

**Acronym: COLUMBUS**

**Title: *Monitoring, Managing and Transferring Marine and Maritime***

*Knowledge for Sustainable Blue Growth*

**Grant agreement n° 652690**

## **Deliverable D.2.1**

# **Internal Project Management System**

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**Lead parties for Deliverable: AquaTT**

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## 1. Introduction

Marine and Maritime Research has a critical role to play in developing our understanding of the seas and advance technology so that we can develop their economic potential in a sustainable manner. The **COLUMBUS** project intends to capitalise on the EC's significant research by ensuring accessibility and uptake of research Knowledge Outputs by end-users (policy, industry, science and wider society).

**The core element of COLUMBUS is to operate a network of Competence Nodes** across Europe covering a wide scope of marine and maritime areas/sectors. A network of **9 Competence Nodes**, each with a "*Knowledge Fellow*" (KF) and support team across Europe will provide the necessary critical mass (470pm of effort) to ensure full thematic and spatial coverage.

- KFs are **embedded in a range of partner organisations** and **tasked specifically with accelerating and amplifying the adoption of relevant research knowledge** resulting in value creation for society. To do this they will **work full time (for a common period of time)** during the project, following a defined methodology and process.
- They will ensure valuable Research Knowledge from EC funded activity is identified, captured, analysed and transferred effectively to **different end-users (Industries, Policy, Scientific Community and wider society [social innovation])** for uptake and application. The end result is a tangible contribution to the EU strategy of sustainable Blue Growth.

WP2 (Methodology) will establish the network of the KFs to work as a peer group during the implementation of the project and it is expected they will interact on a regular basis sharing experiences and working as a team. Training on methodologies will be provided for each step of the process. Furthermore, where external expertise is required, a budget line is available to bring in extra support e.g. in WP5 for the Knowledge Output Analysis process.

This reference guide is for each KF to understand their role and responsibilities within the project, and how to maximise the expertise and insights of the COLUMBUS partnership as a whole.

## 2. Competence Node Composition

### *Competence Node Leaders & Knowledge Fellows*

Each Node will be led by a Columbus "Knowledge Fellow" (KF), working full time for a partner on the project for a common period of time. As agreed with nodes at proposal development stage, each KF will work full time on COLUMBUS for at least 24 months. Some may be able to work for a longer period depending on budget availability. Each Node will also have a Node Lead which may be the same individual as the KF. To differentiate between the roles, responsibilities of a Node Leader could be listed as follows:

#### **Node Leader:**

- Supervises the work of the KF



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- Could be more senior with a broader understanding of the thematic area including best placed experts to approach if required, best networks/channels to use etc.
- Provides advice on end users, applications, value chains, markets, policy etc.
- Considers the strategic positioning of the Competence Node
- Oversees the resourcing within the Competence Node

### ***Competence Node team***

Other partner organisations with specific competence in the thematic area. They will provide support to the KF by providing technical competence from their organisation during implementation of the project. See Annex 1 for the Competence Node team's breakdown.

## **3. Knowledge Fellows' Description**

### ***Profile***

Ideally an individual who has worked in both research and industry/or policy as it has been found that individuals with experience in both sides of the equation usually have a better understanding of needs/challenges. Has the ability to interact with a range of stakeholders and has a sufficient technical level to be able to understand and analyse research Knowledge Outputs and determine their applicability to different target users in the theme concerned. The level of qualifications is not prescribed and each Node Lead needs to identify an individual who they think can fulfil the job specification.

### ***Skills and Expertise***

- Analytical skills
- Broad general knowledge of the marine and maritime sectors
- Fluent in English
- Critical thinking
- Curiosity
- Determination and Patience
- Discretion
- Empathy
- Flexibility
- Investigative skills
- Logical thinking, organisation and self-discipline
- Objectivity
- Problem-solving skills
- Show initiative
- Teamwork and communication skills



### ***Job Description - Roles & Responsibilities***

- Full time for 24 months
- Communicates with other knowledge fellows on a regular basis, working through the methodology outlined in COLUMBUS.
- Is the point of contact with external projects when they are identified as potentially having Knowledge Outputs which could progress to Knowledge Transfer
- Attends internal capacity training
- Provides feedback and observations of working within the COLUMBUS methodology, allowing it to be improved if required within the framework of the project

The role of the KF is to lead, in conjunction with the Node Lead (where they are separate individuals within the same partner organisation), a specific thematic Competence Node through the Knowledge Transfer methodology defined in COLUMBUS. Guidelines on how to carry out these activities including timelines and templates will be provided for in WP2 Support, as well as through regular internal capacity training. The Node Lead/KF provides expertise and strategic input and ensures that the activities are carried out on time, to budget and to the required quality standard (within agreed specifications). He/she ensures the activities within the COLUMBUS Knowledge Transfer Cycle (WP4, 5 & 6) is effectively resourced and manages relationships with a wide range of groups (including all project partners). The KF is also responsible for managing the involvement of external advisors, allocating and utilising resources in an efficient manner and maintaining a co-operative, motivated and successful team.

