2004-2007). In this framework 8 projects were implemented, 3 horizontal (Information, participation and training; Systemic and Prospective Sustainability Analysis; Regional Information System) and 5 individual projects (Regional Conception of Spatial development; Detailed Spatial Arrangement of Coastal Belt; Management of Nature Protected Areas; Regional Strategy of Sustainable Tourism Development; Regional Programme of Water Resources Protection; Sensivity Maps of the Coast).

RDC Koper implemented various projects, related to Environmental protection and Coastal issues:

- PlanCoast (Interreg IIIB CADSES): related to Sea-use planning, Integrated Coastal Zone Management and GIS;
- River shield (Interreg IIIB CADSES): related to the Protection of the Rivers from Accidental Industrial Pollution;
- ADRINET EMAS (PHARE): Networking of municipalities around North Adriatic for sustainable development, promotion of EMAS and Eco label;
- NADREMA (Interreg IIIA Slovenia-Italy): Methodology of re-use of dredging material;

### **Profile of participating staff:**

**Slavko Mezek**, landscape architect, has experience in landscape design, spatial planning, regional spatial planning, project management (preparation of detailed plans for state infrastructure, representative of the Republic of Slovenia in international programmes), complex project management (Coastal area management programme, Regional development programme).

## **Participant 9: UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, Ireland**

<p><b>Description of Organisation:</b></p> <p>The primary objective of the CMRC, <a href="http://cmrc.ucc.ie">http://cmrc.ucc.ie</a>, is to make a significant contribution to the scientific understanding of coastal and marine environments and their management. The CMRC is a multidisciplinary research in University College Cork and its research activities four thematic areas:</p> <ul style="list-style-type: none"><li>• Coastal Governance including for example - Capacity building, Public participation, Networking, User requirements, Indicators, Carrying capacity, Marine spatial planning</li><li>• Marine Ecology (Population Monitoring &amp; modelling, Risk assessment, Protocols for best practice, Biotelemetry)</li><li>• Marine Geomatics (Interpretation tools, Geophysical analysis, Data Acquisition, Policy links, Web-enabled GIS, Portal &amp; Information Platforms)</li><li>• Coastal Processes and Seabed Mapping (living and non-living resource evaluation, acoustic mapping, mariner aggregates, costal evolution, management of coastal erosion, wave climate hind-casting and prediction, physical/human response to climate change)</li></ul>
<p><b>Main tasks in the project:</b></p> <ul style="list-style-type: none"><li>- Coordinate and implement Actions under relevant Workpackages (primarily WP4-6) for Ireland</li><li>- Subject to discussion / agreement to Lead Workpackage 4, Platform for Dialogue of Stakeholders</li><li>- Contribute as required to the other Workpackage actions</li></ul>
<p><b>Relevant experience:</b></p> <p>The CMRC has been involved in Coastal Management initiatives since 1994 and is currently engaged in over 25 National and European marine focussed projects including seven EU Framework projects and four INTERREG projects. The Centre is the Lead Partner on the large-scale INTERREG NWE project, IMCORE, Node Leader on the FP6 project, SPICOSA and is a Workpackage leader in several FP7 projects, including COEXIST, NETMARE and MESMA. Within the CMRC the Groups that are of direct relevance to this particular project proposal are Governance and Geomatics:</p> <ul style="list-style-type: none"><li>• The Governance Group have collaborated on numerous national and international projects aimed at improving understanding of the inter-relationships between government, market and civil society at a range of scales. The Group has extensive experience of organising workshops and post-graduate field-courses across Europe to look at environmental issues including marine litter.</li><li>• The Geomatics Group have an excellent track record in the use of data management for effective marine resource management. Sound data handling is required to develop an integrated management solution; from the development of tools for data integration for scientific analysis, to decision support systems for policy makers, to communication technology for engaging with stakeholders. The Group has developed several information portals including the Marine Irish Digital Atlas (MIDA) and has recently been awarded the contract to develop a Climate Information Platform for Environmental Protection Agency (EPA) in Ireland.</li></ul>
<p><b>Profile of participating staff:</b></p> <p><b>Jeremy Gault</b>, Director, CMRC: Responsible for the successful delivery of numerous national and European projects. He is concerned with both the quality and relevance of the data collected and the ability of the scientific community to effectively communicate results.</p> <p><b>Anne Marie O'Hagan</b>, Senior Researcher, HMRC: Anne Marie is an expert in marine legislation and has worked on a number of European and nationally funded projects including COREPOINT, IMCORE PROTECT and HERMES.</p> <p><b>Cathal O'Mahony</b> – Research Scientist, Coastal Governance. Cathal research has primarily focused on capacity building and developing mechanisms for implementation of integrated approaches to coastal management and planning.</p> <p><b>Declan Dunne</b> – Team Leader and Academic Researcher, Data integration and GIS data delivery and visualisation. Responsible for development of geospatial data and metadata web services for FP6 InterRisk project using OpenGIS standards, and lead architect and developer of a pan-European coastal observational data management system for the FP6 ECOOP project.</p> <p><b>Vicki O'Donnell</b> – Geomatics Specialist. Vicki has 13 years experience of working in applied science research, holding a Degree in Natural Sciences from TCD, a Masters (MPhil) in Environmental Research from DIT and a Higher Diploma in Applied Geographical Information Systems (GIS) and Remote Sensing from the NUI, Maynooth.</p>



## **Participant 10: Mare Nostrum, Romania**

### **Description of Organisation:**

Mare Nostrum was formed in the summer 1993 as an association of specialists to address the continuous degradation of Black Sea marine and coastal ecosystems. Mare Nostrum has 70 registered members, more than 75 supporters, a staff of 10 (full time and part time) and an active group of volunteers which currently exceeds 100 people. In order to achieve this mission, Mare Nostrum is focusing on environmental education, public awareness campaigns, coastal environment surveys, advocacy, and lobbying.

### **Main tasks in the project:**

Mare Nostrum will be responsible for conducting WP 4, 5 and 6 in Romania and also input into WP 1 and 2. It will also take the lead of the Black Sea Node.

### **Relevant experience:**

Mare Nostrum has developed over the years several projects, public campaigns and events related to marine litter, waste management and the protection of the coastal environment. In all these projects, there were involved public institutions, authorities, educational institutions and so on, developing various types of activities, with a significant impact on the target group. Thus, Mare Nostrum has a sufficient experience in order to be able to implement successfully its tasks in this project.

### **Profile of participating staff:**

Most of the staff is trained in organizational management, environmental policies and project management. The people that will be involved in the project have experience in developing and coordinating projects/public campaigns/events on various themes related to environmental issues.

**Mihaela Candea**, Executive Director – Responsible for the monitoring and management of numerous projects (national or international).

**Andreea Ionascu**, Project Coordinator – Has an experience of over 3 years in coordinating different activities, events and projects related to Education for Sustainable Development, Waste Management and she is also the Volunteer Coordinator, being responsible for recruiting, monitoring and evaluating them.

**Marian Paiu**, Field Activities Coordinator – He is responsible for all the field and outdoor activities, monitoring and collecting data for different projects.

**Marcela Roman**, PR Responsible – Marcela is the person in charge of maintaining the relation with the media, with partners, sponsors and other stakeholders, of promoting the organisation and providing support for all the activities related to public relations and communication.

**Raluca Fabian**, Project Assistant – Responsible for scientific activities, such as documentation on different environmental domains, collecting data and processing it for many projects.

**Georgiana Burlaciuc**, Financial Responsible – Georgiana is in charge with centralizing financial data and also financial monitoring and reporting.

**Alexandra Telea**, Administrative Responsible – She is responsible for monitoring the implementation of everything related to the administrative domain, such as work procedures, inventories and other organisational procedures.

## **Participant 11: Die Küsten Union Deutschland e.V., Germany**

### **Description of Organisation:**

'Die Küsten Union Deutschland' was established as a non governmental association (NGO) in 2002. The main objective is to strengthen German activities within the field of Integrated Coastal Zone Management (ICZM) by bridging the gap between coastal science and practice.

'Die Küsten Union Deutschland' has experiences in the development of coastal information systems, creates tools (e.g. databases, learning modules) for international networks and disseminates coastal and marine information. The NGO provides relevant information, consults and educates coastal practitioners, hosts workshops and conferences and runs demonstration projects. The main office is located in Rostock-Warnemünde at the German Baltic Sea coast.

### **Main tasks in the project:**

'Die Küsten Union Deutschland' will function as national representative in Germany, and will implement relevant actions within WP 4, 5 and 6 in this geographical context. In addition to this, it will lead WP 3 and will design and implement a web portal as public interface and dissemination centre of the project. For WP 4 it will organise a national forum, bringing together relevant stakeholders for components of ML in Germany (e.g. beaches, small harbours, marine underwater ecosystems). In WP 5 and 6 it will draw upon previous educative activities (for pupils, students, voluntary environmental trainees) and several projects, contributing to the European video contest (WP 5) and the compilation of an educational package (WP 6). An enhanced co-operation with the German Maritime Museum/ Ozeaneum in Stralsund is planned, bringing in further media contacts, educational staff and additional experience with schools. The museum features exhibitions that already refer to the topic of marine litter and could be expanded with a regional focus, taking in results of educational contests such as video, photo or arts. In WP 6 'Die Küsten Union Deutschland' will use its informative instruments and networks to raise awareness for the problem of ML in the Baltic, a topic that presently has little awareness and coverage in public discussions in Germany.

### **Relevant experience:**

'Die Küsten Union Deutschland' has in the past conducted various projects dealing with stakeholder involvement, and information and dissemination of relevant actors, such as RADOST, BaltCICA, Küstenschule, 'Im Fokus' and 'Meer im Fokus'. Outputs include online training modules, an information platform for coastal and marine issues for pupils and students, informative magazines and brochures, photo competitions and video contests. The NGO hosts various open web databases on coastal topics, such as projects, documents, photos and events.

