

Joint European Research Infrastructure network for Coastal Observatory – Novel European eXpertise for coastal observaTories - **JERICO-NEXT**

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JERICO-NEXT

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1. Executive Summary

This report relates to WP8 - Outreach, communication and engagement. It describes the activities of the JERICO NEXT TNA programme so far, carried out under Task 8.8: Implementing Transnational Access to coastal observatories. Information on the Calls' programme, the rules governing the eligibility of user groups and the procedures for the selection and approval of proposals are described in D8.9 (Rules and procedures for TNA), and the facilities participating to the TNA programme in D7.1 (Description of facilities participating to the TNA program).

The launch of each Call was preceded by a long period of preparatory work: the drafting of the required publicity and TNA documentation, the update of the TNA Web pages on the JERICO NEXT website, and the promotion of the access opportunities offered.

This document describes the various steps involved in the implementation of the Calls, giving an overview of the proposals that were accepted and indicating the state of their progress at the present time.



2. Introduction

The JERICO NEXT Consortium offers Transnational Access (TNA) to a number of unique European Coastal Observatories and Calibration Facilities for international research and technology development. The facilities open to users are ferryboxes, fixed platforms, including cabled observatories, gliders, fishing vessels and associated calibration laboratories and marine research stations.

Free-of-charge access to the facilities specified in the TNA context is granted following the evaluation and selection of proposals submitted by user groups for their utilization in response to three dedicated Calls during the lifetime of the JERICO NEXT project. The assessment and selection of submitted proposals is conducted by an independent panel of experts (Selection Panel, SP), and is based on scientific excellence, innovation and eventual impacts on the state-of- the-art.

Access to a specific infrastructure (or a specific installation that is part of an infrastructure) by a user group is intended as a concession granted to use the infrastructure to collect specific data following the implementation of a specific automated measuring system. Unless otherwise stated (e.g. for the use of gliders), the measuring system is provided by the user group. The access conceded includes logistical, technical and scientific support by the access provider, and any special training required by a user group to use the assigned infrastructure.

At the present date, two Calls have been completed, 21 user projects were positively evaluated by the Selection Panel and selected for execution.

	1st Call	2nd Call
Opening of the call	May 2, 2016	February 20, 2017
Deadline	July 5, 2016	April 10, 2017

Table 1 – Dates of JERICO NEXT TNA Call completed so far.

In the following we describe experience so far for selecting and implementing these projects, and also give some outcomes being achieved.



3. First Call

The first Call was published on the JERICO NEXT website on May 2, 2016, the deadline for proposals submission, originally planned on June 20, 2016 was extended up to July 5, 2016 (ref. Annex 1 - Call announcement). The Call was widely advertised via the JERICO NEXT newsletter and the mailing lists of the JERICO RI. The proposals were edited according to the Application template distributed with the Call announcement (ref. Annex 1 - Application Form).

Twelve submitted proposals passed through a three-step selection process (ref. Annex 1 - Guidance Note). From the pre-screening made by the TNA Office, three of them resulted not eligible under the present consortium's rules. Consequently, only nine of them were sent to the Selection Panel for evaluation and selection of the research groups to be financially supported in this Call.

The Selection Panel has been established at the JERICO NEXT Kick-off meeting (Mallorca, Spain, October 1, 2016) involving the members of the Scientific and Technological Advisory Committee (STAC). The TNA procedure allows to name additional experts for the evaluation, if necessity rise, but the final assessment and selection of TNA projects to fund is done by the Selection Panel only. No additional expert was involved in the evaluation of the proposals submitted to the 1st Call, and the STAC members having participated to their review are listed in Table 2.

Review panel member	Affiliation	Role
Laura Beranzoli	INGV, Italy	Representative of EMSO
Eric Delory	PLOCAN, Spain	Representative of NEXOS
Peter Herman	DELTARES, The Netherland	Chair of the STAC
Alicia Lavin Montero	IEO, Spain	Past member of FP7 JERICO SP
Janet Newton	University of Washington, United States of America	Past member of FP7 JERICO SP
Isabel Sousa Pinto	University of Porto, Portugal	Vice chair of EMBOS
Roger Proctor	IMOS and University of Tasmania, Australia	Past member of FP7 JERICO SP

Table 2 – Review panel for the first call for access in 2016

A Selection Panel meeting was organized in Bordeaux, France, on September 7, 2016, during which six out of nine evaluated proposals were finally selected for funding (Table 3).

Results of evaluation were communicated to the proponents in September/October 2016, and selected user projects were published in the JERICO NEXT website (http://www.jerico-ri.eu/tna/call-program/first-call/selected-projects/).

TNA END User agreements have been signed between the institution leading the user group (end user), the JERICO Consortium in the person of the coordinator IFREMER and the beneficiary giving access to owned infrastructure (facility operator).



Reference number	User project Acronym	Title	User group P.I.	User group members nationality(ies)	Host Infrastructure	Score
JN_CALL_1_1	MAICA	Mediterranean Aerosol In Coastal Areas	Jacques Piazzola University of Toulon, Mediterranean Institute of Oceanography, France	France, Greece	Acqua Alta Oceanographic Tower, CNR-ISMAR, Italy	16.3
JN_CALL_1_2	ABACUS-3	Third Algerian BAsin Circulation Unmanned Survey	Giorgio Budillon Università degli Studi di Napoli "Parthenope", Italy	Italy	Glider facility, SOCIB, Spain	20.0
JN_CALL_1_9	CarbonAS	Seasonal variability in carbonate chemistry in the southern Aegean Sea	Andrew King Norwegian Institute for Water Research, Norway	Norway	Poseidon Ferrybox, HCMR, Greece	21.5
JN_CALL_1_10	ANTEIA	Directional wave measuring sensor validation	Ibone Rodriguez de Pablo ZUNIBAL, SL, Spain	Spain	Galway Bay Data Buoy, SBI, Ireland	19.5
JN_CALL_1_11	FinisGlider	Pilot experience to incorporate Glider technology to the Finisterre repeated hydrographic section.	César M. González Pola Muñiz Spanish Institute of Oceanography, Spain	Spain	Glider National Facility, CNRS, France	17.0
JN_CALL_1_12	GLIDER- SOUTH	GLIDER missions in the SOUTHern Sicilian Channel	Aldo Drago University of Malta, Malta	Malta, Italy	Glider National Facility, CNRS, France	18.3

 Table 3: Results of proposal evaluation following the first call for access in 2016

Call A



4. Second Call

The second Call was open from 20 February to 10 April 2017 and widely advertised via the JERICO NEXT newsletter and the mailing lists of the JERICO RI.

Sixteen proposals were submitted and one of them (JN_CALL_2_7) did not receive the feasibility assessment from one of the facility operators involved, so, following the TNA procedure it was not included in the evaluation. The remaining were eligible and passed through a three-step selection process (ref. Annex 2 - Guidance Note).

Following the TNA protocol additional experts were named for the evaluation in support of the Selection Panel. The evaluation team is listed in Table 4. It was composed by four members of the Selection Panel agreeing to do the evaluation, six members of the User Panel (a group of experts established in WP8 Task 8.1 representing enduser communities linked to JERICO-RI), and a member of the JERICO-NEXT consortium, whose Institute is not involved in the TNA activity.

Name	ne Affiliation Grou			
Laura Beranzoli (5)	INGV, Italy	Selection Panel		
Alicia Lavin Montero (6)	IEO, Spain	Selection Panel		
Janet Newton (6)	University of Washington, United States of America	Selection Panel		
Roger Proctor (5)	IMOS and University of Tasmania, Australia	Selection Panel		
Laurent Coppola (3)	CNRS, UPMC, Villefranche, France	User Panel		
Jo Foden (2)	OSPAR, United Kingdom	User Panel		
Peter McKenzie-Midlane (1)	Scitus Management Limited, United Kingdom	User Panel		
David Mills (3)	Bangor University, United Kingdom	User Panel		
Olaf Sveggen (1)	Fugro Norway A.S, Norway	User Panel		
Johan Vercruysse (3)	Flemish government - MDK –aKust, Belgium	User Panel		
Rajesh Nair (2)	OGS, Italy	JERICO-NEXT Consortium, WP2 co-leader		
the number of p	proposals evaluated by each member is re	ported inside brackets		

Table 4 – Evalution panel for the Second TNA Call of JERICO-NEXT

The final assessment and selection of TNA projects to fund was done by the four members of the Selection Panel only, during a videoconference meeting held on 6th July 2017 during which all the evaluated proposals were approved for funding (Table 5).

Results of evaluation were communicated to the proponents in July 2017, and selected user projects were published in the JERICO NEXT website (http://www.jerico-ri.eu/tna/call-program/second-call/selected-projects/).



TNA END User agreements between the institution leading the user group (end user), the JERICO Consortium in the person of the coordinator IFREMER and the beneficiary giving access to owned infrastructure (facility operator) are under preparation at the date of this report.