The KF is responsible for developing and carrying out Knowledge Transfer Strategies ensuring that a strategic, coordinated and effective approach in transferring knowledge.



#### **4. The Knowledge Fellow and Knowledge Transfer Work Packages**

The WP Leaders and KFs will use email and telephone calls for general communication; Skype for instant messaging; and basecamp for file storage and thread discussions under specific WPs.

All steps undertaken under the COLUMBUS Knowledge Transfer Methodology are aligned with tasks and deliverables of WPs 4, 5 and 6. The leaders of these WPs will need to be informed of the KFs' progress and findings. The templates that will be completed at each step of the Methodology should be submitted to the relevant WP Leader to satisfy reporting requirements. The Work Package Leaders relevant to the Knowledge Transfer Methodology are:

##### ***Knowledge Supply – WP4***

**WP Leader:** Cristina Costa, EurOcean

**Contact:** [cristina.costa@eurocean.org](mailto:cristina.costa@eurocean.org)

##### ***Knowledge Analysis – WP5***

**WP Leader:** Rosa Fernandez, CETMAR

**Contact:** [rfernandez@cetmar.org](mailto:rfernandez@cetmar.org)

##### ***Knowledge Transfer – WP6***

**WP Leader:** Simon Powell, MSE

**Contact:** [sp@mseuk.org](mailto:sp@mseuk.org)

#### **5. Other Interactions**

Interaction and cooperation between Nodes is essential and necessary for the success of the project. Knowledge sharing should be maximised as a strategy to facilitate the integration of complementary knowledge outputs. The Node Lead/KF will meet with the other Competence Node teams on a regular basis; meeting on a quarterly basis remotely (using conferencing facilities) and during a dedicated session at partner meetings. These meetings will facilitate an open and transparent model of knowledge transfer, allowing for exchanges of experiences and understandings as well as support. In some cases, knowledge collected in one Competence Node could enable or facilitate other Knowledge Outputs. Depending on the results of WP3 the scope of each Node may be adjusted to achieve the best results.

The leader of WP2 “Support: methodology, processes and capacity building” will be in contact with every KF on a fortnightly basis to provide support and ask for updates, and will act as a switchboard to pass on queries to the other WP leaders.

#### **Within each Competence Node Team**

The KFs and Node Leads have a dedicated Competence Node Team surrounding them. Furthermore, as all COLUMBUS partners have a time allocation under WPs 4, 5 and 6 and have a broad and varied expertise, the KFs are encouraged to draw upon their expertise to assist their Knowledge Transfer



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activities. The leader of Work Package 2 should be informed when expertise is sought from non-Competence Node Team partners, so that this collaborative impact is recorded.

## **With other Work Packages**

### ***Coordination & Project Management – WP1***

KFs must provide technical and financial reporting through their organisations to WP1 as part of official EC reporting requirements but also through COLUMBUS 6M reporting protocol as outlined in the project management manual (D1.1). This involves keeping timesheets (unless KF is full time working on COLUMBUS in which case timesheets are not necessary but this must be reflected in their employment contracts). All travel expenses must have the relevant original evidence available in case of audit.

### ***Support: Methodologies, Processes & Capacity Building – WP2***

Each Competence Node through its KF and/or Node Lead will be required to partake in training provided through WP2, as well as provide input and feedback while carrying out Knowledge Transfer. The objectives of WP2 are two-fold: To develop initial Knowledge Transfer methodologies to inform the KFs' work, but also to use the experiences of the KFs to evolve and adapt these methodologies throughout the project. The end result should be a more robust and user friendly guide which will inform WP8 Legacy.

### ***Knowledge Demand – WP3***

Competence Nodes contributed to WP3 by identifying the key strategic documents relevant to their competence nodes. This WP will be key to prioritising the knowledge needs of the Competence Nodes and also to understand where Knowledge Fellows can successfully apply KT activity for impact.

