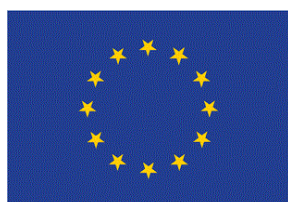


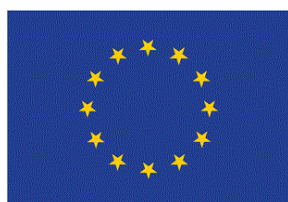
<b>WP1</b>	<b>Deliverable 1.2</b>
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## MUSES Project

<b>Title: MUSES Interim Report</b>
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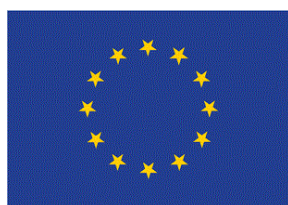


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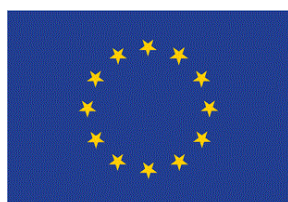


## Contents

<b>1. Purpose</b>	<b>5</b>
<b>2. Introduction</b>	<b>5</b>
<b>3. The Consortium</b>	<b>5</b>
<b>4. Objectives</b>	<b>6</b>
<b>5. Overview of MUSES Work-packages</b>	<b>6</b>
<b>6. Work undertaken by the MUSES project during the first year</b>	<b>7</b>
<b>7. Work Package 1</b>	<b>7</b>
7.1 Project Management Plan (D 1.1 & MS 1) (Consortium Only)	7
7.2 Interim Report (D 1.2 & MS 3) (Public)	7
7.3 Project Steering Group Meeting 1 (D 1.4) (Consortium Only)	7
<b>8. Work Package 2</b>	<b>8</b>
8.1 WP2 Analytical Framework (D 2.1) (Public)	8
8.2 Sea Basin Interim Reports (D 2.2) (Consortium Only)	11
8.3 Stakeholder Workshop (D 2.7 & MS 2) (Public)	12
8.4 Project Steering Group Meeting 2 (D 2.8) (Consortium Only)	17
<b>Photograph 5 – PSG Meeting 2 in Edinburgh</b>	<b>18</b>
<b>9. Work Package 3</b>	<b>18</b>
9.1 Case Study Methodology (D 3.1) (Public)	18
9.2 Stakeholder Identification & Engagement Process (D 3.2) (Public)	23
9.3 Project Steering Group Meeting 3 (D 3.6) (Consortium Only)	24
<b>Photograph 6 – PSG Meeting 3 in Berlin</b>	<b>24</b>
<b>10. Work Package 4</b>	<b>25</b>
10.1 Overview Stakeholder Profiles (D 4.1) (Public)	25
<b>11. Work Package 5</b>	<b>27</b>
11.1 Logo & Publicity (D 5.1) (Public)	27
11.2 Website (D 5.2) (Public)	27
11.3 Infographics (D5.3) (Public)	27
11.4 Conference Presentations & Attendance at Events (D5.5) (Public)	28
11.5 Newsletter & Social Media (D5.6) (Public)	31
11.6 Dissemination of Interim Reports (Half way stage) (D 5.8) (Public)	31
11.7 Exploitation of Results (D 5.12) (Public)	31



<b>11.8</b>	<b><i>Data Management Plan (D 5.14) (Consortium Only)</i></b>	<b>31</b>
<b>12.</b>	<b><i>Work Package 6</i></b>	<b>32</b>
<b>13.</b>	<b><i>Further Information &amp; Comments</i></b>	<b>32</b>



## 1. Purpose

The purpose of this document is to provide a half term summary of the work undertaken for the Multi-Use in European Seas (“MUSES”) Project during the first year (1<sup>st</sup> November 2016 – 31<sup>st</sup> October 2017).

## 2. Introduction

The MUSES project is a 2 year Horizon 2020 funded project under Grant Agreement No. 727451. The MUSES project builds on existing knowledge to explore the real opportunities for Multi-Use (“MU”) in Europe, including the scope for innovation and Blue Growth potential and to present practical solutions on how to overcome existing barriers and minimise risks associated with MU development. The MUSES project encompasses five EU sea basins (Baltic Sea, North Sea, Mediterranean Sea, Black Sea and Eastern Atlantic).

## 3. The Consortium

The MUSES project consortium of 10 partners includes a mix of consultancies, academia and Government bodies providing a strong team with complementary skills from the different types of organisations. The Consortium was formed with partners that ensure we have excellent geographical coverage, understanding and relevant links to key stakeholders in the five sea basins that this project will report.

- **Marine Scotland** (Scotland) (*project coordinator and WP1, WP5 & WP6 Leader*)
- **The Maritime Institute in Gdańsk** (Poland) (*WP2 Leader*)
- **THETIS SPA** (Italy) (*WP3 Leader*)
- **SUBMARINER Network for Blue Growth EEIG** (*WP4 Leader*)
- **The Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research** (Germany)
- **Ecorys** (Netherlands)
- **Fundação Gaspar Frutuoso** (Portugal / Azores)
- **The Hellenic Centre for Marine Research** (Greece)
- **The Institute of Marine Sciences – National Research Council** (Italy)
- **The University of Dundee** (Scotland)

Further information on the consortium can be found here:

<https://muses-project.eu/consortium/>



## 4. Objectives

The objectives of the MUSES project are to:

- Explore the opportunities for MU in European Seas, including the scope for innovation and Blue Growth potential
- Present practical solutions on how to overcome existing barriers and minimize risks associated with MU development whilst maximising local benefits
- Provide an understanding of environmental, spatial, economic & societal benefits of co-location
- Highlight challenging regulatory, operational, environmental, H&S, societal and legal aspects.

## 5. Overview of MUSES Work-packages

The table below summaries the work-packages (“WP”) under the MUSES Project. In very brief terms; WP1 deals with Project Management; WP2 will consider MU at a Regional EU sea basins level; WP3 will consider and analyse MU through a comprehensive set of case studies; WP4 will develop an Action Plan; WP5 deals with dissemination and communication.

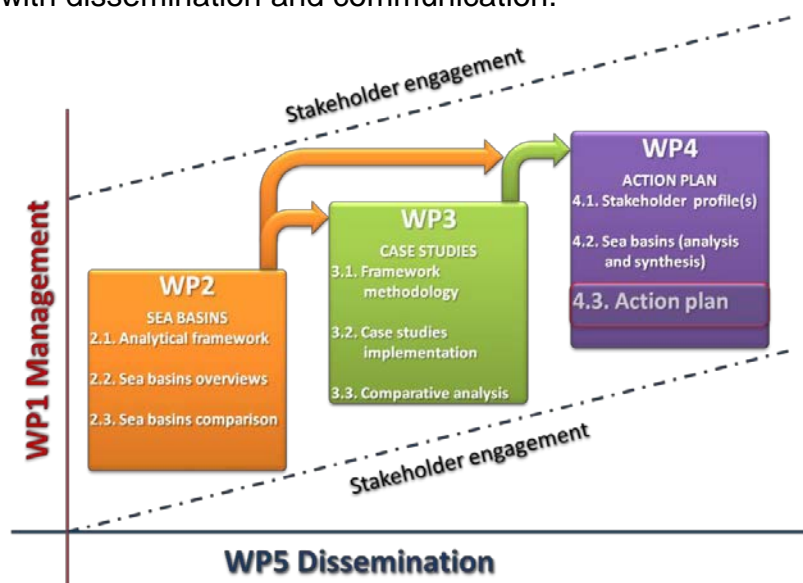
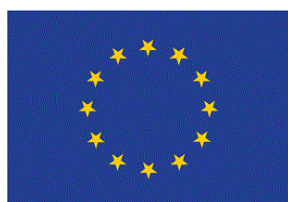


Fig. 1 – MUSES Work-Packages



## **6. Work undertaken by the MUSES project during the first year**

The consortium has been working over the first year of the project to meet the deliverables and milestones for the MUSES Project and building on earlier work undertaken in other related studies. The section below provides a more detailed breakdown of the work against the six WP's of the MUSES Project. Those deliverables that are available as public outputs can be found on the MUSES website at <https://muses-project.eu/downloads/>

## **7. Work Package 1**

WP1 deals with the Project Management & Coordination aspects of the MUSES project. The WP1 Leader is Marine Scotland.