Reference	User project	Title	User group P.I.	User group members	Host Infrastructure(s)	Score
number	Acronym			nationality(ies)		
JN_CALL_2_1	EvoLUL	Long term underwater evaluation localization in extreme conditions	Konstantin Kebkal EvoLogics GmbH, Germany	Germany, France , Spain	Expandable Seafloor Observatory, UPC, Spain	17.7
JN_CALL_2_2	MicroPlastox	Microplastics in the marine environment: estimation and ecotoxicological logical assessment	João Pinto da Costa University of Aveiro, Portugal	Portugal	 Galway Bay Cabled Observatory, SBI, Ireland MS Color Fantasy, NIVA, Norway Heraklion Coastal Buoy, HCMR, Greece 	19.0
JN_CALL_2_3	ReMoBiB	Real time monitoring of bivalve behavior	Rob Witbaard Netherlands Institute for Sea Research, the Netherlands	the Netherlands	Underwater Node Helgoland, HZG/AWI, Germany	19.3
JN_CALL_2_4	ABACUS-4	Fourth Algerian Basin circulation unmanned survey	Yuri Cotroneo Università degli Studi di Napoli "Parthenope", Italy	Italy, Spain, Algeria	Glider facility, SOCIB, Spain	21.0
JN_CALL_2_5	ANB Sensors pHIMS	Testing an autonomous self-calibrating pH sensor (pHIMS) with on-board QA/QC, for ocean and water quality monitoring	Nathan Lawrence ANB Sensors, United Kingdom	United Kingdom	 Ferrybox at m/s Silja Serenade, SYKE, Finland Atmospheric and Marine Research Station, FMI, Finland Marine Research Centre Laboratory, SYKE, Finland 	18.5

 Table 5: Results of proposal evaluation following the second call for access in 2017

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Reference number	User project Acronym	Title	User group P.I.	User group members nationality(ies)	Host Infrastructure(s)	Score
JN_CALL_2_6	ADVANCE	Automatic Data and Video Acquisition for uNderwater monitoring across Coastal Environments	Simone Marini CNR-ISMAR, Italy	Italy, Spain	 Expandable Seafloor Observatory, UPC, Spain Galway Bay Cabled Observatory, SBI, Ireland 	23.0
JN_CALL_2_8	BB-TRANS	Three-dimensional circulation and transport within the south-eastern Bay of Biscay from a multi- platform approximation	Ainhoa B. Caballero Reyes Azti Foundation, Spain	Spain, Italy	COSYNA Glider, HZG, Germany	19.0
JN_CALL_2_9	LETS-SAT	Leverage tracking efficiency on oceanographic buoys using an energy autonomous solution transmitting satellite messages	Georgios Koutras OpenIchnos Ltd, Malta	Malta	 Heraklion Coastal Buoy, HCMR, Greece Saronikos buoy, HCMR, Greece Athos buoy, HCMR, Greece 	18.8
JN_CALL_2_10	MOCo Sea Pass	Monitoring of Organic Contaminants in the water of the Southern Europe with Passive Sampling	Ioanna Kalantzi Institute of Oceanography, HCMR, Greece	Greece	 Port Operational Marine Observing System - st. Balchik, IO-BAS, Bulgaria Meteoceanographic site S1- GB, CNR-ISMAR, Italy 	17.0
JN_CALL_2_11	FluorMed-1	Phytoplankton fluorescence studies in Mediterranean. Part 1. Feasibility and comparability of different methods in oligotrophic seas	Jukka Seppälä Finnish Environment Institute SYKE, Finland	Finland, France	 Heraklion Coastal Buoy, HCMR, Greece Poseidon Calibration Lab, HCMR, Greece 	20.2

 Table 5: Results of proposal evaluation following the second call for access in 2017 (continued)

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Reference	User project	Title	User group P.I.	User group members	Host Infrastructure(s)	Score
number JN_CALL_2_12	Acronym FOULSTOP	Fouling Protection for marine optical systems	Laurent Delauney Ifremer - Detection, Sensors and Measurements Laboratory, France	nationality(ies) France	Expandable Seafloor Observatory, UPC, Spain	23.0
JN_CALL_2_13	DYNAS	Dynamics and turbulence in the Sicily channel	Pascale Bouruet-Aubertot Université Pierre et Marie Curie, Laboratoire d'Océanographie et du Climat, France	France	Sicily Channel Observatory, CNR-ISMAR, Italy	20.8
JN_CALL_2_14	GETSCh	Glider Experiments in the Tunisia-Sardinia Channel	Sana Ben Ismail Institut National des Sciences et Technologies de la Mer, Tunisia	Tunisia, Algeria, France, Italy	Glider National Facility, CNRS, France	20.3
JN_CALL_2_15	MONICOAST	Monitoring of organic contaminants by passive samplers in the Southern Europe coastal areas	Natalia Montero Ruiz AZTI-TECNALIA, Spain	Spain, Italy	 Heraklion Coastal Buoy, HCMR, Greece Saronikos buoy, HCMR, Greece 	20.5
JN_CALL_2_16	ECSyrinx	Environmental Characterisation of Syrinx ADCP	Geraint West Sonardyne International Ltd., United Kingdom	United Kingdom	Galway Bay Cabled Observatory, SBI, Ireland	19.7

 Table 5: Results of proposal evaluation following the second call for access in 2017 (continued)

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5. Status of the User projects

This section reports only on the projects of the first Call, since the ones of the second Call are still in the earlier stage of preparation of the END User agreements.

5.1 User project ABACUS-3

General Information

Proposal reference number	JN-CALL 1_2, Agreement n° 16/1212704
Project Acronym	ABACUS-3
Title of the project	Third Algerian BAsin Circulation Unmanned Survey
Name of Principal Investigator	Giorgio Budillon
Home Laboratory	Università degli Studi di Napoli "Parthenope"
Country	Italy
Host Research Infrastructure	SOCIB glider facility
Country	Spain
Principal contact	Joaquim Tintoré Subirana, Marc Torner Tomàs
Status	Completed
	Total project duration: 25/10/2016-16/06/2017
	Glider activity at sea: 04/11/2016-23/12/2016
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected- projects/abacus-3/

Project objectives

Just after the Alboran Sea, the Algerian Basin (AB) is the first wide basin crossed by Atlantic Water entering the Mediterranean Sea. It is dominated by the presence of energetic mesoscale structures that usually develop from meanders of the Algerian Current to isolated cyclonic and anti-cyclonic eddies.

The project aims at assessing the importance of a new monitoring line across the AB between Palma de Mallorca and the Algerian Coast and will contribute to data collection in the Southern European Seas, one of the main EU maritime policy objectives, as outlined in the Marine Strategy Framework Directive (MSFD).

The realization of a new glider mission, along the Sentinel-3 groundtracks #57 and #713, enriches the dataset previously collected in this area (Autumn 2014 and 2015), taking into account the lesson learned (i.e., improving the optimized synopticity of glider measurements and satellite overflights, the downcast/upcast data sampling strategy, etc.) also focusing on possible inter-annual and multiplatform comparisons.

Furthermore, the high resolution of glider data will allow one to investigate smaller spatial scales. In fact, despite the large bibliography about the circulation of the entire Mediterranean Sea and its sub-basins, knowledge about mesoscale structures like eddies is still incomplete because of their intrinsic time scales and of the difficulties in their sampling. Recently, the merging of glider measurements and new generation remotely sensed data, offered the opportunity to study some of the eddies' characteristics, such as radius, track and rotational speed. Nevertheless, the lack of high resolution in situ data, through eddies and along their edges, still remains a main concern. ABACUS-3 also aims at filling this gap intercepting any mesoscale structures in the AB eventually identified during the mission.

Glider track of the ABACUS 3 project

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Finally, the collected high resolution glider observations is expected to be used for the validation of the new Sentinel-3 along-track (L3) and gridded interpolated (L4) altimetry products in the western Mediterranean Sea.

Summary of activities so far

The new glider mission realized in November-December 2016 allowed to extend the dataset previously collected in the area (Autumn 2014 and 2015) for an interannual comparison.

ABACUS-3 mission main achievements can be summarized through some technical data:

- 49 days in water
- 1127.90 Km (609 Nm) navigated
- About 1800 triplet-profiles (CTD, Oxygen, Fluorescence)
- 2 SENTINEL-3 overflights
- 4 SENTINEL-3 swath-segments

Two meetings have been realized at the glider facility to analyse data collected through the glider missions and discuss the scientific results achieved. Up to now ABACUS results have been presented in 2 scientific papers and 7 international conferences.

Data are public and available on-line (netCDF, 3 levels of QC) at the following link:

http://thredds.socib.es/thredds/catalog/auv/glider/sdeep01-scb_sldeep001/L2/2016/catalog.html?dataset=auv/glider/sdeep01-scb_sldeep001/L2/2016/dep0021_sdeep01_scb-sldeep001_L2_2016-11-04_data_dt.nc

Dissemination activities

The results achieved during this and previous ABACUS glider missions have been presented at several national and international conferences as the EGU General Assembly 2017 (Aulicino et al., 2017) and IUGG/IAPSO-IAMAS-IAGA Joint Assembly 2017 (Cotroneo et al., 2017).

Seminars for graduate and post-graduate students have been organized at the Università degli studi di Napoli "Parthenope" and the Università Politecnica delle Marche.

A video has been realized to disseminate the project and published on the JERICO-NEXT website and on the YouTube channel.



Links:

http://www.jerico-ri.eu/2017/07/14/abacus-3-project-information/ https://www.youtube.com/watch?v=GZ43huftfGl&feature=youtu.be

More details on the ABACUS Project can be found in Cotroneo et al., 2016.