### ***Communication – WP7***

All KFs will work with WP7 to promote COLUMBUS to all relevant parties and the general public and to communicate on marine Knowledge Transfer, and its added value toward a Blue Society. In particular, Task 7.2 involves support being offered to KFs as they work through their KT activities. While this support is not defined there is budget available for support in graphical design, events, and development of materials or promotional items which could enrich a KT plan.

Protocol – KFs should keep WP7 informed of potential ideas per Knowledge Output, allowing as much time as possible.

### ***The COLUMBUS Legacy – WP8***

Europe is lagging behind other continents in its ability to convert research knowledge into innovation and growth. The research community is seen as a potential enabling community to achieve Europe 2020. To achieve measurable benefits, the research system needs to be examined to identify potential improvements and efficiencies to allow it to respond to the demand set by the policy makers. WP8 will investigate options for extending the COLUMBUS Methodology beyond the project having a permanent impact on the knowledge management within the EU.



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## 6. Risk Management

### *Delays*

Any significant delays to the work activities of KFs should be immediately brought to the attention of the WP2 Leader as well as the management team. Mitigation will be based on the reasons for the delay as well as the severity of the issue. Shorter or insignificant delays should be communicated to the WP2 Leader with a detailed explanation as well as a new timeline. Depending on what aspect of the KT activities is concerned, the relevant WP Leader (4, 5 or 6) may also need to be informed and consulted.

### *Unsuccessful methodology*

Through WP2 and the planned regular communications between the KFs themselves and also within the partnership, negative experiences or barriers affecting the Knowledge Transfer activities should be quickly identified. The guidelines for carrying out Knowledge Transfer developed in WP2 will be seen as a live document which, through working together, can and will be adapted as the KFs work through the different steps of the KT methodology. Each KF will be afforded a level of flexibility in how the methodology is followed, based on the different motivations, capacities, priorities, stakeholders etc. of each individual Competence Node.

The protocol for KFs who believe the methodology should be adapted and/or changed will be to notify the network of KFs as well as the WP2 Leader.

### *Change of personnel*

In the case of the situation of staff leaving the role of KF or Node Lead, please advise the coordination team as soon as possible. We would recommend that a passing over document is prepared.



## 7. Annex 1: Competence Node Teams

		BIM	AquaTT	EuroOcean	CETMAR	DTU Aqua	UPMC-CNRS Roscoff	JÜLICH	Seascope Consultants (EMODNET)	Marine South East	Aquark	SMARTBAY Ireland	PLOCAN	Innovatec	VLIZ	CEFAS	Nausica/World Ocean Network	Aquatera/EMEC/Herriot-Watt	EuroGOOS	Maritime Development Center of	NERC-NOC	UEFISCDI	ECMAR	EAS	NTNU	CMVT	ICES	
Fisheries	Fisheries Management																											
	Gear/Technology																											
	Stock assessment																											
	Seafood value chain																											
Aquaculture	Biofouling																											
	Breeding and Husbandry																											
	Quality																											
	Health and Welfare																											
	Sustainable aquaculture																											
	Production																											
	Supply sector and full value chain																											
Monitoring & Observation	Marine data and information acquisition, storage and access systems																											
	Monitoring and observation technology and systems (e.g. sensors, biosensors, bioinformatics, seabed mapping, Ocean observing systems, etc)																											
Marine Biological Resources	Biomass																											
	Biocompounds for applications in e.g. Aquaculture, food, feed, biomaterial, biotechnology																											
	Marine genomics																											
	Blue biotech																											
	Marine ecosystem																											
Maritime Transport & Logistics	Shipbuilding																											
	Shipping and operations																											
	Maritime logistics infrastructures																											
	Operations and Port operations (incl. safety & security, surveillance)																											
	Marine engineering value chains																											
Marine Physical Resources	Marine & offshore renewable energy																											
	Offshore oil & gas																											
	Marine aggregates																											
	Deep sea mining																											
Maritime Tourism	Cruise and Cruise supply chains																											
	Leisure marine activities																											
	Marine infrastructures																											
	Leisure boat-building																											
	Marine engineering value chains																											
	Coastal tourism																											
Marine Governance & Management	Coastal & ocean governance and management																											
	Finance modelling & prediction																											
	Socio-economics																											
	Environmental impact assessment																											
	Water resource management																											
Marine Environment & Futures	Marine spatial planning																											
	Oceanography																											
	Biodiversity																											
	Climate change and effects on marine environment																											
	Ecosystem services																											

Competence Node Leader (Knowledge Transfer Fellow)
Competence Node Partner
Partner with competency in this area



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