Please check our wiki for help on navigating the form.

Horizon 2020

Call: H2020-INFRASUPP-2018-2020

(Support to policy and international cooperation)

Topic: INFRASUPP-01-2018-2019

Type of action: CSA

Proposal number: 871146

Proposal acronym: ECLECTIC

Deadline Id: H2020-INFRASUPP-2019-1

Table of contents

How to fill in the forms

The administrative forms must be filled in for each proposal using the templates available in the submission system. Some data fields in the administrative forms are pre-filled based on the steps in the submission wizard.

1 - General information

Topic	INFRASUPP-01-2018-2019	Type of Action	CSA
Call Identifier	H2020-INFRASUPP-2018-2020	Deadline Id	H2020-INFRASUPP-2019-1

Acronym	ECLECTIC
Proposal title	EU-CELAC Research Infrastructure Biodiversity Climate Network

Note that for technical reasons, the following characters are not accepted in the Proposal Title and will be removed: < > " &

Duration in months	*36*
Free keywords	*EU-CELAC international research infrastructure climate change biodiversity mobility of researchers data sharing policy making development*

Abstract

Highly competent Research Infrastructures have been in the center of research, education, and innovation. ECLECTIC aims at identifying shared priorities between EU-CELAC countries and develop a road-map of research infrastructures rich in data on the fields of climate change and biodiversity. The effective dissemination of the data will enable its easy access by key stakeholders - researchers and policymakers, fomenting global research area vision, innovation, and knowledge.
The project will provide a collaboration framework for bridging the gap between different levels of infrastructure development in the EU-CELAC countries. In order to achieve the settled aims the consortium will organize two symposia. The first symposium will be focused on identifying challenges and the second in presenting a draft of the research infrastructures road-map developed. At the end of ECLECTIC the consortium expects to have facilitated the transfer of knowledge, technology uptake and exploitation capabilities to assemble a mission-oriented critical mass of researchers in the area of climate change and biodiversity. The expected impacts will be accomplished by alluring new users, attracting additional funding, and supporting more efficient research and innovation environments.

Remaining characters 721

Has this proposal (or a very similar one) been submitted in the past 2 years in response to a call for proposals under Horizon 2020 or any other EU programme(s)? ○ Yes ◉ No

Please give the proposal reference or contract number.	
xxxxxx-x	

Declarations

1) The coordinator declares to have the explicit consent of all applicants on their participation and on the content of this proposal.	☒
2) The information contained in this proposal is correct and complete.	☒
3) This proposal complies with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct).	☒

4) The coordinator confirms:

- to have carried out the self-check of the financial capacity of the organisation on http://ec.europa.eu/research/participants/portal/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed financial year. Where the result was "weak" or "insufficient", the coordinator confirms being aware of the measures that may be imposed in accordance with the H2020 Grants Manual (Chapter on Financial capacity check); or	○
- is exempt from the financial capacity check being a public body including international organisations, higher or secondary education establishment or a legal entity, whose viability is guaranteed by a Member State or associated country, as defined in the H2020 Grants Manual (Chapter on Financial capacity check); or	◉
- as sole participant in the proposal is exempt from the financial capacity check.	○

5) The coordinator hereby declares that each applicant has confirmed:

- they are fully eligible in accordance with the criteria set out in the specific call for proposals; and	☒
- they have the financial and operational capacity to carry out the proposed action.	☒

The coordinator is only responsible for the correctness of the information relating to his/her own organisation. Each applicant remains responsible for the correctness of the information related to him and declared above. Where the proposal to be retained for EU funding, the coordinator and each beneficiary applicant will be required to present a formal declaration in this respect.

According to Article 131 of the Financial Regulation of 25 October 2012 on the financial rules applicable to the general budget of the Union (Official Journal L 298 of 26.10.2012, p. 1) and Article 145 of its Rules of Application (Official Journal L 362, 31.12.2012, p.1) applicants found guilty of misrepresentation may be subject to administrative and financial penalties under certain conditions.