5.2 User project ANTEIA

General Information

Proposal reference number	JN-CALL 1_10, Agreement n° 17/1212943
Project Acronym	ANTEIA
Title of the project	Directional wave measuring sensor validation
Name of Principal Investigator	Ibone Rodriguez de Pablo
Home Laboratory	ZUNIBAL, SL
Country	Spain
Host Research Infrastructure	SBI Galway Bay Data Buoy
Country	Ireland
Principal contact	Rogério Chumbinho
Status	Not started yet
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected- projects/anteia/

Project objectives

A complete wave measuring system has been designed and built by Zunibal. This project aims at deploying this system, a small buoy, in the Galway Bay for data comparisons and validation and to further develop it. The deployment will make use of the facilities and services in GB MARETS, in particular the communication facilities and the SMARTBUOY, and will last for 4 to 6 months.



Zunibal wave measuring system

The final objective of this development is to have a cost effective buoy for wave measurements producing different parameters associated with wave motion such as Heave, Direction, Period and Water Temperature (in addition to wave induced motion).

The system must analyse each wave impacting the buoy and send the corresponding information in real time through the different communication systems available. This requirement is a useful tool for making a complete analysis about an area using a small buoy; currently the only way to do this is to install instruments on the seabed.

As a result, the end user will have a measuring system that will give data on real time wave to wave (heave, direction and period), statistical parameters, spectral parameters and water temperature (surface).

Deploying the wave measuring system in the Galway Bay will enable the verification of all measurements against the permanent instruments on site, with the goal of offering to the market a new system for wave observation.



5.3 User project CarbonAS

General Information

Proposal reference number	JN-CALL 1_9, Agreement n° 17/1212895
Project Acronym	CarbonAS
Title of the project	Seasonal variability in carbonate chemistry in the southern Aegean Sea
Name of Principal Investigator	Andrew King
Home Laboratory	Norwegian Institute for Water Research (NIVA)
Country	Norway
Host Research Infrastructure	HCMR Poseidon Ferrybox
Country	Greece
Principal contact	Petihakis George
Status	Not started yet
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected- projects/carbonas/

Project objectives

The anthropogenically-driven rise in atmospheric CO2 has potentially significant consequences on marine ecosystems. The deployment of sensors systems that can measure pH and partial pressure of CO2 (pCO2) in surface seawater are reliable, globally accepted methods to implement low-cost, unattended flow-through measurements for comprehensive datasets unequalled by other techniques or shipboard laboratories.

The CarbonAS team plans to deploy a state-of-the-art spectrophotometeric pH sensor (AFtES – Automated Flow through Embedded Spectrophotometry) on the host institution's Ferrybox sensor system to measure pH and to better elucidate seasonal variability in carbonate chemistry of the southern Aegean Sea – a region of large variability especially with regards to dust deposition and salinity gradients.

The Ferrybox operates daily along the route Heraklion-Piraeus in oligotrophic waters, travelling from one coastal zone (Heraklion Gulf) across the open sea (South Aegean Sea) to another coastal zone (Saronikos Gulf). The route of H/S/F "Knossos Palace" crosses three fixed platforms, Saronikos buoy-SB, Heraklion Coastal Buoy-HCB, and Athos buoy-AB, and manual sampling will take place next to two of them. Through this project, the team will add high precision pH observations to the suite of measurements that are already part of the Ferrybox infrastructure, therefore better characterizing the carbonate system through the use of two of the four traditionally measured carbonate system variables.



Ferry Box System I (-4H- JENA engineering GmbH) on board the Passenger Ship "Knossos Palace"

The concomitant sensor deployment and collection of reference seawater for laboratory-based analysis is a unique and valuable opportunity to contribute significantly to both instrumental development for surface monitoring and determination of CO2 fluxes in an important region of the Mediterranean Sea with unique biogeochemical and water mass characteristics.



5.4 User project FinisGlider

General Information

Proposal reference number	JN-CALL 1_11, Agreement n° 17/1212864
Project Acronym	FinisGlider
Title of the project	Pilot experience to incorporate Glider technology to the Finisterre repeated hydrographic section
Name of Principal Investigator	César M. González-Pola Muñiz
Home Laboratory	Spanish Institute of Oceanography (IEO)
Country	Spain
Host Research Infrastructure	CNRS-INSU Glider National Facility
Country	France
Principal contact	Jean-Luc Fuda
Status	ongoing
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected- projects/finisglider/

Project objectives

The objectives of FinisGlider are part of a long-term monitoring program from the Spanish Institute of Oceanography to monitor the ocean hydrography and biogeochemistry at the Western Iberian Margin. Present monitoring program include a repeated section perpendicular to the coast extend to 250 nm off Cape Finisterre into the Iberian Abyssal Plain basin (north-western Iberia, 43°N, 9-15°W, > 5000 m). The aim of the group is to perform a first set of occupations of the sections by glider missions in order to (i) study the influence of mesoscale variability on the water mass properties determination by ship cruises, (ii) understand the variability in circulation patterns at the Galician slope and the passage from the shelf to the Galician Bank and (iii) explore the viability of addressing the repeated hydrographical section west of Finisterre through glider missions.

The FinisGlider project will provide the first glider mission of the section, partially overlapping with a ship cruise. The following specific objectives are pursued:

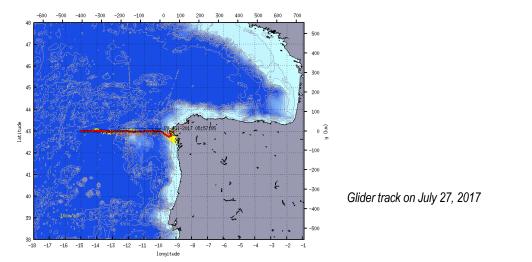
- Evaluate the comparability of the hydrographical structure in the Western Iberian Margin as seen by a regular cruise and an overlapping glider mission.
- Quantify the intrinsic short-term variability of hydrographical properties and mesoscale structures through the repeated sampling by the glider (forward and backward tracks).
- Assess the capability of biogeochemical sensors on glider payload to determine variability and trends in terms of ventilation of central waters.
- Have a glider mission pilot experience to assess the possibility of addressing the repeated hydrographical section west of Finisterre trough such devices, on regular basis, as part of the national monitoring program of the oceans.



Summary of activities so far

The 27th of June, 2017, staff of Glider National Facility with the Spanish team and the crew of the LURA deployed the glider, called Bonpland, off Finistère.

Bonpland is currently performing the section and will be recovered in mid-August.



The evolution of the mission and the plots of the measures taken along the track, are viewable at the following link:

https://gfcpdsi.ego-

network.org/plot/plot_deployment.php?glider=bonpland&deployment=FinisGlider&posti=0&postj=position_zoom0&pposti=4&ppostj=position_zoom12_lastweek&hchk=&defsct=default_scatter

5.5 User project GLIDER-SOUTH

General Information

Proposal reference number	JN-CALL 1_12, Agreement n° 16/1212766
Project Acronym	GLIDER-SOUTH
Title of the project	GLIDER missions in the SOUTHern Sicilian Channel
Name of Principal Investigator	Aldo Drago
Home Laboratory	Physical Oceanography Research Group, Dept. of Geosciences, University of Malta
Country	Malta
Host Research Infrastructure	CNRS-INSU Glider National Facility
Country	France
Principal contact	Jean-Luc Fuda
Status	Completed
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected-projects/glider- south/

Project objectives

The stretch of sea southward of the Maltese Islands beyond 35°N is practically an unexplored area of the Mediterranean Sea. Except for a very limited number of oceanographic surveys, the most recent one conducted



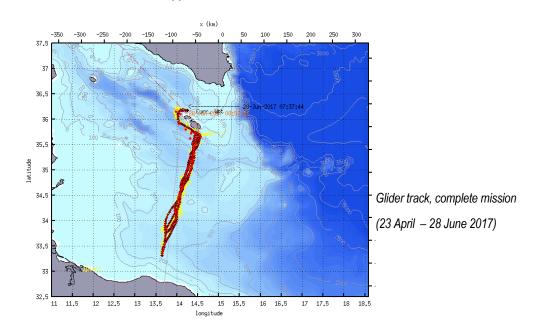
within the MEDSUDMED initiative on the shelf area close to Tripoli in summer 2006, data are very scarce and provide only a coarse description of the hydrographical conditions of the region. Knowledge about the thermohaline characteristics and the water mass circulation in the southern Sicilian Channel is mainly derived from regional scale numerical simulations and satellite observations. The surface circulation appears to be complex with the presence of gyres, eddies and current bifurcations, and characterized by a significant seasonal modulation.

The significant extent of the African (Tunisian and Libyan) continental shelf, with a large portion of very shallow bathymetry, renders sampling efforts and the characterisation and location of water masses somewhat demanding; furthermore national structures for data acquisition, even in the coastal sea areas, are greatly lacking.

The GLIDER SOUTH project was principally aimed to sample intensively this historically under surveyed area of the Sicily Channel, by using dedicated glider missions in the area shown in the figure below, supported by joint Lagrangian drifter experiments, and assessments through the use of numerical model simulations to better interpret the pertinent processes in this marine domain.