### **Profile of participating staff: (May vary according to allocation of tasks)**

**Gerald Schernewski** is a Senior Scientist and head of the group 'Coastal Research & Management' at the Leibniz-Institute for Baltic Sea Research in Warnemünde. He has a strong expertise in coastal zone and marine management, the implementation of EU-Directives, water quality assessment and applied coastal research. He has led and managed a number of national and international projects. He is president of 'Die Küsten Union Deutschland' and has been member or external expert of several committees including UNEP-ICARM, EEA, LOICZ, EC DG Research.

**Nardine Stybel** is a marine biologist, freelance science journalist and general manager of 'Die Küsten Union Deutschland'. She conducted research in IKZM-Oder and SPICOSA (FP6), focusing on eutrophication, fisheries, aquaculture and shoreline pollution, and has experience in liaising between science and practice using different media and communication channels.

**Inga Haller** is a biologist and ecologist with an expertise in tourism management. She has experience in organising workshops and capacity building events, and participated in several projects linking natural and socio-economic sciences including projects on beach management and climate change impacts in coastal areas (RADOST, BaltCICA).

**Anke Vorlauf** is a geographer with a strong expertise in environmental education and informal learning. She has participated and led national educational projects in the topical area of integrated coastal zone management (ICZM) such as "Küstenschule" and "Meer im Fokus".

**Wolf Wichmann** is a geologist and freelancing science journalist with a strong expertise in marine and geosciences. Being a certified research diver he contributed to various projects documenting impacts on marine ecosystems using diving robots, photographic and video equipment.

## **Participant 12: ISOTECH LTD, Cyprus**

**Description of Organisation:** Since 1991, ISOTECH Ltd Environmental Consultants has evolved into one of the leading environmental companies in Cyprus. The firm has a dynamic involvement in environmental consulting and applied environmental research. As a consulting firm, ISOTECH has extensive experience in local, regional and international projects in the field of environment. The scientific team of ISOTECH covers a broad spectrum of environmental expertise, aiming at an integrated approach to environmental problems.

ISOTECH LTD is a research oriented SME, focused on applied research on waste management. The company has been actively involved in several projects in the fields of waste management, environment, coastal zone/ coastal engineering (eg EUROSION), environmental vocational training and civil society. The projects have been funded by EU (eg 5<sup>th</sup> Framework programme, 6<sup>th</sup> Framework Programme, Leonardo Da Vinci, LIFE, (MEDA TEN-T), projects funded by UNDP, by UNOPS, by USAID, national funded projects by the Research Promotion Foundation of Cyprus and several other projects funded by the Public Administration of Cyprus and by private sector.

### **Main tasks in the project:**

ISOTECH will be responsible for conducting the national activities under WP 4, 5 and 6 in Cyprus and input into WP 1 and 2. Due to its expertise in waste management issues, it will lead WP 2.

**Relevant experience:** ISOTECH Ltd has been involved in several relevant projects ([www.isotech.com.cy](http://www.isotech.com.cy)). Here is a short list:

- Critical Assessment of Biodegradable Waste Management Options for Cyprus with Special Reference to the Rotary Bio-drying For Solid Fuel Production for the Cement Industry (2006-2008, funding: Research Promotion Foundation)
- **LITUSGO!:** TRAINING MEDITERRANEAN LOCAL AUTHORITIES AND CIVIL ORGANIZATIONS ON INTEGRATED COASTAL ZONE MANAGEMENT AND REACTION TO THE IMPACTS OF CLIMATE CHANGES. A LEONARDO DA VINCI Multilateral project for the Development of innovation, (1/12/2009 – 30/5/2012)
- **SUSTAIN:** Assessing sustainability and strengthening operational policy. Project under INTERREG IVC, 2009, project no: 0497R2, 1 Nov. 2009 – 30 December 2012
- **WAVES:** Wave energy converter mechanism by transmitting reciprocating, variable amplitude and direction wave motion into uni-rotational motion. Project funded by the Research Promotion Foundation of Cyprus, 1/10/2009, end:30/9/2011)
- **EUROSION:** European Project for Coastal Erosion Management) funded by DG Environment, Cyprus case study

### **Profile of participating staff:**

**Michael I. Loizides**, Director (BSc, MSc, DIC). He graduated from the Department of Chemical Engineering of the National Technical University of Athens in 1991, MSc-DIC in Environmental Engineering at Imperial College of Science, Technology and Medicine, London (MSc, 1992) and (PhD, 2009) in the School of Chemical Engineering, National Technical University of Athens. Since 1998 M. Loizides is the Director of the company ISOTECH Ltd Environmental Research and Consultancy. He has been involved in more than 100 national, EU and international funded projects, total budget more than 5 mEuro, in the fields of environmental and waste management, Community Annoyance a.o.

**Xenia I. Loizidou** is the co-director of the company. She has graduated the Civil Engineering Department of National Technical University of Athens in 1989 (Hydraulics Section, Harbour and Coastal Works Laboratory) and Imperial College of Science, Technology and Medicine of London in 1990 (MSc, DIC in River, Estuary and Coastal Engineering). Since 1990 she has been working in Integrated Coastal Zone Management (ICZM) and Natural System Management Projects, and has been involved in more than 30 EU funded projects: (MEDSPA, LIFE, EUROSION, Leonardo Da Vinci, 5th and 6th EU Framework for Research, MEDA, DG Environment projects a.o.), international funded projects (by UNDP, UNEP, USAID, WWF International a.o.), transnational/regional projects (DAC, INCO etc) and several national and private funded projects relevant to Coastal Zone, erosion control, coastal processes and climate changes.

## **Participant 13: UBBSLA, Bulgaria**

### **Description of Organisation:**

The Union of Bulgarian Black Sea Local Authorities /UBBSLA/ is an independent non - profit organization, which is established in 1992 for pursuing activities in the country and abroad in compliance with the relevant local legislation. The UBBSLA serves as umbrella organization of 21 member municipalities covering the Bulgarian Black Sea region for encouraging of effective local self government in terms of capacity building, know-how transfer, sustainable regional development, environment protection and energy issues as well as social inclusion and active citizen participation in the local government process.

The main priorities of UBBSLA are targeted to:

- Development of cross-border activities oriented to creation of civil society and sharing successful practices for social development which stimulate the active citizen participation in the social, economic, political and cultural dialogue
- Enhancing joint initiatives between the local authorities and non-governmental organizations for resolution of local problems; improvement of the managerial capacity of the local authorities and establishment of effective practices of designation of municipal services to NGOs
- Stimulation of innovations in professional education and support to the national policy of life long learning
- Improvement of the social-economic characteristics in the member municipalities through elaboration of joint projects for resolution of the local communities' most crucial issues
- Contributing to the sustainable development, environment protection and biodiversity in the Black Sea region, energy efficiency and RES utilization
- Enhancing the social and economic development through establishment of cooperation at the local level

### **Main tasks in the project:**

Contribution to implementation of the project activities in Bulgaria, under WP 4, 5 and 6 and bring in national input to WP 1 and 2.

### **Relevant experience:**

Until now the UBBSLA has implemented a number of projects funded within national and international projects some of which directly correspond to the project objectives:

- STREAM Sustainable Tourism and REcreation as an opportunity to promote Alternative Mobility.
- IdeQua - Establishment of an Identity – and Quality Axis from the Baltic Sea to the Aegean Sea – Strengthening Regional Identity and Structures of Centres. Black Sea Coast Support Action: Promotion of Community Participation in integrated coastal zone management

### **Profile of participating staff:**

The UBBSLA has a high professional administrative and expert staff which supports and duly contributes to the practical fulfilment of the Association activities and assistance to the local administrations. To this end, the necessary staff to fulfill the project implementation purposes is divided to the positions of:

- senior expert – to implement specific activities which need professional expertise
- junior expert – to implement specific activities of professional and technical expertise
- technical assistant – to support the technical and expert work

## **Participant 14: PlasticsEurope AISBL, Belgium**

### **Description of Organisation:**

PlasticsEurope exists to carry out pan-European work on behalf of the plastics resin manufacturing industry. The aims of the Association are to manage issues related to the production, use and disposal of plastics products, balance the image of plastics and to generate and provide relevant information in order to clarify the benefits of using plastics in society as well as dealing with the issues.

The Association is focused on communicating its messages that are based on clear, objective, science-based research.

PlasticsEurope is a non-profit pan-European organization made up of separate legal entities, in Belgium, Germany, Italy and Spain with its headquarters in Belgium and operational Regional Centres in Frankfurt, London, Madrid, Milan, Paris and Warsaw.

The Association is funded by membership subscriptions.

### **Main tasks in the project:**

PlasticsEurope is qualified to provide the consortium with information and data in order to cooperate to build the knowledge tank and the framework of the activities for this project.

Furthermore, PlasticsEurope is trying to build up a plastics association platform in order to take a holistic approach to prevent marine litter and share experiences and best practices. The outcome of these efforts can be shared with this consortium.

Also, we can participate in the discussions that might bring solutions to solve or minimize the impacts of marine litter.

### **Relevant experience:**

PlasticsEurope, in cooperation with national plastics associations has already started to work on the problem. PlasticsEurope has funded 39% of the research study "Occurrence of microplastics in mussels and lugworms collected along the Belgian, French and Dutch coastal zone".

PlasticsEurope has organized a debate about marine litter with relevant players in Polytalk 2010 (a plastics industry event), has participated in several workshops in 2010 (GESAMP June in Paris; 8<sup>th</sup> November in Brussels, ALDE workshop in June...)

PlasticsEurope has also a broad experience in communication on environmental issues towards young people, disseminating best practices in the management of plastics wastes.

### **Profile of participating staff:**

The staff working in the consortium will be the Project Manager for Marine Litter. Roberto Gomez has a degree in Physics and 13 years experience as Environmental Manager in a Petrochemical site in Spain.