Personal data protection

The assessment of your grant application will involve the collection and processing of personal data (such as your name, address and CV), which will be performed pursuant to Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. Unless indicated otherwise, your replies to the questions in this form and any personal data requested are required to assess your grant application in accordance with the specifications of the call for proposals and will be processed solely for that purpose. Details concerning the purposes and means of the processing of your personal data as well as information on how to exercise your rights are available in the privacy statement. Applicants may lodge a complaint about the processing of their personal data with the European Data Protection Supervisor at any time.

Your personal data may be registered in the Early Detection and Exclusion system of the European Commission (EDES), the new system established by the Commission to reinforce the protection of the Union's financial interests and to ensure sound financial management, in accordance with the provisions of articles 105a and 108 of the revised EU Financial Regulation (FR) (Regulation (EU, EURATOM) 2015/1929 of the European Parliament and of the Council of 28 October 2015 amending Regulation (EU, EURATOM) No 966/2012) and articles 143 - 144 of the corresponding Rules of Application (RAP) (COMMISSION DELEGATED REGULATION (EU) 2015/2462 of 30 October 2015 amending Delegated Regulation (EU) No 1268/2012) for more information see the Privacy statement for the EDES Database.

2 - Participants & contacts

#	Participant Legal Name	Country	Action
1	Associação para o Desenvolvimento do Atlantic International Research Centre (AD AIR Centre)	Portugal	
2	INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, TECNOLOGIA E CIENCIA	Portugal	
3	INOVA+ - INNOVATION SERVICES, SA	PT	
4	Laboratorio Nacional de Computacao Cientifica	BR	
5	BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION	ES	
6	CONSORCIO PARA EL DISENO, CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA PLATAFORMA OCEANICA DE CANARIAS	ES	
7	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	MX	
8	CONSIGLIO NAZIONALE DELLE RICERCHE	Italy	
9	FONDAZIONE CENTRO EURO-MEDITERRANEOSUI CAMBIAMENTI CLIMATICI	Italy	
10	FUNDACAO EUROCEAN	Portugal	

2 - Administrative data of participating organisations

PIC	***Legal name***
902624480	*Associação para o Desenvolvimento do Atlantic International Research Centre (AD AIR Centre)*

Short name: AIR Centre

Address of the organisation

Street Casa da Roda, Rua Gervásio Lima S/N

Town Praia da Vitória

Postcode 9760-472

Country Portugal

Webpage www.aircentre.org

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....unknown

Non-profit .....unknown

International organisation .....unknown

International organisation of European interest .....unknown

Secondary or Higher education establishment .....unknown

Research organisation .....unknown

Legal person .....yes

Industry (private for profit).....unknown

Enterprise Data

SME self-declared status..... unknown

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

No department involved

Department name: *Name of the department/institute carrying out the work.* ☒ not applicable

☐ Same as proposing organisation's address

Street: *Please enter street name and number.*

Town: *Please enter the name of the town.*

Postcode: *Area code.*

Country: *Please select a country*

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Mr.

Sex: (•) Male ( ) Female

First name: **José** Last name: **Moutinho**

E-Mail: **jose.moutinho@aircentre.org**

Position in org.: Business Developer

Department: Lisbon Branch ☐ Same as organisation name

☐ Same as proposing organisation's address

Street: Palácio das Laranjeiras, Estrada das Laranjeiras 205

Town: Lisbon Post code: 1649-018

Country: Portugal

Website: www.aircentre.org

Phone: +351926663570 Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Frank	Neumann	frank.neumann@aircentre.org	*+351 933692004*
Tânia	Chen	tania.chen@aircentre.org	*+351963207617*
Joaquín	Brito	joaquin.brito@aircentre.org	*+xxx xxxxxxxxx*
Mariana	Santos	mariana.santos@inova.business	*+xxx xxxxxxxxx*

PIC	***Legal name***
999513706	*INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, TECNOLOGIA E*

Short name: INESC TEC

Address of the organisation

Street RUA DR ROBERTO FRIAS CAMPUS DA FEUP

Town PORTO

Postcode 4200 465

Country Portugal

Webpage www.inesctec.pt

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....no

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status..... unknown

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

No department involved

Department name: *Name of the department/institute carrying out the work.* ☒ not applicable