### **7.1 Project Management Plan (D 1.1 & MS 1) (Consortium Only)**

The 'Project Management Plan' (PMP) was both a deliverable ("D") and milestone ("MS") that was completed in December 2016.

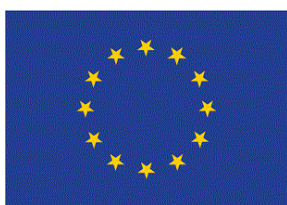
### **7.2 Interim Report (D 1.2 & MS 3) (Public)**

This document you are reading has been prepared as the interim technical report providing a summary of the work undertaken for the MUSES Project during the first year. This document will be made available on the MUSES website.

### **7.3 Project Steering Group Meeting 1 (D 1.4) (Consortium Only)**

The 1<sup>st</sup> Project Steering Group ("PSG") meeting took place on 13<sup>th</sup> & 14<sup>th</sup> December 2016 in Brussels. The meeting was also joined by Matthijs Soede from the European Commission and by Robert Goodchild and Elena Pedone from the Innovation and Networks Executive Agency ("INEA").

This was the first time that the Consortium partners had met in person and each partner was able to introduce themselves and briefly outline what they will bring to the MUSES project. The objectives of the various WP's and the early work required under each was discussed and agreed. These discussions led to some more in-depth considerations, including the definition of 'Multi-use'.







*Photograph 1 – Kick Off Meeting in Brussels*

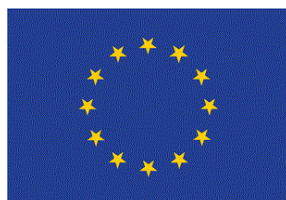
## **8. Work Package 2**

WP2 considers MU at a Regional EU sea basins level (Baltic Sea, North Sea, Mediterranean Sea, Black Sea and Eastern Atlantic) using an analytical framework developed by the MUSES consortium to facilitate a common research approach across sea basins. The progress in implementation of the concept of MU's in European Sea Basins will be assessed and key barriers and drivers identified.

The WP2 Leader is the Maritime Institute of Gdansk.

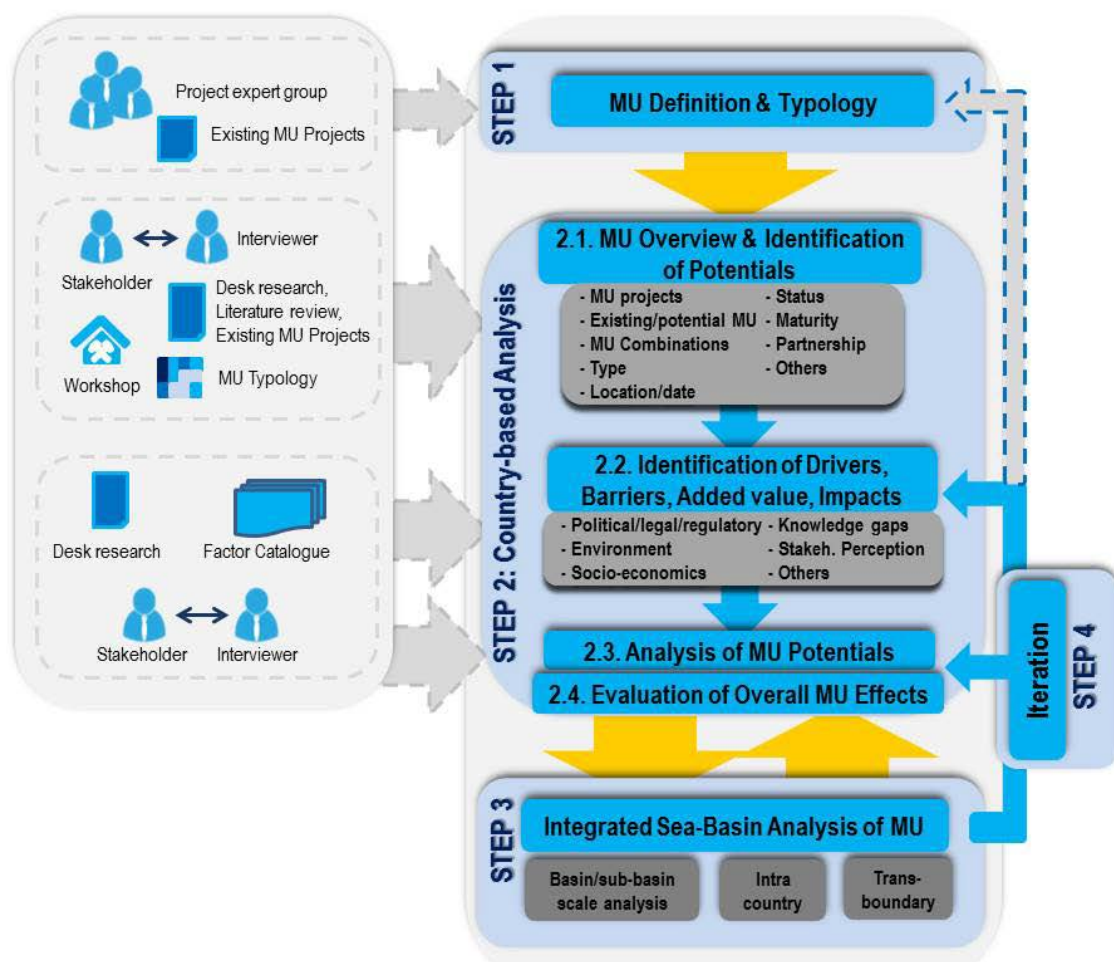
### **8.1 WP2 Analytical Framework (D 2.1) (Public)**

A total of five European Sea basins will be considered under the MUSES Project (Baltic Sea, North Sea, Mediterranean Sea, Black Sea and Eastern Atlantic) These Sea Basins are illustrated at Fig. 8. The Analytical Framework (“AF”), a live document under WP2 for analysing MU in these five European Sea Basins was completed in February 2017. The AF provides the project consortium with the practical research tools necessary to examine the theoretical understanding and practical experience related to MU. It is intended to guide the process of information and data gathering and stakeholder engagement of the five European Sea Basins. The framework is a flexible tool that may be modified and adapted through the implementation process, according to emerging needs. The AF can be downloaded from the MUSES website: <https://muses-project.eu/downloads/>



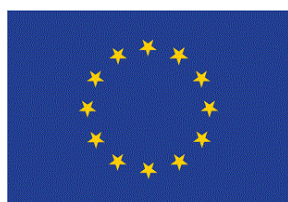


The flow chart below summarises the AF methodology. In simple terms the AF describes (1) Desk analysis; (2) Stakeholder Engagement and: (3) Categories of MU factors – Drivers, Added values, Barriers & Impacts (DABIs).