Occasional participation of additional staff from PlasticsEurope might be required according to the activities involved (people from other regions, Communication experts, etc).

## **Participant 15: Foundation of Faculty of Sciences and Technology of New University of Lisbon, Portugal**

**Description of Organisation:** The Foundation of Faculty of Sciences and Technology of New University of Lisbon (FFCT UNL) is a private non-profit organisation created by the initiative of the Faculty of Sciences and Technology and its major aims are focused on the support of scientific research, technological development, training and consulting.

The Faculty of Sciences and Technology – FFCT UNL is one of most prestigious public school of engineering and science in Portugal.

In the accomplishment of the above objectives, the Foundation is responsible for the management of two research centres, about one hundred projects financed by “Fundação para a Ciência e a Tecnologia”, and several projects financed by the European Commission, and provides consulting to both Portuguese private and public enterprises.

**Main tasks in the project:** To conduct the national activities in Portugal (WP 4 – 6) and contribute to WP 1, 2 and 3.

**Relevant experience:** The FCT UNL promotes scientific research, training and consulting and collaborates extensively with international research and higher education institutions. The Department of Sciences and Environmental Engineering develops interdisciplinary research, focusing on interface of ecology, environmental management and social systems. The staff is involved in outreach activities directed to disseminate knowledge and raise awareness on environmental issues.

### **Profile of participating staff:**

**Paula Sobral** - PhD in Environmental Sciences - Pollution and Environmental Stress, has worked extensively in Marine Ecology and Ecotoxicology, participated in national and international research projects and published several research papers. She is a member of GESAMP and recently participated in international meetings on the issue of marine litter. She is the PI of a national research project on microplastics and contaminants in the ocean, and is monitoring marine plastic litter on the Portuguese coast and its impacts.

**Lia T. Vasconcelos** PhD in Environmental Engineering – Social Systems Her main research interests include new forms of decision-making and governance in the field of planning and environmental management. She has been the PI in national research projects focusing in communicating science outreaching different publics. Presently coordinating a project aiming the development of a model of governance (<http://margov.isegi.unl.pt>)

**Graça Martinho** - PhD in Environmental Engineering – Social Systems. Her main research interests include waste management, recycling technologies, prevention and recycling attitudes and behaviors. Member of the Monitoring Commission of Waste Management at the Portuguese Environment Agency (APA) and Member of Advisory Board at the Water and Waste Services Regulation Authority (ERSAR).

**José Carlos Ferreira** - MSc in Geography and Environment. His research interests are in Integrated Coastal Zone Management Processes, risk assessment in coastal areas, geographical information technologies. Member of the Coastal education and Research Foundation, he participates in the project SUSTAIN (Assessing sustainability and strengthening operational policies) and DELTANET-Network of European Delta Regions - Sustainable Delta Governance, funded by the INTERREG IVC program.

All staff is part of the Faculty of the *Department of Environmental Sciences and Engineering, Faculty of Science and Technology, New University of Lisbon*

**Participant 16: Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), Greece**

**Description of Organisation:** The Mediterranean Information Office for Environment, Culture and Sustainable Development, is a non-profit Federation of 112 Mediterranean Non-Governmental Organisations (NGOs) for Environment and Development. MIO-ECSDE ([www.mio-ecsde.org](http://www.mio-ecsde.org)) acts as a technical and political platform for the presentation of views and intervention of NGOs in the Mediterranean scene. In co-operation with governments, international organisations and other socio-economic partners, MIO-ECSDE plays an active role for the protection of the environment and the promotion of the sustainable development of the Mediterranean region and its countries. Its main objectives are to protect the Natural Environment and the Cultural Heritage of the Mediterranean region. The ultimate goal of MIO-ECSDE is to promote Sustainable Development in a peaceful Mediterranean. Moreover, MIO-ECSDE facilitates the MEDIES network ([www.medies.net](http://www.medies.net)), an electronic network of formal and non formal educators of “Education for Sustainable Development”. MIO-ECSDE has been certified the ISO 9001 (2008) ‘quality management system’ certification for: (a) design, development and production of educational material, implementation of educational programmes on environment and sustainable development and contribution to environmental policy formulation and application; (b) design, development, management and implementation of European co-funded and international projects.

**Main tasks in the project:**

1. Leader for the Med Node (Staff member 1)
2. Leader for WP6 Educational material and other activities (Staff member 2 & 3)
3. Contributor for the communication to public of the web portal, WP3 (staff members 1, 2, 3)

**Relevant experience:**

1. Experience at policy/advocacy/awareness raising level: MIO-ECSDE since 1993 has been active in the Euro- Mediterranean scene on marine protection issues including marine litter (raising awareness and disseminating information, e.g. through the “Keep the Mediterranean Litter-free Campaign”, relevant publications in 10 languages, the Mediterranean Action Day, beach clean-ups, etc.). In 2008, MIO-ECSDE in cooperation with UNEP/MAP (WHO/MED POL), HELMEPA and Clean up Greece prepared the “Assessment of the status of marine litter in the Mediterranean”. In addition, MIO-ECSDE participates in the MSFD working groups (GES descriptors, marine litter).

2. Experience in education: MIO-ECSDE since 2002 facilitates an educational initiative called MEDIES ([www.medies.net](http://www.medies.net)), a pioneer initiative on **Education for Sustainable Development (ESD)** that aims to support the Mediterranean educational community (formal and non-formal) by means of:

- a) Educational material produced in many languages,
- b) Experiential trainings for educators of Mediterranean countries (more than 40 since 2002, including several international Conferences)
- c) The facilitation of a webpage that acts as a platform for ESD educators (~ 3300 members).

So far, priority themes of the educational activities of MIO-ECSDE and MEDIES have been Water, Waste, Food, Consumption, Protected Areas, etc.

MEDIES has been selected in a pan-European inventory of innovative practices on ESD by the EC-DG Education and Culture. The purpose of the inventory is to illustrate how the concept of sustainable development has been used and implemented in education practices. MEDIES was selected among 40 good ESD practice examples across all Member States.

**Profile of participating staff:**

**Thomais Vlachogianni**, holds a PhD in Environmental Chemistry & Ecotoxicology and since 2008 has been working at MIO-ECSDE as a programme officer, handling many thematic and horizontal tasks in the Secretariat mainly on policy areas (and project basis), one of which is marine protection, including marine litter.

**MSc Iro Alampei**, ESD project officer of MIO-ECSDE & MEDIES: Author of several publications on ESD (i.e. Wastes in our life in English and French language, ESD in Protected Areas, in Greek language); has organised several ESD trainings at national and international level, has acted as a facilitator to several experiential trainings, facilitates the MEDIES Secretariat.

**MSc Vicky Malotidi**, ESD project officer of MIO-ECSDE & MEDIES: Author of several publications on ESD (i.e. The Mediterranean Food (in English, French, Arabic, Greek and Portuguese; the Gift of Rain in Greek); has organised several ESD trainings at national and international level, has acted as a facilitator to several experiential trainings, facilitates the MEDIES Secretariat

**Participant 17: Turkish Marine Research Foundation (Turk Deniz Arastirmalari Vakfi), Turkey**

**Description of Organisation:** Turkish Marine Research Foundation (TUDAV) was founded in 1996 by marine scientists, environmentalists, sailors, captains, and sea-loving people. It has 3 main objectives: research, education and conservation. TUDAV has organized more than 20 meetings concerning sea and marine environment, published more than 40 books.

**Main tasks in the project:**

To conduct all national activities in Turkey (WP 4, 5 and 6) and input to WP 1 and 2.

**Relevant experience:** TUDAV has conducted research on marine litter collected by trawl nets in the Aegean Sea and found on the Black Sea coast (see the reference papers attached). TUDAV also successfully carried out a LIFE Third Country Project on the Preservation of Oludeniz Lagoon, in 2002-2005.

**Profile of participating staff:**

**Dr. Bayram Ozturk** (Director): Graduated from Ege University. Became Professor in 1999 at the Faculty of Fisheries, Istanbul University. He is one of the founders of TUDAV. He has been working extensively on marine biodiversity, ecology, and pollution, published more than 100 papers in distinctive journals. He has worked as a consultant for RAC/SPA (UNEP), GFCM (FAO) and a national advisor for IMO/MEPC.

**Dr. Ayaka Amaha Ozturk** (Senior Researcher): Graduated from Tokyo University of Fisheries in 1995 (Ph.D.). She has been working at Fisheries Faculty, Istanbul University. At TUDAV, she has been working as an advisor on marine biodiversity but has carried out various projects on environment and education.

**Ms. Eda Topcu** (Researcher): Graduated from Université de Bretagne Occidentale, Brest, France (BSc and MSc), Marseille Oceanology Center (Centre d'Océanologie de Marseille), Mediterranean University, Marseille, France (MSc) and currently a research assistant at Fisheries Faculty, Istanbul University. She has carried out some studies on marine litter in the Turkish coastal waters.



## **Participant 18: KIMO Danmark (Kommunernes Internationale Miljøorganisation), Denmark**

**Description of Organisation:** KIMO - Kommunenes Internasjonale Miljøorganisasjon (Local Authorities International Environmental Organisation) was founded in Esbjerg, Denmark, in August 1990 to protect, preserve and enhance northern Europe's marine environment. The organisation represents coastal communities on marine pollution issues and has over 150 member municipalities in 15 countries around the North Sea and the Baltic Sea. There are national networks in most countries. In 2007, KIMO expanded to include all the countries around the Baltic Sea and established the KIMO International Baltic Forum. KIMO Denmark has 10 member municipalities.

### **Main tasks in the project:**

- Main focus as the contact point in Denmark for WP5 and as disseminator of the video project in Denmark.
- Contribution to WP 1 and 2 with regards to KIMO International's perspective on marine litter.
- Translation of the Educational Pack – WP6 into Danish and dissemination of information on Marine Litter through this material in Denmark.