☐ Same as proposing organisation's address

Street: *Please enter street name and number.*

Town: *Please enter the name of the town.*

Postcode: *Area code.*

Country: *Please select a country*

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr. Sex: ○ Male ◉ Female

First name: **Susana** Last name: **Barbosa**

E-Mail: **susana.a.barbosa@inesctec.pt**

Position in org.: Senior Researcher

Department: INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTAD ☒ Same as organisation name

☒ Same as proposing organisation's address

Street: RUA DR ROBERTO FRIAS CAMPUS DA FEUP

Town: PORTO Post code: 4200 465

Country: Portugal

Website:

Phone: +351 222 094 129 Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Marta	Barbas	mbarbas@inescporto.pt	*+351 222 094 008*
Paulo	Ferreira	pdnf@inesctec.pt	*+351 222 094 059*
João	Vinagre	jnsilva@inesctec.pt	*+xxx xxxxxxxxx*
Hélder	Oliveira	hfpo@inesctec.pt	*+xxx xxxxxxxxx*

PIC	***Legal name***
999928478	*INOVA+ - INNOVATION SERVICES, SA*

Short name: INOVA+

Address of the organisation

Street RUA DR AFONSO CORDEIRO 567

Town MATOSINHOS

Postcode 4450-309

Country Portugal

Webpage www.inova.business

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....no

Non-profit .....no

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....no

Legal person .....yes

Industry (private for profit).....yes

Enterprise Data

SME self-declared status.....31/12/2014 - yes

SME self-assessment .....31/12/2014 - yes

SME validation sme.....11/12/2009 - yes

Based on the above details of the Beneficiary Registry the organisation is an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: International Unit ☐ not applicable

☒ Same as proposing organisation's address

Street: RUA DR AFONSO CORDEIRO 567

Town: MATOSINHOS

Postcode: 4450-309

Country: Portugal

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Mrs

Sex: ○ Male ◉ Female

First name: **Catarina** Last name: **Azevedo**

E-Mail: **catarina.azevedo@inova.business**

Position in org.: Head of unit

Department: International ☐ Same as organisation name

☒ Same as proposing organisation's address

Street: RUA DR AFONSO CORDEIRO 567

Town: MATOSINHOS Post code: 4450-309

Country: Portugal

Website:

Phone: +xxx xxxxxxxxx Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Ana Solange	Leal	ana.leal@inova.business	+xxx xxxxxxxxx

PIC	***Legal name***
996067393	*Laboratorio Nacional de Computacao Cientifica*

Short name: LNCC

Address of the organisation

Street AVENIDA GETULIO VARGAS 333

Town Petropolis

Postcode 25651-075

Country Brazil

Webpage http://www.lncc.br

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....yes

Non-profit .....yes

International organisation .....unknown

International organisation of European interest .....unknown

Secondary or Higher education establishment .....no

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status..... unknown

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

No department involved

Department name: *Name of the department/institute carrying out the work.* ☒ not applicable

☐ Same as proposing organisation's address

Street: *Please enter street name and number.*

Town: *Please enter the name of the town.*

Postcode: *Area code.*

Country: *Please select a country*

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr. Sex: (•) Male ( ) Female

First name: **Artur** Last name: **Ziviani**

E-Mail: **ziviani@lncc.br**

Position in org.: Senior Technologist

Department: Department of Computational and Mathematical Methods (COMAC) ☐ Same as organisation name

☒ Same as proposing organisation's address

Street: AVENIDA GETULIO VARGAS 333

Town: Petropolis Post code: 25651-075

Country: Brazil

Website:

Phone: +55242233-6199 Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Fábio	Porto	fporto@lncc.br	+xxx xxxxxxxxx
Luiz	Gadelha	lgadelha@lncc.br	+xxx xxxxxxxxx

PIC	***Legal name***
999655520	*BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION*

Short name: BSC

Address of the organisation

Street Calle Jordi Girona 31

Town BARCELONA

Postcode 08034

Country Spain

Webpage www.bsc.es

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....yes

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status.....01/03/2005 - no

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: Earth Science department ☐ not applicable

