



JOINT EUROPEAN RESEARCH INFRASTRUCTURE
NETWORK FOR COASTAL OBSERVATORIES

Interim Periodic Activity Report

Grant Agreement n° 262584

Project Acronym: **JERICO**

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Periodic report: 0 1st 2nd 3rd

Period covered: from Month 1 to Month 18

Name, title and organisation of the scientific representative of the project's coordinator:

Patrick FARCY – coordinator - Ifremer

Tel: + 33 2 98 22 44 08

Fax: + 33 2 98 22 45 55

E-mail: jerico@ifremer.fr

Project website address: www.jerico-fp7.eu



Declaration by the scientific representative of the project coordinator

I, as scientific representative of the coordinator of this project and in line with the obligations as stated in Article II.2.3 of the Grant Agreement declare that:

- The attached periodic report represents an accurate description of the work carried out in this project for this reporting period;
- The project (tick as appropriate) ¹:
 - has fully achieved its objectives and technical goals for the period;
 - has achieved most of its objectives and technical goals for the period with relatively minor deviations.
 - has failed to achieve critical objectives and/or is not at all on schedule.
- The public website, if applicable
 - is up to date
 - is not up to date
- To my best knowledge, the financial statements which are being submitted as part of this report are in line with the actual work carried out and are consistent with the report on the resources used for the project (section 3.4) and if applicable with the certificate on financial statement.
- All beneficiaries, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs, have declared to have verified their legal status. Any changes have been reported under section 3.2.3 (Project Management) in accordance with Article II.3.f of the Grant Agreement.

Name of scientific representative of the Coordinator:Patrick Farcy

Date:20...../ .February...../ .2013....

For most of the projects, the signature of this declaration could be done directly via the IT reporting tool through an adapted IT mechanism.

¹ If either of these boxes below is ticked, the report should reflect these and any remedial actions taken.

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REFERENCES

Annex 1 to the Contract: Description of Work (DoW) version 2011-02-22

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Third parties				
Associated Partners				

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PUBLISHABLE EXECUTIVE SUMMARY

1 PROJECT OBJECTIVES AND MAJOR ACHIEVEMENTS DURING THE REPORTING PERIOD

1.1 Overview of general project objectives

This project has been conceived in the framework of the MarinERA ERANET (**A Marine RTD Infrastructure Strategy for Member States** - April 2009). JERICO is clearly a process aiming at bringing together the representative European coastal observatory operators, enhancing their coordination and promoting the cost-effective use of their facilities, in order to support the efficient provision of essential research and monitoring networks. The development of high-quality and comprehensive coastal observing systems has only recently moved forward, principally at national and regional level. In this overall context, the JERICO project aims at creating a solid and transparent organization towards an operational service for the timely, continuous and sustainable delivery of high quality environmental data and information products related to the marine environment in European coastal seas. It will promote joint research initiatives and standardisation, giving a boost to the industrial sector of coastal instrumentation and monitoring services.

Such a research infrastructure is innovative in the sense that, for the first time, there will be a common European organization that will consolidate and harmonize the currently fragmented coastal observing activities in a consistent, coherent framework to the benefit of data quality, availability and cost. This would in turn give generic support to monitoring the environment and biodiversity, to understanding climate change and to better prediction of related impacts, to facilitate the sustainable exploitation of marine resources and indirectly to increase employment through education, training and technological innovation. JERICO aims are:

Networking Activities	Enhanced structure and integration	<ul style="list-style-type: none"> • Define a common strategic vision for coastal observatories • Facilitate coordinated infrastructure access to European researchers to broaden services and facilities • Establish a European Network Infrastructure
	Enhanced sustainability	<ul style="list-style-type: none"> • Facilitate optimal use, and inter-operability, for existing equipment
	Sharing of knowledge	<ul style="list-style-type: none"> • Advance training in modern equipment • Intensify dialogue and interactions with industry and policy makers • Promote interactions with other infrastructures and European projects (EuroArgo, SeaDataNet, MyOcean)
	Cooperation	<ul style="list-style-type: none"> • To develop International cooperation
Trans National Access	Wider access	<ul style="list-style-type: none"> • To observatory infrastructure • To mobile coastal observing systems (gliders, ...) • To added value data and services
Joint Research Activities	Joint development	<ul style="list-style-type: none"> • Study on optimization of the coastal observing system of systems • Innovative sensors or systems to enhance interoperability • Innovative software for a better exploitation of mobile systems

1.2 Objectives for the reporting period, work performed and the main achievements in the period

□ Objectives of the reporting period

The main objectives of the 1st period were to initialise the project (at a Kick-off meeting) and to organise the first workshops for the Best Practices. JERICO also launched the first call for Trans National Access with 9 selected projects from 13 proposals. The first general Assembly was held in Heraklion on the 1st and 2nd of September 2012. A dedicated JERICO website has been opened. All the submitted deliverables (except the consortium agreement) are available on this site: www.jerico-fp7.eu

□ Work performed and main achievements in period

- **WP11:** The management task was performed by the project management team of Ifremer, including the coordinator (Patrick Farcy), the deputy coordinator (Ingrid Puillat) and the administrative officer (Dominique Gueguen). HCMR and NIVA are associated to that WP for the Quality Assessment plan, delivered in October 2011, and the Identity set in January 2012.

The management team organised the Kick off meeting in Paris (in May 2011) and the first Steering Committee in Paris too (January 2012). In October 2012, the 1st general Assembly week was organised in Heraklion with the support of HCMR who managed the on site organisation. This event was an opportunity to organise also the 2nd Steering committee and two workshops: the first one on the future strategy of coastal observatories and the second one was to finalize the best practices for Ferrybox and fixed platforms. The management team provided an internal 9 month reporting technical and financial reporting.

The Consortium agreement was signed by all the partners and delivered to the European Commission in December 2011.

- **WP1:** The “JERICO label” has been initiated but needs more time to be finally defined.

The first JERICO FCT (Forum for Coastal Technology) was held in Brest, during the second week of October. It was based on the results of 2 surveys. In parallel with the first FCT workshop, we organised an in-lab calibration experiment jointly with WP4.

The dedicated workshop on the future strategy is the first step towards the definition of the Roadmap for the future; the task will start after month 24.

The first call for TNA has been launched with definition of users modalities, selection process etc.

- **WP2:** The inventory of existing observatories was done with EuroGOOS partners. The first two deliverables are done.

- **WP3:** The first “Best practices Workshops” on Ferrybox (August 2011), on fixed platforms (February/March 2012) and on gliders (May 2012) were organised. A complementary workshop was also organized in Heraklion, just after the general assembly. A questionnaire on FerryBox was prepared and sent to the users; this helped

us to propose the best practices for Ferrybox (1st WP3 deliverable). A questionnaire on fixed platforms and gliders has also been sent out: the results will be integrated in the two next deliverables on best practices (fixed platforms and gliders).

- **WP4:** Two questionnaires on Calibration practices and bio-fouling protection have been prepared and sent to all the partners. A first calibration workshop was organised by SYKE in Finland at the very beginning of February 2012. WP4 co-organised the Best Practices workshops (Ferrybox in August 2011, Fixed platforms in February/March 2012, Gliders in May 2012, and the common one in October 2012). A calibration exercise was organised jointly with the FCT in October 2012 during Brest SeaTech Week.
- **WP5:** A meeting dedicated to Jerico data management main principles was organised by the WP leader in May 2011. The Jerico data will flow through two data streams: i) the GMES/EUROGOOS/MyOcean data stream for near real time data ii) the SeadataNet data stream for data flowing in delayed-mode. The first two deliverables on Real Time and Delayed Mode are submitted: i) Near real time data management handbook, ii) Delayed Mode data management handbook. The preliminary works to interface Jerico's partner data to MyOcean Insitu TAC and SeaDataNet are on going. The aim date is the 1st of January for the delivery of Jerico Data to the MyOcean In-situ TAC. Some datasets already circulate in near real time and for the other datasets. Contacts have been taken with the corresponding PIs (Principle Investigators). An inventory of the datasets (circulating and not yet circulating) is been kept updated on a regular basis (see WP7).
- **WP6:** A website currently hosts the JERICO Community Hub: www.jerico-fp7.eu
This has links to Trans National Access, FCT, OceanBoard, Workshops, meeting documents and submitted deliverables. The designs for the "JERICO community Hub" and "JERICO Oceanboard" are complete. The first summer school planned in summer 2012 has been postponed in summer 2013.
- **WP7:** The WP 7 is not yet initialised (It will start in November 2012). The task of referencing all the data to be provided had already started. The start date for the data integration into MyOcean Insitu TAC is the 1st of January
- **WP8:** The preparation of the TNA calls is one of the tasks of WP1. The 1st call was published on January 12th 2012. Text of the 1st call, rules and procedures, and guidelines for evaluation were completed in December 2011. TNA web page was implemented on the JERICO Website and continuously updated. 13 Principal Investigators (PI) and user groups sent a proposal to answer the call. 9 have been selected for access to the TNA. The first selected project started at the very end of October 2012.
- **WP9:** The WP leader organised a workshop in October 2011 to initiate the works on OSE and OSSE. The workshop notes will be used as a guideline for the writing of the reports on experiments. The set-up of tuning the assimilation experiments started both for Observations System Experiments (OSE) (Task 9.2) and Observations System Simulation Experiments (OSSE) (Task 9.3).

- **WP10:** The task 10.1 software is under development by CNRS (University of Bordeaux) and NIVA. A first workshop regarding task 10.4 (ships of opportunity) was organised by Ifremer in June 2011. A dedicated Kick-off meeting for this WP was held the 1st of March 2012. A new task was added to the WP: Remote sensing on Suspended Particulate Matter.

□ **Expected final results**

JERICO is the very first attempt of a unified management scheme at the European level. Being built on the outcomes from previous studies and proposed programmes by EuroGOOS and MedGOOS, the JERICO consortium has the ambition to contribute step by step, to the concepts arising from the European Research Area which are defined in the European Marine and Maritime Research Strategy (COM 2008-534). The JERICO project is clearly the first step of a future pan-European coastal infrastructure, open to all providers and users, the model of which is not yet finalised but which will mature over the next decade. The long lasting legacy of JERICO is therefore a necessity, and JERICO will be committed to building bridges with other short term initiatives such as the SEASERA ERANET on marine research, the various FP7 projects and other long lasting initiatives in the field of marine research infrastructures (e.g. EMBRC, EMSO, EuroARGO, EUROSITES (FIXO3), SeaDataNet and MyOcean) and research networking programmes (e.g. ESONET).

After completion, it is intended that the JERICO project continues with other funding sources, the structuring efforts being further developed by volunteer groups of coastal observatory managers under centralised or decentralised governance.

Through the FCT (Forum for Coastal technology) JERICO will involve european SMEs to the construction of an European market of coastal sensors and systems. The JRA is focusing on the adaptation of new sensors for the coastal observatory platforms, and also on the use of ship of opportunity (as fishing vessel) as part of a coastal observatoru network.

The overall activities of coastal observatories have to become sustainable and to be an important source of qualified data for the future European Observing System EOOS.

1.3 Comment on the most important problems during the period including the corrective actions taken

The main source of delays during this first period is due to the deliverable calendar, which was not realistic. Therefore, many of the first deliverables are or will be delivered with some months delay. The objective is to catch up the delayed deliverables before the month 24 (and the mid term review).

Two of the deliverables planned in the first period will be postponed to the second period: the “First summer school” (in WP6) and the “Report on current status of gliders observatories within Europe” (in WP3).

In WP11, Deliverable D11.4 "First periodic activity report" was erroneously due to month M18 according to the DoW, but this date did not take in account the 60 days contractually agreed to prepare the report: it should be due for Month 20. In addition the coordination team gets some difficulties in gathering some WP reports, inducing a 15-day delay. Consequently this report is delivered in Month 21.

In WP1, the task 1.2 “JERICO label definition” deliverable will be postponed, due to the need to take in account the ongoing JERICO results. Indeed a correct and complete definition of the label should include results of Best Practices defined all along the project duration. Task 1.4, Definition Strategy with the monitoring of the Marine Biodiversity has not yet started because of the poor health of the task leader (Carlo Heip from NIOZ). It is postponed to month 24.

In WP2, the two first deliverables were lately delivered (10th January 2013) with a 9-month delay. WP2 leader needed longer time than expected to discuss the issue and content of WP2 deliverables. To solve this problem in the future, the coordinator, the WP2 leader and the steering committee decided to strengthen the WP2 coordination by adding a deputy coordinator (Patrick Gorringer from SMHI).

In WP3, the first deliverable will be delayed for some months due to a change in responsible partner from HZG to NOCS. The second deliverable (“Current status of glider observatories”) has been postponed for a better synchronisation with the FP7 GROOM activities (the workshop has been organised jointly with GROOM). It will be ready before the mid term review.

In WP4, the first deliverable D4.1 (Report on existing facilities), with the capacity to handle pressure, temperature, salinity and dissolved oxygen calibrations amongst the active coastal observing networks - planned for M18 will be delayed until the end of 2012, in order to take into account the first results of the Calibration experiment held in October 2012 in Brest.

In WP5, the production of the handbooks took a longer (5 months) than planned because the partners wanted to define a solution applicable both in JERICO and EMODNET-PP (Preparatory Phase).

In WP6, the summer schools have been postponed by one calendar year for each school. Thus the new dates are summer 2013 for Course 1 and summer 2014 for Course 2. This change was agreed at the outset of the JERICO programme (1st steering committee decision); more time is needed for the partners to prepare and to design the summer schools.

In WP8, NERC will not provide all the facilities it originally proposed for TNA. As corrective action a revision of the costs is asked. A new TNA infrastructure will be added to mitigate the ones not provided by NERC: a FerryBox from CNRS will be proposed instead of those of NERC. Funds not used by NERC and by this new TNA infrastructure will be added to the TNA budget for travel grants of users and Selection Panel members. An amendment of the DoW will be needed.

In WP9, deliverables D9.2 and D9.3 with intermediate reports on the status of OSE and OSSE experiments, that were due on M18, were postponed to M20 due to problems of the data assimilation system for the Adriatic Sea.

In WP10, CEFAS will now be involved in Task 10.2.1 (Contaminants).

The milestone MS23 was changed to reflect the delivery date of deliverable 10.2 (month 42) in DoW.

There are some delays in the moored profiling experiment due to delay of equipment availability and in situ technological problem: a bad weather event damaged the MAMBO Buoy in Adriatic Sea.