### **Relevant experience:**

KIMO is dedicated to finding methods to reduce the volume of litter and hazardous substances discharged into our seas by:

- Working with the EU, OSPAR, HELCOM and National Governments to raise marine litter up the political agenda
- Implementing Fishing for Litter one of the few practical measures that actually removes litter from the marine environment
- Taking part in developing the Marine Awareness Course into an internationally recognised, respected and regularly organised course for the international maritime sector in and around the North Sea
- Undertaking research on the economic and social impact of marine litter highlighting the impact on coastal communities
- Undertaking assessment of marine litter such as that of North East Atlantic for the United Nations Environment Programme
- Undertaking research into highly toxic micro-plastics that may transport hazardous chemicals into the food chain
- Pressing for the implementation of a Convention on Liability and Compensation for Non-Toxic Pollution and a reduction in the number of containers lost overboard

KIMO proactively lobbies government ministers to acknowledge and take action on the issues threatening our marine environment. KIMO promotes its experience and highly-regarded research to persuade ministers to tailor marine legislation to care for our oceans and protect coastal communities.

### **Profile of participating staff:**

**Poul Sig Vadsholt** is the present head of the department of the Environment for the municipality of Varde (since 2007). He was leader of the Environmental Centre West I/S from 2000 – 2006 and has been involved as coordinator of KIMO Denmark and head of the Danish secretariat since 2002. He, with KIMO participated in the project "Save the North Sea" from 2002-2004. Poul has a civil engineering degree as Environmental specialist from the university of Ålborg (1990) and has a degree in leadership (1998).

**Ryan D'arcy Metcalfe** works as an environmentalist for the city of Varde (since 2007). His main area of work has been environmental assessment and control. He worked in the Environmental Centre West I/S from 2004-2006. He has been involved with KIMO Denmark since 2009 and is helping Mr. Vadsholt in the coordination of the Danish secretariat. Ryan has a Bachelors degree in Environmental Studies and Biology from the University of Waterloo in Canada (1995) and has an Environmentalist degree from the Technical School of Esbjerg Denmark (2001).

**John Mouat** has led the KIMO International secretariat since August 2007. He graduated from Edinburgh with a BSc Hons in Environmental Chemistry and an MSc in Environmental Protection and Management before joining KIMO International (Local Authorities International Environmental Organisation) in 2003. Since then he has worked as a project co-ordinator on a range of maritime environmental issues.

## **Participant 19 : Honkytonk Films, France**

### **Description of Organisation:**

Since 2007, Honkytonk Films develop, produce and distribute interactive documentary films that give a unique, yet universal perspective on today's most important trends and events. From entertainment to politics Honkytonk brings non-fiction stories to an international audience in partnership with leading broadcasters and news portals, using both creativity and technology to create compelling programs. More recently, we have been developing *Klynt*, an interactive editing tool dedicated to filmmakers, photographers and journalists willing to harness the power of the Internet, create and share their stories in the most open and creative way.

### **Main tasks in the project:**

- Production and direction of the web-documentary that will show the activities and different operations taking place throughout the project Marlisco (WP 3)
- Technical expertise for the contest conception and production of the final video compilation, with the selected awarded videos from the Video Contest (WP 5)

### **Relevant experience:**

At the forefront of new media storytelling, the company and its original approach to documentary filmmaking has been featured in some of the most cutting-edge documentary festivals and new media events (including IDFA (Amsterdam, The Netherlands), Prix Europa (Berlin, Germany), Sheffield Doc/Fest (Sheffield, UK) and South by Southwest (Austin, USA).

Latest productions include:

- *Journey To The End of Coal* (Samuel Bollendorff & Abel Ségrétin)  
Best Interactive Program (National Author Guild (SCAM– Paris, France)
- *The Big Issue* (Samuel Bollendorff & Olivia Colo)  
Special Commendation – Emerging Media Award (2010 Prix Europa – Berlin, Germany)  
Special Commendation – Innovation Award (2010 Sheffield Doc/Fest – Sheffield, UK)

### **Profile of participating staff:**

**Isabelle Sylvestre** is a sociologist of new media and new technologies (Edgar Morin Centre / Escom laboratory - Archives Audiovisual Research - AAR / EHESS / FMSH) and a documentary filmmaker. She wrote and directed over 20 documentary films for television broadcasts or alternatives medias She works in conjunction with international university laboratories on the conceptualization of novel web-based tools in creative research / action. Directly inspired by the theory of "complex thought" these movies are a collaborative web meeting place for art, science and logos.

**Arnaud Dressen** Prior to co-founding honkytonk, Arnaud has had numerous experiences in the media industry working subsequently for public media institutions (*France Televisions Group, Arte France, and ITVS/USA*), the documentary distribution start-up *Vodeo.tv* and more recently, a new-media press agency *Article Z*. He has worked with award-winning producer Patrice Barrat on several international co-productions (with broadcasters such as *NYT Television, CBC Canada, or ITVS*) and managed the company's leading multimedia project *madmundo.tv* with the support from both public and private institutions (*Open Society Institute UK, HEC school of management and Orange*).

## **Participant 20: MediaTools, France**

### **Description of Organisation:**

MediaTools is a digital text, graphic and multimedia agency, developing websites and other multimedia productions, specialized in “edutainment” and scientific communication. MediaTools designs and produces digital communication strategies and tools and is specialised in the creation of innovative multimedia “smart games” for the Web.

### **Main tasks in the project:**

Development of a multimedia educational tool (serious game) associated to WP 6

### **Relevant experience:**

Webdocumentaries : MediaTools recently produced a documentary for the CNES - Centre National des Etudes Spatiales (French Government Space Agency) to explain the media launch of the Ariane rocket from A to Z. <http://www.cnes-jeunes.fr/web/CNES-Jeunes-fr/7947-jeux.php>

Interactive Webgame : MediaTools produced a Webgame for increasing children’s awareness regarding security and the future tramway in Toulouse.  
and produced a “serious game” for the trade union CFDT in order to sensitize young workers to their rights : <http://www.majobaventure.fr/>

MediaTools and the Buzzaka agency co-designed the website club for Casterman’s well-known Children’s character Martine. The site offers numerous games and applications for multimedia books, developed by MediaTools as well as the character of Martine in 3D.

Games : MediaTools designed games and entertainment for *In Flight Entertainment* for Air France’s A380s.

Interactive biography of Foré, wellknown poster designer. <http://www.fore-affichiste.com>

### **Profile of participating staff:**

**Dimitri Galitzine** is the MediaTools founder and editorial director, journalist training, former head of media group Publishing & Media Milan Press, creator of the first all-digital magazines for children.

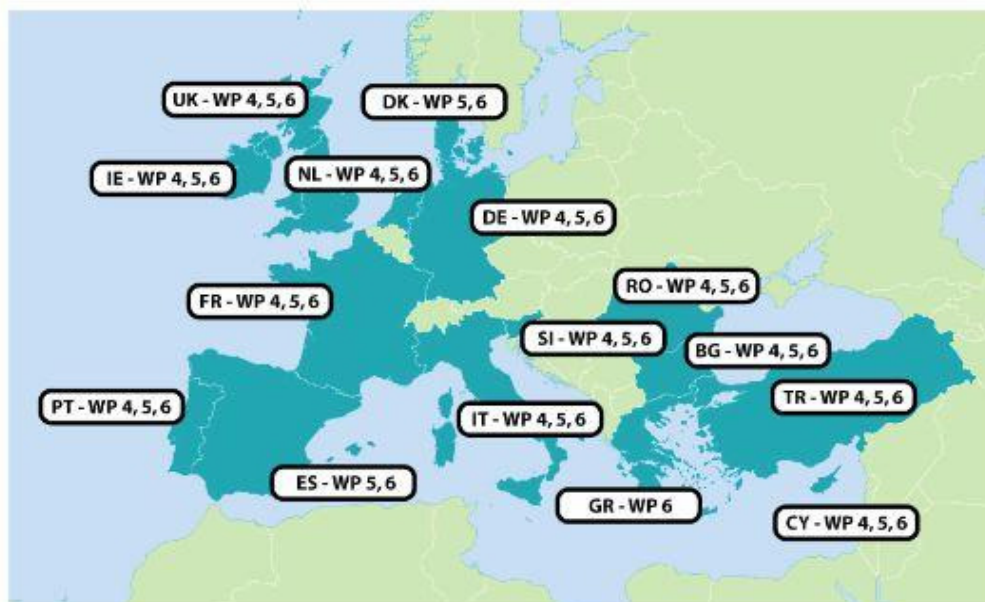
**Corinne Cartailac** graduated from the Paul Valéry University, Montpellier and has been a multi-media Web designer and project manager for the past fifteen years. She is also a lecturer at Montpellier 1 University. She has designed projects in many different fields, primarily cultural, scientific communication, educational and serious games. Lately she has been particularly involved in web-documentaries and multi-media installations for virtual museums.

## 2.3 Consortium as a whole

In order to fulfil the objectives set for the project, the composition of the consortium was carefully designed, not only to represent a good geographical coverage of Europe but mainly to include a wide range of sectors with high relevance in the issue and proper competences to deliver what is required for the project.

### Good geographical coverage

The consortium is composed by partners from 14 Member States (Germany, Denmark, The Netherlands, UK, Ireland, Belgium, France, Portugal, Italy, Slovenia, Bulgaria, Romania, Greece and Cyprus) and 1 Associated Country (Turkey). All 4 Regional Seas (Baltic, NE Atlantic, Mediterranean and Black Sea) are therefore represented and regional partners will be grouped in Regional Nodes in order to work closely together and make sure the transnational aspects are included in the approach of the project. The recognition of the importance of this approach justifies the inclusion of Turkey in the Consortium and also some organisations which network goes well beyond European member states (*e.g.* MIO-ECSDE - a federation with member-NGOs representing 22 Mediterranean Countries, 14 of them Non-European Member States). In fact, several other partners represent a wider group or organisations or entities (*e.g.* both the 3 representatives of the Plastic Industry are European Associations, KIMO-DK and UBBSLA are National networks of Local Authorities and Agencies) and therefore they will be able to bring the perspectives of the sectors they represent and reach out a wider number of individuals/entities than the ones directly involved in the Consortium.