Summary of activities so far

The glider Campe has been deployed on the 23th of April, 2017 by staff of the Glider National Facility with the help of the Maltese team and support of the Armed Forces of Malta. It has since then performed transects between the Maltese Islands and the southern Mediterranean shelf, and after a successful mission of 65 days, the glider was recovered in the north-western approaches to the Maltese Islands.



Hydrographic data in this region is very scarce and the project provides pristine data which will help to understand the dynamic phenomena observed in the stretch of sea between Malta and Libya.

The sea glider was further employed along a track close to the Maltese Islands to demonstrate how adaptive monitoring strategies using remotely controlled unmanned devices provide cost effective methods to routinely collect basic marine data and measure the health of coastal waters.

The track of this mission and the plots of the measures taken along it, are viewable at the following link:

https://gfcpdsi.ego-network.org/plot/plot_deployment.php?glider=Campe&deployment=GliderSouth

In the last of the



Dissemination activities

A half-day seminar was organized on 7 July 2017, at the Dolmen Resort Hotel, Qawra, to present the sea glider experience in Malta to key stakeholders and interested parties, and showcase how the new generation of sea gliders offers an innovative aid to observe and monitor the sea areas under local jurisdiction. With the participation of local scientists and two foreign experts, the seminar provided an avenue to brainstorm the way to the shaping of the operational marine observing system for the Maltese Islands ("Introducing sea gliders for monitoring the marine environment in Malta", http://ioi.research.um.edu.mt/GliderSouth/index.php/welcome/events).

5.6 User project MAICA

General Information

Proposal reference number	JN-CALL 1_1, Agreement n° 17/1212835
Project Acronym	MAICA
Title of the project	Mediterranean Aerosol In Coastal Areas
Name of Principal Investigator	Jacques Piazzola
Home Laboratory	University of Toulon – Mediterranean Institute of Oceanography (MIO)
Country	France
Host Research Infrastructure	CNR Acqua Alta Oceanographic Tower
Country	Italy
Principal contact	Mauro Bastianini
Status	ongoing
JERICO-NEXT dissemination link	http://www.jerico-ri.eu/tna/call-program/first-call/selected- projects/maica/

Project objectives

The estimation of the atmospheric aerosol impact on climate remains an important scientific challenge (e.g. IPCC, 2013). The aerosol particles can be emitted from natural and/or anthropogenic sources. Among them, sea-spray aerosols generated at the air-sea interface by wave breaking represent a major aerosol emission at global scale with a key role in the Earth radiation budget. Lining seven European countries, the Mediterranean Sea is a hot spot for climate change, a region sensitive for precipitation extreme events and its coastal areas constitute specific zones of a large variability for aerosol properties.

The present project deals with the spatio-temporal evolution of the aerosols in Mediterranean coastal areas on a basis of the implementation of a chain of grid-nested models dedicated to the aerosol sources and transport processes at local scale of coastal areas. To this end, physical-chemical aerosol data for different geographical locations over the Mediterranean are required. The present proposal follows the MAPOM project conducted previously in 2014 under the JERICO program (grant agreement n° 262584 FP7). This study focused on the sea-spray contribution and the anthropogenic influence in the coastal aerosol using measurements of aerosol size distributions acquired in the Northern Adriatic on board the Acqua Alta tower. By comparing with data recorded in the French Mediterranean, the results indicated a similar sea surface production of sea-spray aerosols issued from bubble bursting processes in these two locations. The sea-surface source function formulation proposed in Demoisson et al. (2013) can be then generalized to the whole Mediterranean (Piazzola et al., 2016). In addition, the Adriatic experiments confirmed the occurrence of interaction processes between sea-spray and anthropogenic components (Piazzola et al., 2016). The objectives of the present project are first to confirm the earlier results about



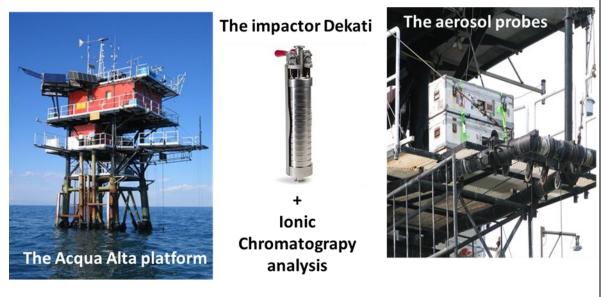
the sea-spray source function and the sea-spray content of organic matter. In addition, this should go forward to establish an accurate formulation for the spume drops production and allows implementation and validation of a nested model chain dedicated to the aerosol transport in coastal areas in the Northern Adriatic. This will be achieved by addressing a more comprehensive understanding of:

1) the sea-spray production processes, more particularly the spume drops contribution;

2) the interaction between sea spray and anthropogenic pollutants using a chemical analysis of the organic matter, as OC (and biogenic component), BC, EC measurements and MSA.

Summary of activities so far

The air sampler and impactor systems has been deployed on the 21th of March, 2017 by staff of University of Toulon with the help of the CNR ISMAR team. Since then it has been performed two sampling campaigns (22-26 March and 22-23 June) and numerous autonomous recording sessions during the first deployment lasted till 28th of June when the Oceanographic Tower underwent revamping process and all the equipment has been removed. At the end of this (estimated September 2017) the instruments will be reinstalled and the remaining campaigns could be rescheduled (estimated September to November 2017).



The Acqua Alta Platform and the instrumentation installed by the user

Aerosol size distributions and filters have been collected and analyses are running.



6. Conclusions

The JERICO-NEXT project has organized and closed two Calls for Transnational access at the date of this report. Twenty-one out of a total of twenty-eight proposals submitted until now were selected by an independent Panel of Experts, and the related projects are being supported under the TNA program.

The operators of the involved JERICO-RI facilities are contributing to the user projects by providing the necessary in loco logistical, technological and scientific assistance, including specific training, required for their realization.

Most of the user groups are from the research community (universities or research institutions), except four of them representing companies active in manufacturing marine sensors and devices. Two user groups involve scientists from non-EU countries (Tunisia and Algeria), one of them also leaded by one researcher from a developed country.

The user projects are oriented towards both scientific research and technological applications, and some of them specifically addressed the issue of testing/validating new sensors/sampling methods using the available JERICO-RI platforms.

However, at present, only four out six projects of the first Call have completed their activities or are close to conclude them. Two projects have not started yet, ANTEIA and CarbonAS, and this is due to delays in the hosting infrastructures availability and in the set-up of the sensor to test, respectively.

The projects of the second Call are expected to start their activity in Autumn 2017- Spring 2018. But the actual starting date will rely on the timing of End user agreements signature and on the need to harmonize requested periods with the regular operating schedules of host facilities.



7. References

Aulicino, G., Cotroneo, Y., Ruiz, S., Sanchez Roman, A., Pascual, A., Fusco, G., Tintoré, J. and G. Budillon (2017): Intercomparison of numerical simulations, satellite altimetry and glider observations in the Algerian Basin during fall 2014 and 2015: focus on a SARAL/AltiKa track, EGU General Assembly 2017, Geophysical Research Abstracts, Vol. 19, EGU2017-7110.

Cotroneo, Y., Aulicino, G., Ruiz, Sanchez Roman, A., Pascual, A., Fusco, G., Tintoré, J. and G. Budillon (2016): Monitoring of the Algerian Basin Circulation through glider observations, numerical simulations and altimetry during fall 2014-2016", IUGG/IAPSO-IAMAS-IAGA Joint Assembly 2017, Cape Town, South Africa, 27 August – 1 September, 2017.

Cotroneo, Y., Aulicino, G., Ruiz, S., Pascual, A., Budillon, G., Fusco, G. and J. Tintoré (2016): Glider and satellite high resolution monitoring of a mesoscale eddy in the algerian basin: Effects on the mixed layer depth and biochemistry, Journal of Marine Systems, vol 162, pp. 73-88.

Demoisson, A, Tedeschi, G and J. Piazzola (2013): A model for the atmospheric transport of sea-salt particles in coastal areas, Atmospheric Research, vol 132-133, pp. 144-153, doi.org/10.1016/j.atmosres.2013.04.002.

Piazzola, J., Mihalopoulos, N., Canepa, E., Tedeschi, G., Prati, P., Zarmpas, P., Bastianini, M., Missamou T. and L. Cavaleri (2016): Characterization of aerosols above the Northern Adriatic Sea: case studies of offshore and onshore wind conditions, Atmospheric Environment, n° 132, pp. 153–162, doi:10.1016/j.atmosenv.2016.02.044.



Annex 1 – First call announcement and Application documents

Call announcement

<u>Please note that the deadline has been extended up to July 5, 2016 at 11:59 HOURS (CET)</u> [Note also that the Application form and Guidance note below have not be updated with the new

date]



JERICO NEXT TNA Application Form 1st Call (178.1 KiB)



JERICO NEXT Guidance Note 1st Call For TNA (314.8 KiB)

The first call for access to the JERICO-NEXT Coastal Observatories and Supporting Facilities is open

from 2 May to 20 June 2016

for activities scheduled in the period October 2016 – September 2017 subsequent to a formal screening and selection process.

The JERICO-NEXT project is offering access to ferrybox lines, fixed platforms, including cabled observatories, glider fleets, and fishing vessels based in coastal and shelf-sea areas around Europe.