2 WORK PACKAGE PROGRESS AND ACHIEVEMENTS DURING THE PERIOD

Work Package leaders - Primary contacts (PC) and substitutes (S)						
Beneficiary	Person			Activity Coordinators	Roles	
	First Name LASTNAME	Email Address	Work Package activities			
IFREMER	Patrick FARCY	Patrick.farcy@ifremer.fr	General coordination of the project	COORD	WP11	<u>PC</u>
	Ingrid PULLAT	ingrid.puillat@ifremer.fr	GA organization, QAP, reporting			<u>S</u>
CNRS	Pascal MORIN	pmorin@sb-roscoff.fr	A common strategy	NA	WP1	<u>PC</u>
	Ingrid PULLAT Dominique DURAND	ingrid.puillat@ifremer.fr dominique.durand@niva.no	Share a strategic view for the future, promote an open access to facilities and organize a FCT			<u>S</u>
IMR	Henning WEHDE	henning.wehde@imr.no	Strengthening regional and trans-regional activities,	NA	WP2	<u>PC</u>
	Patrick GORRINGE		State of the art in the ROOS and cross regional integration			<u>S</u>
HZG	Wilhelm PETERSEN	wilhelm.petersen@hzg.de	Observing system technologies	NA	WP3	<u>PC</u>
	David HYDES	david.hydes@noc.ac.uk	Ferrybox, gliders and fixed platforms			<u>S</u>
HCMR	George PETIHAKIS	gpetihakis@hcmr.gr	Harmonization of operation and maintenance methods	NA	WP4	<u>PC</u>
	Manolis NTOUMAS	mntou@hcmr.gr	Calibration, bio-fouling prevention, end to end quality control			<u>S</u>
OGS	Alessandro CRISE	acrise@ogs.trieste.it	Data distribution	NA	WP5	<u>PC</u>
	Rajesh NAIR Gilbert MAUDIRE	rnair@ogs.trieste.it Gilbert.Maudire@ifremer.fr	Harmonization real time & delayed mode – SeaDataNet & MyOcean			<u>S</u>
CEFAS	David MILLS	david.mills@cefias.co.uk	Public outreach and education	NA	WP6	<u>PC</u>
	Jo FODEN Aldo DRAGO	jo.foden@cefias.co.uk aldo.drago@um.edu.mt	End-user services, datatools, OceanBoard and summer schools			<u>S</u>
IFREMER	Patrick FARCY	Patrick.farcy@ifremer.fr	Data access & targeted operational phases	TNA	WP7	<u>PC</u>
	Ingrid PULLAT	ingrid.puillat@ifremer.fr				<u>S</u>
CNR	Stefania SPARNOCCHIA	stefania.sparnocchia@ismar.cnr.it	Access to trans-national facilities	TNA	WP8	<u>PC</u>
	Margherita CAPPELLETTO	margherita.cappelletto@cnr.it	Fixed platforms, ferryboxes, gliders and calibration facilities			<u>S</u>
CMCC	Srdjan DOBRICIC	srdjan.dobricic@cmcc.it	Observing system design	JRA	WP9	<u>PC</u>
	Gerrakimos KORRES		OSE and OSSE			<u>S</u>
MI	Glenn NOLAN	Glenn.Nolan@marine.ie	Improve the system components	JRA	WP10	<u>PC</u>
	Antoine GREMARE	a.gremare@epoc.u-bordeaux1.fr	Biological processes, physico-chemical sensors, emerging technology, ship of opportunity and FerryBox quality control			<u>S</u>

2.1 WP 1 – A COMMON STRATEGY

+Person in charge of this report:

Pascal Morin

Email: pmorin@sb-roscoff.fr

Phone number: +33 298 292 317

Institution name and Acronym: Centre National de la Recherche Scientifique/Institut National des Sciences de l'Univers, CNRS/INSU

+Name of task team responsible persons:

Work package leaders' name:

Task title	Responsible persons	Institution
Task 1.1 Set up the scene and implementation plan	Pascal Morin	INSU
Task 1.2 JERICO label	George Petihakis	HCMR
Task 1.3 Forum for coastal technology	Glen Nolan	MI
Task 1.4 Definition strategy and interfaces with the monitoring of marine biodiversity	Carlo Heip	NIOZ
Task 1.5 Roadmap for the future	Pascal Morin	INSU
Task 1.6. User modality access for the Trans National activities	Stefania Sparnocchia	CNR

+Name of other participating institutions:

all (Ifremer, SYKE, IBWPAN, DMI, NIVA, IMR, DELTARES, OGS, CNR, UOM, NERC, INGV, HZG, MUMM, CEFAS, SMHI, CSIC , BL, TECHNALIA-AZTI, IH, IO-BAS, PUERTOS, CMCC)

2.1.1 Work package objectives and starting point of work at beginning of reporting period

Task 1.1 Set up the scene and implementation plan

The task objectives are to implement plans to

- establish a rationale for a common strategy
- propose a later analysis of existing observatories, define a JERICO label, propose a roadmap for future governance
- organize a meeting in Australia to stress a cooperation with the Australian community
- set the terms of reference of the Forum for Coastal Technologies
- analyse present successes and gaps of the existing facilities

Briefly for this first period it had objective to manage the starting of main JERICO issues.

Task 1.2 JERICO Label

This task aims at proposing how coastal observation systems managed in JERICO could be compliant to a JERICO set of criteria defined to ensure some standardisation and interoperability issues, and qualification of issued data. Observation systems gratified by the JERICO label will be internationally recognised. The main task is to define those criteria meaning that we have to:

- define the JERICO label for coastal observatories and technology,
- design a comprehensive bullet list of what a JERICO observatory should be,
- ensure wide publicity to attract other teams to adopt the JERICO label.

Consequently this task will synthesize main JERICO results along the project duration, and the initial stage for this period was devoted to discuss its content in order to bound the topic in the face of many technological issues.

Task 1.3 Forum for Coastal Technologies (FCT)

The task objectives are:

- to implement a forum to encourage communication between scientists, users, stakeholders and private companies to reduce the gaps between needs and products offered by providers. It will also help to develop the coastal observation market,
- to animate a scientific secretariat

For this period the main objective was to launch the FCT activities, starting with a Term of Reference document and some questionnaires to initiate the dialogue.

Task 1.4 Definition strategy and interfaces with monitoring of marine biodiversity:

- to investigate the potential of existing coastal observatories to develop into observatories of biodiversity with a future marine biodiversity network.

This task was expected to start M12.

Task 1.5 Roadmap for the future

- to analyse and synthesize of the deliverables of all the other work packages to propose a roadmap for a future network of coastal observatories

This task is expected to start M24.

Task 1.6 User modality access for the TNA

The task objective is to promote use of JERICO installations by the research and development community at large, and is achieved through two calls for Trans National Access. The necessary actions to be conducted during this first period were:

- preparation of the call and peer review of the proposal (with WP8),
- definition of the user modality to access the TNA infrastructure.

2.1.2 Progress towards objectives – tasks worked on and achievements made

Task 1.1 Set up the scene and implementation plan

During the first months, we focussed on the definition of a rationale for a common strategy for a pan European network of coastal observatories. The background, state of the art on best practices and the main challenges to be answered have been established for the different types of platforms. Implementation plans with expected outputs from the different workpackages have been proposed. The delivery of the document D1.2 Rationale and definitions for a common strategy has been postponed for a few months due to the difficulty encountered to define its content. Indeed it had to build upon DoW content, not repeating it. D1.2 was delivered in month 21.

Task 1.2 JERICO Label

The main point of activity was to define what will be the JERICO label for coastal observatories and technology by designing a comprehensive bullet list (list of variables to be measured with their precision, availability, sampling frequency, ..) of what a JERICO

observatory should be. The delivery date for the JERICO label definition was planned for month 18 but to define this label, the contribution of the synthesis of WP3 and WP4 is needed. Consequently the first version of the JERICO label is postponed to month M22: this version will list the items to be dealt with in the JERICO Label, then the final document, including criteria and chosen technical solutions can be only written at the end of the JERICO project as it will be built upon JERICO experience.

Task 1.3 Forum for Coastal Technologies (FCT)

Main activity of this task was to prepare the Forum for Coastal Technologies “Terms of reference” that describes the expected FCT objectives and activities including workshops and experiments. A first FCT online survey to determine the boundary of the FCT has been completed using the “Monkey survey” tool. This first survey has documented the most frequently measured parameters, the needs and gaps in the commercially available products on the market in the sensor users community. The first FCT workshop has been organized on 10th October 2012 in Brest (France) along with the SeaTechWeek event and has been focussed on oxygen and nutrients measurements and the sensor calibration procedures, deployments, maintenance and robustness. The organisation of a metrology experiment, jointly with WP4, dedicated to compare sensors calibrations for temperature, dissolved oxygen and salinity was initiated. This joint experiment has been realized, in October 2012, in Ifremer Brest.

This is reported in deliverable D1.3.

Task 1.4 Definition strategy and interfaces with monitoring of marine biodiversity

This task will prepare an implementation strategy allowing for the optimization of long-term observations of marine biodiversity. This task should began at month 12 as planned in the DOW but is delayed due to health problem of the task leader.

Task 1.5 Roadmap for the future

This task will analyse and synthesize the deliverables of all the workpages and will translate into recommendations the outcomes of the FCT. This task will take benefit from the outputs of all the workpackages and will begin at month 24.

Task 1.6 User modality access for the TNA

Main achievements are:

- Selection Panel settled at kick off meeting (May 2011).
- Text of the 1st TNA Call, rules and procedures, guidelines for evaluation done (December 2011).
- TNA webpage implemented with information on accessible facilities, access rules and selection procedure (from November to December 2011).
- 1st Call published (January 12, 2012), and publicized (MedCLIVAR Newsletter, EGO web site, mailing lists of other projects and communities).
- 1st Call closed on April 3rd, 2012. Thirteen proposals were received. One proposal was not eligible since the User Group was working in the same country of the legal entity operating the targeted facility.
- Scientific and technical evaluations started on April 24th, 2012, and evaluation results were communicated to proponents in July. Revised proposals were received within September 30th, 2012.

- Granting letters and TNA end user agreement templates were prepared during the evaluation period.
- The first TNA project started on October 23rd, 2012.
- The TNA Selection Panel had met officially on October 1st, 2012, in Heraklion to debrief and conclude after the 1st TNA Call and selection process.
- Up to the meeting date, 6 proposals get the green light on and needed to be definitively validated to start. In addition, 3 proposals were still on post-evaluation and the panel had to conclude these post-evaluations. A minute of the TNA selection panel meeting, including final decisions, is provided in the “Report after 1st General Assembly”(Document ID MS 11.2).
- Preliminaries activities for launching the 2nd TNA Call started (designing update of website, revision of text call and procedures).

• **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D1.1	First call for TNA proposals	1	M8	Submitted M9	5	6.75	CNR
D1.2	Rationale and definitions for a common strategy	1	M9	Uploaded M18 To be submitted M21	6	2	INSU/CNRS
D1.3	Terms of reference of the FCT	1	M9	Submitted M14	3	1	MI
D1.4	JERICO label definition	1	M18	Postponed to M23	2	0	HCMR
D1.5	Second call for TNA proposals	1	M20	M21	5	0.5	CNR
D1.6	First report of the FCT activity	1	M24	M24	3	0	MI
D1.7	First report of the access activity	1	M24	M24	5	0	CNR
D1.8	Second report of the FCT activity	1	M36	M36	3	0	IFREMER
D1.9	Proposed strategy for biodiversity	1	M36	M36	4	0	NIOZ
D1.10	Second report of the access activity	1	M42	M42	5	0	CNR
D1.11	Final report	1	M48	M48	20.3	0	INSU/CNRS

• **Milestones list**

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS5	First steering committee outputs	WP1	M9	Achieved M9	INSU/CNRS Ifremer
MS6	Infrastructure available for users (TNA)	WP1	M11	Achieved M9	INSU/CNRS
MS7	First forum for coastal technology	WP1	M18	Achieved M18	INSU/CNRS

MS8	Second steering committee outputs	WP1	M18	Reached M18	INSU/CNRS Ifremer
MS9	Third steering committee outputs	WP1	M27	M27	INSU/CNRS Ifremer
MS10	Second forum for coastal technology	WP1	M30	M30	INSU/CNRS
MS11	Fourth steering committee outputs	WP1	M36	M36	INSU/CNRS Ifremer
MS12	Fifth steering committee outputs	WP1	M45	M45	INSU/CNRS Ifremer
MS13	User reports of activities	WP1	M47	M47	INSU/CNRS
MS14	Roadmap for the future	WP1	M48	M48	INSU/CNRS

2.1.3 Deviations from the project work programme, and corrective actions taken

Task 1.1: Deliverable D1.2 was 6 months postponed due to the difficulty to find the right exercise to do: not duplicating the current DoW and not doing the job of each WP. After presentation of a draft document in SC meeting in January (initial delivery date) it was concluded that this deliverable need to be fed by WP first results, ie each WP state of art and internal discussions, in order to provide a significant document.

Task 1.4: For deliverable 1.4 (definition of a common label) we need to converge between all the partners. A meeting will be organised to elaborate such definitions. A first version is planned for end of March.

Task 1.6: 1st Call delayed by 1 month to account for Christmas and New Year closures of institutions. No impact on other tasks or on available resources and planning.

Deliverables 1.1 and 1.5 have had 1 month delay because we decided to postpone the calls in January instead of December that is not a good period for a call. It was a decision of the coordinator.

2.2 WP 2 – STRENGTHENING REGIONAL AND TRANS-REGIONAL ACTIVITIES

+Person in charge of this report:

Henning Wehde

Email: henning.wehde@imr.no

Phone number: +47 55238650

Institution name and Acronym: Institute of Marine Research, IMR

+Name of task team responsible persons:

Work package leaders' name: **Henning Wehde (IMR)**

Work Package Deputy Coordinator: **Patrick Gorringe (SMHI)**

Task title	Responsible persons	Institution
Task 2.1 State of the Art	Henning Wehde	IMR
Task 2.2 Cross regional integration	Irene Lake	SMHI

+Name of other participating institutions:

Deltares, IH, AZTI, INGV, IO-BAS

2.2.1 Work package objectives and starting point of work at beginning of reporting period

Task 2.1 State of the Art in Coastal observing systems

The task objectives are to:

- Review of ongoing and planned programmes and projects collecting in situ data
- Make an inventory of existing coastal observing systems
- Identify data and make data available on servers
- Identification of the main gaps between accessible observations and data needs, define priorities

Task 2.2 Cross regional integration and demonstration

The task objectives are:

- Demonstration of pan-European transport product
 - Exploring/inventory of JERICO partners with observations which concentrate on fluxes in the different areas
 - Define operational products based on this and connect to operational users.
- E-HYPE European Hydrological Predictions for the Environment
 - Access to water discharge and nutrient transport from main rivers and diffuse outlets on a daily timescale and at a high spatial resolution.
 - Access to hindcast data for monitoring changes in the coastal environment
 - Incorporating observations into the river runoff model to increase its performance. Integration of transport and river runoff will be demonstrated
 - Evaluation of the effect of including river data in operational coastal modelling of transport of nutrients.
 - Demonstration of pan-European transport product by SMHI

2.2.2 Progress towards objectives – tasks worked on and achievements made

Task 2.1: State of the Art in Coastal observing systems

Focal point of this task was twofold. Firstly the main focus was laid on the review of the ongoing and planned programmes respectively projects dealing with the collection and delivery of In Situ observational data aiming for the establishment of an actual inventory of available coastal observing systems. The work was complimented by the actual ongoing activities within the EMODnet program. Secondly, missing observations and the aimed future development of the observational system was reviewed and forms the basis for the deliverable 2.2 which will be updated via inclusion of OSSEs for the assessment of the positioning of the observing systems carried out within WP 9. Methodologies for the inclusion of that kind of approaches will be further developed for the inclusion within the version of the deliverable scheduled at the end of the project.

Task 2.2 Cross regional integration and demonstration

Main focal point of activity for this task was laid on the E-Hype work within JERICO. There is a strong user need to include the estimation of improved nutrient fluxes into the EHype predictions.

EHYPE v2.1 was taken in production mode with water swirl, this means it now calculate real-time and forecasts of runoff, nitrogen and phosphorus to the sea so that the forecasts are available to those who have requested it every day for oceanographers who want to run their operating models with it.

An analysis of the model hindcast, i.e. how well do we simulate Q, N and P to the sea and to the ocean is performed. Towards the deliverable scheduled next year, the evaluation period covered would ideally include the whole duration of the annual spring flooding.

- **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D2.1	Report on existing observation network	2	M12	M21	6	3	IMR
D2.2	Report on recommendations	2	M12	M21	6	3	IMR
D2.3	Integrated Pan European Atlas first report	2	M18	Postponed to M23	6	0	IMR
D2.4	Demonstration of the feasibility of Joint trans-regional production	2	M24	M24	9	0	SMHI
D2.5	Integrated Pan European Atlas/second report	2	M48	M48	6,25	0	IMR

- ***Milestones list***

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS27	Report on activities	WP2	M42	M42	IMR

2.2.3 Deviations from the project work programme, and corrective actions taken

The delivery of version 1.0 of the Deliverables D-2.1 and D-2.2 was delayed to January 2013, which delays the delivery of the D-2.3 first version to the end of March 2013.

Patrick Gorringer (SMHI) will act as deputy coordinator in order to re-enforce the management of the WP2.

2.3 WP 3 – HARMONIZING TECHNOLOGICAL ASPECTS

+Person in charge of this report:

Wilhelm Petersen

Email: wilhelm.petersen@hzg.de

Phone number: +49 4152 87 2358

Institution name and Acronym: Helmholtz-Zentrum Geesthacht (HZG), Institute of Coastal Research

+Name of task team responsible persons:

Work package leaders' name:

Task title	Responsible persons	Institution
Task 3.1. FerryBox (FB)	David Hydes	NOCS
Task 3.2. Gliders	Simón Ruiz,	CSIC IMEDEA
Task 3.3. Fixed Platforms	Rodney Forster	CEFAS

+Name of other participating institutions:

IFREMER, SYKE, IBWPAN, NIVA, OGS, CNR, HCMR, NERC, HZG, MUMM, CEFAS, SMHI, CSIC, MI, TECNALIA-AZTI, INSU/CNRS, PUERTOS

2.3.1 Work package objectives and starting point of work at beginning of reporting period

Task 3.1 FerryBox

The task objectives are to:

- review the current status and best technical practices of the existing FB systems in order to harmonise the resulting data
- provide technological solutions to integrating new sensors, developed in WP10, into FerryBoxes
- define consensual procedures for using FerryBox data in validation of earth observation data

Task 3.2 Gliders

The task objectives are to:

- review the current status of the existing glider fleet in operational use in European seas.
- define the best technical practices for operation of a fleet of gliders

Task 3.3 Fixed Platforms

The task objectives are to:

- review the current status of existing systems in operational use in Europe and defining best technical practices for compatible, robust and cost-effective systems on a variety of fixed platforms,
- defining procedures for harmonizing and merging quality-assessed high-frequency in situ data across regional seas (e.g. the North Sea),
- identifying gaps in the present coverage,

- proposing technological solutions for the integration and testing of new sensors on fixed platforms,
- sharing data with mobile platforms and remote sensing to create new integrated products.