**Figure 2.2** – Geographical coverage of NPs and the activities to be conducted at a national and regional level (WP 4, 5 and 6)

### Wide range of sectors and proper competences

In respect to ML, the composition of the consortium was purposely design to include relevant and influential organisations representing different sectors but robust enough to ensure that the consortium is able to work as a whole even if its members come from diverse backgrounds and may have distinct views on the issue.

Evidence-based Knowledge - Research and Advisory Bodies (UoP, CMRC, Cefas, FFCT UNL), including some of the key experts on Marine Litter in Europe (*e.g.* R. Thompson, from the University of Plymouth) will provide the evidence-based knowledge on the issue, in particular trends and sources. The Consortium includes also government advisory bodies with representation in the ML Task Group (Cefas) and Technical Subgroup for the MSFD (Cefas, UoP, and EUCC), the main contributors for regional assessments on ML (Mare Nostrum and TUDAV, for the Black Sea) and Associations of Plastic Producers, Converters and Recyclers that will bring in industry data, trends and the ability to liaise within their sectors.

Plastic Industries – ranging from the initial stage of virgin pellets and representing 80% of production in Europe (Plastics Europe), its conversion to finished products and its use as packaging (EuPC) and finally the industries

responsible for the recycling of this material (EuPR, representing 80% of European Recyclers). All the 3 Industry partners have been committed to educational projects and activities in respect to ML issue.

Regional and Local Authorities or Agencies (Province of Teramo, UBBSLA, RDC Koper, KIMO-DK), which ultimately are the main responsible for waste management in their areas.

KnowHow type of organisations that have been dedicated to address ML issue at the local level, in a hands-on but integrative manner, involving several stakeholders (*e.g.* MerTerre).

NGOs and networks that have been active in public education and environmental awareness (*e.g.* MIO-ECSDE, Kuesten Union) and stakeholder engagement (EUCC).

As a considerable effort of MARLISCO will be focused on engaging general public and transmit clear information as the basis for an increase in awareness and promoter of change in behavior, the consortium includes specialized multimedia companies (Media Tools and HonkyTonk) that will convert that information and part of the products of MARLISCO into appealing, interactive and innovative tools of communication, in particular the tool corresponding to the educational pack and the one that will be produced as one of the final products, as an audio-visual “journey into” MARLISCO process and results.

The project will be strengthened by a comprehensive stakeholder survey both at the start and end and by the inclusion of robust and systematic evaluation tools that will inform specifically engagement methods for the issues surrounding marine litter but also assess best practice for science-in-society interactions more generally.

This diverse assemblage is supported by organisations and individuals that have successful experience in the interface of science-management (CMRC, EUCC, Cefas) but also expertise in mechanisms of decision-making and governance in environmental management (FFCT UNL).

### Sub-contracting

Technical expertise required to enable the communication strategies (*e.g.* webcasting, multimedia tools) was reduced to a minimal level of support. For example, one of the partners will provide a technical staff member to deal with technical set-up and support the webcasting of the events under WP 4, as alternative to having those services fully assured by subcontracted external companies. In this case, only the minimal requirements from a professional company (*i.e.* providing the software, encoder and server to host the interface event/online audience) will be needed. Furthermore, the enterprise responsible for developing the innovative multimedia communication tools (under WP 3 and 6) is integral part of the consortium.

However, as a considerable part of the activities are related to communication with public also through conventional means, it was necessary to allocate resources to subcontract services like printing brochures and boards, buying material for the artistic works with children and their video development, technical web-design, part of the translations, etc.

Details are described in the table below.

Subcontractors will be selected by means of a public tender when the partner is a public body, according to national rules, or at the best market price.

Any subcontract, the costs of which are to be claimed as an eligible cost, will be awarded to the bid offering best value for money (best price quality ratio) under conditions of transparency and equal treatment.

Activity to subcontract	Amount	Partners	WP	Reason
Solutions	12.363,61	KIMO	2	Beneficiary requires technical expertise to collect and fine tune 10 examples of best practices
Webdesign	€ 44.647,53	Kusten Union, Honky Tonk	3	Beneficiaries require technical expertise and hosting to complement their

				role as web and multimedia developers.
Organisation of debates, i.e. costs associated to venue and logistics, etc.	€ 29.002,97	CEFAS, MerTerre, Kusten Union	4	Beneficiaries require professional support, in particular for the venue and logistics of the event.
Professional mediator/facilitator	€ 48.218,09	Prov. Teramo, EUCC, CEFAS, MerTerre, RRC Koper, NUIOUCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, FFCT-UNL, TUDAV	4	This service needs to be subcontracted at the national level, as there isn't the necessary expertise in the consortium to professionally, neutrally and efficiently mediate and chair a public debate.
Webcast technical service and logistics	€ 51.515	EUCC	4	This technology requires professional software and hardware that only a webcasting company is able to provide
Dissemination Outsourcing (e.g. printing services)	€ 11.303,01	Prov. Teramo, EUCC, MerTerre, RRC Koper, NUIOUCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, FFCT-UNL, TUDAV	4	4 No printing in-house
National support for Video Contest (e.g. engagement of schools and translations)	€ 77.272,62	Prov. Teramo, MerTerre, PlasticsEurope, FFCT-UNL	5	Some beneficiaries do not have in-house capacity for translations and need support to engage schools
Transport Services	36060,50	Prov. Teramo, EUCC, UoP, MerTerre, RRC Koper, NUIOUCC, Mare Nostrum,	5	Consortium is not able to provide these services

		Kusten Union, ISOTECH, UBBSLA, PlasticsEurope, FFCT-UNL, TUDAV and KIMO-DK		
Supplies needed for the video development and production (e.g. material to build scenarios, characters, etc)	36060,50	Prov. Teramo, EUCC, UoP, MerTerre, RRC Koper, NUIO-UCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, PlasticsEurope, FFCT-UNL, TUDAV and KIMO-DK	5	Consortium is not able to provide this material.
Audio-visual material and software needed for the technical production of videos	36060,50	Prov. Teramo, EUCC, UoP, MerTerre, RRC Koper, NUIO-UCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, PlasticsEurope, FFCT-UNL, TUDAV and KIMO-DK	5	Consortium is not able to provide these services
Training for video production	36060,50	Prov. Teramo, EUCC, UoP, MerTerre, RRC Koper, NUIO-UCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, PlasticsEurope, FFCT-UNL, TUDAV and KIMO-DK	5	The media partners are not able to provide training in all countries involved, due to language limitations and cost-efficiency.
Software, material for video production, rental of audiovisual studio.	€ 1.515,00	HonkyTonk	5	Very specific technical expertise and logistics is needed to complement the video production.
Software, logistics and	€ 30.850,00	MediaTools	6	This activity needs

specific expertise				complement of very technical expertise and resources that the consortium is not being able to provide
Exhibition	€13.084,81	MerTerre MIOECSDE	6	No full capacity in-house Professional exhibition design
Support for the national, educative activities	€ 52.545,35	MerTerre, Kusten Union, FFCT-UNL	6	Activity needs complementary external support, e.g. professional trainers or other services that will enrich the educational activities.
Dissemination and printing services	€ 143.729,22	Prov. Teramo, EUCC, UoP, MerTerre, RRC Koper, NUIO-UCC, Mare Nostrum, Kusten Union, ISOTECH, UBBSLA, PlasticsEurope, FFCT-UNL, MIOECSDE, TUDAV and KIMO-DK	6	No layouting and printing in-house for the sort of quality and format required.
Audit	€ 5000	Prov. Teramo	7	Audit (One audit for 5000 needed as budget reaches the threshold of € 375.000)

**TOTAL AMOUNT € 665,289,21**



## 3 Impact

### 3.1 Expected impacts listed in the work programme

#### **Preamble**

The spread of marine litter (ML) is not constrained by national or other administrative boundaries, and the impacts of ML are often expressed far from the source. The sources are many and varied and some solutions may require local implementation. But, the overall strategy will need to be regional in scale, in some cases going beyond the jurisdiction of EU Member States, to be fully effective. This requires a European approach.

At present, information about the sources, types and distribution of marine litter is rather scattered, and there is a need to collate what we know, as well as establishing where information is lacking. This is needed so that efforts to reduce the input of litter to the ocean can be targeted more effectively. By identifying the main routes by which litter enters the marine environment it will be possible to identify those sectors, groups and individuals who have some responsibility or interest in the chain of production, use and waste management. This allows the overall societal problem to be broken down into more appropriate scales for identifying and resolving problems; i.e. assigning ownership and lines of responsibility. In turn this should encourage more elements of society to become more actively engaged in finding solutions.

#### **How MARLISCO will influence the governance of R&D**

From the scoping work done under WP 1, it will be clear what are the main gaps of knowledge in geographic areas but also specific aspects of the ML issue, which can help identifying priorities in future research agendas on the subject. Most important, the different activities involving stakeholders (from specific sectors, to industry and public in general), a societal vision in respect to the direction of waste production and management may be defined, which can contribute to foster new research and development of technologies and stimulate responsible sectors to invest on innovation (e.g. new technologies on waste treatment and infrastructures, monitoring and removal of ML, innovations on materials used in packaging and apparatus, product design, etc). Furthermore, WP 4 may serve as the basis to form informal working partnerships between stakeholders (e.g. plastic producers-plastic recyclers, public organisations-authorities, research-business) and establish a common-ground to find concerted solutions and measures.