Calibration and **research laboratories** complement the offer, as also certain specific kinds of **special equipment**. These are intended to be used in conjunction with one or more of the observing systems mentioned above.

Go ahead and browse the JERICO-NEXT catalogue of available infrastructures and facilities to find the ones most suitable to your research purposes!!!

The catalogue of facilities is accessible by clicking on through the 'Jerico Facilities in TNA' option in the Menu bar; items are sorted either by country or by facility type (Cabled observatories, Ferryboxes, Fishing Vessels, Fixed Platforms, Gliders, Specialised Equipment, Supporting Facilities).

In addition to this catalogue, an interactive map has been provided to allow you to visualise the locations of all the facilities, to zoom in and out, and to view cursory descriptions of single elements by hovering over them with your cursor. Clicking the 'View Details' button in the popup, will permit you to recover more information and go directly to the relative facility page in the catalogue.

- Browse the interactive map
- Browse the facilities by type
- Browse the facilities by country

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This is a unique opportunity for scientists and engineers to avail of high-quality, interlinked instrumented infrastructures operating in coastal and shelf-sea areas for carrying out research and/or testing activities.

Interested users can request access to one or more facilities in the same proposal. JERICO-NEXT will provide them with technical assistance, travel support and complimentary core measurements that may be necessary to their work, if these are available. Projects will be selected on the basis of the quality and novelty of the proposed activities

Check rules and procedures on this website using the following links

- Access rules
- Evaluation and selection procedures

Proposals must be drafted according to the attached template, and should be submitted by email within

20th of JUNE 2016 23:59 HOURS (CET)

to the following email address:

JERICO.TNA (at) ismar.cnr.it

Proposals for the first call will NOT be accepted after this date: **late submission will be rerouted to the Second Call in May 2017**.



Application Form

JERICO-NEXT

Proposal for Transnational Access

to Coastal Observatories

1st Call

2 May 2016 - 20 June 2016

Description of the project to be sent in pdf format to jerico.tna@ismar.cnr.it on 20 June 2016 23:59 HOURS (CET) the latest

Please consult access rules at <u>http://www.jerico-ri.eu</u> and contact the manager of the infrastructure/installation you wish to use before writing the proposal

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PART 1

1. GENERAL INFORMATION

Title of the project (255 characters max.)	
Acronym (20 characters max.)	
Applying Institution	
Host Institution	
Host facility(ies)	

Have you or other members of your user group previously used the requested facility(ies)?	Yes	No	
If yes, please indicate the EU Program(s), the name of the project(s) and year(s) you or other members of your user group have used such facility(ies)			
If you have received transnational access support by the JERICO FP7 project, please list resulting publications, conference contributions, patents. List only the ones that acknowledge the support of the European Commission and JERICO			

2. USER GROUP DETAILS

Indicate if the proposal is submitted by

an	individual
----	------------

a user group

Principal Investigator (user group leader)

First and last name				
Gender	Male	Female	Nationality	
Institution				
Address				
Country				
Email address				
Telephone				
Fax				
Previous user	Yes	No		

In the second second second



User group members

Member # 1

First and last name			
Gender	Male	Female	Nationality
Institution			
Address			
Country			
Email address			
Telephone			
Fax			
Previous user	Yes	No	

(duplicate below for each member of the user group)

3. HOST INFRASTRUCTURE

Indicate the JERICO-NEXT host facility(ies) offered in Chapter 1 (Observing systems) you are interested in (*Tick more than one boxes if it is useful for your project*)

	Short name	Requested access time (UA*)
cabled observatory		
ferrybox		
fixed platform		
fishing vessel		
glider		

*UA: please refer to the Infrastructure description in the JERICO-NEXT website

Modality of access

remote	the measuring system is implemented by the operator of the installation and the presence of the user group is not required
partially remote	the presence of the user group is required at some stage e.g. installing and un-installing
in person/hands on	the presence of the user group is required/recommended during the whole access period

If you wish to avail also of a support facility from Chapter 2, please fill in the table below

	Short name	Requested access time (UA*)
Supporting facilities and specialized equipment		

*UA: please refer to the Infrastructure description in the JERICO-NEXT website





Modality of access

remote	the measuring system is implemented by the operator of the installation and the presence of the user group is not required
partially remote	the presence of the user group is required at some stage e.g. installing and un-installing
in person/hands on	the presence of the user group is required/recommended during the whole access period

Explain briefly why you think your project will be best carried out at the specified host facility(ies)	
If possible, list other JERICO-NEXT facility(ies) where you think your experiment could alternatively be carried out	

Is there a facility similar to one/all those you wish to utilize in your country?	Yes	No	
If yes, please indicate your reasons for requesting access to the JERICO-NEXT facility(ies) you have chosen and also exist in your country			

4. REQUEST FOR A JERICO-NEXT GRANT

(tick the box)	X)	bo	the	tick	(
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Travel grant (*)
Shipment of your equipment, if applicable

(*) travel, hotel and meals

Please provide a detailed and realistic budget for the expenses you expect to incur, including the number of people and days required. Explain clearly the role of each person for which a travel grant is requested.

Please note that a base amount of $3000 \in$ has been set for each facility involved in a TNA project. The effective grant assigned to a project will be considered case- by-case depending on the type of access, the types and number of facilities requested, the length of stay, and the costs in the visited country.

- Travel : < number, costs, persons' role >
- Hotel : < number, costs, persons' role >
- Meals : < number, costs, persons' role >
- Shipment of equipment : <type of carrier, costs>



JERICO-NEXT

PART 2

Note: This part contains material for the evaluation

1. SCIENTIFIC EXCELLENCE OF USER GROUP (maximum score: 5)

Short biography of the PI

(half a page)

Expertise of the user group in the domain of the application

(half a page)

A list of 5 recent, relevant publications of the user group in the field of the project

2. SCIENTIFIC AND TECHNICAL VALUE OF THE PROJECT (maximum score: 5)

Description of the project

Main objectives

(half a page)

Scientific background and rationale

(one page)

3. QUALITY OF THE WORK PLAN (maximum score: 5)

Experimental method and work plan

Describe below the proposed method and work plan for the project

(one page)



Proposed time schedule

Provide below a clear schedule for your project including interruption, restarts and expected duration of access time (half a page)

Please specify your requests regarding the use of your chosen facility's equipment / instruments / sensors, including any additional services, data or other requirements

List all material/equipment you plan to bring to the facility (if any)

Risks, contingencies and mitigation measures

Describe below the potential risks and contingencies that might occur during the project and how do you plan to avoid, mitigate or resolve them

#	Risk / Contingency	Prevention / Mitigation / Corrective action
1		
2		
3		

4. POTENTIAL FOR SEEDING LINKS WITH INDUSTRY (maximum score: 5)

Do you think that this proposal has potential for seeding links with Industry? If so, how? (half page)

5. EUROPEAN RELEVANCE AND INTERESTS FOR THE SCIENTIFIC COMMUNITY (maximum score: 5)

Describe the relevance of your proposal at the European level and the potential interests for the research community (half page)



Date of compilation

Signature of the PI

Signature of an appropriate authorised person (e.g. Head of Department, Research Office)

This section is reserved to the JE	ERICO-NEXT TNA Office
------------------------------------	-----------------------

Date of proposal receipt by email

Assigned reference number

Signature of receiving officer



Guidance Note

JERICO-NEXT

Transnational Access to Coastal Observatories

Guidance Notes

1st Call

2 May 2016 - 20 June 2016

Project website: <u>http://www.jerico-ri.eu/</u> TNA webpages: <u>http://www.jerico-ri.eu/tna/</u>

Version 28.04.2016



1. FIRST CALL

The first Call for access to the JERICO-NEXT Coastal Observatories and Supporting Facilities is open from **2 May** to **20 June 2016** for activities scheduled in the period **October 2016** – **September 2017** subsequent to a formal screening and selection process.

Look for detailed descriptions of facilities available for this Call in the JERICO website¹.

The access time available per facilities participating to the first Call is also summarised in Annex 1.

2. REQUEST FOR ACCESS

Free-of-charge access to the facilities specified in the TNA context will be granted following the evaluation of proposals submitted by user groups for their utilization in response to three dedicated Calls during the lifetime of the JERICO-NEXT project.

Interested users can request access to one or more facilities in the same proposal.

Proposals for the first Call have to be drawn up following the template available in the JERICO-NEXT website² and sent by email to <u>JERICO.TNA@ismar.cnr.it</u> within **JUNE 20th**, **2016**, **23:59 HOURS** (CET).

3. ELIGIBILITY OF USER GROUPS

A user group can be a single researcher (user) or a team of two or more researchers (users) satisfying specific eligibility conditions:

- a) The access must be transnational, i.e. the user group leader and the majority of the users in the group must work in a country other than the country(ies) where the installation is located.
- b) Only user groups that are allowed to disseminate the results they have generated under the action may benefit from the access, unless the users are working for SMEs.
- c) Access for user groups with a majority of users not working in an EU or associated country is limited to 20 % of the total amount of units of access provided under the grant.

4. MODALITY OF ACCESS

Unless otherwise specified, access to a specific infrastructure (or a specific installation that is part of an infrastructure) by a user group is to be intended as a concession granted to use the infrastructure to collect specific data following the implementation of a specific automated measuring system. A written contract or agreement between the "Access Provider" and the "End User" will delineate the actions to be undertaken, the resources that will need to be allocated, the length of planned user stays (if any), and the period of use. It will also define the rights and obligations of all the Parties involved, including eventual provisions for early termination of the conferred access.