2.3.2 Progress towards objectives – tasks worked on and achievements made

During the first months we started with the FerryBox activities (Task 3.1) and later on with investigations on fixed platforms and gliders. Main focus was on collection of all the available information within the JERICO community regarding the different platforms in use and their technical equipment mainly done by questionnaires. On common workshops shared with WP4 (see **Erreur ! Source du renvoi introuvable.**) the experiences of operation of these platforms were exchanged in order to work out best practices recommendations. The first three workshops were dedicated to the three different platforms. Following the General Assembly in Crete in October 2012 a fourth workshop was organized on best practices for all platforms with focus on common measured parameters and exchange of experiences with different type of sensors. **As outputs from common WP3 and WP4 workshops are reported in the WP4 section we will only report other WP3 actions and results.**

Task 3.1 FerryBox (FB)

Towards the task “review current status of FerryBoxes (FB) activities” a questionnaire has been developed and distributed to the partners in June 2011. The results have been presented and discussed at a two-day JERICO FerryBox workshop, end of August 2011. The aim of the questionnaire was to gather information about FerryBox routes throughout Europe as well as to get details of measured parameters and used instruments. The questionnaire itself (Excel sheet) will be updated regularly at least once a year. The completed questionnaires are also available both on Ferrybox.org and on the JERICO homepage. From the FB-workshop a report has been written.

One major issue of JERICO in this context is the automatic data checking in real time. This is also an important requirement for data flow to MyOcean (and the assimilation into operational models). So, before the full quality data control an appropriate quality flagging based on housekeeping parameters will be applied in future. Thus, two data streams out of FerryBox measurements will be then established.

The workshop output together with the results of the questionnaire was the basis of deliverable D 3.1. The report on current status of FerryBox finalized August 2012. Starting from the collected information of existing FerryBox installations, mechanisms which ensure a greater harmonisation between FerryBox users are to be developed.

A common equipment system for FerryBoxes is not a practical solution, as several aspects of monitoring onboard the ships of opportunity are different among the FerryBox users as well as the technical circumstances on each ship. However, the exchange of information about operating experience should be enhanced for harmonisation of scientific work with FerryBoxes. A kind of JERICO quality stamp could then be introduced. An intensified work, between the three Work Packages 3, 4 and 5, would be necessary for that purpose.

The deliverable report D3.1 serves also as a guideline for installing, maintaining and operating of a FerryBox. It lists in detail many advices for institutes what should be considered when a new FerryBox operating route is planned.

Task 3.2 Glider

This task started their main activities after the EU project GROOM (Gliders for Research, Ocean Observation and Management) has been started as well. Together with GROOM a two days Glider workshop as been organized in Palma de Mallorca in May 2012 (see **Erreur ! Source du renvoi introuvable.**). A first draft of the workshop report was circulated already. The deliverable D-3.2 (Report on current status of gliders observatories within Europe) was postponed from M15 to M24 in order to facilitate coordination with the GROOM project and to avoid any unnecessary duplication of efforts.

As for FerryBoxes, Task 3.2 serves as an opportunity to gather information of the current status of glider operations in Europe. Details for each country have been presented. Main issues in Task 3.2 are

- glider and sensor maintenance
- key research topics addressed to glider operations
- data management and issues regarding the planning of glider missions (e.g. risks of glider deployment).

It was observed that glider operations are intended to play a more important role in future ocean observing systems planned by the EC. Also a coordinated network of glider observations could be proposed in future.

For gathering more information (e.g. resources, costs, risk survey) questionnaires are planned, together with the GROOM project.

Task 3.3 Fixed Platforms

A questionnaire about fixed platforms was circulated and first results were discussed at the first workshop on fixed platforms in May 2012 in Rome (see **Erreur ! Source du renvoi introuvable.**). The questionnaire started with all information already exists in the EDIOS database and all results shall be closely coordinated with the activities within the EDMODNET physics database. On the basis of this questionnaire and the report about the workshop the deliverable D-3.3 (Review of current marine fixed instrumentation, delivery date M21) is in preparation. A report about the results of the workshop has been written.

The main actions in this task and the main topics of the corresponding workshop were so far

- Overview of the existing and established Fixed Platforms in Europe
- Current status of Fixed Platforms operations
- Development of new sensors for Fixed Platforms
- Defining best practices for Fixed Platforms operations

The survey of existing Fixed Platforms yielded need for updating and verification of information. Gaps have to be identified and a complete station list to be established. Also a demand for a common vocabulary for description of the list entries was formulated.

JERICO partners presented overviews of existing national Fixed Platform system. A summary can be found in the minutes of the workshop. It became clear, that these systems should be integrated in European structures (e.g. EuroGOOS, JERICO, MyOcean2, EMODNET). In particular, through its portal EMODNET PP there is the opportunity of collaboration between JERICO and EMODNET PP.

The operation of Fixed Platforms provides high frequency observations which already have been used for data assimilation into (operational) models. Regarding new sensors for Fixed Platforms, the questionnaire has to be updated to get more information of developments in the participating institutes. Especially in the field of biogeochemistry, new sensors have been

developed and tested on Fixed Platforms among the JERICO partner institutes. The questionnaire should be an instrument for getting more information about these issues.

For defining best practises for Fixed Platform operations, it was agreed that the updated questionnaire should give answers to

- What is the experience with different kind of platforms? What kinds of purpose do need big or small platforms, fixed platforms or buoys?
- How do we resolve the vertical? What is the experience with profiling devices?
- What type of platforms should be mentioned?
- What is the accessibility of platforms? Advantages/Disadvantages?

• ***Deliverables***

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D3.1	Report on current status of FerryBox	3	M9	Uploaded M15 Submitted M17	20	12	HZG/NOCS
D3.2	Report on current status of gliders observatories within Europe	3	M15	Postponed to M24	20	1	CSIC
D3.3	Review of current marine fixed instrumentation	3	M21	Postponed to M22	20	5	HZG/CEFAS
D3.4	Report on new sensor developments	3	M36	M36	24.7	1	HZG
D3.5	Conclusion report	3	M42	M42	20	0	HZG

• ***Milestones list***

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS28	Report on activities	WP3	M42	M42	HZG

2.3.1 Deviations from the project work programme, and corrective actions taken

Currently there is only one deviation from the plan. The deliverable D-3.2 (Report on current status of gliders observatories within Europe, delivery date M15) has been postponed to M24 in order to synchronize the work with the activities in the GROOM project.

2.4 WP 4 – HARMONIZING OPERATION AND MAINTENANCE METHODS

+Person in charge of this report:

George Petihakis

Email: gpetihakis@hcmr.gr

Phone number: +30 6977 916206

Institution name and Acronym: Hellenic Centre for Marine Research - HCMR

+Name of task team responsible persons:

Work package leaders' name: George Petihakis

Task title	Responsible persons	Institution
Task 4.1: Calibration	Wilhelm Petersen	HZG
Task 4.2: Bio fouling prevention	Stefania Sparnocchia	CNR
Task 4.3: End to end quality assurance	George Petihakis	HCMR

+Name of other participating institutions:

IFREMER, SYKE, NIVA, OGS, NERC, MUMM, CEFAS, SMHI, CSIC, MI, INSU-CNRS, IH, PUERTOS.

2.4.1 Work package objectives and starting point of work at beginning of reporting period

Task 4.1 Calibration

The task objectives are to:

- standardize and harmonize various facilities across European networks,
- share existing calibration facilities within the network, thus significantly reducing costs,
- exchange and transfer know-how within the network through a series of workshops, seminars and staff exchange.

Task 4.2 Bio fouling prevention

The task objectives are to:

- all different methods used across the network will be described with reference to the cost (implementation, maintenance) and adaptability (different sensors and areas),
- there will be sharing of best practices and methodologies across the network with the aim towards a common approach
- new methods used by the community external to JERICO will be evaluated to identify and suggest possible future implementation.

Task 4.3 End to end quality assurance

The task objectives are:

- to describe best practices in all phases of the system (pre-deployment test, maintenance, calibration etc)
- to adopt common methodologies and protocols

- c) to move towards the harmonisation of equipment which will help in reducing maintenance and calibration costs. For this inter calibration tests and in-situ validation will be organised.

The above objectives indicate the starting point of work at the beginning of the first reporting period.

2.4.2 Progress towards objectives – tasks worked on and achievements made

During the first 18 months we focused mainly on the first two tasks and in particular to collect all the available information within the network regarding calibration and biofouling. Towards this two major tools were identified questionnaires and workshops. In summary 3 questionnaires were prepared and sent to the partners:

- Calibration (task 4.1)
- Biofouling (task 4.2)
- Running costs (task 4.3)

In terms of workshops 4 common events between WP3 & WP4 and 2 calibration exercises /workshops were organised:

DATE	TITLE	LOCATION
30 -31 August 2011	1 st JERICO WP3 & WP4 common workshop on FerryBox	HZG, Hamburg
9 th February 2012	1 st Calibration and biofouling prevention of optical sensors & sharing of calibration facilities	SYKE, Helsinki
29 th February – 1 st March 2012	2 nd JERICO WP3 & WP4 common workshop on Fixed Platforms	CNR, Rome
22 – 23 May 2012	3 rd JERICO WP3 & WP4 common workshop on Gliders	IMEDEA, Palma
4-5 October 2012	4 th WP3 & WP4 common workshop on Best Practices	HCMR, Heraklion
10 th of October 2012	2 nd Calibration exercise, sharing of calibration facilities	IFREMER, Brest

Task 4.1 Calibration

a) Standardize and harmonize various facilities across European networks,

Towards the first objective a questionnaire focusing on calibration issues was developed and distributed amongst partners. The first version prepared by the sub-task responsible was delivered to all partners for comments in mid-October 2011, and the final version in mid November 2011 with deadline for completion the end of January 2012.

The answers were presented during the fixed platform workshop in Rome (29 Feb – 1 Mar, 2012). From the questionnaire analysis becomes evident the need of action on calibration issue, as only 6 out of 16 partners operate a dedicated calibration facility even though all invest significant resources on sensor operation. Furthermore of the ones operating calibration labs only 33% adopts some kind of accreditation. In terms of costs most of partners send their sensors to manufacturer for calibration. This is an expensive practice, since most of the manufactures are in the USA and figures range from thousands to some tens of thousands.

Workshop conclusions included future aims/actions:

- Enlarge the community of operators of in-house calibration facilities.
- Promote the adoption of accreditation for the calibration, and in general work more on the Quality Standards issues.
- Homogenize calibration approaches.
- Set up a permanent calibration-working group.

During the common WP3&WP4 workshop in Heraklion on the 4th & 5th of October calibration issues were further discussed and as agreed future actions on this objective will have to wait the work from the other two objectives of task 4.1.

- b) Share existing calibration facilities within the network, thus significantly reducing costs,**
- c) Exchange and transfer know-how within the network through a series of workshops, seminars and staff exchange.**

Work towards the second and third objectives ((b) and c)): the 1st calibration workshop/exercise took place on the 9th of February in SYKE, focusing on optical sensors (Chl-a and Turbidity). There were 21 attendants .

The outcomes of the workshop in SYKE, consider optical sensor (Chl-a) calibration to be a 2 level problem starting from the absence of a commonly accepted reference material for chl-a calibration and the challenges of estimating the chl-a concentration using fluorescence measurements.

The 1st level problems are the reference materials for Chl-a calibration:

- Secondary standards:
- Chemical standards:

The 2nd level problem is the conversion from fluorescence to Chl-a concentration. There are many alternatives to estimate Chl-a concentration from fluorescence thus:

- Importance of keeping raw data
- Importance of archiving
- Optimal data treatment solutions may be site-specific, time-specific, event specific, user specific ...

The above were presented and discussed during the Rome workshop and given the success of the particular action it was commonly agreed to be followed by more workshops. During the Rome Workshop, conclusions included the following future actions:

- Sharing of facilities and mutual training of technical staff.
- Create a space on the JERICO web-site where people can upload/download manuals.
- Organize a calibration exercise/workshop, including DO Optode sensors.
- Identify key nodes as reference for calibrating specific parameters in order to reduce costs.

After the Rome workshop it was decided to organise the second calibration exercise in IFREMER Brest facilities focusing on Oxygen, Temperature and Conductivity in an attempt to benefit from the significant experience of IFREMER, which operates one of the few accredited marine calibration labs in EU. This second calibration exercise took place in Brest (8-12 October 2012) in parallel with the SeaTech Week event. The idea was to compare the calibration methods used by each laboratory by organizing an inter-laboratory comparison. Four partners participated with six different sensors and a report is in preparation and will be presented in the next reporting period.

Since the 2 calibration exercises proved to be very beneficial in Heraklion meeting it was also decided to explore the possibility of a 3rd exercise in association with the Glider community (EGO) focusing on sensors for gliders.

Furthermore, as agreed, the project webpage was enriched with the corresponding areas with useful for the partners materials such as manuals, SOP's, references etc. This is an ongoing process and will continue until the end of the project.

Task 4.2 Bio fouling prevention

a) All different methods used across the network will be described with reference to the cost (implementation, maintenance) and adaptability (different sensors and areas),

Towards the first objective of this task a questionnaire was prepared and distributed to the partners. The first version was circulated to the partners for comments at the end of October 2011 and the final version at mid-November 2011. The deadline was the end of January 2012, and the results were presented during the fixed platform workshop in Rome (29 Feb – 1 Mar, 2012) paying particular emphasis on a) which are the most reliable sensors and b) to describe and evaluate different methods in terms of actual costs. The questionnaire was constructed into two parts, a general part and a part specific to each type of sensor. 18 partners replied with 52 sensor surveys. The main results were:

- Most popular sensors are for measuring physical parameters: 100% of partners use them, especially Temperature and Conductivity/Salinity.
- Optical sensors are used by the 67% of partners, mainly for measuring Turbidity and Fluorescence/Chlorophyll-a.
- Chemical sensors are the less well used (28%). More diffuse ones are Dissolved Oxygen and Nitrate sensors.
- All the interviewees perceive the biofouling is a problem in the observing activity.
- Impact of biofouling on planning and running the observing activities is perceived at different extent by the interviewees.
- On Anti-biofouling techniques passive techniques are preferred to active ones by 50% of interviewees. Among anti-biofouling techniques currently used, mechanical devices (70% of interviewees) and uncontrolled biocide generation systems (70% of interviewees) are the most used while irradiation systems are not used at all.
- Mechanical devices are absolutely the ones believed to be the most effective. None of the different techniques listed in the questionnaire prevails as the possible greatest promise for the future.
- Closed-path versus open-path systems. The 87% of people think there are advantages using closed-path systems since they are easier to maintain, it is easier to obtain a good antifouling protection and the absence of light decreases the developmental rate of biofouling.
- The 80% of interviewees is not aware of any recurring differences in the extensions/distributions of the various types of biofouling (biofilm/slime, hard-fouling, soft-fouling) between physical, optical and chemical sensors (see comment below).
- 3 ideas were suggested by partners choosing/promoting/developing new antifouling systems specific for sensors: new energized bubble system for cleaning, keep sensor in deep water when not used, and new engineered non-toxic AF paint.

During the common WP3&WP4 workshop in Heraklion on the 4th & 5th of October it was decided to update the biofouling questionnaire, some important questions which were missed.

b) There will be sharing of best practices and methodologies across the network with the aim towards a common approach

For the second objective as acknowledged from the start of the project, significant role is expected to play the three platform specific workshops where partners can discuss and analyse current practices. During the first common WP3 & WP4 workshop in HZG in Hamburg (30/08/2011) best practices on sensors used on FerryBox systems were discussed. During the second common WP3 & WP4 workshop in Rome (29 Feb – 1 March 2012) bio fouling prevention best practices on sensors used on Fixed Platforms were discussed. Furthermore during the third common WP3 & WP4 workshop in Palma (22 – 23 May 2012) bio fouling prevention best practices on sensors used on Gliders were discussed.

In the framework of the second common WP3 & WP4 workshop in Rome (29 Feb – 1 March 2012) the partners explored the idea of a common bio fouling experiment where selected sites will act as a test bed. It was decided to work on the idea and to discuss in detail during the Heraklion workshop in October 2012. Thus CNR presented at Heraklion meeting an outline of the common Biofouling Monitoring Program (BMP) and the next steps, which involve the site selection criteria, the production of an information pack and the slates which will be used.

Task 4.3 End to end quality assurance

a) To describe best practices in all phases of the system (pre-deployment test, maintenance, calibration etc)

Towards the first objective although a questionnaire was firstly considered to be the favourable approach during the Rome workshop it was decided for the calibration to identify key-persons for each sensor/technology who will lead the work. Their responsibilities include describing the best practice for the sensor calibration of each parameter or group of parameter, distribute the information, recommend methodologies and issue protocols. The result maybe general due to sensor/equipment differences but the recommended guidelines will be common for all partners.