*Fig. 2 – Graphical flow chart of the operational methodology and methods used for data collection and analysis. (Source: own elaboration by ISMAR)*

The aim of the AF is to provide a practical procedure for data collection and analysis within WP2. Desk analysis and stakeholder engagement activities will be combined through the different steps. For each step and sub-step a template sheet has been designed to guide MUSES data collection along the analytical process. The main steps are outlined below:



**Step 1 – MU definition & Typology:** The definition of MU has been considered and recorded in the AF. At an early stage the MU combinations were also compiled from a total of 24 cases analysed in past projects.

**Step 2 – Country based analysis:** Country based analysis of MU that has resulted in a collection of country fiches for each sea basin.

**Step 2.1 – MU overview & identification of potentials:** Considers MU potentials identified at the country level. The starting point being the selection of feasible and most probable types of MU combinations for each country (based on desk analysis, literature review and various forms of stakeholder engagement).

**Step 2.2 - Identification of MU drivers, barriers, added values, impacts (country-based):** The output will be a catalogue of DABIs to MU.

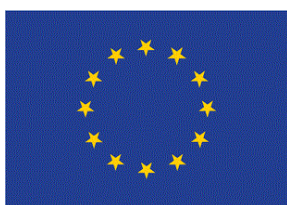
**Step 2.3 - Analysis of MU potentials (country-based):** This step analyses the drivers and barriers for MU development identified in step 2.2 by applying a scoring system. Whenever possible and feasible, stakeholders will be asked to score drivers and barriers according to their knowledge. The relative balance between drivers and barriers will identify the potentials for MU development in the study area.

**Step 2.4 - Evaluation of overall MU effects (country-based):** This step analyses the added values (positive effects) and the impacts (negative effects) related to MU development and identified in step 2.2 by applying a scoring system. Whenever possible and feasible, stakeholders will be asked to score added values and impacts according to their knowledge. The relative balance between added values and impacts will identify the overall MU effect in the study area.

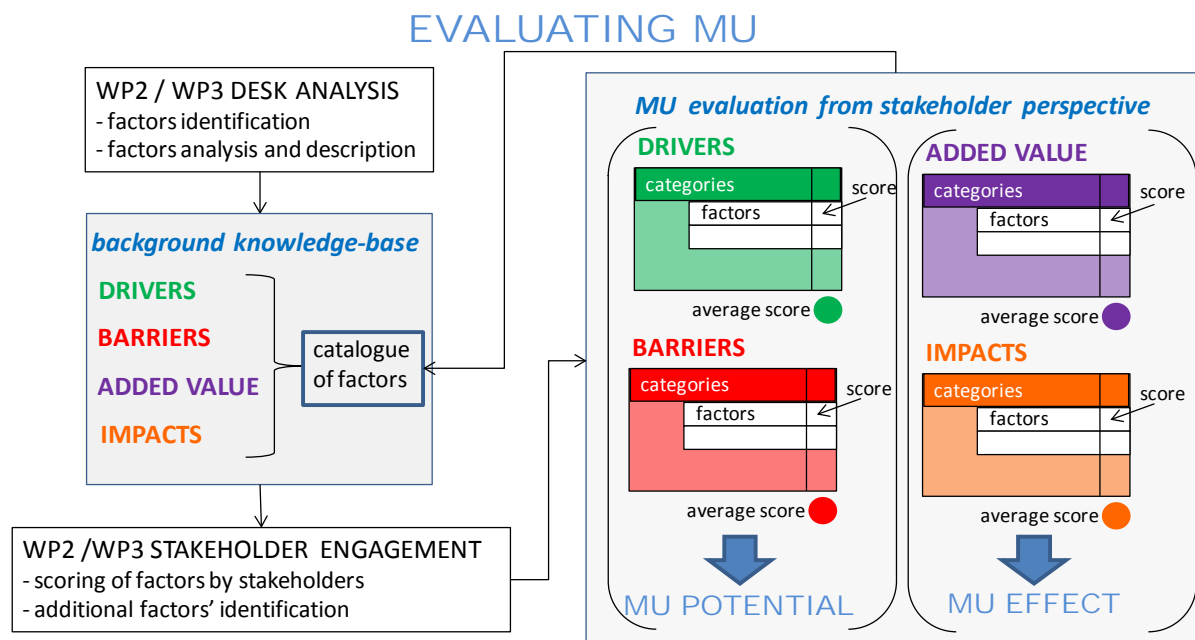
**Step 3 - Integrated Sea Basin Analysis of MU:** The country-based analysis generated in step 2 will be synthesized at basin scale to address opportunities and challenges for future development

**Step 4 - Iterative Analysis:** Results obtained from the country-based analysis (steps 2.3 and 2.4) and from the scaled MU analysis (step 3) in terms of MU potentials and effects will be iterated in order to identify knowledge gaps, new elements or improve existing ones and compare results within the sea-basin. Moreover, results obtained from the overall process can then be reiterated back into the initial stages of the AF at step 1, for refining MU Definition and Typology.

Much of the essential elements of the methodology developed here for WP2 Sea Basin level research has been incorporated into the WP3 cases study methodology.



The following diagram illustrates how MU will be evaluated in both WP2 & WP3:



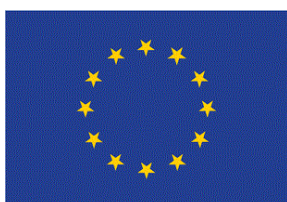
*Fig. 3 – Diagram of the methodology for evaluating MU in Sea Basins and Case-Studies. (Source: own elaboration by THETIS)*

There are also very close links with WP4. The WP4 Action plan will bring together the results generated by both WP2 and WP3.

## 8.2 Sea Basin Interim Reports (D 2.2) (Consortium Only)

The MUSES consortium has been working under the methodology of the AF to deliver the 'Sea Basin Interim Reports' by the end of October 2017. This deliverable will result in a total of five 'Sea Basin Interim Reports' for the Baltic Sea, North Sea, Mediterranean Sea, Black Sea and Eastern Atlantic.

Consortium partners have undertaken both desk research and have engaged with relevant MU stakeholders (including the stakeholder workshop – see par. 8.3) in accordance with the AF. The information gathered has been drawn together into a number of 'Country Reports' for countries adjacent to the five EU Sea Basins. The Country Reports do not form and are not part of this deliverable, however, the information from each Country Report has been used to compile the respective 'Sea Basin Interim Reports'.



The Sea Basin Interim reports take the information from the Country Reports to produce an introduction to the relevant sea basin, a general description of the sea basin which includes details on legal frameworks, institutions, policies, administrative procedures which support MU in the Sea basin.

These interim reports will be developed as the project progresses. The next stage will be to consider three categories of MUs in each sea basin; (1) Existing MU; (2) planned or likely to occur MU; and (3) MUs that are proposed by stakeholders. Following this work the reports will also consider at least three of most relevant MU combinations and from both desk analysis and stakeholder input, the DABI's will be listed for the MU combinations.

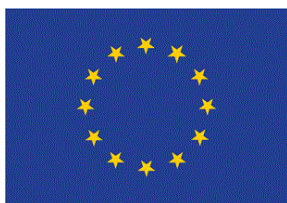
The Sea Basin Interim Reports are Consortium only documents that will be developed further during the project for the deliverables 'Sea Basin Overviews' and 'Sea Basin Comparison Interim Report' due in January 2018 and for the 'Comparative Analysis' and 'Final Report' due in April 2018.