#### **Impacts of MARLISCO on the implementation of European policy**

It is recognised that the Europe 2020 Strategy for smart, sustainable and inclusive growth requires a co-ordinated response to the scientific and technical challenges faced by European society. In addition, it is clear that MMLAPs have an important role in providing mechanisms to facilitate the engagement of the many different actors who need to be involved in reaching equitable and sustainable solutions. This realisation will form the underlying rationale of how MARLISCO is structured and operated, the methods of communication and the final outputs. In the case of ML there is a range of additional European policy that will need to be considered in reaching solutions regarding marine litter. This is both to provide an essential background to inform the project partners, and stakeholders, about the range of existing mechanisms and their current effectiveness, and to provide solutions that help with the implementation of policy more effectively. This includes legislation of direct relevance to the reduction in the quantities of litter entering the ocean, such as the MSFD and MARPOL Annex V. But the review will consider a variety of additional legislation and areas of policy development that have importance in the overall drive to reduce marine litter, including the use of economic instruments. It is intended that MARLISCO will have a direct and measureable impact in each of the policy areas listed below.

#### **Contributing to the Europe 2020 Strategy<sup>13</sup>**

The 2020 Strategy seeks to promote Smart, Sustainable and Inclusive growth and identifies seven flagship initiatives. Although the Strategy is not intended to specifically address waste management issues MARLISCO will provide outputs relevant to five of the initiatives:

<sup>13</sup> [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)

- i. ***Innovation Union*** - by encouraging innovation in product design to reduce use of natural resources and promote recycling and re-use (e.g. energy generation) (WP2, WP4);
- ii. ***Youth on the move*** – by facilitating engagement in the sustainability culture leading to a better educated workforce and consumers in terms of use, misuse and re-use of resources (WP5, WP6);
- iii. ***Resource efficient Europe*** – by encouraging economic growth that takes place within environmental limits, for example by using waste materials as a valuable resource rather than an expensive problem (WP2, WP4);
- iv. ***An industrial policy for the globalisation agenda*** – by recognising that European industry has to compete globally, and that it is not desirable to impose conditions with dubious benefit if this encourages migration of manufacture outside Europe. Instead there is a need to look at optimising product life cycles and make better choices in the use and re-use of resources (WP2, WP4);
- v. ***An agenda for new skills and jobs*** – by encouraging innovative forms of product design and manufacture will be required to make better use of resources and reduce waste, and together with the need for improved waste management solutions, are likely to increase demand for new skills in an expanded workforce (WP2, WP4)..

### **Supporting the process of implementation of the MSFD**

The timeframe foreseen for MARLISCO runs in parallel with important phases of implementation of the MSFD:

- i. ***the definition of targets in 2012*** will set a quantitative goal that will be incorporated in the project activities and general ambitions;
- ii. ***the implementation of the monitoring programme within Member States will be put in place in 2014***  
MARLISCO will disseminate the protocols for surveying Coastal-Beach Litter, selected within the MSFD Technical Subgroup, these can be used by scientists or non-scientists in beach clean-up initiatives Europe-wide. It is expected that the wide dissemination and adoption of a similar methodology by these initiatives will not only substantiate them as educational tools but will also make use of the collected data for the national and regional monitoring programme, allowing the public to contribute to the process and broaden the meaningfulness of these actions.
- iii. ***the design of the programme of measures in 2015 and implementation in 2016 in order to achieve GES in 2020***  
Some of the activities of MARLISCO represent an early implementation of measures, in particular those that deal with consumer behaviour by educating and triggering responsibility among the general public and in particular the younger generation.

By collecting and presenting a selection of best practices which can be applied as possible solutions, MARLISCO will provide concrete examples that can be adapted and adopted for the implementation of measures for reduction of ML. The project will favour fruitful collaboration between responsible sectors into adopting concerted measures. This will be achieved by identifying relevant stakeholders - in all regions and each of the countries covered by MARLISCO's national activities - surveying their perceptions and visions, pre-establishing connections and facilitating positive dialogue between key actors.

### **Supporting the implementation of the Waste Framework Directive (2008/98/EC) and related legislation**

The revised Waste Framework Directive is based on the principle of the 2005 Thematic Strategy on the prevention and recycling of waste<sup>14</sup>. This recognises the importance of influencing practical decisions taken at the various stages of the product life cycle, covering design, manufacture and use by the consumer. Waste prevention is closely linked with improving manufacturing methods and influencing consumer choice<sup>15</sup>. MARLISCO will provide a mechanism that will encourage consumers and producers to exchange ideas to move towards a less wasteful society with respect to the reduction in the quantities of materials that end up as marine litter. This is very much in line with the Commission's objective to move waste management up the hierarchy from disposal through to prevention. It will examine the results of a 2008 report on waste reduction and prevention and seek opportunities to put these recommendations into practice<sup>16</sup>. Embedded in this Directive is the concept of Life Cycle Analysis (LCA)<sup>17</sup>. This 'cradle –to-grave' approach includes potential impacts on the environment at the end of product life. In

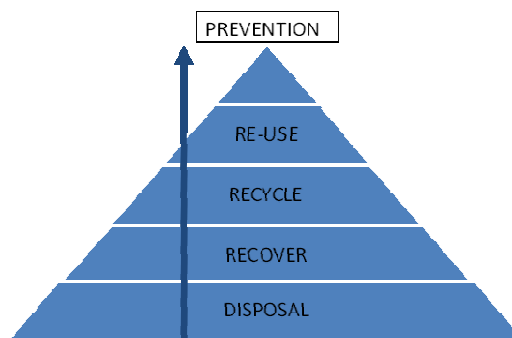
<sup>14</sup> COM (2005) 666 final. Thematic Strategy on the prevention and recycling of waste.

<sup>15</sup> <http://ec.europa.eu/environment/waste/prevention/index.htm>

<sup>16</sup> EU, 2008. Analysis of the evolution of waste reduction and the scope of waste prevention. Final report. Framework contract ENV.G.4/FRA/2008/0112, 372pp.

<sup>17</sup> <http://lca.jrc.ec.europa.eu/lcainfohub/introduction.vm>

MARLISCO this equates to the release of litter into the marine environment. The LCA approach provides a mechanism of accounting for such consequences.



**Figure 3.1** Moving waste management up the hierarchy

MARLISCO will provide quantitative information to feed into the LCA process, and a forum to disseminate information about LCA. Extended Product Responsibility (EPR) is also of relevance in considering mechanisms to reduce environmental littering. It has been promoted by the OECD and taken up by the EU in legislation such as the Waste Electrical and Electronic Equipment (WEEE) Directive<sup>18</sup>. It can have a significant influence on the choice of materials and in product design, with the potential to increase recycling rates and reduce waste production, LCA and EPR and good examples of a more joined-up approach and MARLISCO will provide an opportunity to test to what extent their further application may help in reducing ocean litter.

MARLISCO will consider two other EU Directives concerned with waste: i) the landfill of waste<sup>19</sup>, intended to prevent negative effects on the environment from the landfilling of waste, including the pollution of surface water by litter; and ii) bathing water quality<sup>20</sup>, with regard to the prevention of sanitary and other solid waste polluting bathing waters.

#### **Supporting maritime policy**

MARPOL Annex V<sup>21</sup> prohibits the dumping of all plastic waste by merchant ships. A lack of enforcement means that shipping-related waste is still being thrown overboard and contaminating Europe's seas and coastlines. Part of the problem has been a lack of adequate shore-side facilities to discharge waste. The EU Directive on port reception facilities<sup>22</sup> focuses on ship operations in Community ports and addresses the legal, financial and practical responsibilities of the different operators involved. MARLISCO will provide an opportunity to gauge how effective the present arrangements are in reducing litter from shipping, and provide a dissemination platform to encourage debate. It will provide a communication path for a community that is often rather dispersed, by the nature of their occupations, making use of appropriate trade and professional associations.

MARLISCO will look at examples of good practice in environmental management amongst maritime sectors. One such is provided by the shipping sector which formed the Hellenic (later International) Marine Environmental Protection Association following public concern at the state of Greek beaches<sup>23</sup>. This is a good example of an industry-led initiative that can benefit both the industry and the environment. Some ports and associated businesses<sup>24</sup> have recognised the potential for waste landed from ships being treated as a valuable resource rather than an unwanted problem. MARLISCO will seek to recognise and promote this type of good practice.

#### **Informing and supporting the delivery of targets under the Directive on packaging and packaging waste<sup>25</sup>**

This Directive entered into force in 1995 and there have been several amendments. A number of targets have been set although there is a large disparity in achieving these in different Member States. In addition, there have been

<sup>18</sup> EC, 2002. Directive on waste electrical and electronic equipment (2002/96/EC)

<sup>19</sup> EC 1999. Directive on the landfill of waste (1999/31/EC)

<sup>20</sup> EC 2006. Directive on the management of bathing water quality (2006/7/EC)

<sup>21</sup> International Convention for the Prevention of Pollution from Ships (MARPOL 73/78 – Annex V garbage)

<sup>22</sup> EU, 2002. Directive on port reception facilities for ship-generated waste and cargo residues (2000/59/EC)

<sup>23</sup> INTERMEPA International Marine Environment Protection Association. [http://www.intermepa.org/about\\_us.html](http://www.intermepa.org/about_us.html)

<sup>24</sup> [www.portofrotterdam.com](http://www.portofrotterdam.com)

<sup>25</sup> EU 1994. Directive on packaging and packaging wastes (1994/62/EC, and revisions)

concerns about different national standards interfering with the internal market, and questions as to what extent some measures are justified ecologically. This is a topic area that MARLISCO will be able to offer mechanisms to encourage debate and move towards finding solutions.

### **Regional Seas Commissions**

An essential component of MARLISCO will be establishing good lines of communications with the four regional seas bodies covering the NE Atlantic, Baltic, Mediterranean and Black Sea. This will be accomplished both formally through the Project Board and through participation in regional activities, as well as by establishing regional nodes within the project. This will allow the participants to become familiar with the extensive knowledge base held by these organisations and make use of existing communication links to disseminate the results of the MMLAP, providing a strong regional relevance to the outputs, and increasing their impact.