The platform specific best practices were discussed during the platform-dedicated workshops:

- Hamburg, Ferry Box 30-31 Aug 2011
- Rome, Fixed Platforms 29 Feb – 1 Mar 2012
- Palma, Gliders 22-23 April 2012

As scheduled, after the General Assembly meeting in Crete the first week of October 2012 two days (4&5 of October) were devoted to a common WP3 and WP4 across platform and activities workshop. The scope of the workshop was to start shaping the End-to-End Quality Assurance for Biofouling, Calibration, FerryBox, Gliders and Fixed Platforms. Partners identified as being the “experts” in each field from the previous workshops, presented the best practices for each activity. In detail presentations were focused:

- Biofouling best practices for Optical and Physical Sensors
- Calibration best practices for Chl-a, Temperature, Conductivity, Chemical and Oxygen sensors.

For the platform best practice each partner presented their practice on maintenance, pre and post deployment procedures (cleaning etc), maintenance, storage, transport, data transfer, data post-process, etc. for

- FerryBox
- Fixed Platforms
- Gliders

During the discussion several things were decided for future action:

- **To produce a white paper for oxygen sensors which would be presented at the Forum for Coastal Technology in Brest (10th October 2012).**
- To form small working groups elaborating the main issues and recommendations concerning End-to-End best practice for each platform (FerryBox, Fixed Platforms and Gliders)
- The working group for the FerryBox will present a first draft during the Alg@l Meeting in SYKE next April.

b) To adopt common methodologies and protocols

The second objective is a continuous effort with discussions being more and more integrated as workshops take place and partners are involved in common exercises etc. Furthermore during the Heraklion workshop it was decided to explore the possibility to design and implement a CO2 calibration experiment in the HCMR calibration lab.

c) Move towards the harmonisation of equipment, which will help in reducing maintenance and calibration costs. For this inter calibration tests and in-situ validation will be organised.

The third objective is also a continuous effort and results will stem out from the common activities within the network. A significant objective of WP4 is to record the “*Running costs*” associated with each platform. Towards this a questionnaire/excel sheet has been prepared and distributed to partners who will have to record for one year all system related costs.

• **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D4.1	Report on existing facilities	4	M18	Postponed to M21	10.00	5.00	HZG
D4.2	Report on calibration best practices	4	M36	M36	20.00	5.00	HZG
D4.3	"Report on biofouling prevention methods	4	M36	M36	20.00	5.00	CNR
D4.4	"Report on best practice in operation and maintaining	4	M42	M42	20.00	4.30	HCMR
D4.5	Report on running costs of observing systems	4	M48	M48	14.50	2.70	CEFAS

- ***Milestones list***

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS15	Constitution of a permanent JERICO Working Group for Calibration Activities	WP4	30	30	HCMR

2.4.3 Deviations from the project work programme, and corrective actions taken

Five deliverables are planned for this work package. The first one D4.1 - Report on existing facilities with the capacity to handle pressure, temperature, salinity and dissolved oxygen calibrations amongst the active coastal observing networks - planned for M18, (October 2013) will be delayed until the end of 2012. The report is sent to the coordinator at the end of December 2012 and will be submitted in January 2013.

2.5 WP5 – DATA MANAGEMENT AND DISTRIBUTION

+Persons in charge of this report:

Alessandro Crise, Caterina Fanara

Email: acrise@ogs.trieste.it; cfanara@ogs.trieste.it

Phone number: +39 040 21401

Institution name and Acronym: OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale)

+Name of task team responsible persons:

Work package leaders' name: OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale)

Task title	Responsible persons	Institution
5.1 CREATE VALUE FOR MEASURED DATA	Rajesh Nair	OGS
5.2 HARMONIZATION OF DELAYED MODE DATA MANAGEMENT PROCEDURES WITH SEADATANET	Loic Petit de la Villeon	IFREMER
5.3 HARMONIZATION OF REAL TIME DATA MANAGEMENT PROCEDURES WITH MYOCEAN/EUROGOOS AND THE INSTITUTION OF DATA ACCESS SERVICES FOR JERICO TOP ACTIVITIES	Sylvie Pouliquen	IFREMER

+Name of other participating institutions:

NIVA, IMR, CNR, HCMR, MUMM, SMHI, PUERTOS

2.5.1 Work package objectives and starting point of work at beginning of reporting period

Task 5.1: Create value for measures data

Documentation of the state-of-the-art and review of available literature.

Task 5.2: Harmonisation of delayed mode data management procedures with SeaDataNet

The goal of this task is to define guidelines to enhance access to historical observation from the coastal platforms operated within JERICO in partnership with SeaDataNet and to provide help to partners which may have some difficulties to implement the SeaDataNet components.

Task 5.3: Harmonisation of real time data management procedures with MyOcean/EUROGOOS and the institution of data access services for JERICO TOP activities

The goal of this task is to define guidelines to enhance access to near real time observation from the coastal platforms operated within JERICO. This task will be conducted in close partnership with SeaDataNet.

2.5.2 Progress towards objectives – tasks worked on and achievements made

Task 5.1: Create value for measures data

A comprehensive review of the state-of-the-art in uncertainty estimation methodology is being performed, and a preliminary report on the importance of this methodology in the context of coastal data quality assessments is under preparation. Work on defining procedures for ascribing realistic uncertainties to measurements for some specific variables that are being handled within JERICO has been initiated, and is ongoing.

Task 5.2 and Task 5.3: Harmonisation of data management procedures

Since the start of the JERICO project, discussion have been carried out with both the SeaDataNet, MyOcean and the EuroGOOS ROOSes to define what was the best way to integrated both Historical (task 5.2) and Near Real Time (Task 5.3) observation from the JERICO coastal observing systems. Discussion has also taken place with EMODnet-PP project that is facing similar issues so that the solutions proposed within JERICO and EMODnet-PP are consistent. A first version of a handbook providing guidelines to observation providers have been drafted and distributed first to the WP5 partners and then to the observing system data provider for comments and application.

The corresponding deliverables: D5.1 and D5.2 have been delivered month M13 to the European Commission.

Moreover a subcontract has been set up with MARIS to support observation providers that are not NODC's to connect to the SDN infrastructure. MARIS will be in charge of i) populating the EDIOS catalogue (European Directory of the Ocean-observing System, a unique searchable metadatabase), ii) Generate the CDIs (Common data indexes) that will allow to access the Jerico datasets through the SeaDataNet portal, iii) Develop a prototype of portal (based on SeadataNet technologies) which will allow direct access to Jerico data. A subcontract has also been passed to MARUM to set up procedures to describe accurately observatories and their on board sensors, including for instance calibrations, processing, accuracy limits, using SensorML standard

In 2012, a series of tasks was performed to enhance Ifremer coastal data management for Jerico.

To ensure that the Jerico developments are carefully tested before operational use, we installed and configured a Testlink server. Any new development will pass a test protocol managed by Testlink. More on Testlink : <http://en.wikipedia.org/wiki/TestLink>

We developed an operational data distribution for the French Jerico data providers. This ftp data distribution is updated once a day.

A web data selection tool for Jerico and other operational data was developed.

We setup the Ferrybox data collect and distribution (French ferrybox lines), they are available in the above ftp operational server and web interface.

We performed a survey on glider data management.

We ensured that the glider data management proposed by the Groom EU project was compatible with Jerico data management.

The decision to manage glider data as time-series proved to be compatible with our data distribution to Jerico.

We received, processed and quality controlled data from the Lion Mediterranean coastal mooring, managed by the French research center CNRS.

• **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D5.1	DM data management handbook V1	5	M8	Submitted M13	6	3	Ifremer
D5.2	RT data management handbook V1	5	M8	Submitted M13	6	3	Ifremer
D5.3	First data management report	5	M24	M24	6	0	OGS
D5.4	Guidelines for uncertainty	5	M30	M30	6	0	OGS
D5.5	Report on uncertainty	5	M42	M42	6.1	0	OGS
D5.6	DM data management handbook V2	5	M48	M48	6	0	OGS
D5.7	Second data management report	5	M48	M48	10	0	OGS
D5.8	RT data management handbook V2	5	M48	M48	6	0	OGS

• **Milestones list**

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS16	First JERICO management Handbook	WP5	M8	Achieved M13	OGS
MS17	Launch of service access	WP5	M18	M21	OGS
MS18	Report on activities	WP5	M46	M46	OGS

MS19	Final JERICO management Handbook	WP5	M48	48	OGS
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2.5.3 Deviations from the project work programme, and corrective actions taken

The production of the handbook took a bit longer than planned because the partners wanted to define a solution applicable both in JERICO, in PERSEUS and in the French project MOOSE and EMODNet-PP. The proposed solution was discussed with EuroGOOS ROOSes observation partners in workshops organised by EurOGOOS office from June 2011 to February 2012. From the discussion at these workshops we are confident that the procedures described in the present version of the handbook are acceptable for the JERICO observation providers as most of them participated into these workshops and were supporting a common approach.

The launch of service access is planned for January 2013, i.e. M21 (and not M18 as in the DOW).

2.6 WP6: OUTREACH

+Person in charge of this report:

Jo Foden

Email: jo.foden@cefas.co.uk

Phone number: +44 (0)1502 524456

Institution name and Acronym: Centre for Environment, Fisheries and Aquaculture Science (Cefas)

+Name of task team responsible persons:

Work package leaders' name: David Mills (twin Jo Foden)

Task title	Responsible persons	Institution
6.1: Development of end user products and services	<u>Lead:</u> David Mills (twin Jo Foden) <u>Main partners:</u> Simon Keeble & David Hydes	Cefas Blue Lobster & NERC
6.2: The JERICO OceanBoard	<u>Lead:</u> David Mills (twin Jo Foden) & Aldo Drago	Cefas UoM
6.3: The JERICO summer schools	<u>Lead:</u> Aldo Drago <u>Main partner:</u> Nicki Villiers	UoM DELTARES

+Name of other participating institutions:

DELTARES

University of Malta (UoM)

CSIC

Blue Lobster

2.6.1 Work package objectives and starting point of work at beginning of reporting period

Task 6.1: Development of end-user products and services

- SubTask 6.1.1 : To develop a JERICO Community Hub using web technologies.
- SubTask 6.1.2 : Enhance the current web-based EMECO data fusion and visualisation tools (Datatools) to allow users to import data and export integrated data sets and information products via a new user interface developed for the general public and educational sectors.

The starting points of the SubTasks in 6.1 for the reporting period were:

- SubTask 6.1.1 The JERICO Community Hub. This was started and completed during the first reporting period and was reported in M12, May 2012.
- SubTask 6.1.2 Development of JERICO Datatool. The majority of the JERICO Datatool has been completed and is now awaiting confirmation of data from other work packages.
- SubTask 6.1.3 Provision of data from JERICO observing systems onto public display monitors. A proto-type of a public display was created during the reporting period.

Task 6.2: The JERICO OceanBoard

- To provide informative and educational resources on-line based on project activities, new and existing material targeted at different educational end-users.
- To shape the educational resource in a form suitable for uptake for 2 categories of end-user: professional and public.
- To enhance the JERICO Community Hub as appropriate to implement an outreach strategy for end-user groups.

During the reporting period the OceanBoard was functionally completed on time in M6, Nov 2011. The banner design was provided by Ifremer in Dec 2011 and the OceanBoard was handed over to the University of Malta in January 2012. Deliverable 6.2 on the OceanBoard was reported to the Coordinator in February 2012. The OceanBoard PUBLIC and PROFESSIONAL web pages are being populated with content for the duration of the project.

Task 6.3: The JERICO Summer School

- To use project outputs (data, information, skills and expert knowledge) as the basis of two targeted summer schools.
- To organise and run two summer courses targeting specific groups: (i) scientific and technical staff engaged in the running of meteo-marine observatories, and (ii) environmental managers and policy makers

Task 6.3 planning and preparations have been underway during the reporting period. Deliverables are not due until M27 and M30, August 2013 and August 2014.

2.6.2 Progress towards objectives – tasks worked on and achievements made

Task 6.1 Development of end-user products and services

SubTask 6.1.1: The development of end user products and services

The JERICO Community Hub was delivered to the coordination team ahead of schedule in M8, January 2012.

The JERICO Community Hub is hosted at www.jerico-fp7.eu. This has links to Trans National Access, Forum for Coastal Technology, descriptions of the work packages, the JERICO OceanBoard, workshops and meeting documents.

The associated Deliverable 6.2 (JERICO Community Hub) was reported to the coordinator in M12, May 2012 and delivered to the European Commission in Month M13.

SubTask 6.1.2: Development of the EMECO DataTool for JERICO

This has made excellent progress during this reporting period and the JERICO Datatool is ready to be populated with data. The partners Blue Lobster are now awaiting confirmation of data from other work packages to populate the Datatools. A decision on these is expected in early 2013 and completion is anticipated by May 2013.

The associated Deliverable 6.4 (Development and implementation of suite of web-based interactive tools) is not due until M24, May 2013. It is anticipated that the sub-task will be completed on target.

SubTask 6.1.3: Provision of data from JERICO observing systems onto public display monitors/information hubs including enhancement of NERC-NOCS Ferrybox passenger display

This SubTask has also made good progress during the reporting period. The Ferrybox JUD (JERICO User Display) document is available from a link on the front page of the JERICO Community Hub website. The JUD is under test by HCMR and SMHI. The display is crudely operational but not yet of a quality for public display on a ferry. Work is underway to make the display more user-friendly; e.g. capacity for users to change the order of slides, change colour scales, back-ground (currently JEBCO). A workshop at the next Ferrybox Meeting in Helsinki (24-25th April 2013) has been proposed to look at the next developments of the JUD.

SubTask 6.1.4: On going maintenance, support, hosting of JCH and JERICO Datatool

This SubTask continues for the life of the JERICO programme.

Task 6.2 The JERICO OceanBoard

The OceanBoard has been developed and incorporated into the JERICO Community Hub. The OceanBoard is complete and is available at: <http://www.jerico-fp7.eu/oceanboard>. The OceanBoard was handed over to University of Malta in January 2012 and training was provided on its use by Blue Lobster. There are ongoing updates and new content is uploaded to OceanBoard PUB and PROF web pages as it is made available to the coordinators and editorial group (University of Malta). The associated Deliverable 6.1 (OceanBoard) was reported to the coordinator in M9, Feb 2012

All partners are encouraged to register on the site and to send content to the editorial group. Articles of approx. 200 words are requested, with an accompanying image and web link. An electronic alert goes out once a month with details and links of new articles. Content can be sent to oceanboard@jerico-fp7.eu or via the contact page form.

Task 6.3 JERICO Summer Schools:

These have been postponed by one calendar year for each school. The new dates are summer 2013 (M27) for Course 1 and summer 2014 (M39) for Course 2. This was a change agreed at the outset of the JERICO programme.

Following the recommendation of the Steering Committee (January 2012), it has been agreed to swap the order of the summer schools. Course 1 will now focus on technologies and the use of sensors and will be held at University of Malta (UoM) in 2013. Course 2 will focus on data assimilation and will be held at Deltares in 2014.

Teleconferences were held with Cefas, UoM and Deltares in February and October 2012, a WP6 meeting was held at the GA in October 2012, and further email communications have taken place. At these meetings the plans and design for the summer schools have begun to take shape.

Several experts at the JERICO 1st GA kindly offered their services as lecturers. There is a suggestion to set up an expert committee for the 1st school (Malta). This could constitute some of the lecturers, with one co-ordinating lecturer who will attend the whole course and sign certificates. The 2nd summer school will be on data assimilation or 4th Paradigm (NL).

It is anticipated that the summer schools and their associated Deliverables 6.3 and 6.4 will be completed on target.

• **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor

D6.1	Design and launch of JERICO OceanBoard v0	6	M6	Submitted M13	6.0	3	Cefas (+UoM)
D6.2	JERICO Community Hub	6	M12	Submitted M13	5.0	0.5	Cefas
D6.3	Summer school 1	6	M15	Postponed to M27	3.02	0.3	UoM
D6.4	Development and implementation of suite of web-based interactive tools	6	M24	M24	8.0	0.0	Cefas
D6.5	Summer school 2	6	M27	Postponed to M39	4.0	0.07	DELTAIRES
D6.6	Final version of JERICO OceanBoard	6	M30	M30	14.08	0.0	Cefas (+UoM)

- *Milestones list*

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS20	Summer School 1	WP6	M16	M28	CEFAS
MS21	Summer School 2	WP6	M28	M40	CEFAS

2.6.3 Deviations from the project work programme, and corrective actions taken

Task 6.3 Summer schools. These have been postponed by one calendar year for each school. The new dates are summer 2013 for Course 1 and summer 2014 for Course 2. This was a change agreed at the outset of the JERICO programme (1st steering committee decision) as more time is needed for the various partner organisations to prepare their data and to design the summer schools. Furthermore, the order of the summer schools has been changed. The 1st summer school will be held at UoM and the second at Deltares (as explained above). The consequences are that Deliverables 6.3 and 6.5, about summer schools, are one year postponed.