### **8.3 Stakeholder Workshop (D 2.7 & MS 2) (Public)**

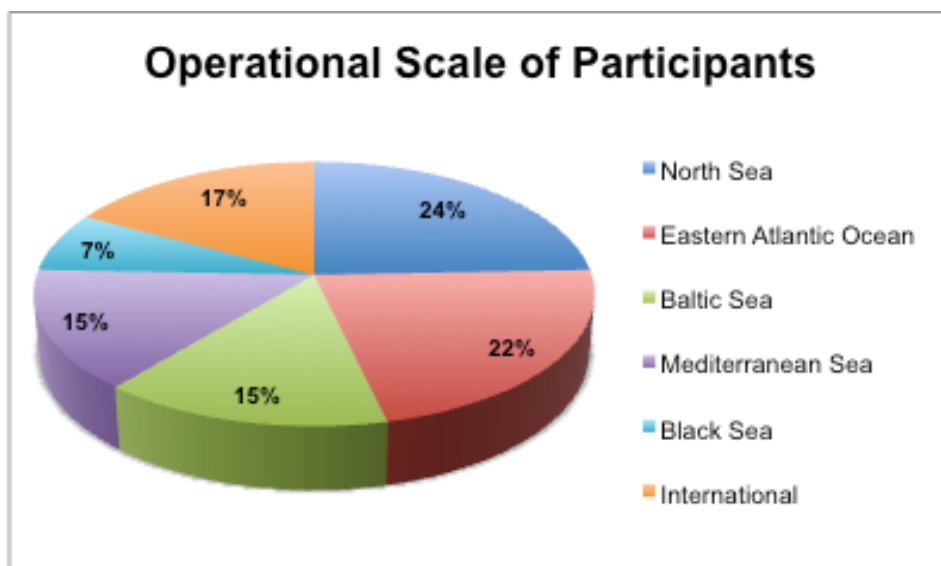
The MUSES Stakeholder workshop took place on 17<sup>th</sup> May 2017 at the Thistle Hotel, Poole, England (UK), back to back with the European Maritime Day Conference which was held in the same town.

The workshop sessions were made up of interactive group table sessions and games which allowed stakeholders to engage with the project and contribute to the identification of the MU combinations existing in the EU Sea Basins, as well make suggestions of potential MU combinations. The outcomes have been used to guide the MUSES project team in clarifying DABI of identified and examined MU combinations, as well as initiating a rapport with some key stakeholders.

The invited stakeholders were from a diverse range of areas working in marine sectors and with previous experience/involvement in MU. They also represented all European Sea basins. A total of 26 stakeholders attended the workshop; Fig. 4 provides a breakdown of those stakeholders by Sea Basin.



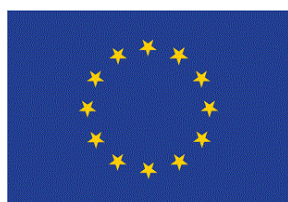




*Fig. 4 – Operation scale of workshop participants*

The objectives of the workshop were as follows:

1. Share a common MU definition according to the MUSES project and seek stakeholders views on definition.
2. Identification of MU combinations in the five EU Sea Basins:
  - Verification of MU combinations, identified from previous MU projects;
  - Identification of the most important MU combinations in the five EU Sea Basins;
  - According to the stakeholders' perception, investigate potential MU combinations relevant to occur in the Sea Basin, and identify potential MUs that could take place.
3. Examination of DABIs for identified MUs on the sea basin level;
4. Clarification with stakeholders on their roles and degree of influence in the decision-making process;
5. Identification of other potential stakeholders;
6. Ensuring good collaboration with attendees and their continued involvement in the MUSES project.



Different dynamics were used in preparation to involve stakeholders and organize their participation.

**A Voting Game** was used to get verification of MUSES' preliminary findings on existing MU combinations with the most relevant MU combinations and those with the least potential to occur in EU sea basins. The four most attractive MU combinations are provided below:

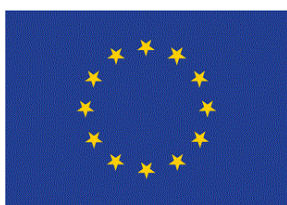
- Combination 1: Offshore Wind & Wave Energy
- Combination 2: Underground Cultural Heritage (UCH) & Tourism
- Combination 3: Aquaculture + Environmental protection
- Combination 4: Fishery + Tourism + Environmental Protection



*Photograph 2 – Stakeholder Workshop Poole*

**Interactive Table Discussions** – There were three interactive table discussions during the stakeholder workshop. In the first session four tables were set up, one to discuss each of the 4 MU combinations identified in the voting game. The second table discussion considered the two most important MU combinations at a Sea Basin level that were identified by the voting game. Table discussions 1 and 2 focused on the consideration of DABI's for each of the MU combinations.

The third interactive table discussion explored the roles of the participants present at the event in relation to MU development as well as the consideration of other institutions and individuals who may play a major role in MU development.







*Photograph 3 – Stakeholder Workshop groups Poole*

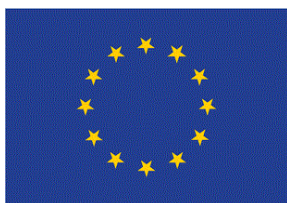
**The definition of MU** - Stakeholders were given the opportunity to compare the definition of MU to their personal understanding of MU and add comments and engage in discussions with other stakeholders as well as the MUSES project team about the definition. The collected comments and discussion points were helpful and allowed the project team to consider our definition further. Our current definition of MU is:

***‘In the realm of marine resource utilisation Multi-Use should be understood as the joint use of resources in close geographic proximity. This can involve either a single user or multiple users performing multiple uses. It is an umbrella term that covers a multitude of use combinations and represents a radical change from the concept of exclusive resource rights to the inclusive sharing of resources by one or more users’***

**Base definitions:**

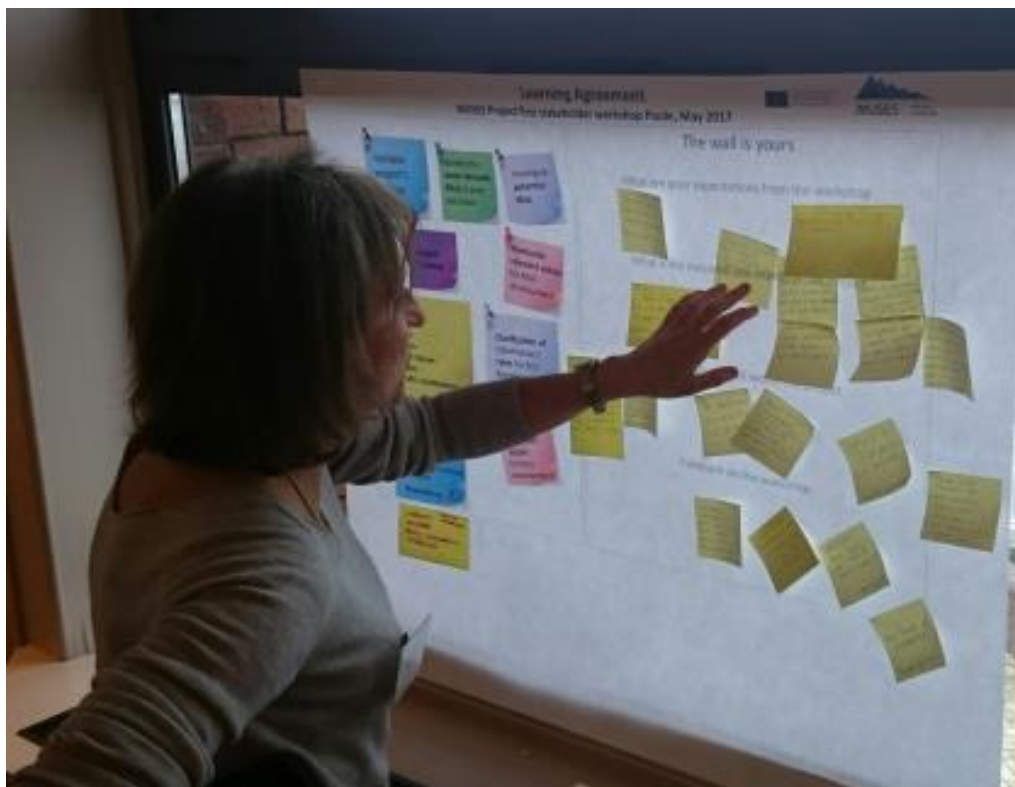
***A user*** is understood as the individual, group or entity that intentionally benefits from a given resource. If a business creates a separate legal entity to exploit an additional resource, this entity is then considered another user.