Unless otherwise stated (e.g. for the use of gliders), the measuring system shall be provided by the user group.

Whenever possible, the start and end of an access interval will be set by the access provider to coincide with times scheduled for the ordinary maintenance of the installation in the interests of financial economy (e.g. limiting the costs of vessel-time needed to access the infrastructure, etc.).

¹ http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/

² http://www.jerico-ri.eu/tna/calls-and-selection/1st-call



It is mandatory that user groups interact directly with the managers of the infrastructures/installations they wish to use during the preparation of proposals

- to verify the particulars of access to the infrastructure/installation they wish to use, and
- to verify the feasibilities of the proposed projects and address practical concerns.

5. EVALUATION AND SELECTION

The user groups will be selected by a Selection Panel, consisting of independent international experts.

Submitted proposals will first be checked by the JERICO-NEXT TNA Office to ensure formal compliance with access rules. Incomplete proposals, where the template has been filled in only partially, will automatically be rejected.

Properly compiled proposals will undergo a three-step selection process involving:

- 1. Validation of each proposal by the interested facility operator (feasibility assessment).
- 2. Evaluation based on scientific excellence, innovation and impacts on the state-of-theart. This step will be performed by the SP with the aid of additional experts, if necessary.
- 3. Final assessment and selection by the SP, which will recommend a short-list of proposals eligible for support.

Only proposals successfully validated by the relevant facility operators, will pass on to the evaluation phase. To avoid misunderstandings and difficulties, users shall interact directly with the facility operators during the preparation of their proposals, to confirm that their targeted facilities are suitable for the planned experiments.

#	Criterion for Evaluation	Max Score
1	Scientific excellence of user group	5
2	Scientific and technical value of the project	5
3	Quality of the work plan	5
4	Potential for seeding links with industry	5
5	European relevance and interests for the scientific community	5
	Total score	25

The submitted projects will be evaluated according to the following criteria:

A proposal will be considered for acceptance if it receives a total score that is \geq 15.

Priority will be given to user groups composed of users who:

- have not previously used the installation and
- are working in countries where no equivalent research infrastructure exists.

According to EU requirements, special attention will be paid to female participation in order to promote equal opportunities in the implementation of the TNA activities, to the extent possible.



The results of the selection will be published on the JERICO-NEXT web site, and will be communicated directly to user group leaders and facility providers by email.

If users apply for access to a facility, the access time of which has already been used up, they may be redirected to another facility with unconsumed access time. As far as possible, the alternative facility offered will have similar technical or geographical characteristics.

6. SUPPORT TO USER GROUPS

User groups whose proposals are approved by the Selection Panel will benefit of:

- free-of charge access to the infrastructure(s) they have selected for the purposes of their research,
- logistical, technical and scientific support by the access provider, and any special training they may require to use the assigned infrastructure/facility,
- a financial contribution for travel and subsistence costs for visiting infrastructures, if justified
 [A base amount of 3000 € has been set for each facility involved in a project. The effective
 grant assigned to a project will be considered case-by-case depending on the type of
 access, the types and number of facilities requested, the length of stay, and the costs in the
 visited country],
- a financial contribution shipping their equipment to the infrastructure/facility, if justified [*The amount conceded will be evaluated case-by-case*].

7. POST-ACCESS REQUIREMENTS

i. At the stipulated end of the access project, the user group leader must submit a report describing the resulting technical and preliminary scientific outputs within 30 days (a template will be provided by the TNA management team). The report will be published on the JERICO-NEXT web site, and will be made available to the European Commission if requested.

The receipt and approval of this report **will be required to finalize any and all financial support** received by the user group, as indicated in the relevant TNA End-user Agreement.

- ii. Any publications or patents resulting from the JERICO-NEXT TNA project must be reported to the host institute and the JERICO-NEXT TNA office. Furthermore, all such publications or patents shall acknowledge the support of the European Commission's H2020 Framework Programme under grant agreement No. 654410, JERICO-NEXT Trans National Access program, and the host institute.
- iii. Access beneficiaries undertake to reply promptly to all the requests of the JERICO-NEXT coordinator and the TNA office relating to their access activities.

Access

ANNEX 1 - FACILITIES AVAILABLE FOR THE FIRST CALL (PER TYPE)

Chapter 1 – Observing systems

Organization	Country	Name	Short name	Unit of Access (UA)	available (in UA)
		CABLED OBSERVAT	ORIES		
FMI	Finland	Atmospheric and Marine Research Station	Utö	day	120
IFREMER	France	Coastal-cabled observatory EMSO-Molène	MOLENE	month	3
HZG & AWI	Germany	Underwater Node Helgoland	COSYNA_UNH	14 days	4
HZG & AWI	Germany	Underwater Node Spitzbergen	AWIPEV_UNS	14 days	2
IMR	Norway	LoVe cable based observatory	CABLE	day	100
SBI	Ireland	Galway Bay Cabled Observatory	CPO	month	2
UPC	Spain	Expandable Seafloor Observatory	OBSEA	day	210
		FERRYBOXES			
HCMR	Greece	Poseidon Ferrybox	PFB	month	12
HZG	Germany	COSYNA FerryBox	COSYNA FB	day	120
IMR	Norway	MV Vesterålen	FERRY	day	100
NIVA	Norway	MS Color Fantasy	FA	day	120
NIVA	Norway	MS Trollfjord	TF	day	120
SYKE	Finland	MS Finnmaid	FINNMAID	day	60
SYKE	Finland	MS Silja Serenade	SILJA	day	60
	Norway	FISHING VESSE		dav	50
IMR	Norway Norway	FV Brattholm	FISHING1	day day	50
IMR	Norway		FISHING2	day	50
		FIXED PLATFOR	MS		
CNR-ISMAR	Italy	Acqua Alta Oceanographic Tower	Acqua Alta	2-months	2
CNR-ISMAR	Italy	Meteoceanographic site S1	S1	4-months	1
HCMR	Greece	Saronikos buoy	SB	month	12
HCMR	Greece	Heraklion Coastal Buoy	HCB	month	12
HCMR	Greece	Athos buoy	AB	month	6
IFREMER	France	MOLIT Buoy	MOLIT	month	3
HZG	Germany	Stationary FerryBox system	COSYNA_SFB	day	120
IO-BAS	Bulgaria	Port Operational Marine Observing System (st. Balchik)	POMOS	month	2
SBI	Ireland	Galway Bay Data Buoy	SMARTBUOY	month	2
		GLIDERS			
CNRS	France	CNRS-INSU Glider National	GNF	day	98
HZG	Germany	COSYNA Glider	COSYNA_GL	month	2
SOCIB	Spain	SOCIB glider facility	SOCIB GF	day	110
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Chapter 2 – Supporting facilities and specialized equipment

Organization	Country	Name	Short name	Unit of Access (UA)	Access available (in UA)		
SUPPORTING FACILITIES							
HCMR	Greece	Poseidon Calibration Lab	PCL	week (*)	4		
IFREMER	France	Ifremer Metrology Laboratory	METLAB	week (*)	5		
NIVA	Norway	NIVA Research Station	NRS	week (*)	5		
SYKE	Finland	SYKE Marine Research Centre	SYKE MRC-	8 hour day	25		
SPECIAL EQUIPMENT							
CNRS	France	Sediment Profile Imager	SPI-H	week	5		

(*) week=5 days of 8 hours

The detailed catalogue of facilities is accessible in the JERICO-NEXT website by clicking on the 'Jerico Facilities in TNA' option in the Menu bar.

Items are sorted either by country or by facility type (Cabled observatories, Ferryboxes, Fishing Vessels, Fixed Platforms, Gliders, Specialised Equipment, Supporting Facilities).

In addition to this catalogue, an interactive map has been provided to allow you to visualise the locations of all the facilities, to zoom in and out, and to view cursory descriptions of single elements by hovering over them with your cursor. Clicking the 'View Details' button in the popup, will permit you to recover more information and go directly to the relative facility page in the catalogue.

- Browse the interactive map [link to http://www.jerico-ri.eu/tna/]
- Browse the facilities by type [link to <u>http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/by-type/]</u>
- Browse the facilities by country [link to <u>http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/by-country/]</u>





Annex 2 – Second call announcement and Application documents

Call announcement



JERICO NEXT TNA Application Form (180.2 KiB)

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	JERI

JERICO NEXT Guidance Note 2nd Call (189.2 KiB)

NOTE: There are changes from the First Call. Please download the documents pertinent to the present Call.

The second call for access to the JERICO-NEXT Coastal Observatories and Supporting Facilities is open

from 20 February 2017 to 10 April 2017

for activities scheduled in the period **September 2017 – August 2018** subsequent to a formal screening and selection process.

The JERICO-NEXT project is offering access to Observing systems, such as ferrybox lines, fixed platforms, including cabled observatories, glider fleets, and fishing vessels based in coastal and shelf-sea areas around Europe.

Supporting facilities, such as **calibration** and **research laboratories**, complete the offer, as also certain specific kinds of **special equipment**. These may be used alone or in conjunction with one or more of the observing systems, but priority will be given to the projects using the both (Supporting facilities/Special equipment and Observing systems).