2.7 WP 7 – SERVICE AND DATA ACCESS

This work package will start at month 19.

In advance to the scheduled planning, some JERICO observing system dataset have been gathered and pushed into the Near Real time data stream as defined in the MyOcean project

1)	MOLIT & Mesurho buoys	11)	CNR - FOS
2)	RECOPECA	12)	POSEIDON Buoy Network
3)	Alg@line	13)	POSEIDON Buoy Network
4)	CRS - Coastal Research Station	14)	POL - COBS
5)	NorFerry - Norwegian Ferrybox Network	15)	COSYNA
6)	NorFerry - Color Fantasy	16)	SMHI - MOS
7)	IMR - coast observatories	17)	SMHI - Laesoe
8)	OGS-NACObs - FVG-MMS	18)	SmartBay Galway
9)	OGS-NACObs - MAMBO	19)	Puertos del Estado Deep Water Network
10)	CNR - NAMS		

Status of the JERICO datasets regarding their integration through the NRT data stream
(last update 2012-12-01)

Data set circulating in NRT

Data set not yet integrated in a NRT data stream

The NRT data stream is based on Regional Operational Oceanographic Systems (*ROOSes*) that provide data to the MyOcean in situ TAC (Thematical assembling centre) hosted by the Coriolis data centre.

The NRT data stream is based on a ftp site that contains:

- data in the NetCDF Oceansites format
- an global index that allows to pick up the data files

A new index has been prepared. It will allow selecting the Jerico data among a wider dataset and subsequently will allow to clearly identifying the Jerico contribution to a global observation system. The same approach has been developed for the PERSEUS and MOON project

In order to develop links between data observation systems and the MyOcean TAC and also to develop specific data and indexes distribution, a contract has been passed between Ifremer and Cap Gemini.

- *Deliverables: no deliverables in WP7*
- *Milestones list: no milestones in WP7*

2.8 WP 8 – TRANSNATIONAL ACCESS TO COASTAL OBSERVATORIES

+Person in charge of this report:

Stefania Sparnocchia

Email: stefania.sparnocchia@ismar.cnr.it

Phone number: +39 366 6594647

Institution name and Acronym: Consiglio Nazionale delle Ricerche - CNR

+Name of task team responsible persons:

Work package leaders' name: Stefania Sparnocchia (CNR)

Task title	Responsible persons	Institution
Implementation of Trans National Access to Coastal Observatories	Stefania Sparnocchia	CNR

(Note: Activities for implementing TN Access to Coastal Observatories are conducted in WP1 Task 1.6)

+Name of other participating institutions:

IFREMER	IBWPAN	NIVA	OGS	HCMR	NERC	HZG	CSIC	INSU-CNRS
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2.8.1 Work package objectives and starting point of work at beginning of reporting period

The primary objective of this WP is to enable scientists and engineers to access, free of charge, original coastal infrastructures that do not exist in the country where they are working. These infrastructures include fixed platforms, buoys, profiling systems, gliders, ferryboxes and associated support facilities (e.g. calibration laboratories) managed by the participating institutions.

2.8.2 Progress towards objectives – tasks worked on and achievements made

The 1st Call for Transnational Access was published on the JERICO website on January 12th, 2012. Deadline for proposals submission was set on April 3rd, 2012.

We received 13 proposals (see following table), of which one was not eligible since the Principal Investigator leading the User Group worked in the same country where the legal entity operating the targeted facility operated. Amongst the eligible proposals, two were rejected not fulfilling the requisite of a score greater than 60, and one was withdrawn by the Principal Investigator.

Reference Number	Facility ID	Type	Facility provider	Proponent	Result
CALL_1_1	POSEIDON BUOYS	FP	HCMR GREECE	Melchor Gonzales-Davila – Universidad de Las Palmas de Gran Canaria SPAIN	Score: 72.7 Approved
	POSEIDON CAL	CL			
CALL_1_2	ACQUA ALTA	FP	CNR ITALY	Giuseppe Zibordi – Joint Research Centre ITALY	Not eligible
CALL_1_3	POSEIDON CAL	CL	HCMR GREECE	Rajesh Nair – OGS ITALY	Score: 59.0 Rejected
CALL_1_4	Colour Fantasy	FB	NIVA NORWAY	Kevin C. Jones – Lancaster University UNITED KINGDOM	Score: 74.3 Approved
	COSYNA_2 (PILE)	FP	HZG GERMANY		
CALL_1_5	OGS-CTO	CL	OGS ITALY	George Pethiakos – HCMR GREECE	Score: 76.5 Approved
CALL_1_6	MPL Genoa	FP	CNR ITALY	E. Cano Diaz – GENIM/CSIC SPAIN	Score: 70.1 Approved
CALL_1_7	CETSM	GL	INSU/CNRS FRANCE	Ainhoa Caballero Reyes – AZTI Technalia SPAIN	Score: 68.0 Approved
CALL_1_8	CSIC-Glider	GL	CSIC SPAIN	Alberto Ribotti – CNR IAMC ITALY	Score: 72.0 Approved
CALL_1_9	MPLC	FP	CNR ITALY	L.Coppola - Observatoire Oceanographique de Villefranche/Mer FRANCE	Score: 82.1 Approved
CALL_1_10	COBS 4 POL GLIDER	GL	NERC UNITED KINGDOM	Anna Wahlin – Dep. Earth Sciences Univ. Gothenburg SWEDEN	Withdrawn by the User Group leader
CALL_1_11	POSEIDON CAL	CL	HCMR GREECE	Roberto Bozzano –CNR ISSIA ITALY	Score: 75.6 Approved
CALL_1_12	ACQUA ALTA	FP	CNR ITALY	Salud Deudero – Instituto Espanol de Oceanographia RESMARE SPAIN	Score: 59.3 Rejected
CALL_1_13	COBS 4 POL GLIDER	GL	NERC UNITED KINGDOM	Ian Allan – NIVA NORWAY	Score: 87.1 Approved

FB = FerryBoxes; FP = Fixed Positions; GL = Gliders; CL = Calibration Laboratories

Description of the publicity concerning the new opportunities for access

A dedicated Web page was developed on the JERICO website (www.jerico-fp7.eu/tna), where the relevant information was published, including detailed description of the facilities open to TNA (www.jerico-fp7.eu/tna/accessible-facilities), eligibility and access modality (www.jerico-fp7.eu/tna/access-rules), schedule of the calls and procedure of selection, including the composition of the Selection Panel (www.jerico-fp7.eu/tna/calls-and-selection). The text of the first Call had a special section, containing also a downloadable version of the application form (www.jerico-fp7.eu/tna/calls-and-selection/first-call, www.jerico-fp7.eu/attachments/article/53/JERICO%20TNA%20Application%20Form.doc).

Furthermore, the opportunities for access open to research teams throughout Europe were publicised in the 1st MedCLIVAR Newsletter (www.medclivar.eu), in the News sections on the websites of the EGO community (www.ego-network.org), MOON community (www.moon-oceanforecasting.eu), and participating Institution websites (e.g., CNR ISMAR, www.ismar.cnr.it), and distributed through mailing lists of other projects (e.g. PERSEUS) and communities (e.g. EuroGOOS and ROOSs).

Description of the selection procedure

Submitted proposals were collected by the JERICO TNA Office (jerico.tna@ismar.cnr.it), composed by Stefania Sparnocchia and Sara Ferluga at CNR-ISMAR in Trieste (Italy). After reception, the office registered each proposal and sent acknowledge of receipt to the Proponent communicating also the assigned Reference Number. The code used for the first call was CALL_1_N.

Submitted projects were subjected to a three-step selection process involving:

- i. evaluations of all the submitted proposals by the Selection Panel (SP), particularly with regard to scientific excellence, innovation and impacts on the state-of-the-art;
- ii. validation of the proposals by the managers of the targeted facilities;
- iii. final assessments by the SP.

The composition of the SP was the same communicated in deliverable D1.1 – First Call for TNA V1, published on the JERICO web site <http://www.jerico-fp7.eu/tna/calls-and-selection> and also listed in **Annex 1**.

As regards step (i) each proposal was evaluated by 3 members of the SP. The proposals were distributed equally among SP members, avoiding nationality conflicts and, as a rule, if a single facility was the target of more than one proposal, at least 2 out of 3 evaluators were common to each of the evaluating groups involved.

Each evaluator was asked to fill a form containing a list of selection criteria and respective maximum scores, as in the following:

Criterion for Selection	Score
1. Fundamental, scientific and technical value	0 - 30
2. Quality of the work program	0 - 25
3. Feasibility	0 - 20
4. Potential for seeding links with industry	0 - 10
5. Quality of users groups	0 - 10
6. European representivity	0 - 5

He/she was informed that the proposals would be considered if a score greater than 60 was ranked, a threshold stated by the JERICO Steering Committee during its first meeting on 23-24 January 2012.

A summary scientific evaluation report was compiled for each proposal by the JERICO TNA Office and sent by email to successful and rejected applicants together with feedbacks from technical revision (step ii). Three successful proposals needed further interaction between user group and facility operator to work out technical issues.

A report of the 1st TNA call evaluation was compiled by the JERICO TNA Office and sent by the project coordinator to the SP for approval by email on July 12th, 2012. Final approval was received on October 24th, 2012

The SP was officially gathered during the GA of JERICO on October 1st, 2012, to debrief and conclude after the first TNA call and selection process. The report was also discussed and decision taken of preparing an Addendum containing conclusion by the SP. The Addendum was sent by the TNA coordinator to the SP for approval, by email on October 18th, 2012. Final approval was received on November 7th, 2012.

Trans-national Access activity

Only one of the approved user-projects started in the reporting period involving the partner CSIC (Spain) and a user group made by scientists of CNR IAMC (Italy), whose purpose is a scientific project using in situ observations and modeling. A glider mission from Minorca to Sardinia in the Western Mediterranean Sea started on October 23rd, 2012, involving the infrastructure managed by CSIC. The mission was suspended on October 30th because of technical problem and it is planned to restart in January 2013.

Scientific output of the users at the facilities

None of the approved user-project achieved results in the reporting period.

User meetings

No user meeting has taken place in the reporting period.

• Deliverables

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D8.1	Trans National Access Provision	WP8	M48	M48	2.50	0.50	CNR

• Milestones list: no milestones for this WP

2.8.3 Deviations from the project work programme, and corrective actions taken

NERC will not provide all the facilities it originally proposed for TNA, in particular the facilities COBS 1 POL BUOY and COBS 3 FERRYBOX are no longer accessible.

Corrective action: A new TNA infrastructure will be added to mitigate the ones not provided by NERC: a FerryBox from CNRS will be proposed instead of those of NERC. Funds not used by NERC and by this new TNA infrastructure will be added to the TNA budget for travel grants of users and Selection Panel members.

INSU/CNRS referred to a wrong unit cost calculation for its glider infrastructure. Recalculation was asked for successive amendment to the Contract to account for expected changes in costs. New calculation has not been provided yet.

(See annexes 1 to 3 at the end of the report)

2.9 WP 9 – NEW METHODS TO ASSESS THE IMPACT OF COASTAL OBSERVING SYSTEMS

+Person in charge of this report:

Srdjan Dobricic

Email: srdjan.dobricic@cmcc.it

Phone number: +39 051 3782637

Institution name and Acronym:

+Name of task team responsible persons:

Work package leaders' name: Srdjan Dobricic

Task title	Responsible persons	Institution
9.1: Scientific coordination	Srdjan Dobricic	CMCC
9.2: Impact of existing observational platforms on estimates of coastal processes by the use of high resolution coastal models	Gerasimos Korres	HCMR, CMCC, DMI, DELTARES, MUMM, HZG
9.3: Impact of future coastal observing platforms on the estimates of coastal processes by the use of high resolution coastal models	Frederic Francken	MUMM, DMI, HZG, IFREMER, INSU/CNRS, CMCC

+Name of other participating institutions:

IFREMER	DMI	DELTARES	MUMM	HCMR	INSU-CNRS	HZG		
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2.9.1 Work package objectives and starting point of work at beginning of reporting period

Task 9.1: Scientific coordination

Organizes WP9 technical meetings for the definition of OSE and OSSE experiments and presents the findings on the impact of existing and future platforms to WP2 and WP10.

Task 9.2: Impact of existing observational platforms on estimates of coastal processes by the use of high-resolution coastal models

A set of Observation System Experiments (OSE) is performed with different existing observational platforms and in different European seas.

Task 9.3: Impact of future coastal observational platforms on estimates of coastal processes by the use of high-resolution coastal models

Observations System Simulation Experiments (OSSE) are developed for several European seas and different observing platforms that may be implemented in the future.

2.9.2 Progress towards objectives – tasks worked on and achievements made

Task 9.1 Scientific coordination

On 4 October 2011 a workshop was organized in Bologna. It was an opportunity to present each partner's data assimilation system and the methodology that is going to be used during the project. The workshop ended with a discussion on how to harmonize in the most appropriate way the execution of experiments and the presentation of experimental results. Major issues and limits of the methodology were discussed, too. The workshop notes will be used as a guideline for the writing of the reports on experiments. The first year scientific results of WP9 are reported in deliverable D9.1 (Month 12)

Task 9.2 Impact of existing observational platforms on estimates of coastal processes by the use of high-resolution coastal models

All partners started to work on the set-up and tuning of data assimilation systems necessary for the experiments, and started to obtain the first experimental results.

In the North Sea, the German Bight, the Adriatic Sea and the Baltic Sea first OSE experiments are made with coastal observations of temperature and salinity. The existing HF radar observations are implemented in the first OSE experiments in the German Bight and the Aegean Sea. The initial OSE experiments are performed with the sea level observations in the North Sea. Deliverable D9.2 reports intermediate results of this task.

Task 9.3 Impact of future coastal observational platforms on estimates of coastal processes by the use of high-resolution coastal models

All partners started to work on the set-up and tuning of data assimilation systems necessary for the experiments, and started to obtain the first experimental results.

In the Gulf of Biscay the first OSSE experiments are made in order to evaluate the impact of future observations on fishing boats. The OSSE experiments in other European coastal areas are still under development. Deliverable D9.3 reports intermediate results of this task

• Deliverables

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D9.1	First scientific report	9	M12	Submitted M12	10	10	CMCC
D9.2	First report on OSE	9	M18	M21	10	10	HCMR
D9.3	First report on OSSE	9	M18	M21	10	10	DMI
D9.4	Second scientific report	9	M24	M24	7.5	7.5	CMCC
D9.5	Second report on OSE	9	M36	M36	10	10	HCMR
D9.6	Second report on OSSE	9	M36	M36	10	10	DMI

- *Milestones list*

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS29	Final Report OSE	WP9	M42	M42	HCMR
MS30	Final Report OSSE	WP9	M42	M42	DMI

2.9.3 Deviations from the project work programme, and corrective actions taken

The WP9 workshop was organized 6 months after the start of the JERICO project on 4 October 2011. This was a delay with respect to the plan, which had envisaged the workshop 3 months after the start of the project. The reason for the delay was that during summer it was not possible to find a date when all partners were available. Therefore it was preferred to postpone the workshop and have the participation by most of the partners. The delay did not produce any negative impact on the project tasks.

Deliverables D9.2 and D9.3 with intermediate reports on the status of OSE and OSSE experiments, that were due on M18, are postponed to M21. The delay was due to the problems of the execution of the data assimilation system for the Adriatic Sea on the new distributed memory computer. The problem is solved and the deliverables will be produced before end of M21.

2.10 WP 10 – IMPROVED EXISTING AND EMERGING TECHNOLOGIES

+Person in charge of this report:

Glenn Nolan

Email: glenn.nolan@marine.ie

Phone number: +353 91 387496

Institution name and Acronym: IMI

+Name of task team responsible persons:

Work package leaders' name: Glenn Nolan

Task title	Responsible persons	Institution
10.1: Monitoring of key biological compartments	Antoine Gremare	INSU
10.2: Physico-chemical sensors	Kai Sorensen David Hydes Jukka Seppala	NIVA NOC SYKE
10.3: Profiling technologies	Rajesh Nair	OGS
10.4: Ships of opportunity	Laurent Delauney	IFREMER
10.5: Ferrybox data quality control	Wilhelm Petersen	HZG
10.6: Benthic sediment measurements	Fritz Francken	MUMM

+Name of other participating institutions:

IFREMER	SYKE	NIVA	OGS	HCMR	INSU-CNRS	HZG	CNR	NERC
CEFAS	SMHI	CSIC	MUMM	MI	INSU-CNRS			

2.10.1 Work package objectives and starting point of work at beginning of reporting period

Task 10.1 Development of new tools and strategies for the monitoring of key biological compartments and processes

The aim of this task is to develop new procedures, largely based on image analysis, to monitor biological compartments and processes at high frequency and/or over large spatial scales using automated or semi-automated procedures.