***A use*** is understood as a distinct and intentional activity through which a direct (e.g. profit) or indirect (e.g. nature conservation) benefit is drawn by one or more users.



*For the purpose of this definition, a clear distinction is made between different types of uses.*

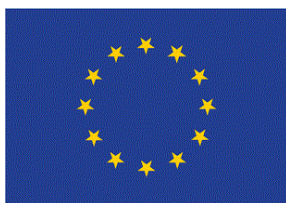
**A resource** is understood as a good or service that represents a value to one or more users. Such a resource can be biotic (e.g. fish stocks) or abiotic (e.g. ocean space) and can be exploited through either direct (e.g. fishing) or indirect (e.g. nature conservation) uses.



*Photograph 4 – Stakeholder Workshop Poole – Learning Agreement*

**The Learning Agreement game** was used as a means of obtaining feedback from participants about their expectations from the project. Stakeholder provided feedback on their expectations from the MUSES project as well as suggestions on future steps for the project. A few of the suggested future steps are provided below:

- To establish collaboration on the decommissioning of offshore platforms in order to define best solutions for their reuse;
- To invite developers of the Wave devices to the project and discuss MU potential (like MARIBE Project);
- Consider how to develop collaboration between competing users;
- To tailor results on particular governance levels – Policy makers, national, regional and local authorities;



- To create information sheets to maximize impacts and stakeholders' awareness about their potentials or not.

Suggestions were also collected for future engagement in the MUSES project, and these include:

- Newsletters
- LinkedIn discussion group
- Twitter
- Working group that would be commenting on our draft documents.

### **Stakeholder Workshop Conclusion**

The Stakeholder Workshop was an important step in meeting the MUSES project objectives, set out in the introduction of the workshop to the participants. It also allowed interested parties an opportunity to engage with the MUSES project team, to verify identified MU combinations and introduce their views on DABIs of identified combinations.

The outcomes of the workshop have contributed in the building of the report for final selection of the MU combinations for the five EU sea basins. A few suggested actions taken from the workshop include:

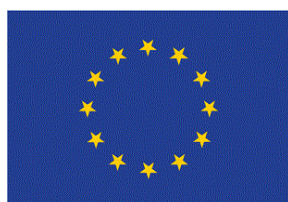
- Extension of the list of stakeholders involved in the project
- Consideration of a second workshop event
- Continuous work on the MU definition

Further information on the more detailed aspects of the workshop, including the structure and components parts as well as the initial findings can be found in the full 'MUSES Stakeholder Workshop Report' which is held on the MUSES website: <https://muses-project.eu/downloads/>

### **8.4 Project Steering Group Meeting 2 (D 2.8) (Consortium Only)**

PSG meeting 2 was held in Edinburgh on 11<sup>th</sup> & 12<sup>th</sup> April 2017 with all partners.

There was discussion on progress with all of the WP's, however, the main focus of discussion related to preparation for the Stakeholder Workshop in Poole.







*Photograph 5 – PSG Meeting 2 in Edinburgh*

## **9. Work Package 3**

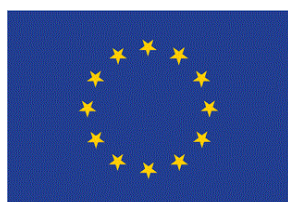
WP3 considers and analyses MU through a comprehensive set of case studies of real and/or potential MU to provide a complete spectrum of advantages in combining different uses of the sea. The case studies will engage stakeholders in identifying MU potentiality, opportunities and limitations.

The WP3 Leader is the Thetis.

### **9.1 Case Study Methodology (D 3.1) (Public)**

A total of seven MUSES cases studies will be considered under WP3. These cases studies are illustrated as 'Numbered orange circles' at Fig. 8. Case studies 1 and 3 have more than one study area resulting in 10 individual studies in total. Each of these 10 studies will produce a report using the report structure defined in the methodology; the ten reports will be aggregated to form deliverable "D.3.3 – Case study implementation". The Case Study Methodology document was completed in May 2017 and can be downloaded from the MUSES website: <https://muses-project.eu/downloads/>

The case studies consider a number of different MU combinations in different sea basins, detailed information on each of the cases studies is included within the Case Study Methodology document and will be further specified in the case study reports. The document establishes a common methodology for the analysis of these MU



case studies. This methodology provides the case study leaders with a common but flexible approach to examine practical experience related to MU in their local contexts. The methodology incorporates some of the elements defined in the AF developed under WP2 for the Sea Basin level research.

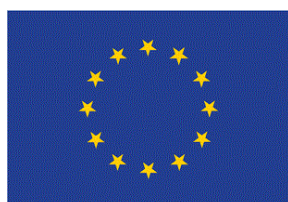
The methodology explains that case studies will be developed both through desk activities and stakeholder involvement. The desk analysis and stakeholder engagement activities will be combined but the process will be in a large part stakeholder-oriented. Stakeholder identification and engagement is covered in more detail through deliverable D3.2 (See section below).

The case study level analysis will consider future MU potentials on the basis of:

- existing legal, policy, strategic and planning documents covering MU at case study level
- the literature findings and the experience of the completed and on-going international projects
- stakeholder involvement
- other available information.

The Case Study methodology defines two phases of work:

- Phase A. Case study Implementation (Task 3.2)
- Phase B. Comparative analysis (Task 3.3).