Go ahead and browse the JERICO-NEXT catalogue of available infrastructures and facilities to find the ones most suitable to your research purposes!!!

The catalogue of facilities is accessible by clicking on through the 'Jerico Facilities in TNA' option in the Menu bar; items are sorted either by country or by facility type (Cabled observatories, Ferryboxes, Fishing Vessels, Fixed Platforms, Gliders, Special Equipment, Supporting Facilities).

In addition to this catalogue, an interactive map has been provided to allow you to visualise the locations of all the facilities, to zoom in and out, and to view cursory descriptions of single elements by hovering over them with your cursor. Clicking the 'View Details' button in the popup, will permit you to recover more information and go directly to the relative facility page in the catalogue.

- Browse the interactive map
- Browse the facilities by type
- Browse the facilities by country

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This is a unique opportunity for scientists and engineers to avail of high-quality, interlinked instrumented infrastructures operating in coastal and shelf-sea areas for carrying out research and/or testing activities.

Interested users can request access to one or more facilities in the same proposal. JERICO-NEXT will provide them with technical assistance, travel support and complimentary core measurements that may be necessary to their work, if these are available. Projects will be selected on the basis of the quality and novelty of the proposed activities.

Check rules and procedures on this website using the following links

- Access rules
- Evaluation and selection procedures

Proposals must be drafted according to the attached template, and should be submitted by email within

10th of APRIL 2017 23:59 HOURS (CET)

to the following email address:

JERICO.TNA (at) ismar.cnr.it

Proposals for the Second Call will **NOT** be accepted after this date: **late submission will be rerouted to the Third Call in January 2018**.



Application Form

JERICO-NEXT

Proposal for Transnational Access

to Coastal Observatories

2nd Call

20 February 2017 - 10 April 2017

Description of the project to be sent in pdf format to jerico.tna@ismar.cnr.it on 10 APRIL 2017 23:59 HOURS (CET) the latest

Please consult access rules at <u>http://www.jerico-ri.eu</u> and contact the manager of the infrastructure/installation you wish to use before writing the proposal

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PART 1

1. GENERAL INFORMATION

Title of the project (255 characters max.)	
Acronym (20 characters max.)	
Applying Institution	
Legal contact	
Name	
Address	
Function	
e-mail address	
Legal representative	
Name	
Address	
Function	
e-mail address	
Host Institution	
Legal contact	
Name	
Address	
Function	
e-mail address	
Legal representative	
Name	
Address	
Function	
e-mail address	
Host facility(ies)	

Have you or other members of your user group previously used the requested facility(ies)?	Yes	No	
If yes, please indicate the EU Program(s), the name of the project(s) and year(s) you or other members of your user group have used such facility(ies)			
If you have received transnational access support by the JERICO FP7 project, please list below resulting publications, conference contributions, patents. List only the ones that acknowledge the support of the European Commission and JERICO			

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Is this a resubmission of a previously rejected proposal?	Yes	No	
If yes, please give the exact reference number and submission date. Kindly describe briefly the changes made in comparison to the rejected version.			

Is this a continuation of an earlier project funded under a previous call for Transnational Access in JERICO-NEXT at the same facility?		No	
If yes, please give the exact reference number and submission date. Kindly indicate also what has been achieved in the previous experiment and the reasons why the objectives have not been fully met.			

2. USER GROUP DETAILS

Indicate if the proposal is submitted by

an individua

a user group

Principal Investigator (user group leader)

First and last name				
Gender	Male	Female	Nationality	
Institution				
Address				
Country				
Email address				
Telephone				
Fax				
Previous user	Yes	No		

User group members

Member # 1

First and last name				
Gender	Male	Female	Nationality	
Institution				

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Address			
Country			
Email address			
Telephone			
Fax			
Previous user	Yes	No	

(duplicate below for each member of the user group)

3. HOST INFRASTRUCTURE

Indicate the JERICO-NEXT host facility(ies) offered in you are interested in

(Tick more than one boxes if it is useful for your project)

Chapter 1 (Observing systems)

	Short name	Requested access time (UA*)
cabled observatory		
ferrybox		
fixed platform		
fishing vessel		
glider		

*UA: please refer to the Infrastructure description in the JERICO-NEXT website

Modality of access

remote	the measuring system is implemented by the operator of the installation and the presence of the user group is not required
partially remote	the presence of the user group is required at some stage e.g. installing and un-installing
in person/hands on	the presence of the user group is required/recommended during the whole access period

Chapter 2 (Supporting facilities and special equipment)

	Short name	Requested access time (UA*)
Supporting facilities and specialized equipment		

*UA: please refer to the Infrastructure description in the JERICO-NEXT website

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Modality of access

remote	the measuring system is implemented by the operator of the installation and the presence of the user group is not required
partially remote	the presence of the user group is required at some stage e.g. installing and un-installing
in person/hands on	the presence of the user group is required/recommended during the whole access period

Explain briefly why you think your project will be best carried out at the specified host facility(ies)	
If possible, list other JERICO-NEXT facility(ies) where you think your experiment could alternatively be carried out	

Is there a facility similar to one/all those you wish to utilize in your country?	Yes	No	
If yes, please indicate your reasons for requesting access to the JERICO-NEXT facility(ies) you have chosen and also exist in your country			

4. REQUEST FOR A JERICO-NEXT GRANT

(tick the box)

Travel grant (*)
Shipment of your equipment, if applicable

(*) travel, hotel and meals

Please provide a <u>detailed and realistic budget</u> for the expenses you expect to incur, including the number of people and days required. <u>Explain clearly the role of each person for which a travel grant is requested</u>.

Please note that a comprehensive nominal reference amount of 3000-6000 € is available to each project. The effective grant assigned to a project will be considered case- by-case depending on the type of access, the types and number of facilities requested, the length of stay, and the costs in the visited country. <u>Please be sure to</u> provide detailed justification of your request.

- Travel : < number, costs, persons' role >
- Hotel : < number, costs, persons' role >
- Meals : < number, costs, persons' role >
- Shipment of equipment : <what equipment, type of carrier, costs>



PART 2

Note: This part contains material for the evaluation

1. SCIENTIFIC AND TECHNOLOGICAL EXCELLENCE OF USER GROUP (maximum score: 5)

Short biography of the PI

(half a page)

Expertise of the user group in the domain of the application

(half a page)

A list of 5 recent, relevant publications/patents of the user group in the field of the project

2. SCIENTIFIC AND TECHNICAL VALUE OF THE PROJECT (maximum score: 5)

Description of the project

Main objectives

(half a page)

(one page)

(one page)

Scientific/Technical background and rationale

3. QUALITY OF THE WORK PLAN (maximum score: 5)

Experimental method and work plan

<Describe the proposed method and work plan for the project>

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Proposed time schedule

(half a page)

<Provide here a clear time schedule for your project including interruption, restarts and expected duration of access time>

Please specify your requests regarding the use of your chosen facility's equipment / instruments / sensors, including any additional services, data or other requirements

List all material/equipment you plan to bring to the facility

Risks, contingencies and mitigation measures

<Describe below the potential risks and contingencies that might occur during the project and how do you plan to avoid, mitigate or resolve them?>

#	Risk / Contingency	Prevention / Mitigation / Corrective action
1		
2		
3		

4. POTENTIAL FOR SEEDING LINKS WITH INDUSTRY AND/OR POTENTIAL APPLICATION TO STAKEHOLDERS (maximum score: 5)

Highlight below any innovative aspect of your proposal beneficial to industrial
application and/or relevant to other stakeholders.(half page)

5. EUROPEAN RELEVANCE AND INTERESTS FOR THE SCIENTIFIC COMMUNITY (maximum score: 5)

Describe the relevance of your proposal at the European level and the potential interests for the research community (half page)



Date of compilation

Signature of the PI

Signature of an appropriate authorised person (e.g. Head of Department, Research Office)

This se	ection is	reserved to	the JERICO-	-NEXT TNA	Office
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Date of proposal receipt by email

Assigned reference number

Signature of receiving officer





Guidance Note

JERICO-NEXT

Transnational Access to Coastal Observatories

Guidance Notes

2nd Call

20 February 2017 to 10 April 2017

Project website: http://www.jerico-ri.eu/

TNA webpages: http://www.jerico-ri.eu/tna/

Version 13.02.2017

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1. SECOND CALL

The second Call for access to the JERICO-NEXT Coastal Observatories, Supporting Facilities and Special Equipment is open from **20 February** to **10 April 2017** for activities scheduled in the period **September 2017 - August 2018** subsequent to a formal screening and selection process.

Look for detailed descriptions of facilities available for this Call in the JERICO-RI website³.

The access time available per facilities participating to the second Call is also summarised in Annex 1.

2. REQUEST FOR ACCESS

Free-of-charge access to the facilities specified in the TNA context will be granted following the evaluation of proposals submitted by user groups for their utilization in response to three dedicated Calls during the lifetime of the JERICO-NEXT project.

Interested users can request access to one or more facilities in the same proposal.

Proposals for the second Call have to be drawn up following the template available in the JERICO-NEXT website⁴ and sent by email to <u>JERICO.TNA@ismar.cnr.it</u> within **APRIL 10th**, **2017**, **23:59 HOURS (CET)**.