Task 10.2 Development of physico-chemical sensors and implementation on new platforms

This task includes development of new physico-chemical sensors; Emphasis will be put on sensors that will quantify contaminants and acidification of coastal waters such as pH, pCO₂ and alkalinity.

Task 10.3 Emerging technology, profiling technology, intercomparison with mature technologies

The aim of this task is to compare profile measurements from a moored buoy with similar profiles from profiling floats, standard ship-based CTD measurements and surface data from FerryBox systems.

Task 10.4 Ships of opportunity, Next generation fishing vessels probes

Organise a short workshop (linked to other WP10 activities) to identify gaps in terms of observations, and suggest solutions to try and fill them utilizing existing project infrastructure and specify and scope out next-generation sensors that could be deployed on ships of opportunity such as fishing vessels to gather nutrient, pH and other necessary data for coastal operational oceanography on a sustained basis.

Task 10.5 FerryBox data quality control algorithm

Review data processing undertaken by relevant partners for FerryBox systems, Identify points of manual intervention in the data-processing protocols of each relevant partner, Design algorithms for optimising the FerryBox data-processing (to facilitate utilisation e.g. by models through data assimilation) and Develop examples of Matlab code to implement the algorithms for use by other partners.

Task 10.6 Remote sensing of SPM

Using a smart buoy to establish the relationship between surface (measured in situ and remotely) and near-bed (in situ tripod) concentration of Suspended Particulate Matter.

2.10.2 Progress towards objectives – tasks worked on and achievements made

Progress to date on WP10 was presented at the JERICO General Assembly in Heraklion in early October 2012. Key personnel is assigned and active in delivering the main elements of the WP10 work plan.

Task 10.1 1 Development of new tools and strategies for the monitoring of key biological compartments and processes

INSU and NIVA are the main contributors to this task. Jean Claude Duchene (Bordeaux) and Lars Stemmann (VLFR) are the key contacts with Jean Claude responsible for tasks 10.1.1 to 10.1.3 and Lars responsible for task 10.1.4.

Lars Stemmann and Alicia Romero Ramirez gave a summary of the work to date on this task which is well advanced. The SpiArcBase software was demonstrated which provides an excellent visualisation tool for Sediment profile images. Lars Stemmann gave a comprehensive overview of imaging systems and how they can be used to provide indicators of ecosystem status. Particular emphasis is placed on the Flow cytometer, Flowcam and Zooscan technologies. An integrated software suite has been developed and an extensive test of sampling protocols has been completed. Work on optimising the software for semi-automatic recognition of plankton groups is currently underway.

Task 10.2 Development of physico-chemical sensors and implementation on new platforms

Sub-task 10.2.1: Contaminants

Kai Sorensen

A Chem-Mariner system has been developed and deployed on a Norwegian ferry in late 2012. The system uses Low Density Polyethylene (LPDE) membranes deployed in a flow through chamber to measure PAH and PCB contaminants. The cumulative build up of these contaminants is analysed in the lab post deployment. Comparisons will be made with a TriOS sensor designed for making PAH measurements.

Sub-task 10.2.2: Algal pigments

Jukka Seppala

A TriOS sensor that measures Chl-a fluorescence, CDOM fluorescence and phycocyanin fluorescence has been acquired by the project. Initial lab tests are underway and the sensor will be deployed on a ship in autonomous mode in late 2012. Under this task fluorometers will also be used to detect phycoerythrin pigments for comparison with samples analysed by FlowCam and conventional microscopy. Some development work is also underway applying new algorithms to data collected from a Fast Repetition Rate Fluorometer (FRRF).

Sub-task 10.2.3: Carbon

David Hydes/ Kai Sorenson

pCO₂ and pH sensor systems are currently deployed and being evaluated on several FerryBox type systems. Multiple sensors are being evaluated including systems by Aanderaa, Contros and ProOceanus. Water samples are being analysed for Total Alkalinity and Dissolved Inorganic Carbon. The SeaFET pH sensor is also being evaluated within this task.

Task 10.3 Emerging technology, profiling technology, intercomparison with mature technologies Rajesh Nair/Laurent Coppola

Linked to task 10.3 VLFR is also integrating Pco2 and Ph sensors on the EOL coastal buoy in Villefranche. A 3rd generation of the EOL profiling buoy is developed as part of the JERICO project. This buoy is designed to make continuous profile measurements of a variety of parameters in the Ligurian Sea. The technology is based on a Mobilis design and following some modifications in the latter half of 2012, the current plan is to re-deploy the buoy off Villefranche shortly. Laurent Coppola plans to generate a 1-year time series of key oceanic variables for this task using this profiling buoy and a local vessel for conventional CTD profiles.

OGS planned to deploy a tethered profiling float (ARVOR C, provided by IFREMER) alongside the MAMBO buoy in the Northern Adriatic in October 2012 (M18). A vessel based CTD system will be used as the control for this experiment. Material has been sent to OGS but the MAMBO buoy has been damaged in early November 2012 by a very bad weather event. Fieldwork has been delayed in spring 2013 so the current plan is to fulfil this experiment in Q2 2013.

A third experiment in Bay of Biscay will be undertaken, most likely in 2013 where the Ferrybox system will be compared with XBT measurements and a tethered profiler. Yannick Aoustin (Ifremer) and Pascal Morin (INSU) will work with David Hydes (NOCS) on this experiment.

The overall objective of task 10.3 is to assess the data availability using the different methods in varying weather and operating conditions. The work will also link to the cost benefit being undertaken in WP4.

Task 10.4 Ships of opportunity, Next generation fishing vessels probes Laurent Delaunay/ Michela Martinelli

A Ships Of Opportunity workshop was held in Brest during the ESFRI meeting in June 2011. This has been followed by a workshop organised by Laurent Delaunay on Autonomous Surface Vehicles in June 2012. In this task, a synthesis of VOS activity in Europe and the US will be compiled based on the presentations at the 2011 and 2012 workshops and some additional fact-finding.

CNR is currently working with NKE to upgrade their probes and software. They also plan to develop a new radio tool for data transmission. Other plans include developing catch maps and electronic logbooks from the vessels. There will be a test operational period for this technology in the Adriatic and Celtic seas in late 2013 with a planning meeting in Galway in May 2013.

Task 10.5 FerryBox data quality control algorithm Willi Petersson

A new quality control scheme will be considered based on the collective Ferrybox experience within the JERICO community. In April 2013 existing Ferrybox quality control schemes will be evaluated and discussed with a view to developing new algorithms in the September 2013-2015 period.

Task 10.6 Remote sensing of SPM Fritz Francken

A market study to establish the most appropriate smart buoy use to establish the relationship between surface (measured in situ and remotely) and near-bed (in situ tripod) concentration of Suspended Particulate Matter has been undertaken by MUMM. Some field comparisons have been conducted comparing remotely sensed and in-situ surface and near-bed sediment measurements. *This task was not initially in the DoW.*

• **Deliverables**

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D10.1	Report on trials and deployments	10	M36	M36	20	0	MI
D10.2	Set of software (analysis of SPI, Flowscan and Zooscan images)	10	M42	M42	60	6	INSU/CNRS
D10.3	Report on data analysis (moored profile comparison, 3D T/S structure)	10	M42	M42	32.5	2	HZG
D10.4	Report on potential new sensors (fishing vessels and VOS)	10	M42	M42	30	2	IFREMER

- *Milestones list*

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS22	JERICO workshop on sensors for vessels of opportunity and fishing vessels probes	WP10	M12	Achieved M2	MI Ifremer
MS23	Software and manuals for new image analysis techniques (including Flowscan and Zooscan)	WP10	M24	M42	INSU/CNRS (not BLIT as indicated in the DOW)
MS24	Recommendations Report for autonomous carbon measurements	WP10	M26	M26	MI
MS25	Data report on salinity and Temperature measurements from XBT and FerryBox	WP10	M26	M26	MI
MS26	Report of joint workshop on best practices for coastal observatories	WP10	M30	M30	MI

2.10.3 Deviations from the project work programme, and corrective actions taken

There are some delays in the moored profiling experiment due to equipment availability and technical problems due to a bad weather event on MAMBO buoy in November 2012. These experiments are now expected to be conducted in Q2 2013.

3 DELIVERABLES AND MILESTONES TABLES

3.1 Deliverables list

Del. no.	Deliverable name	WP n°	Delivery date from DOW	Actual/Forecast delivery date	Estimated indicative person-months	Used indicative person-months	Lead beneficiary
D1.1	First call for TNA proposals	1	M8	M9	5	6.75	CNR
D1.2	Rationale and definitions for a common strategy	1	M9	Uploaded M18 To be submitted M21	6	2	INSU/CNRS
D1.3	Terms of reference of the FCT	1	M9	M14	3	1	MI
D1.4	JERICO label definition	1	M18	Postponed to M23	2	0	HCMR
D1.5	Second call for TNA proposals	1	M20	M21	5	0	CNR
D1.6	First report of the FCT activity	1	M24	M24	3	0	MI
D1.7	First report of the access activity	1	M24	M24	5	0	CNR
D1.8	Second report of the FCT activity	1	M36	M36	3	0	IFREMER
D1.9	Proposed strategy for biodiversity	1	M36	M36	4	0	NIOZ
D1.10	Second report of the access activity	1	M42	M42	5	0	CNR
D1.11	Final report	1	M48	M48	20.3	0	INSU/CNRS
D2.1	Report on existing observation network	2	M12	Postponed to M21	6	3	IMR
D2.2	Report on recommendations	2	M12	Postponed to M21	6	3	IMR
D2.3	Integrated Pan European Atlas first report	2	M18	Postponed to M23	6	0	IMR
D2.4	Demonstration of the feasibility of Joint trans-regional production	2	M24	M24	9	0	SMHI
D2.5	Integrated Pan European Atlas/second report	2	M48	M48	6,25	0	IMR
D3.1	Report on current status of FerryBox	3	M9	Uploaded M15 Submitted M17	20	12	HZG/NOC S
D3.2	Report on current status of gliders observatories within Europe	3	M15	Postponed to M24	20	1	CSIC

D3.3	Review of current marine fixed instrumentation	3	M21	Postponed to M22	20	5	HZG/CEFAS
D3.4	Report on new sensor developments	3	M36	M36	24.7	1	HZG
D3.5	Conclusion report	3	M42	M42	20	0	HZG
D4.1	Report on existing facilities	4	M18	Postponed to M21	10.00	5.00	HZG
D4.2	Report on calibration best practices	4	M36	M36	20.00	5.00	HZG
D4.3	"Report on biofouling prevention methods	4	M36	M36	20.00	5.00	CNR
D4.4	"Report on best practice in operation and maintaining	4	M42	M42	20.00	4.30	HCMR
D4.5	Report on running costs of observing systems	4	M48	M48	14.50	2.70	CEFAS
D5.1	DM data management handbook V1	5	M8	M13	6	3	Ifremer
D5.2	RT data management handbook V1	5	M8	M13	6	3	Ifremer
D5.3	First data management report	5	M24	M24	6	0	OGS
D5.4	Guidelines for uncertainty	5	M30	M30	6	0	OGS
D5.5	Report on uncertainty	5	M42	M42	6.1	0	OGS
D5.6	DM data management handbook V2	5	M48	M48	6	0	OGS
D5.7	Second data management report	5	M48	M48	10	0	OGS
D5.8	RT data management handbook V2	5	M48	M48	6	0	OGS
D6.1	Design and launch of JERICO OceanBoard v0	6	M6	M13	6.0	3	Cefas (+UoM)
D6.2	JERICO Community Hub	6	M12	M13	5.0	0.5	Cefas
D6.3	Summer school 1	6	M15	Postponed to M27	3.02	0.3	UoM
D6.4	Development and implementation of suite of web-based interactive tools	6	M24	M24	8.0	0.0	Cefas
D6.5	Summer school 2	6	M27	Postponed to M39	4.0	0.07	DELTAR ES
D6.6	Final version of JERICO OceanBoard	6	M30	M30	14.08	0.0	Cefas (+UoM)

D8.1	Trans National Access Provision	WP8	M48	M48	2.50	0.50	CNR
D9.1	First scientific report	9	M12	M12	10	10	CMCC
D9.2	First report on OSE	9	M18	M21	10	10	HCMR
D9.3	First report on OSSE	9	M18	M21	10	10	DMI
D9.4	Second scientific report	9	M24	M24	7.5	7.5	CMCC
D9.5	Second report on OSE	9	M36	M36	10	10	HCMR
D9.6	Second report on OSSE	9	M36	M36	10	10	DMI
D10.1	Report on trials and deployments	10	M36	M36	20	0	MI
D10.2	Set of software (analysis of SPI, Flowscan and Zooscan images)	10	M42	M42	60	6	INSU/CNRS
D10.3	Report on data analysis (moored profile comparison, 3D T/S structure)	10	M42	M42	32.5	2	HZG
D10.4	Report on potential new sensors (fishing vessels and VOS)	10	M42	M42	30	2	IFREMER
D11.1	Signed consortium agreement	11	M2	M8	2	2	IFREMER
D11.2	Quality assurance plan	11	M3	M6	5	5	HCMR
D11.3	Identity Set	11	M6	M12	2	2	NIVA
D11.4	First periodic report	11	M18	M21	12	0	IFREMER
D11.5	Second periodic report	11	M36	M36	12	0	IFREMER
D11.6	Final report	11	M48	M48	15	0	IFREMER

3.2 Milestones list

Mil. no.	Milestones name	WP n°	Delivery month from DOW	Actual Forecast achievement date	Lead contractor	Achieved Yes/No	Comments
MS1	Kick off meeting	WP11	1	M1	Ifremer	Yes	Kick off meeting report
MS2	First intermediate GA	WP11	18	M18	Ifremer	Yes	General Assembly in Heraklion (1 and 2 Oct)
MS3	2 nd intermediate GA	WP11	36	36	Ifremer	No	
MS4	Final GA	WP11	48	48	Ifremer	No	
MS5	First steering committee outputs	WP1	9	M9	INSU/CNRS Ifremer	Yes	First steering committee report
MS6	Infrastructure available for users	WP1	11	M9	INSU/CNRS	Yes	1st TNA call
MS7	First forum for coastal technology	WP1	18	M18	INSU/CNRS	Yes	Held during the Sea Tech Week in Brest

MS8	Second steering committee outputs	WP1	18	M19	INSU/CNRS Ifremer	Yes	SC meeting in Heraklion in October the 2 nd .
MS9	Third steering committee outputs	WP1	27	27	INSU/CNRS Ifremer	No	
MS10	Second forum for coastal technology	WP1	30	30	INSU/CNRS	No	
MS11	Fourth steering committee outputs	WP1	36	36	INSU/CNRS Ifremer	No	
MS12	Fifth steering committee outputs	WP1	45	45	INSU/CNRS Ifremer	No	
MS13	User reports of activities	WP1	47	47	INSU/CNRS	No	
MS14	Roadmap for the future	WP1	48	48	INSU/CNRS	No	
MS15	Constitution of a permanent JERICO Working Group for Calibration Activities	WP4	30	30	HCMR	No	
MS16	First JERICO management Handbook	WP5	8	M13	OGS	Yes	Handbook in progress
MS17	Launch of service access	WP5	18	21	OGS	No	
MS18	Report on activities	WP5	46	46	OGS	No	
MS19	Final JERICO management Handbook	WP5	48	48	OGS	No	
MS20	Summer School 1	WP6	16	28	CEFAS	No	Organisation UOM
MS21	Summer School 2	WP6	28	40	CEFAS	No	Organisation Deltares
MS22	JERICO workshop on sensors for vessels of opportunity and fishing vessels probes	WP10	12	M2	MI Ifremer	Yes	Workshop report done
MS23	Software and manuals for new image analysis techniques (including Flowscan and Zooscan)	WP10	24	42	INSU/CNRS (not BLIT as indicated in the DOW)	No	Milestone MS23 brought in line with Deliverable D10.2
MS24	Recommendations Report for autonomous carbon measurements	WP10	26	26	MI	No	
MS25	Data report on salinity and Temperature measurements from XBT and FerryBox	WP10	26	26	MI	No	
MS26	Report of joint workshop on best practices for coastal observatories	WP10	30	30	MI	No	
MS27	Report on activities	WP2	42	42	IMR	No	
MS28	Report on activities	WP3	42	42	HZG	No	
MS29	Final Report OSE	WP9	42	42	HCMR	No	
MS30	Final Report OSSE	WP9	42	42	DMI	No	

4 PROJECT MANAGEMENT DURING THE PERIOD (WP11 report)

+Person in charge of this report:

Patrick Farcy

Email: Patrick.farcy@ifremer.fr

Phone number: +33.2.98.29.48.11

Institution name and Acronym: Ifremer

+Name of other persons involved in the WP11:

Dominique Durand, Georges Petihakis, Ingrid Puillat, Nadine Rossignol, Maelle Pichard (Ifremer)

To ensure efficient project coordination adapted to the specificities of the JERICO project and to achieve the project objectives and goals, the management is divided into the following tasks:

- Task 11.1: Day to day management
- Task 11.2: Financial follow-up
- Task 11.3: Technical reporting
- Task 11.4: Quality assurance plan
- Task 11.5: Consortium animation
- Task 11.6: Other management related issues

4.1 Day to day management

To ensure an active and efficient management of the project, JERICO has developed some tools as a quality assurance plan, a project Identity set and templates for the reporting.