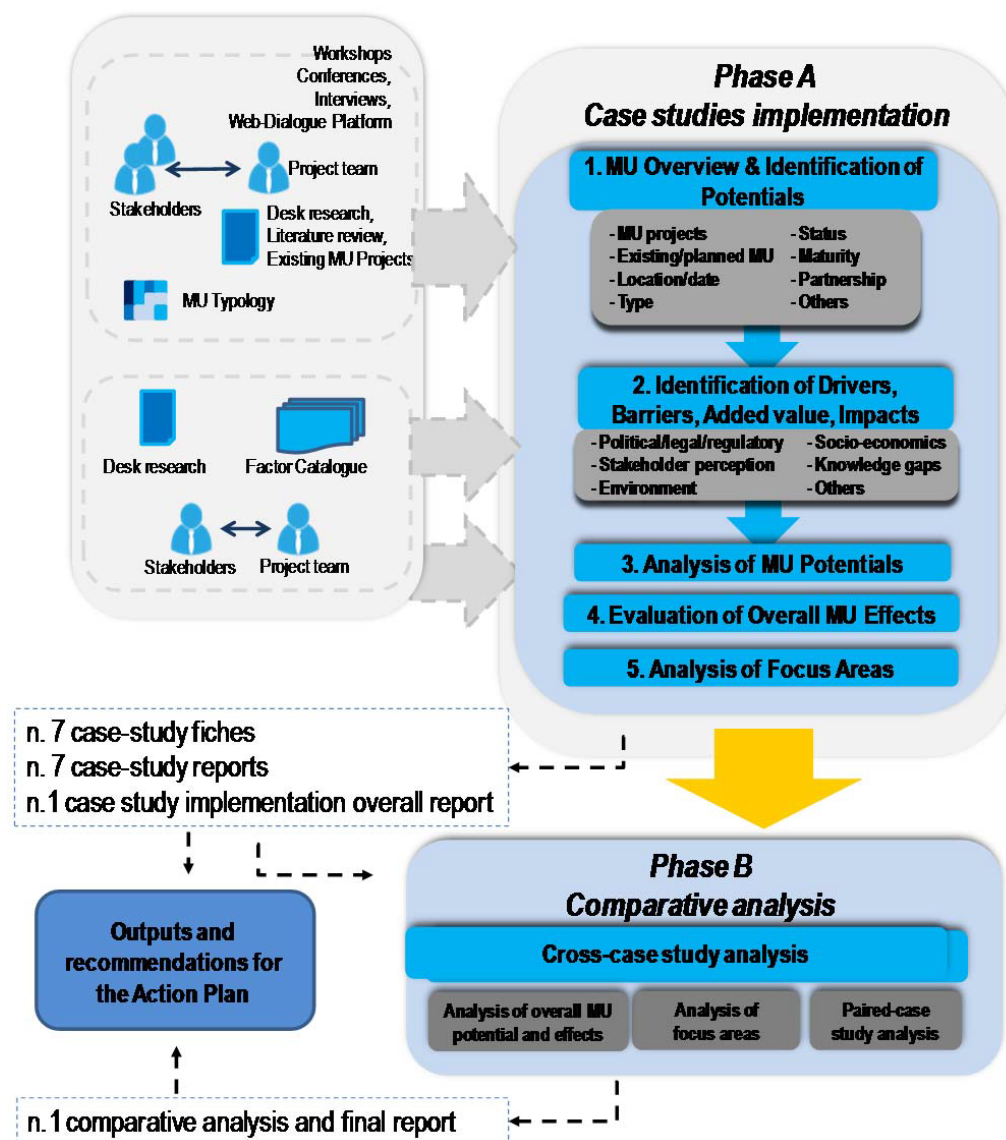
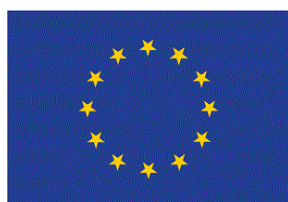


Fig. 5 – Graphical flow chart of the case study methodology and expected outputs.

## Phase A - Case study Implementation

In 'Phase A' there are five steps:

1. MU overview & identification of potentials
2. Identification of MU drivers, barriers, added value, impacts
3. Analysis of MU potentials
4. Evaluation of overall MU net effect
5. Analysis by Focus Areas





The first four steps for the 'Case Study' methodology are similar to the steps in the WP2 AF for the 'Sea basin' level work. Step 5, is unique to the case study methodology and is explained in some detail (Para 2.1.5. of the methodology). In 'Step 5' there are three defined 'Focus Areas':

- **Focus-Area-1 "Addressing Multi-Use"**
- **Focus-Area-2 "Boosting Blue Maritime Economy"**
- **Focus-Area-3 "Improving environmental compatibility"**

The Case Study Methodology explains that analysis for the Focus Areas will be implemented by providing answers to a set of **Key Evaluation Questions (KEQs)** which are defined in the methodology. Draft answers to the KEQs will be prepared by case study leaders based on knowledge and information collected during the desk phase of the research. The final version of the answers will be prepared by case study leaders based on stakeholder feedback.

The WP3 Case Study Methodology maintains a consistency with the WP2 AF and the whole MUSES approach, using the same DABI and MU potential / MU Effect definitions and scoring system (see Fig. 3 – Evaluation MU above). It follows that the methodological approaches for the both of these WP's have a commonality in their respective processes.

## **Phase B – Comparative Analysis**

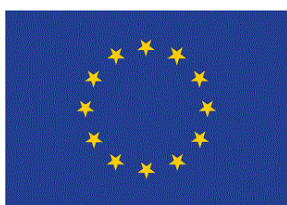
Comparative analysis will be carried out to provide relevant evidence from case studies to feed into the WP4 Action Plan development. Comparative analysis will consider:

- 1) results from DABI analysis and estimation of MU potential and MU effect
- 2) results from real vs. perceived barriers analysis
- 3) results from Focus Areas analysis
- 4) pair analysis will be carried out on two contrasting case studies, aiming at highlighting elements of difference.

Comparative analysis will also look into elements such as Sea Basin or Sub-Sea basin MU commonalities, near shore vs. off-shore MU related elements, "soft" vs. "hard" sea uses in terms of MU DABI's. The analysis will finally provide a set of key conclusions and recommendations to feed into the Action Plan under WP4.

## **Starting point for WP3**

As a starting point the WP3 leader undertook a phase of analysis on the most relevant MU related projects and studies, the results are included at the Annex 1 and



Appendix of the Case Study methodology document. The examined projects belonged to three different categories:

- projects or studies specifically proposing MU design concepts,
- technology oriented projects especially concerning ocean energy,
- projects concerning Marine Spatial Planning issues in relation to MU.

A breakdown of the available information for each case study was then analysed into elements of DABI's. Finally, the main combinations of uses, resulting from all case-studies had the DABI elements re-organised for combinations of uses, independently from the specific location and sea basin (see Annex/Appendix of the Case Study Methodology).

Attached below, by way of an example, is the resultant output for the MU combination of 'Wave & Aquaculture':

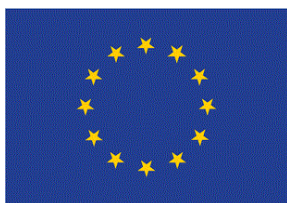


Drivers		Barriers		Added value		Impacts	
Category	Factor	Category	Factor	Category	Factor	Category	Factor
D.1 Policy		B.1 Legal		V.1 Economic	Cost savings due to synergies for installation, inspection and maintenance operation and due to shared vessels	I.1 Economic	A negative balance between costs and benefits has been highlighted (H2Oceans platform)
D.2 Interaction with other uses		B.2 Administrative		V.3 Environmental	Autonomous supply of clean renewable energy Less environmental pollution for aquaculture products due to distance from coast and better dispersion of pollution	I.2 Societal	
D3 Economic	A multi-use platform can be seen as a very good alternative to secure food sources and energy supply	B.3 Financial/R	High cost of investment is needed	V.4 Insurance policy and risk management		I.3 Environmental	The environmental impact of the whole proposed installation has been evaluated as highly significant (H2Oceans platform)
D.4 Societal	Good public perception due to the combination of two environmental friendly products	B.4 Technical	Low technology readiness level of many parts and novelty of the envisaged configuration	V.5 Technical	Calmer waters (due to wave energy converters) facilitating seaweed farm More days of operational activities for seaweed farm during bad weather conditions More frequent activities on site due to the different uses can lead to better detection of potential anomalies		
		B.5 Social		V.6 Administrative	Easier licensing process due to the multiple use of space.		

*Fig. 6 – Example taken from Case Study Methodology - DABIs for MU Combination ‘Wave & Aquaculture’. For further examples go to the Case Study Methodology Document*

## 9.2 Stakeholder Identification & Engagement Process (D 3.2) (Public)

The purpose of the ‘Stakeholder identification and engagement process in case studies’ document is to describe how stakeholder identification and engagement will be carried out at a case study level, within WP3. The document provides actions planned by each case study leader on intended interaction with stakeholders. The document was completed in May 2017 and can be downloaded from the MUSES website: <https://muses-project.eu/downloads/>



There are a number of methods that will be used by the case study leaders to engage with stakeholders, the optimal method will vary between the different case studies. It is expected that the main methods will include; interviews, expert panel(s), local workshop(s), consensus conference(s) and other engagement processes that may be relevant in a particular location.