3. ELIGIBILITY OF USER GROUPS

A user group can be a single researcher (user) or a team of two or more researchers (users) satisfying specific eligibility conditions:

- a) The access must be transnational, i.e. the user group leader and the majority of the users in the group must work in a country other than the country(ies) where the installation is located.
- b) Only user groups that are allowed to disseminate the results they have generated under the action may benefit from the access, unless the users are working for SMEs.
- c) Access for user groups with a majority of users not working in an EU or associated country is limited to 20 % of the total amount of units of access provided under the grant.

4. MODALITY OF ACCESS

Unless otherwise specified, access to a specific infrastructure (or a specific installation that is part of an infrastructure) by a user group is to be intended as a concession granted to use the infrastructure to collect specific data following the implementation of a specific automated measuring system. A written contract or agreement between the "Access Provider" and the "End User" will delineate the actions to be undertaken, the resources that will need to be allocated, the length of planned user stays (if any), and the period of use. It will also define the rights and obligations of all the Parties involved, including eventual provisions for early termination of the conferred access.

Unless otherwise stated (e.g. for the use of gliders), the measuring system shall be provided by the user group.

³ http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/

⁴ http://www.jerico-ri.eu/tna/calls-and-selection/2nd-call



Whenever possible, the start and end of an access interval will be set by the access provider to coincide with times scheduled for the ordinary maintenance of the installation in the interests of financial economy (e.g. limiting the costs of vessel-time needed to access the infrastructure, etc.).

It is mandatory that user groups interact directly with the managers of the infrastructures/installations they wish to use during the preparation of proposals

- to verify the particulars of access to the infrastructure/installation they wish to use, and
- to verify the feasibilities of the proposed projects and address practical concerns.

5. EVALUATION AND SELECTION

The user groups will be selected by a Selection Panel, consisting of independent international experts.

Submitted proposals will first be checked by the TNA management team to ensure formal compliance with access rules and their technical quality. Requests for amendments of technical issues only can be requested to proponents, whose response is expected as soon as possible, anyway before one week.

Properly compiled proposals will undergo a three-step selection process involving:

- 1. Validation of each proposal by the interested facility operator (feasibility assessment).
- 2. Evaluation based on scientific excellence, innovation and impacts on the state-of-theart. This step will be performed by the SP with the aid of additional experts, if necessary.
- 3. Final assessment and selection by the SP, which will recommend a short-list of proposals eligible for support.

Only proposals successfully validated by the relevant facility operators will pass on to the evaluation phase. To avoid misunderstandings and difficulties, users shall interact directly with the facility operators during the preparation of their proposals, to confirm that their targeted facilities are suitable for the planned experiments.

#	Criterion for Evaluation	Max Score
1	Scientific and/or technological excellence of user group	5
2	Scientific and technical value of the project	5
3	Quality of the work plan	5
4	Potential for seeding links with industry and/or potential application to stakeholders	5
5	European relevance and interests for the scientific community	5
	Total score	25

The submitted projects will be evaluated according to the following criteria:

A proposal will be considered for acceptance if it receives a total score that is \geq 15.

Priority will be given to user groups composed of users who:

- have not previously used the installation and
- are working in countries where no equivalent research infrastructure exists.



According to EU requirements, special attention will be paid to female participation in order to promote equal opportunities in the implementation of the TNA activities, to the extent possible.

The results of the selection will be published on the JERICO-NEXT web site, and will be communicated directly to user group leaders and facility providers by email.

If users apply for access to a facility, the access time of which has already been used up, they may be redirected to another facility with unconsumed access time. As far as possible, the alternative facility offered will have similar technical or geographical characteristics.

4. SUPPORT TO USER GROUPS

User groups whose proposals are approved by the Selection Panel will benefit of:

- free-of charge access to the infrastructure(s) they have selected for the purposes of their research,
- logistical, technical and scientific support by the access provider, and any special training they may require to use the assigned infrastructure/facility,
- a financial contribution for travel and subsistence costs for visiting infrastructures, if justified,
- a financial contribution for shipping their equipment to the infrastructure/facility, if justified,
- a comprehensive nominal reference amount of 3000-6000 € is available to each project. The effective grant assigned to a project will be considered case- by-case depending on the type of access, the types and number of facilities requested, the length of stay, and the costs in the visited country.

5. POST-ACCESS REQUIREMENTS

 At the stipulated end of the access project, the user group leader must submit a report describing the resulting technical and preliminary scientific outputs within 30 days (a template will be provided by the TNA management team). The report will be published on the JERICO-NEXT web site, and will be made available to the European Commission if requested.

The receipt and approval of this report **will be required to finalize any and all financial support** received by the user group, as indicated in the relevant TNA End-user Agreement. Any video and/or photo will be appreciated.

- Any publications or patents resulting from the JERICO-NEXT TNA project must be reported to the host institute and the JERICO-NEXT TNA office. Furthermore, all such publications or patents shall acknowledge the support of the European Commission's H2020 Framework Programme under grant agreement No. 654410, JERICO-NEXT Trans National Access program, and the host institute.
- iii. Access beneficiaries undertake to reply promptly to all the requests of the JERICO-NEXT coordinator and the TNA office relating to their access activities.

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ANNEX 1 - FACILITIES AVAILABLE FOR THE SECOND CALL (PER TYPE)

Chapter 1 – Observing systems

Organization	Country	Name	Short name	Unit of Access (UA)	Access available (in UA)
		CABLED OBSERVAT	ORIES		
FMI	Finland	Atmospheric and Marine Research Station	Utö	day	120
IFREMER	France	Coastal-cabled observatory EMSO-Molène	MOLENE	month	3
HZG & AWI	Germany	Underwater Node Helgoland	COSYNA_UNH	14 days	4
HZG & AWI	Germany	Underwater Node Spitzbergen	AWIPEV_UNS	14 days	2
IMR	Norway	LoVe cable based observatory	CABLE	day	100
SBI	Ireland	Galway Bay Cabled Observatory	CPO	month	2
UPC	Spain	Expandable Seafloor Observatory	OBSEA	day	210
		FERRYBOXES			
HCMR	Greece	Poseidon Ferrybox	PFB	month	5
HZG	Germany	COSYNA FerryBox	COSYNA_FB	day	120
IMR	Norway	MV Vesterålen	 FERRY	day	100
NIVA	Norway	MS Color Fantasy	FA	day	120
NIVA	Norway	MS Trollfjord	TF	day	120
SYKE	Finland	MS Finnmaid	FINNMAID	day	60
SYKE	Finland	MS Silja Serenade	SILJA	day	60
		FISHING VESSE	S		
IMR	Norway	FV Vester Junior	FISHING1	day	50
IMR	Norway	FV Brattholm	FISHING2	day	50
		FIXED PLATFOR	MG		
CNR-ISMAR	Italy	Sicily Channel Observatory	SiCO	6-months	3
CNR-ISMAR	Italy	Meteoceanographic site S1	S100	4-months	1
HCMR	Greece	Saronikos buoy	SB	month	12
HCMR	Greece	Heraklion Coastal Buoy	HCB	month	12
HCMR	Greece	Athos buoy	AB	month	6
IFREMER	France	MOLIT Buoy	MOLIT	month	3
HZG	Germany	Stationary FerryBox system	COSYNA_SFB	day	120
IO-BAS	Bulgaria	Port Operational Marine Observing System (st. Balchik)	POMOS	month	2
		GLIDERS			
CNRS	France	CNRS-INSU Glider National	GNF	day	17
HZG	Germany	COSYNA Glider	COSYNA_GL	month	2
1120	On aire				40

Tester tester tester tester

Spain

SOCIB

SOCIB glider facility

day

SOCIB GF

40

Chapter 2 – Supporting facilities and specialized equipment

Organization	Country	Name	Short name	Unit of Access (UA)	Access available (in UA)			
	SUPPORTING FACILITIES							
HCMR	Greece	Poseidon Calibration Lab	PCL	week (*)	4			
IFREMER	France	Ifremer Metrology Laboratory	METLAB	week (*)	5			
NIVA	Norway	NIVA Research Station	NRS	week (*)	5			
SYKE	Finland	SYKE Marine Research Centre	SYKE MRC-	8 hour day	25			
		•		•				
	SPECIAL EQUIPMENT							
CNRS	France	Sediment Profile Imager	SPI-H	week	5			

(*) week=5 days of 8 hours

The detailed catalogue of facilities is accessible in the JERICO-NEXT website by clicking on the 'Jerico Facilities in TNA' option in the Menu bar.

Items are sorted either by country or by facility type (Cabled observatories, Ferryboxes, Fishing Vessels, Fixed Platforms, Gliders, Specialised Equipment, Supporting Facilities).

In addition to this catalogue, an interactive map has been provided to allow you to visualise the locations of all the facilities, to zoom in and out, and to view cursory descriptions of single elements by hovering over them with your cursor. Clicking the 'View Details' button in the popup, will permit you to recover more information and go directly to the relative facility page in the catalogue.

- Browse the interactive map [link to http://www.jerico-ri.eu/tna/]
- Browse the facilities by type [link to http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/by-type/]
- Browse the facilities by country [link to <u>http://www.jerico-ri.eu/tna/jerico-facilities-in-tna/by-country/]</u>