The coordinator manages the delivery and the follow-up of the deliverables and all official documents (administrative and financial ones). He organized the Kick off meeting and the first general assembly. He organised also two steering committees meetings: the first one in Paris (January 2012) and the second one in Heraklion (October 2012).

4.1.1 Kick off meeting and General Assemblies

4.1.1.1 The Kick off meeting

This meeting held in Paris, on the 24th and 25th of June, 2011. 25 of the 27 partners attended the meeting. The objectives were to give the kick off conditions of each work package and to approve the constitution of the Steering committee and the Scientific Advisory Committee.

The main decisions were:

1 - The eight proposed votes were approved:

- * approval of the steering committee members (2 votes);
- * approval of the internal interim report M9 and M24

- * approval of the SAC constitution
 - * approval of the FCTAC constitution
 - * approval of the TNA selection committee
 - * approval to delay the pre-financing for the access activities (WP7) when the partners will have signed the dedicated agreements.
 - * approval to delay the pre-financing for the TNA activities (WP8) after the selection of the projects.
- 2 – The project will propose a definition of the “Vision” of the European coastal observatory network. A dedicated session will be in the second best practices workshop, after the first general assembly (M18).
 - 3 – The workshops for WP3 and 4 will be organised together:
 - first workshop on “FerryBox” late august in Geesthacht (HZG)
 - first workshop on “fixed platform” to be defined by CNR and CEFAS
 - first workshop on “gliders” to be defined by CSIC
 - 4 – The common questionnaire WP2, 3, 4 & 5 to be ready in September
 - 5 – The objectives and scheduling of a common event: first summer school and first forum FCT must be defined very soon (before October 2011).
 - 6 – The definition of the TOP activities and the access of these data sets need to be cleared before the starting of the WP, i.e. Month 18.
 - 7 – A dedicated session on the TNA proposal will be added to the first summer school.
 - 8 – The consortium agreement to be validated and signed by all the partners.

4.1.1.2 The first General Assembly meeting

It was held in Heraklion the 1st and 2nd of October 2012. 24 of the 27 partners attended the meeting.

The statement of decisions is:

WP#	Decisions / Recommendations
WP1	- TO PROPOSE A MULTI-STAGE METHODOLOGY FOR THE DEFINITION OF THE JERICO LABEL TO BE CONCLUDED BY A WORKSHOP BEFORE END OF JERICO (THE DELIVERABLE IS THE FIRST STAGE)
WP2	- TO STRENGTHEN THE INTERFACE BETWEEN JERICO AND THE EUROGOOS COMMUNITY. MAYBE PLAN A WP2 Workshop WITH PARTNERS - TO SEND DRAFT OF THE DELIVERABLES D2.1 & D2.2 before end of October
WP3	- TO CLARIFY THE USE OF GOOGLE TOOLS WITH WP6 - TO PROVIDE A MEETING/WS AGENDA FOR 2013
WP4	- THE DRAFT OF D4.1 TO DELIVER BEFORE CHRISTMAS - TO PROVIDE A MEETING/WS AGENDA FOR 2013 - JERICO Working Group ON CALIBRATION TO BE ORGANISED AND ALSO A SCIENTIFIC WORKSHOP DURING NEXT PERIOD
WP5/WP7	- PARTNERS NEED TO HAVE A DEDICATED WORKSHOP WITH PARTNERS INVOLVED IN WP5 AND WP7 (MAY BE A “HOTLINE” WILL BE NECESSARY) - ACTION OF THE PARTNERS: TO PROPOSE OR VALIDATE THE CONTACT PERSONS FOR THE #INFRASRUCTIONS -WP7: TO PROPOSE A “KICK-OFF” FOR TOP IN 2013
WP6	- PERMANENT ACTION OF PROMOTION OF OCEANBOARD -CONFIRMATION OF THE PROGRAM AND AGENDA OF THE FIRST SUMMER SCHOOL AND PROPOSAL FOR THE THEME OF 2nd SUMMER SCHOOL

WP8	- TO FINISH THE 1st CALL EVALUATION PROCESSUS BEFORE END OF OCTOBER (AND COST EVALUATION) - TO PREPARE THE DRAFT OF THE NEXT CALL IN THE EARLY NOVEMBER
WP9	- TO ENHANCE COLLABORATION WITH WP2 AND WP10 + PROMOTION OF THE TNA INFRASTRUCTURES
WP10	- TO EXCHANGE BETWEEN CNRS AND CNR ON BIOFOULING - TO ORGANISE A SCIENTIFIC WORKSHOP IN THE EARLY AUTUMN 2013 - TO PREPARE A WP10 INTERMEDIATE REPORT FOR THE MID TERM REVIEW

4.1.2 Steering Committee meetings

The 1st Steering committee meeting (SC) was held in Paris (Roissy) on 23rd and 24th of January 2012. The second meeting was held in Heraklion on 2nd of October 2012.

-All the actions taken by the 1st SC are closed except the action SC1_15 that is due for month M42 (end of 2014):

15	Workshop on coastal observatories implementation M42	Glenn Nolan
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-The actions decided by the 2nd SC are:

Decision SC2#	Content	Who
1	Initiate the content of the MOU with MyOcean ASAP (including new bio-geochemical parameters).	Coordinator + WP5 leader and Ifremer WP5 team
2	MOU to be accepted by next Steering committee.	SC#3
3	MOU with SeaDataNet to be prepared before end 2013.	Coordinator + WP5 leader and Ifremer WP5 team
4		All partners
5	Detailed program and participants to the first summer school to be provided. Spring 2013.	WP6 Leader
6	Definition and general content of the second summer school (related to the 4 th paradigm) to be discussed at next steering committee.	WP6 Leader
7	Constitution of a Label council - to be validated by the next steering committee.	WP1 coordination team, Glenn Nolan, WP3 & WP4 leaders.
8	First draft of the "JERICO label" – to be discusses at the next SC.	WP1 coordination team, Glenn Nolan, WP3 & WP4 leaders.
9	Dedicated meeting of WP2 in Hamburg during EUROGOOS annual meeting.	WP2 leader
10	Participation to that meeting	Coordinator
11	Clarification action with GROOM	Coordinator and Joaquin Tintore
12	Constitution of the permanent WG on	WP4 leader, Florence Salvetat

	calibration.	
13	Dedicated meeting for data provider partners.	WP5 leader, Loic Petit de la Villéon.
14	Draft of next TNA call.	WP8 leader
15	Preparation of the WP10 scientific meeting. Agenda to discuss at the SC.	Glenn Nolan, Lars Steeman, Antoine Gremare, Patrick Farcy.

4.1.3 Other Committees

The TNA Selection Panel meeting was organised on October 1st 2012, in Heraklion. This panel meeting's objective was to select the projects which pass the evaluation threshold.

The points of the Agenda were the following:

- 1) Status of JERICO TNA submitted proposals, next steps, 2nd call
- 2) Approval of the First TNA Call Evaluation Report
- 3) Approval of received revised proposals
- 4) Debate of the evaluation procedure, critical points and suggestion for improving it.
- 5) Formal approval of TNA webpages at <http://www.jerico-fp7.eu/tna>

6 projects are selected without restriction, 3 are selected after some minor modifications. Four project are rejected (see also the ANNEX1)

13 SUBMITTED PROPOSALS

SCORE	REF. No	TYPE	OPERATOR	PROPONENT	STATUS
87.1	CALL_1_13	GL	NERK - UK	Allan - NO	REVISION
86.8	CALL_1_10	GL	NERK - UK	Wahlin - SE	WITHDRAWN
82.1	CALL_1_9	FP	CNR - IT	Coppola - FR	APPROVED
76.6	CALL_1_2	FP	CNR - IT	Zibordi - IT	NOT ELIGIBLE
76.5	CALL_1_5	CAL	OGS - IT	Pethiakos - GR	APPROVED
75.6	CALL_1_11	CAL	HCMR - GR	Bozzano - IT	APPROVED
74.3	CALL_1_4	FB FP	NIVA - NO HZG - DE	Jones - UK	REVISION
72.7	CALL_1_1	FP & CAL	HCMR - GR	Gonzales Davila - ES	APPROVED
72.0	CALL_1_8	GL	CSIC - ES	Ribotti - IT	APPROVED
70.1	CALL_1_6	FP	CNR - IT	Cano Diaz - ES	APPROVED
68.0	CALL_1_7	GL	CNRS - FR	Caballero Reyes - ES	REVISION
59.3	CALL_1_12	FP	CNR - IT	Deudero - ES	REJECTED
59.0	CALL_1_3	CAL	HCMR - GR	Nair - IT	REJECTED

WP8 TNA - JERICO - 5

The coordination team also participated in the organisation and the promotion of all the workshops organised by the work packages.

Workshops and meetings organized by the project

WP11	<i>KICK OFF MEETING / PARIS / 2011 MAY 24 & 25</i>
WP10	<i>WORKSHOP ON NEW SENSORS FOR VESSEL OF OPPORTUNITY / BREST / 2011 JULY 1st</i>
WP3/WP4	<i>FIRST WORKSHOP ON FERRYBOX BEST PRACTICES / GEESTADT / 2011 AUGUST 30 & 31</i>
WP9	<i>KICK OFF MEETING WP9 / BOLOGNA / 2011 OCTOBER 4th</i>
WP11/WP1	<i>FIRST STEERING COMMITTEE / PARIS / 2012 JANUARY 23 & 24</i>
WP4	<i>WORKSHOP ON CALIBRATION ACTIVITIES / HELSINKI / 2012 JANUARY</i>
WP3/WP4	<i>FIRST WORKSHOP ON FIXED PLATFORMS BEST PRACTICES / ROME / 2012 FEBRUARY 28 & 29</i>
WP10	<i>KICK OFF MEETING WP10 / ROMA / 2012 MARCH 1st</i>
WP3/4	<i>FIRST WORKSHOP ON GLIDER BEST PRACTICES / PALMA DE MAJORQUA / 2012 MAY 22 & 23</i>
WP11	<i>FIRST GENERAL ASSEMBLY / HERAKLIO / 2012 OCTOBER 1st & 2nd</i>
WP1/WP8	<i>TRANS NATIONAL ACCESS SELECTION PANEL / HERAKLIO / 2012 OCTOBER 1st</i>
WP11/WP1	<i>SECOND STEERING COMMITTEE / IRAKLIO / 2012 OCTOBER 2nd</i>
WP1	<i>WORKSHOP ON FUTURE STRATEGY FOR COASTAL OBSERVATORIES / IRAKLIO / 2012 OCTOBER 3rd</i>
WP3/WP4	<i>SECOND WORKSHOP ON COASTAL OBSERVATORY BEST PRACTICES / IRAKLIO / 2012 OCTOBER 4 & 5</i>
WP1 WP4	<i>FIRST FORUM FOR COASTAL TECHNOLOGY (FCT) / BREST / 2012 OCTOBER 10 AND CALIBRATION EXERCISES ON TEMPERATURE AND SALINITY SENSORS CALIBRATION PROCEDURES / BREST / 2012 OCTOBER 8 to 12</i>

4.2 Financial follow-up

The financial contact person at Ifremer is Dominique Gueguen. He provides templates to fill in the periodic report with the financial inputs from all the partners. He managed the preparation of an intermediate financial report at M9, in order to prepare the partners in the reporting process, to test our reporting procedures, and of course to check the partners' financial involvement before M18. Since M20 he is assisted by Maëlle Pichard recently hired in Ifremer. A consolidation report is made for the first 18 months. One difficulty came from a change in EC reporting templates during summer 2012, leading the consortium to face new reporting templates requesting more detailed information despite the anticipated M9 report. As a consequence the financial reporting is 1-month delayed. He also manages the pre-financing funds.

4.3 Technical reporting (including technical Deliverables)

The Project Deliverables are split into two categories:

- the technical Deliverables and Milestones,
- the interim, periodic and final reporting.

To ensure proper delivery at due dates, some principles have been set up in the Quality Assurance Plan to allow each actor in the process to know how and when he/she is expected to contribute. The management team intervenes at the beginning of the process (to remind concerned beneficiaries that they are involved in a future delivery) and at the end (to consolidate and harmonize various contributions and finally to store the Deliverable reports).

The deliverable reports can be uploaded from the JERICO Website.

The 18-months interim report was the first official reporting done by the Project. It will be accessible on the website (as a deliverable).

4.4 Quality Assurance Plan (QAP)

The Quality Assurance Plan (Deliverable D11.2) of the JERICO project aims to describe the Project organization (project bodies description and responsibilities, Work Package management and meetings) and the Project communication (communication means, templates, naming conventions and storage, and publications /dissemination rules), but also to describe the technical and financial aspects in view of the mid-term review and periodic reporting. For this purpose, several processes have been proposed for the delivery and storage of Deliverables and Milestone.

The Quality Assurance Plan was not delivered on time (M3) because of the time needed for its development and adaptation to the beneficiaries' suggestions. Based on the experience gained during the document elaboration (see below), the coordinator considered that it was not realistic to reach the M3 objective. He preferred to take more time for of the Deliverable finalization, providing thus a QAP fully adapted to an efficient management of the Project.

4.5 Consortium animation and communication

The Consortium animation is mainly based meetings, WPs workshops and, on the use of the working and reporting tools and the set of templates. All JERICO documents and communication supports use the Identity Set created for the Project and described in the Deliverable D11.3 “Project Identity set”.

The fundamentals of the Project Identity are composed of two main components, the logo and the banner (for websites, posters ...), in addition to Power Point templates and MS word template.. They can be used in a variety of forms, either on materials and presentation slides to promote the dissemination of the Project identity or on the set of templates to ensure efficient communication within the Project.

The creative work has been subcontracted to a specialised SME, H.Comm and the banner including the logo presented hereafter (in full and abbreviate versions,) was designed with the following explanation concerning the graphics and contents:

- the blue colour is for serious and institutional character and in connection with ocean;
- the wave evokes the sea;
- a map of Europe is inserted in the wave;

The JERICO banner obviously includes the JERICO and FP7 logos and the European flag, with the three observing infrastructure included in the project, i.e. ferry, fixed platform (buoy) and glider.



All the communication tool and graphic materials are available on JERICO website: www.jerico-fp7.eu. in the "Partner only" pages which are accessible via login and password after registration.

4.6 Other management related issues (including Relations with other European Projects)

- Committees

The main tasks and objectives of the four JERICO committees are described in the Annex I of the DoW. These committees are:

- *The steering committee (SC)*

It is composed by the main partners of the project; EEA and Marine Board are permanently invited to the SC meeting. Five SC meeting are planed during the project life at M9, M18, M24, M36, and M42. An extraordinary SC meeting can be organized by the coordinator as required. Some decision may be taken by exchanges of emails. The SC representatives are:

W. PETERSEN – HZG, S. KAITALA – SYKE, D. HYDES – NERC, D. MILLS – CEFAS, D. DURAND – NIVA, G. NOLAN – MI, A. GREMARE – CNRS, S. SPARNOCCHIA – CNR, G.PETIHAKIS – HCMR, J. TINTORE – CSIC, P. FARCY – IFREMER

- The Scientific Advisory Committee (SAC)

It is a consultative body, important to maintain communication with international scientific communities and to prepare further steps. It is composed by:

- 1) Dr. Janet Newton, Biological Oceanographer, University of Washington
- 2) Dr. George Zodiatis, Physical Oceanographer, University of Cyprus.
- 3) Dr. Richard Dewey, Physical Oceanographer, University of Victoria, Canada.
- 4) Dr. Hans Dalhin, Director of EUROGOOS
- 5) Dr. Roger Proctor, Program Leader, IMOS, University of Tasmania, Australia

- The FCT Advisory committee (FCTAC)

It is in charge of the technical expertise for the organisation of the Forum for Coastal Technology. This committee is composed by:

- 1) Glenn Nolan (MI)
- 2) Yannick Aoustin (Ifremer)
- 3) Franciscus Colijn (Univ Kiel - Ferrybox)
- 4) Laurent Mortier (LOCEAN - glider)
- 5) Alicia Lavin (IEO – fixed platforms)
- 6) Secretary: French “pôle Mer”, association of SMEs in marine R & D

- The TNA selection committee

It is in charge of the evaluation and the selection of the proposed project relevant to the TNA calls. This committee is composed by:

- 1) The 5 SAC experts (Newton, Zodiatis, Dewey, Dalhin, Proctor)
 - 2) The 3 FCT board experts (Colijn, Mortier, Lavin)
- These 8 members are the TNA scientific evaluation Team
- 3) The WP8 leader, Stefania Sparnocchia.
 - 4) The coordinator, P Farcy.
 - 5) The WP1 coordination team: P Morin-CNRS, D Durand-NIVA, I Puillat-Ifremer.