The Stakeholder Identification & Engagement Process document also includes individual details for each of the case studies. The case study information includes:

- Details of the case study level stakeholders by category
- Issues for discussion with the stakeholders
- Engagement methods
- The expected results and impacts

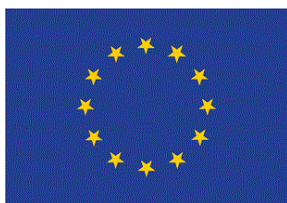
### **9.3 Project Steering Group Meeting 3 (D 3.6) (Consortium Only)**

PSG meeting 3 was held in Berlin on 25<sup>th</sup> & 26<sup>th</sup> September 2017, back to back with the 2<sup>nd</sup> SUBMARINER Conference “Better Off Blue – Creating synergies for a bio based society”.

There was discussion on progress with all of the work packages with the main focus on the deliverables that are due at the end of October & November 2017 as well as the Periodic Technical and Financial Reports.



**Photograph 6 – PSG Meeting 3 in Berlin**





## 10. Work Package 4

WP4 will develop an Action Plan to address the challenges and opportunities for the development of MU's of seas identified in the regional overviews and case studies. It will provide recommendations for future action, taking into account national, regional and sea basin dimensions.

The WP4 Leader is the SUBMARINER Network for Blue Growth EEIG.

### 10.1 Overview Stakeholder Profiles (D 4.1) (Public)

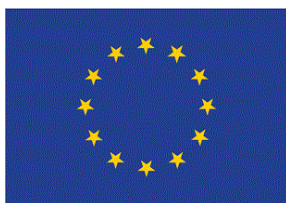
The WP4 leader has been working with the MUSES consortium on the 'Overview Stakeholder Profiles' document. The purpose of this document is to provide an overview of stakeholder profiles, presenting one of the essential steps in development of an Action Plan.

The MUSES stakeholder environment is highly diverse and complex, and requires a thorough understanding of the wide range of stakeholder groups. A number of MU combinations explored in this project are characterised by a diverse range of individuals, groups and organisations with common and/or competing interests operating at a variety of spatial scales. Namely, there are a wide range of interests in and positions on MU, which are manifested at varying scales and degrees of intensity.

The overall aim of stakeholder analysis is to gain a better understanding of the various actors relevant in the context of MU combinations examined in the MUSES project. Therefore, taking into consideration different geographical scales, the stakeholder profiles will be developed with specific attention to those actors identified to be behind the drivers and barriers for the MU development in question. This is essential for development of an Action Plan which will be targeting the right type of stakeholders with the right type of action, taking into account national, regional and sea basin dimensions. Specifically, the Action Plan will highlight the real opportunities for MUs in European Seas including the scope for innovation and Blue Growth potential, and propose solutions to overcome existing barriers.

Stakeholder analysis is an iterative process that will evolve throughout the stages of the MUSES project, rather than a one-off isolated analytical step. Stakeholder analysis is/will be conducted in parallel with barrier/driver identification and evaluation. As new information is gained (purposefully or opportunistically), stakeholder information will be updated and revised, with an intention to deepen the analysis.

The 'Overview Stakeholder Profiles' document defines the analysis of stakeholders into 'Themes' and 'Categories'. A total of 7 themes are defined with a 'Cross Sector'



theme for stakeholders that do not fall under a particular sector. For each of the stakeholder themes elaboration will be given for a number of defined categories (not all categories will be relevant in each country and MU combination). A summary of the stakeholder Themes and categories is listed below:

<b>Stakeholder Themes</b>	Aquaculture; Fishing; Energy; Tourism; Underwater Cultural Heritage (UCH); Environmental Protection; Transport; Cross Sector.
<b>Stakeholder Categories</b>	Commercial Business; Business Support – Consultancies; Research Organisations; Regulators; Policy Makers; Classification Societies; Insurance Companies; Funding Bodies; Intermediaries; NGOs and other intermediaries representing society at large.

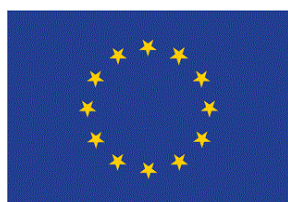
Following the consideration of MU combinations for themes and categories, elaboration on the six following attributes will be made based on desk analysis and stakeholder engagement activities:

- Overall Interest in MU
- Overall attitude towards MU
- Geographical scale at which certain stakeholder has the power
- Organisation of stakeholder (How are stakeholders organised?)
- Type of power
- Level of power.

Using this methodology stakeholder profiles will be elaborated for each stakeholder theme relevant to each country and each stakeholder category under each theme as specified above. This information will be recorded in the excel sheet that will form a database for the analysis necessary for stakeholder visualisation diagrams. Information from the country inputs will be used to compile sea basin level stakeholder profiles and structured in a way it can be visually presented through Venn diagrams in preparation for the Force Field analysis.

These WP4 outputs will feed into the WP5 exploitation of results work which will be developed by the WP5 leader accordingly to help target priority stakeholders.

The ‘Overview Stakeholder Profiles’ will be available for download on the MUSES website once finalised later this year.





## **11. Work Package 5**

WP5 deals with the Project dissemination and communication aspects of the MUSES project.

The WP5 Leader is Marine Scotland.

### **11.1 Logo & Publicity (D 5.1) (Public)**

The MUSES project developed a project visual identity in the form of a project logo (fig.7). The project logo selected by the partners and shown below was developed by designers working with Fundação Gaspar Frutuoso (FGF).



*Fig. 7 – MUSES Project logo*

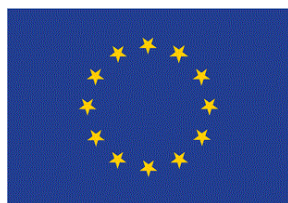
### **11.2 Website (D 5.2) (Public)**

The Project website is the outward facing platform for the MUSES Project and provides a vehicle for communication and dissemination of Project activities and updates to stakeholders. The Project website is managed by Marine Scotland and hosted by the University of Dundee.

The MUSES Project website went live on 31 January 2017 and can be found at <https://muses-project.eu/>. The website will continue to be developed and maintained as the project progresses.

### **11.3 Infographics (D5.3) (Public)**

A MUSES infographic was developed in January 2017 (fig.8). This infographic has been used for a number of purposes including a visual on the MUSES website, posters, presentations and flyers.