### **Communicating science and technology to the wider society**

One of the underlying themes of MARLISCO is to provide mechanisms to enable the general public to communicate about complex issues with specialists from a range of commercial and industrial sectors, where constructive debate is hindered by factors such as ignorance about certain elements of the situation, fixed positions based on sometimes unreliable information, commercial concerns, unclear lines of responsibility and a lack of means of finding expression. MARLISCO is designed to address many of these issues. It will engage with representatives of many of the commercial stakeholders involved (e.g. tourism, ports, retail, plastics industry, shipping, waste management and recycling) as well as municipalities, citizens' groups, NGOs and young people in particular. The aim will be to provide:

- i. Easily accessible and clear information on the current state of ML, in respect to trends, sources, policies and major gaps, for each of the 4 Regional Seas in Europe. More than an extenuating source of all information and data available, MARLISCO will provide the essential lines of current knowledge and indicate where further detail or other sources can be found.
- ii. Easily accessible information on a selection of best practice that may contribute to the solution of a particular driver of ML, in a certain context.
- iii. An analysis of the perceptions of different stakeholders in different regions which will help to understand what are their needs and concerns. This will help to define a vision for society as a whole, on where future strategies, measures and investment of innovation should focus.

### **Providing examples of best practice**

The evaluation of best practices with the involvement of local stakeholders and decision makers will provide an overview of the problem of ML and the solutions that have been implemented. This has been absent until now and is an important aspect of this proposal. The creation of a practical guide - detailing the problems, processes and potential solutions - will form an important tool for the key stakeholders, increasing their efficiency in managing and minimising ML. This is an important impact, since there is no existing solution-oriented, user-friendly guide on marine litter.

The involvement of stakeholders throughout MARLISCO will have two important impacts: i) to increase collective awareness of the complexities of the issue; and, ii) to create deliverables (e.g. the guide and the operation of the help desk) that are focused to their needs and can be implemented by them. The focus on best practices and problems (WP2), will have an important impact on local societies, since they will demonstrate that MARLISCO is concerned with examining local problems and efforts. This is an important factor to encourage the acceptance and take-up of the tools and the other project deliverables by the end users. At the same time, it increases the networking potential which is important for the sustainability of the project after the funding is over.

Marine litter is a significant problem, especially in tourist and urban coastal areas. The deliverables (tools, analyses and guidance) that MARLISCO will provide (WP6) are expected to have an important and real impact on improving those commercial and private activities that contribute to the ML problem. The Help Desk is expected to provide online support to parties that have no other means to reach the experts. This is a common phenomenon in many coastal areas where local decision makers may have limited access to adequate technical or expert support.

### **Engaging with commerce, industry and the wider community**

One of the main tools to be promoted is the use of structured on-line debates (WP4) involving a wide range of stakeholders, identified in WP1 and WP2. The twelve debates that are to be held across Europe will permit direct access by members of society with representatives of science, technology, commercial and industrial sectors, to

become more informed about the issues associated with ML. This will bring together up to 2400 interested parties from across Europe at the events themselves. In addition, there will be an opportunity for the wider public, and representatives of particular sectors, to interact with the debates on-line, together with the potential to use existing virtual platforms and social networks to continue the dialogue. This should raise awareness not only of the scale of the ML problem but also what would be required in order to improve litter management at a national and regional level. By providing neutral facilitation of the debates, it will encourage all stakeholders interested in ML to discuss candidly the issues that they have with regard to waste management. In some cases this may be first time that industry and environmentalists have come together to consider common solutions and would mean that all sectors would gain an appreciation of the complexity of the problem and an insight into the economic, technical and policy constraints that exist.

Introducing science and technology into the political process and into mainstream society can be difficult. There have been several successful attempts in EU projects (e.g. COREPOINT, SPICOSA) but these tended to consider overall coastal management rather than a single issue. By concentrating on ML, this project can demonstrate that, although many environmental problems may be perceived or managed as a local or national issue, such issues can only be truly solved using a regional seas approach, as promoted by the EC – litter and many other forms of marine pollution do not acknowledge national boundaries.

The legacy resources generated from the debates, in the form of freely available videos, will provide invaluable material to those tackling the ML issue in the future. Use of this material, and the debate structure developed as part of the project, should enable interested parties to replicate the successes and minimise any problems encountered. The proposed solutions to the current litter problem will be detailed in the project reports, and in particular the final report and synthesis: *'Recommendations for science and society interactions: a case study from marine litter'* and these should inform policy debates at a national and regional level to deal with a pan-European problem. The cross-sectoral *Working Groups* informally established as an outcome of the debates will be supported by the national event organisers and should provide a forum for discussion after the national events and provide a model for continuity of dialogue after the project itself. MARLISCO will seek to engage with a wider range of maritime stakeholders using the mechanism of the Venice Platform<sup>26</sup>.

### **Disseminating the results**

The web portal on ML will display the Europe-wide collected overview on the topic in one single publicly accessible website. At present, information on the ML problem is widespread and has to be collected from a variety of sources and countries, not all of them being publicly accessible. The ML web portal will be equally accessible for all relevant stakeholders, from local communities to public administrations as well as schools and education facilities, and all other members of society. It will provide a comprehensive overview and will make information gathering on the topic of ML very simple. Consolidating different types of project outputs (documents, best-practice examples, links, photos, videos etc) it will attend to the different needs of different stakeholders and at the same time display the feedback of all relevant stakeholders on the problem of ML. Being the communication platform for all involved project partners as well as for external stakeholders (via web 2.0 features), it will enhance networking activities on the topic beyond the limit of national views and regional sea approaches.

### **Challenging the younger generation**

The MMLAP will use a video contest within schools to challenge the younger generation to reflect about their attitudes and behaviours, and how this may contribute to the problem or contribute to promoting solutions. The video contest will work at 2 different levels: through the process of participation and on the wider community, as audience of the videos.

#### ***The participants in the video contest***

Young participants, with the supervision and guidance of a tutor (e.g. teacher), will be faced with the issue of ML reduction and how to address it. Though the educational pack will be presented as a source of information, it is likely that the participants will require some level of extra research, which can be a desk-based or an experiential study (e.g. a survey of a local beach). The themes proposed for the video will promote discussion and critical thinking about the drivers and potential solutions, but also help to develop and concretise a video script in creative way. The preparation work for the video production, therefore, is multidisciplinary and can be used as a school project that can run in parallel with normal curricula and applied to part of the subject taught. In fact there are some countries that have such projects as part of the schools programmes, so the time to dedicate to this work may not represent an extra burden for classes. It is expected that the process of developing the video will make the children involved more aware of the issue of ML and proactively contribute to promoting concrete solutions. This may

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<sup>26</sup> The Venice Platform – towards a European Marine Stakeholder Platform; [www.veniceplatform.eu](http://www.veniceplatform.eu)

include changes in daily behaviour as a direct result of changes in perception, but also lead to the promotion of more fundamental changes in societal waste production and management, at the family or community level. It is expected that from 5 to 20 school classes or group of children from each of the 14 countries participate, not only because of the pedagogical value described above but also because MARLISCO has foreseen technical and service support for a limited number of schools, which will be used to prepare and produce the videos, not requiring extra resources from the schools/participants involved. It is anticipated that local authorities/enterprises may be also involved and be willing to additionally support the work of local schools.

### ***The audience***

The videos produced and selected represent a message from the youth of a particular country but also, collectively, from all over Europe, where they express their perceptions, concerns on ML and suggestions for the future. It is anticipated that the change of perception and commitment of these children will influence the people directly related to them, be they their families, their schools or their community. As fundamental members of our society, but mainly because they will inherit the ML problems of their predecessors, the dissemination of these videos at local and national events, and throughout the media, is expected to trigger responsibility and inspire the different layers of society to act promptly. The compilation of selected videos, will gather the works of children from opposite sides of Europe, and clearly show that ML is a global issue and of concern all over Europe. The engagement of well-known figures as “ambassadors” of the video contest in each country, will facilitate the involvement of the media to capture public attention.

### **Promoting solutions**

A strong element in MARLISCO is to communicate sometimes complex issues to a wider audience. This will include describing factual information about sources, type, distribution and potential impacts of marine litter, as well as examples of good and inadequate practices. A range of educational and dissemination activities have been designed not only to inform, but to engage the various societal groups (youth, scientists, teachers, artists, and media) with representatives of the scientific, technological, industrial and commercial communities in a meaningful way.

An educational pack will be developed to deliver the scientific and monitoring data on ML, targeted at young people in each of the participating countries. It will include information on inspiring best practices and present examples of how a young person can be a part of the solution to ML threats (practical consumption tips and motivation ideas). The educational impact is augmented if one considers that this educational pack will be used both by formal educators (secondary school teachers) and non-formal ones (NGO staff, animators, etc) with their classes and target audiences. The translation of the educational material into the national language increases its potential outreach as its messages can be used by a much greater number of audiences that do not feel comfortable with the English language. There will be four train-the-trainers events on how to use the educational pack. The participants will be taught by experienced trainers on how to effectively apply the educational pack with their target audiences. This is a cost-effective way of reaching a much larger audience.

A range of additional activities and events will be organised to spread the message to a much wider audience, through exhibitions, display boards, art installations, beach clean-ups and other activities, in conjunction with existing local groups (e.g. teachers, youth groups, conservation NGOs). In addition, industrial and commercial sectors will be supplied with a brochure and summary information for inclusion in trade publications and conferences with the question being posed: ‘Marine litter – are you part of the problem, or are you part of the solution?’