• Relations with other European Projects

JERICO is associated with the FP7 GROOM project on the gliders. The coordinator participated to the GROOM Kick-off meeting in Paris (14th and 15th of November, 2011). A common meeting on gliders was organised in Palma de Mallorca and GROOM coordinators are invited to the JERICO workshops and vice versa.

JERICO is interfaced with SeaDataNet and MyOcean for the data management of JERICO network observatories.

A common approach for the TNA is looked for the I3 and ESFRI marine project as JERICO, Eurofleets, EuroArgo and EMSO. A dedicated workshop will be organised to converge on a TNA marine infrastructure common approach.

Most of the infrastructure of JERICO is involved in the WP4 (Infrastructure WP) of SEASERA. The coordinator of JERICO is invited to participate to workshops on WP4 and WP6 of SEASERA.

JERICO was presented, by the coordinator, to the MARCOMM+ meeting in Brest (October 2012) and to the EUROGOOS general assembly in Hamburg (November 2012).

- Associated partners:

JERICO has not yet invited associated partner to enlarge the consortium. We have initiate some contacts with PLOCAN in Canarias (Spain), Institute of Oceanography and fisheries in Croatia, TUBITAK in Turkey, NIB in Slovenia, UCY in Cyprus, IEO in Spain.

4.7 WP11 Deliverables and Milestones

- *Deliverables (WP11)*

Del. no.	Deliverable name	WP n°	Date due proj.month	Actual/Forecast delivery date	Estimated indicative person-months *)	Used indicative person-months *)	Lead contractor
D11.1	Signed consortium agreement	11	M2	Submitted M8	2	2	IFREMER
D11.2	Quality assurance plan	11	M3	Submitted M6	5	5	HCMR
D11.3	Identity Set	11	M6	Submitted M12	2	2	NIVA
D11.4	First periodic report	11	M18	To be submitted M21	12	0	IFREMER
D11.5	Second periodic report	11	M36	postponed to M38	12	0	IFREMER
D11.6	Final report	11	M48	postponed to month 50	15	0	IFREMER

The first 3 deliverables shifted because of the warm up starting of the project. For the consortium agreement, all the partners have signed it before end of M4 except one partner who signed M8.

The periodic reports are at least 2 months delayed to be completed after the end of the periodic (and final) reporting.

- *Milestones list (WP11)*

Del. no.	Milestones name	WP	Date due proj.month	Actual/Forecast delivery date	Lead contractor
MS1	Kick off meeting	WP11	M1	Achieved M1	Ifremer
MS2	First intermediate GA	WP11	M18	Achieved M18	Ifremer
MS3	2 nd intermediate GA	WP11	M36	M36	Ifremer
MS4	Final GA	WP11	M48	M48	Ifremer

5 FINANCIAL REPORTING

During the first 18 months of the project, the financial follow-up made by IFREMÉR as Project's Coordinator mainly consisted in the distribution of the pre-financing payment, to prepare tables to manage the budget of the project, the collection and consolidation of all financial figures necessary for the preparation of the 9-months interim report and the official 18-months periodic report.

During the General Assembly the 1st and the 2nd of October 2012 in Heraklio, consolidated data of the internal reported M9 have been discussed. We presented a balance sheet based on consumption rates by work package and type of activities. We also gave information to each beneficiary about their consumption rates.

We plan to collect these data using two dedicated Excel documents of the Project set of templates and proposed in the QAP for the financial follow-up. IFREMÉR took into consideration changes made on the level of information requested in order to fill in the FORM C. Further details is required on use of resources : expenses per WP, details on the expenses. Therefore, IFREMÉR adjusted in accordance with these amendments the excel documents and ultimately decided to use only one template called "Explanation of the use of resources".

Financial information was collected from each beneficiary who had to fill out this template describing project costs per WP. This first stage has been the subject of discussions between IFREMÉR as Project's Coordinator and each beneficiary in order to check financial information that will be submit by beneficiaries in their FORM C. A particular attention has been paid to the subcontracting in link with part B of the DOW where tasks to be sub-contracted are listed. We also ascertained that there were consistency between cost declared by each beneficiary and their initial budget in the DOW.

In order standardize FORM Cs for the JERICO project, IFREMÉR specify to all beneficiaries the level of detail needed for to fill in their FORM C. Then IFREMÉR gave the access to the participant portal to each beneficiary.

• **Distribution of the first pre-financing payment**

The first pre-financing payment represented 55% of the average EC contribution for the project (i.e. 3,575,000 Euros). Payment schedule and distribution among the beneficiaries were presented to each partner through the table annexe 2, when the payment has been done.

Considering the start of the support actions activities is being planned in 2012, the pre-financing was split as followed and the budget dedicated to the Management, the Networking Activities (NA) and Joint Research Activities (JRA) was distributed among the beneficiaries:

Management, NA, JRA	:	2,896,498.11 €
Support (TNA)	:	678,501.89 €

Total	:	3,575,000.00 €
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IFREMER received the pre-financing from the EC in May 2011. The pre-financing related to Management, NA and JRA activities was paid within 45 days after receipt of the funds and after signature by each beneficiary of the consortium agreement concluded between beneficiaries.

The pre-financing related to Trans National access activities will be paid by the coordinator to the interested parties within 45 days following the signature of the agreements for Trans National infrastructures Access, as decided during the Kick-Off-Meeting in may 2011.

- **Costs and expenses follow-up through one dedicated template**

As explained in the introductory section on the financial reporting, IFREMER as decided to use one template instead of two templates as present in the QAP, in regard to the amendments made on the level of information requested on the use of resource on the participant portal.

The template “Explanation of the use of resources” allows describing all costs incurred by each beneficiary, to properly check financial information submitted by beneficiaries.

Apart from INGV without any time and costs involved during the first eighteen months of the project, each beneficiary completed these templates for the first internal report at M18.

These consolidated data and conclusion from these 18 first months of the project will be discussed during the mid-term review which will take place the 18th and the 19th of June 2013 in Paris as a conclusion of the 1st official 18-months periodic report and for the preparation of the next reporting period.

- **Overview of the actual eligible costs and associated effort progress per activity for the period M1-M18**

The total eligible costs presented by the 27 beneficiaries of the JERICO project for the eighteen months internal report represent 2,675,903.36€ with a maximum EC contribution of 1,911,103.85 €. These correspond respectively to 29.96 % and 29.40% of the budgets planned for the whole project.

Reported costs by type of costs:

REPORTED costs	M18 (01/05/2011 - 31/10/2012)	
Personnel costs	36,79%	1 313 331,07
Subcontracting	21,90%	62 829,37
Other direct	28,89%	273 925,15
Indirect costs	34,23%	1 025 817,77
access costs	0,00%	0,00
Total costs	29,96%	2 675 903,36

No costs have been presented for Work package 7 as this WP will only start at month 19.
No costs have been presented either for Trans-national Access to Coastal Observatories.
However, the 1st Call for Trans-national Access was published and projects selected.

Percentages correspond to the calculation: type of cost / total costs planned in DoW – Annex I of the ECGA.

Reported effort progress by type of activity:

ACTIVITY	RTD	COORD	SUPPORT	MGT	TOTAL
(A): Total pm (Project)	200,00	371,90	3,50	50,00	625,40
(B): Total pm - Previous periods	0,00	0,00	0	0,00	0,00
(C): Total pm - Actual period	71,89	169,77	0	16,78	258,44
(D): Total (B+C)	71,89	169,77	0	16,78	258,44
(E): % (D/A)	35,95%	45,65%	0,00%	33,56%	41,32%

The percentage corresponds to the calculation between total pm project by type of activity and pm actual M18 period. There has been a substantial involvement of the beneficiaries in the coordination activities which can be explained by the fact that the main objectives of the 1st period are partially linked to coordination activities (Kick-off meeting, first workshops for the Best Practices, the preparation of the first call for Trans National Access is declared under WP1, task 6; the first general Assembly in Heraklio, JERICO website).

- **Description of costs and the associated effort progress by activity**

The only beneficiary whom has not declared any costs for this internal report is INGV. It was expected that INGV worked during the first year of the project on existing observation network in the MOON region. Nadia PINARDI, in charge of the project for INGV, explained that MOON region changed into a new consortium, called MONGOOS and this took all her time for the past 18 months. MONGOOS started its activities in September 2012.

There is no significant conclusion after analysis of the costs for each beneficiary by activity and work package.

A) Joint Research activity (RTD)

The total eligible costs present by the 17 beneficiaries involved in the Joint Research Activity during this internal reporting period represent 645,924.68 € (i.e. 27.10% of the RTD budget planned for the whole project), with a maximum EC contribution of 484,443.51 € (27.10% of the whole EC contribution planned for this activity).

Resources allocated by the beneficiaries for the JRA in the first nine months is 71.89 person months, represent 35.95% of the 200.00 person months initially planned for RTD activity in DoW – Annex I of the ECGA.

Networking activity (Coordination)

The total eligible costs presented by the 27 beneficiaries involved in the Networking activity during this internal reporting period represent 1,722,045.36 € (i.e. 36.99% of the Coordination budget planned for the whole project) with a maximum EC contribution of 1,118,727.02 € (36.60% of the whole EC contribution planned for this activity).

The 27 beneficiaries spent 169.77 person months in networking activity during the first nine months of the project.

The percentage of man-months is 45.65% of the 371.90 person months initially planned in DoW – Annex I of the ECGA.

Trans National Access activity (Support)

The preparation of the call for WP7 and WP8 is declared under WP1, task 6. No costs have been presented for Work package 7 as this WP will only start at month 19. No costs have been presented either for Trans-national Access to Coastal Observatories. However, the first selected project started at the very end of October 2012 which explains that no costs have been presented during this reporting period and will be declare in the next reporting period.

Management activity

The total eligible costs presented by the three beneficiaries (IFREMÉR, NIVA, HCMR) involved in the management activity represent 307,933.32 € (i.e. 45.15% of the management budget planned for the whole project) with a maximum EC contribution of 307,933.32 € (69.17% of the whole EC contribution planned for this activity).

IFREMÉR consumed 46.79 %, NIVA 33.59% and HCMR 36.19% of their budget initially planned in DoW - Annex 1 for their management contribution during the whole project duration.

IFREMÉR is the only beneficiary who reach 375 000€ and we will provide with the FORM C an audit certificate cost.

The person months allocated in the project by the three beneficiaries during the first eighteen months is 16.78 person months (i.e. 33.56% of 50 person months planned in DoW - Annex I of the ECGA).

IFREMÉR, NIVA and HCMR respectively spent 32.17%, 34% and 100% of their indicative person months as planned in DoW Annex I. HCMR declared the full time planned in management which can be explained by the small prevision of time in this activity for this beneficiary (1 p.m.) and also by the fact that this beneficiary organised the General Assembly in Heraklio.

Summary of costs by activity

	RTD (A)	Coordination (B)	Support (C)	Management (D)	Other (E)	Total A+B+C+D+E	
Personnel costs	338 423,69 €	821 927,56 €	- €	152 979,82 €	- €	1 313 331,07	36,79%
Subcontracting	6 205,37 €	31 030,00 €	- €	25 594,00 €	- €	62 829,37	21,90%
Other direct	46 975,27 €	195 030,67 €	- €	31 919,21 €	- €	273 925,15	28,89%
Indirect costs	254 320,35 €	674 057,13 €	- €	97 440,29 €	- €	1 025 817,77	34,23%
access costs	- €	- €	- €	- €	- €	0,00	0,00%
Total costs	645 924,68	1 722 045,36	0,00	307 933,32	0,00	2 675 903,36	
real/previsionnal	27,10%	36,99%	0,00%	45,15%		29,96%	
Requested EC contribution	484 443,51 €	1 118 727,02 €	- €	307 933,32 €	- €	1 911 103,85 €	
real/previsionnal	27,10%	36,60%	0,00%	69,17%		29,40%	

5.5 * Analysis of costs by work package

	WP1		WP2		WP3		WP4	
Costs	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)
TOTAL COSTS BY WP	420 862,57	38,85%	147 329,62	35,49%	434 112,74	38,66%	419 463,01	44,29%

	WP5		WP6		WP7		WP8	
Costs	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)
TOTAL COSTS BY WP	143 262,11	22,71%	157 015,31	34,50%	0,00	0,00%	0,00	0,00%

	WP9		WP10		WP11		TOTAL	
Costs	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)	D) Total costs	(E) = % (D/A)
TOTAL COSTS BY WP	209 926,91	35,77%	435 997,77	24,27%	307 933,32	45,15%	2 675 903,36	29,96%

The above table presents a comparison between initial budget planned in DoW (D) and the actual costs (A) for this M18 report.

WP1 is at near 40% of the costs. The main period of work for that WP is the 1st one as doing scientific coordination of the activities and to prepare the works of the others COORD WP, and will be the 3rd one to prepare the conclusion of the project and the Roadmap for the future.

WP2 to WP4 have had important activities during that 1st period, because of the organisation of questionnaires and workshops. Nevertheless, the results of WP2 (with the delay of the deliverables) need to spend more time with the ROOS partners. It is the reason while this WP is reinforced by a deputy WP leader.

WP5 has less than 25%. The sub contracts are on going and more time has to be spent by Ifremer (we have now more people to work on that task).

WP6 is on going well. The summer schools had to be postponed because of the lack of time to organise them (we need to be ready up to 8 month before). And of course, the delay is around one year for each summer school.

WP7 and WP8 have no cost; the preparation of the call is in WP1, task 6. WP5 and WP10 present the smaller percentages of realised costs with respectively 22.71% and 24.71%.

WP9 is on time with quite the 1/3 of the costs.

WP10 is only at ¼ of the costs. The WP10 started up to 10 month after the beginning of the project (Kick off meeting the 1st of March in Rome). WP10 is now at its cruise speed.

The WP11 “management work package” has the higher percentage of realised costs with 45.15% and the WP4 has also a high percentage of realised cost with 44.29%. A considerable effort has been made on the management for the JERICO project launch and coordination for the first eighteen months of the project. It can also be partially explained by the Kick-off Meeting and the work around the Quality Assurance Plan and the logotype of the project.

Effort progress per WP and Beneficiary

Participant number	Partner	COORDINATION						SUPPORT		RTD		MGT	TOTAL
		WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	WP10	WP11	
		INSU/CNRS	IMR	HZG	HCMR	OGS	CEFAS	IFREMER	CNR	CMCC	MI	IFREMER	
1	IFREMER	7,86		0,82	1,99	2,03		0,00	0,00	0,00	3,27	15,44	31,41
2	SYKE	0,92		0,16	1,14		0,00				3,95		6,17
3	IBWPAN	1,13		1,48					0,00				2,61
4	DMI									5,13			5,13
5	NIVA	1,42		1,22	0,78	0,02		0,00	0,00		1,07	0,34	4,85
6	IMR		3,80			0,00							3,80
7	DELTAIRES		0,73				0,09			1,10			1,92
8	OGS	1,19		3,68	5,73	6,53			0,00		8,24		25,37
9	CNR	6,30		4,95	3,39	0,72		0,00	0,00		1,24		16,60
10	UOM						5,89						5,89
11	HCMR	0,73		11,25	12,25	2,14		0,00	0,00	5,76	3,88	1,00	37,01
12	NERC	0,41		2,67	4,66		3,65		0,00		2,87		14,26
13	INGV		0,00										0,00
14	HZG	0,00		9,15	0,11				0,00	1,81	0,63		11,70
15	RBINS-MUMM			0,55	0,30	0,00				2,06	0,39		3,30
16	CEFAS	1,77		2,56	3,12		2,70				0,56		10,71
17	SMHI		3,70	0,95	1,02	0,04					0,69		6,40
18	CSIC	0,00		7,92	10,17		0,00		0,00		0,00		18,09
19	NIOZ	0,18											0,18
20	MI	1,72		0,11	0,52						2,41		4,76
21	BL						6,00						6,00
22	TECNALIA-AZTI		1,09	0,76	1,68								3,53
23	INSU/CNRS	0,88		0,85	1,02				0,00	0,00	18,10		20,85
24	IH		2,67		1,08								3,75
25	IO-BAS	0,00	3,12										3,12
26	PUERTOS			0,69	1,00	0,61							2,30
27	CMCC									8,73			8,73
	TOTAL	24,51	15,11	49,77	49,96	12,09	18,33	0,00	0,00	24,59	47,30	16,78	258,44