# MUSES : MULTI-USE IN EUROPEAN SEAS

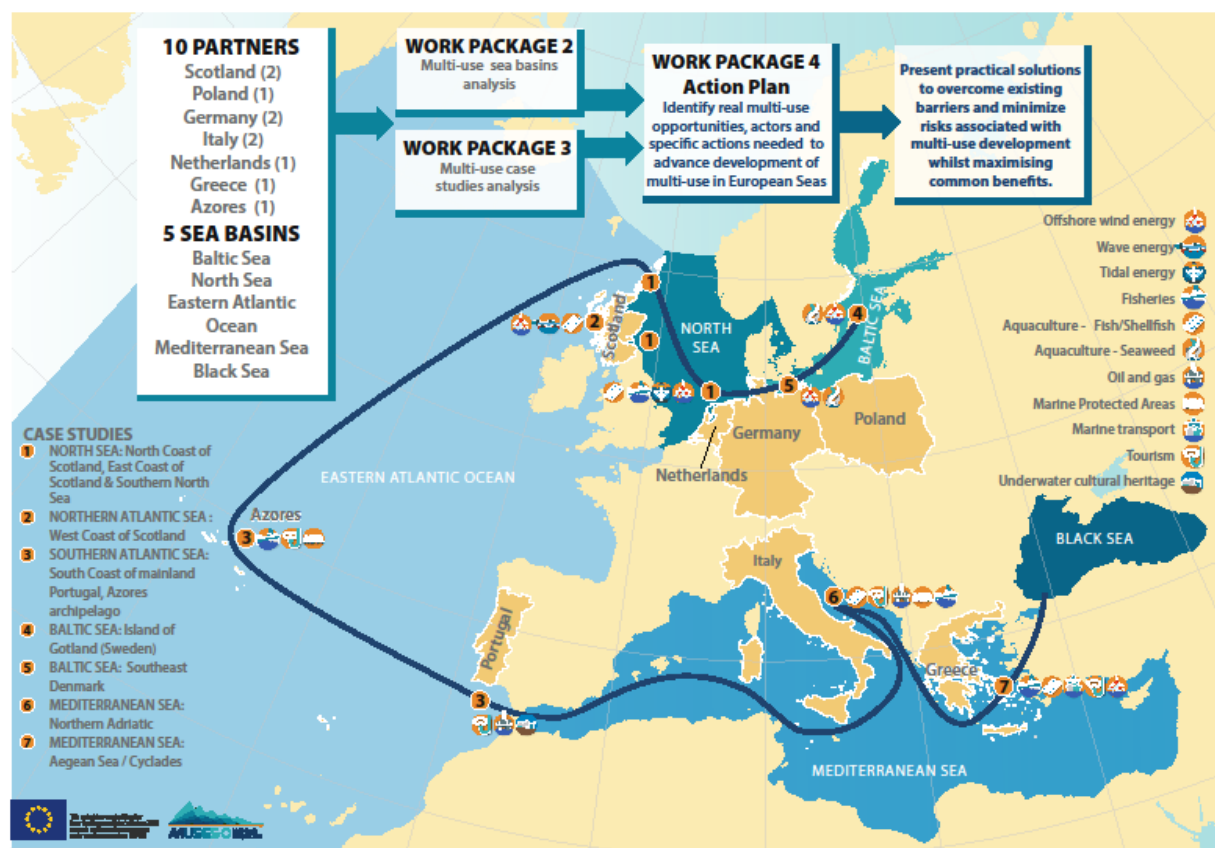
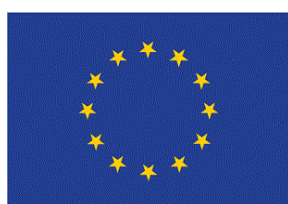


Fig. 8 – MUSES Infographic

## 11.4 Conference Presentations & Attendance at Events (D5.5) (Public)

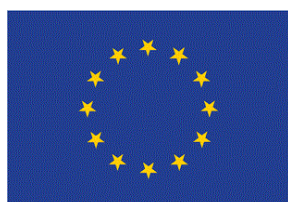
Project Partners have attended a number of events in the first year of the project disseminating information on the project and advising interested parties on where to access project information.

The MUSES project was delighted to accept an invite to attend ‘A New Era of Blue Enlightenment’ event that was held in Portugal in July 2017. Professor Helena Calado represented the MUSES project delivering a well-received presentation at the event. A list of the events attended by the MUSES project is attached below:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 727451

Date	Event	Country
MAR 2017	11th meeting of the Member State Expert Group on Maritime Spatial Planning (MSEG)	Germany
MAR 2017	Marine/Maritime Spatial Planning Conference	France
APR 2017	ICES working group on Marine Planning and Coastal Zone Management Annual Science Meeting 2017	Spain
APR 2017	International Conference Maritime Spatial Planning, Ecosystem Approach and Supporting Information Systems (MaPSIS)	Spain
MAY 2017	All-Energy 2017	Scotland
MAY 2017	European Maritime Day	England
JUN 2017	Sea Scotland 2017	Scotland
JUL 2017	A New Era of Blue Enlightenment	Portugal
SEP 2017	Scottish Renewables Marine Conference	Scotland
SEP 2017	2 <sup>nd</sup> Submariner Conference – Better off Blue	Germany
OCT 2017	MASTS Annual Science Meeting	Scotland

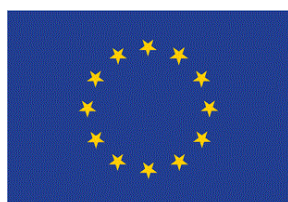




*Photograph 7 – Professor Helena Calado at ‘A New Era of Blue Enlightenment’*



*Photographs 8 – MUSES Partners promoting the MUSES project (left: Timothy Roberts (MUSES Project Manager) at the MASTS Annual Science Meeting, Right: Bruce Buchanan (MUSES Coordinator) at the Scottish Renewables Marine Conference)*





### **11.5 Newsletter & Social Media (D5.6) (Public)**

The MUSES project has used newsletters to disseminate high level results from workshops and work-streams to interested parties. We will continue to issue newsletters throughout the lifetime of the Project which will correspond to significant events/deliverables. If you would like to sign up to receive a newsletter please do so here: <https://muses-project.eu/about-muses/contact-us/>

A social media presence was established through Twitter (@H2020MUSES) and linked to the website on 20<sup>th</sup> January 2017. The project has generated regular news updates on the project and has helped direct interested stakeholders to publically available data for the project.

A LinkedIn profile was set up for MUSES on 31<sup>st</sup> January 2017. The LinkedIn MUSES account can be viewed here: <https://www.linkedin.com/in/muses-project-563191138>

### **11.6 Dissemination of Interim Reports (Half way stage) (D 5.8) (Public)**

This interim report you are reading will be available on the MUSES Project website and disseminated to stakeholders at the end of October 2017.

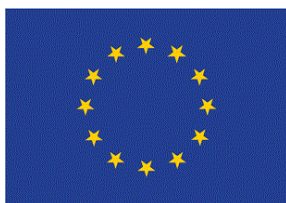
### **11.7 Exploitation of Results (D 5.12) (Public)**

The purpose of the 'Exploitation of Results' document is to ensure that the MUSES project's aims, progress and results are disseminated effectively to those directly involved in marine spatial planning and multiple uses of the oceans, as well as being easily accessible to a wider audience. This document has been created under deliverable 5.12 and will remain live and be revisited under deliverable 5.13 in the final month of the project. This document will be publicly available to view on the MUSES website at the end of October 2017.

### **11.8 Data Management Plan (D 5.14) (Consortium Only)**

A MUSES Data Management Plan (DMP) was completed in April 2017 and remains a "live" document which will be reviewed and amended by the Consortium where necessary during the course of the project. This document outlines how data is to be handled both during the MUSES project and after the project is completed.

The DMP describes the data management life cycle for all the datasets collected, processed or generated during the project. The aim of the DMP is to improve and maximise access to and re-use of research data generated by the MUSES project.



## **12. Work Package 6**

WP6 deals with the ethics requirements for the MUSES project. This deliverable deals with informed consent and data handling procedures. This WP was completed in the first month of the project.

The WP6 Leader is Marine Scotland.

## **13. Further Information & Comments**

Further information on the MUSES project can be found on the MUSES website using the following link: <https://muses-project.eu/>

If you have any comments on this document or on the MUSES project we would very much welcome your input. We would like to invite you to contact us using the following e-mail address: [ms.musesproject@gov.scot](mailto:ms.musesproject@gov.scot)

Finally we would also like to take the opportunity to ask if you would like to sign up to our Project Newsletter. The newsletters will provide regular updates on the MUSES project. You can sign up to the newsletter from this webpage:

<https://muses-project.eu/about-muses/contact-us/>