Considering potential solutions to reduce marine litter provides an excellent opportunity to explore and promote the ethos of sustainable development, and examine the consequences of societal, sectoral and personal decisions. This will include all across the ML supply chain including industry, retailers, general public and policy makers. Members of school-age cohort already have significant economic influence and this will grow as they enter higher education and the labour market, and develop as consumers (with their purchasing and disposal habits), as professionals (e.g. scientists, hoteliers, farmers, fishers), as parents, as citizens (e.g. informed tourists, volunteers etc) and also as voters. In other words marine litter may be used as a vehicle to inspire a more sustainable lifestyle, and promote the aims of the Europe 2020 Strategy.

#### **Purpose of dissemination**

Dissemination in this project is intended to convey the project's main messages and outcomes to a wide community. Dissemination and exploitation of results is a core activity, parallel to all WPs of the project and interrelated to them. The dissemination/exploitation strategies are designed to be flexible and adaptable to the challenges that will arise during the project. All dissemination, and outreach activities are conceived in order to spread the available knowledge on ML, and to enable stakeholders and the public at large to increase their awareness on the topic, and ultimately to develop common activities, and share responsibilities. Furthermore, the creation of a community committed to a better and more sustainable management of ML is fostered, enabling exchanges and discussions. Finally, the MARLISCO action plan could serve as an approach of science/society interface, which could be used when dealing with similar societal challenges.

#### **Objective**

The main objective is:

Build and sustain participation towards social change through:

- a. Dissemination and management of information. Stakeholders, end-users, and participants in general, should be informed about the project, and discuss throughout the duration of it. This will raise awareness and knowledge of the issue. Feedback coming from participants should, in turn, support the project activities, thus enriching them.
- b. Management of communication. There is the need to build cohesion? and participation, to inform, to build capacity, to network and to mobilise participants. Project management needs to be informed by participants, making the most of creativity and other local capacities.
- c. Organisation of communication around concrete success stories (through the identification of best practises) in Europe.
- d. Engagement of important segments of the civil society, such as NGOs, artists, the media, the youngsters, and 'celebrities' as ambassadors of one of the activities, the video contest, in each of the 14 countries where the contest will be launched. The video produced will have increased chances of being disseminated in relevant national media and events, and capture general public attention and visibility
- e. Management and mitigation of risks. Misinformation needs to be recognised as a risk. Alternative models need to be generated to overcome usually observed resistance to change (work on consensus). Conflicting interests need to be raised and managed.

#### **Project stakeholders and dissemination targets**

Considering that society engagement is the guiding principle of the project, stakeholders, project partners, and dissemination targets most often overlap. Groups identified are :

- Private sectors (e.g. plastic industry, fishery, tourism)
- Concerned communities and committed citizens
- Organised civil society (associations, NGOs)
- Youngsters (e.g. students)
- Decision makers
- Regional Seas bodies (UNEP-MAP, HELCOM, OSPAR, BSC)
- Scientific community
- Media

#### **Dissemination strategy**

MARLISCO approach is based on the ethics of the social communication, also widely known today as Communication for Social Change (CSC). Change is understood here as the capacity of stakeholders to permanently engage, share the responsibility, and act together. Communication for Social Change has generally taken place at the initiative of civil society, recognising the necessary need to learn from each other's views and interests, ultimately the need to organise dialogues. Moreover, MARLISCO is aiming at exploiting the potential of the new media forms, in order to reach the widest possible audience, and to explore innovative communication tools. This will be done thanks to the presence in the consortium of specialised companies (MediaTools and HonkyTonk) and with the application of webcasting services to the events of WP 4. Finally, although defining common activities, the MARLISCO consortium acknowledges the cultural specificities of the countries involved,

and will adapt the actions to them. MARLISCO consortium, being very heterogeneous in terms of types of institutions involved (i.e. local authority, research institutions, NGOs, private sector) will take advantage of it, and all partners will use their own networks to disseminate the results (e.g. all partners will have a reference uploaded in their portals, they will include regularly information on the project in their e-newsletters, disseminate leaflets in meetings they participate).

The dissemination impact is further enhanced by the fact that some partners act as networks already or coordinate network initiatives (e.g. MIO-ECSDE is a Federation of ~110 NGOs and coordinates an e-network of ~3300 ESD trainers).

Communication will be based on:

- information sharing (through the webportal clearing-house mechanism, WP 3)
- interactive web-based educational tool (WP 6)
- consultation and evaluation (WP 2 - social survey of baseline and change, and evaluation of several of the activities with public)
- involvement of key stakeholders (events of structured dialogue, WP 4)
- initiating actions (through several other educational activities, WP 6)

Communication and dissemination work will be based on the project action plan and on sharing knowledge. In this spirit, the approach will favour:

- **Interactivity:** Communication will be driven by the principles of participation and listening, and debate rather than ready to be disseminated messages.
- **Opening up to a variety of partnerships:** Reduce isolation of stakeholders.
- **Seek dialogue**
- **Diversify communication channels, spaces and opportunities:** Use all media and editorial initiatives that prove appropriate, use all social spaces that prove appropriate for communication to support the project, favour communication processes, and give attention to feedback.

### **Dissemination actions and tools**

The above described dissemination, and communication strategy will be implemented through the use of following tools, and actions:

- MARLISCO web-portal (WP 3)
  - The web-portal will constitute the primary tool for information sharing and centralisation
- National debates in webcasted mode (WP 4)
  - National debates for promoting dialogue among key stakeholders will be organised at national level. These dialogues can be followed live and watched post-event by wider audience through web streaming. Furthermore, the web-audience will also have the possibility of participating in the dialogue posing questions, and expressing views.
- European video contest (WP 5)
  - The videos submitted during the video contest will represent a communication product to a wider audience and can be used in the other national activities foreseen in the project (e.g. the national debates) but also other in events with related subjects (e.g. National/local celebrations of Maritime Days). On the other hand, some other activities (e.g. national exhibitions) can also work as disseminating opportunities for the contest itself.
- Exhibitions (WP 6)
  - A series of exhibitions will be organised at national level involving young people, and artists. Relevant educational centres will be engaged and some have already manifested interest in collaborating with the activities of MARLISCO, including the Ozeaneum (Stralsund, Germany or The Pier in Scheveningen, The Netherlands).
- Printed material (WP 6)
  - A series of brochure conveying clear messages will be produced for the ML key sectors
- Multimedia Communication Tools (Fig. 3.2)



- **Educational Pack (WP 6):** a Web “intelligent game” on the portal, at the edge of innovative technology, to give young people an accessible multimedia tool, that will be informative and fun in order to capture their attention, while transferring - and creating - knowledge about the issue of ML in Europe
- **Project multimedia tool (WP 3) :** an interactive multimedia Webdocumentary, consisting of a number of small reportages and audiovisual material to help Europeans understand the present situation regarding marine litter, and the project’s outcomes, as well as to open up new lines of thought and action. It will represent an audio-visual “journey” throughout MARLISCO outcomes and main activities.



**Figure 3.2** – Examples of web-communication tools (for general public or targeting young people) developed by MediaTools.

#### 4 Ethical issues

An important part of the MARLISCO proposal is to evaluate the views of stakeholders in relation to the problems surrounding marine litter and also to examine the success of interventions strategies such as educational material. This will require us to obtain responses directly from stakeholders including the general public (particularly in WP 2 and to a lesser extent in WPs 4-6) and therefore appropriate ethical procedures must be followed. We will follow American Psychological Association (APA) guidelines of ethical conduct (<http://www.apa.org/ethics/code/index.aspx>), with additional procedures as appropriate at the national level. The APA guide is the most stringent international code of conduct and covers program design and evaluation; social intervention; policy development and research, for interactions in person, by post, telephone, internet, and other electronic means. Overall we will follow five general principles. **Beneficence and Non-maleficence** means we will aim to benefit the individuals we work with and take care to do no harm. **Fidelity and Responsibility** refers to maintaining professional standards of conduct and managing potential conflicts of interest. **Integrity** is demonstrated by accuracy, honesty and truthfulness in our work. **Justice** means recognition of access to and benefit for all persons and equal quality in the processes, procedures and services. **Respect for People's Rights and Dignity** refers to ensuring privacy, confidentiality and self-determination and putting in place special safeguards when working with vulnerable groups (e.g., children).

In practice, these principles lead to the following procedures:

- 1) Establishment of a complaints procedure should individuals not be happy with the way in which we conduct the consultations, outreach and educational activities.
- 2) Openness and honesty about the aims of all activities, specifically the consultations and evaluations in WP2.
- 3) A consent procedure for all participants whereby they can decide whether to take part in evaluations and where they are free to withdraw. This will use language that is reasonably understandable to that person or persons. If the person is incapable of giving consent, alternative APA recommendations will be followed.
- 4) Implementation of additional safeguards where children or adults with impairments are involved in any activities, commensurate with national guidelines. E.g., in the UK, any partner working with children will undergo a Criminal Records Bureau check.
- 5) Dissemination of findings to all interested parties, with the offer of additional debate.
- 6) Confidentiality of all personally identifying information recorded, including contact details and responses. Responses may be published with the appropriate consent of the participant (e.g., when quoting from an interview).
- 7) Before recording the voices or images of individuals to whom they provide services, permission will be obtained from such persons or their legal representatives.
- 8) Reasonable steps will be taken to ensure that educational and outreach programs are designed to provide the appropriate knowledge and proper experiences.
- 9) Institutional ethics approval will be sought as appropriate (e.g., at UoP, Partner 4).

WP 5 – European Video Contest will promote and use amateur/home-made videos that will be prepared by youngsters under supervision of teachers/educators. It is possible that some of these videos will contain images of children but since the candidate teams will need to apply to the contest under the responsibility of a formal institution or association (e.g. a school) it is expected that these materials will fulfil all the ethical/legal requirements regarding the production of images involving young people. Nevertheless, the contest rules will clearly specify the requirements of signed consent to make the video available for MARLISCO dissemination purposes, responsibility to obtain individual permission of people (or legal guardian) appearing in the video prior to video submission and criteria on content (sexual, violent or any abusive material) that can lead to refusal of videos.

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