☐ Same as proposing organisation's address

Street: NEXUS II building, Jordi Girona 29

Town: Barcelona

Postcode: 08034

Country: Spain

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr. Sex: (•) Male ( ) Female

First name: **Markus** Last name: **Donat**

E-Mail: **markus.donat@bsc.es**

Position in org.: Climate Prediction Group Co-Leader

Department: Earth Science department ☐ Same as organisation name

☐ Same as proposing organisation's address

Street: NEXUS II building, Jordi Girona 29

Town: Barcelona Post code: 08034

Country: Spain

Website: www.bsc.es

Phone: +34 934054290 Phone 2: *+xxx xxxxxxxxx* Fax: *+xxx xxxxxxxxx*

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Pablo	Ortega	portega@bsc.es	*+34 934137679*
Mar	Rodriguez	mar.rodriguez@bsc.es	*+34 934137566*

PIC	***Legal name***
974644458	*CONSORCIO PARA EL DISENO, CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA PLATAFORMA OCEANICA D*

Short name: PLOCAN

Address of the organisation

Street CARRETERA DE TALIARTE

Town TELDE

Postcode 35200

Country Spain

Webpage www.plocan.eu

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....yes

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....no

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status.....14/01/2008 - no

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: International Unit ☐ not applicable

☒ Same as proposing organisation's address

Street: CARRETERA DE TALIARTE

Town: TELDE

Postcode: 35200

Country: Spain

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr. Sex: (•) Male ( ) Female

First name: **Ayoze** Last name: **Castro**

E-Mail: **ayoze.castro@plocan.eu**

Position in org.: Head of the Innovation Unit

Department: Innovation Unit ☐ Same as organisation name

☒ Same as proposing organisation's address

Street: CARRETERA DE TALIARTE

Town: TELDE Post code: 35200

Country: Spain

Website:

Phone: +xxx xxxxxxxxx Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Silvia	Hildebrandt	silvia.hildebrandt@plocan.eu	*+34 928134414*
Marimar	Villagarcía	marimar.villagarcia@plocan.eu	*+34 928134414*

PIC	***Legal name***
999865816	*UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO*

Short name: UNAM

Address of the organisation

Street TORRE DE RECTORIA 9º. PISO, CIUDAD UN

Town MEXICO DISTRITO FEDERAL

Postcode 04510

Country Mexico

Webpage

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....yes

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....yes

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status..... unknown

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: ENGINEERING INSTITUTE ☐ not applicable

☐ Same as proposing organisation's address

Street: AV. UNIVERSIDAD 3000

Town: COYOACAN

Postcode: 04510

Country: Mexico

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr.

Sex: (•) Male ( ) Female

First name: **RODOLFO** Last name: **SILVA**

E-Mail: **rsilvac@ii.unam.mx**

Position in org.: PROFESSOR

Department: ENGINEERING INSTITUTE ☐ Same as organisation name

☒ Same as proposing organisation's address

Street: TORRE DE RECTORIA 9º. PISO, CIUDAD UNIVERSITARIA, D.F.

Town: MEXICO DISTRITO FEDERAL Post code: 04510

Country: Mexico

Website:

Phone: +5215556233600 Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	*Last Name*	*E-mail*	*Phone*
EDGAR	MENDOZA	emendozab@ii.unam.mx	+xxx xxxxxxxxx

PIC	***Legal name***
999979500	*CONSIGLIO NAZIONALE DELLE RICERCHE*

Short name: CNR

Address of the organisation

Street PIAZZALE ALDO MORO 7

Town ROMA

Postcode 00185

Country Italy

Webpage www.cnr.it

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....yes

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status.....18/05/2016 - no

SME self-assessment ..... unknown

SME validation sme.....05/12/2008 - no

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: ENGINEERING INSTITUTE ☐ not applicable

☐ Same as proposing organisation's address

Street: AV. UNIVERSIDAD 3000

Town: COYOACAN

Postcode: 04510

Country: Mexico

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Mr. Sex: (•) Male ( ) Female

First name: **Georg** Last name: **Umgiesser**

E-Mail: **georg.umgiesser@ismar.cnr.it**

Position in org.: Senior Researcher

Department: CNR-ISMAR ☐ Same as organisation name

☒ Same as proposing organisation's address

Street: PIAZZALE ALDO MORO 7

Town: ROMA Post code: 00185

Country: Italy

Website:

Phone: +xxx xxxxxxxxx Phone 2: +xxx xxxxxxxxx Fax: +xxx xxxxxxxxx

Other contact persons

First Name	*Last Name*	*E-mail*	*Phone*
Francesca	de Pascalis	francesca.depascalis@ve.ismar.cnr.it	+xxx xxxxxxxxx

PIC	***Legal name***
999419422	*FONDAZIONE CENTRO EURO-MEDITERRANEOSUI CAMBIAMENTI CLIMATICI*

Short name: FONDAZIONE CMCC

Address of the organisation

Street VIA A IMPERATORE 16

Town LECCE

Postcode 73100

Country Italy

Webpage www.cmcc.it

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....no

Non-profit .....yes

International organisation .....no

International organisation of European interest .....no

Secondary or Higher education establishment .....no

Research organisation .....yes

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status.....11/05/2005 - no

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

Department 1

Department name: OPA - Ocean Predictions and Applications ☐ not applicable

☐ Same as proposing organisation's address

Street: Via Augusto Imperatore 16

Town: Lecce

Postcode: 73100

Country: Italy

Department 2

Department name: ODA – Ocean Modelling and Data Assimilation ☐ not applicable

☐ Same as proposing organisation's address

Street: Via Berti Pichart 6/A

Town: Bologna

Postcode: 40127

Country: Italy

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Dr.

Sex: (•) Male ( ) Female

First name: **Giovanni**

Last name: **Coppini**

E-Mail: **giovanni.coppini@cmcc.it**

Position in org.: OPA Division Director

Department: OPA - Ocean Predictions and Applications

☐ Same as organisation name

☒ Same as proposing organisation's address

Street: VIA A IMPERATORE 16

Town: LECCE

Post code: 73100

Country: Italy

Website: https://www.cmcc.it/it/people/coppini-giovanni

Phone: +390832671050

Phone 2: *+xxx xxxxxxxxx*

Fax: *+xxx xxxxxxxxx*

Other contact persons

First Name	***Last Name***	***E-mail***	***Phone***
Giulia	Galluccio	giulia.galluccio@cmcc.it	*+390283623433*

PIC	***Legal name***
998669806	*FUNDACAO EUROCEAN*

Short name: EUROCEAN

Address of the organisation

Street AVENIDA DOM CARLOS I 126-2

Town LISBOA

Postcode 1249 074

Country Portugal

Webpage www.eurocean.org

Legal Status of your organisation

Research and Innovation legal statuses

Public body .....no

Non-profit .....yes

International organisation .....unknown

International organisation of European interest .....unknown

Secondary or Higher education establishment .....no

Research organisation .....unknown

Legal person .....yes

Industry (private for profit).....no

Enterprise Data

SME self-declared status..... unknown

SME self-assessment ..... unknown

SME validation sme..... unknown

Based on the above details of the Beneficiary Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

Department(s) carrying out the proposed work

No department involved

Department name: *Name of the department/institute carrying out the work.* ☒ not applicable

☐ Same as proposing organisation's address

Street: *Please enter street name and number.*

Town: *Please enter the name of the town.*

Postcode: *Area code.*

Country: *Please select a country*

Dependencies with other proposal participants

Character of dependence	***Participant***	

Person in charge of the proposal

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to Step 4 of the submission wizard and save the changes.

Title: Ms

Sex: ○ Male ◉ Female

First name: **Cristina** Last name: **Costa**

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3 - Budget

No	Participant	Country	(A) Direct personnel costs/€	(B) Other direct costs/€	(C) Direct costs of sub-contracting/€	(D) Direct costs of providing financial support to third parties/€	(E) Costs of inkind contributions not used on the beneficiary's premises/€	(F) Indirect Costs / € (=0.25(A+B-E))	(G) Special unit costs covering direct & indirect costs / €	(H) Total estimated eligible costs / € (=A+B+C+D+F+G)	(I) Reimburse-ment rate (%)	(J) Max.EU Contribution / € (=H*I)	(K) Requested EU Contribution/ €
1	Associação Para O Desenvolvime	PT	90000	164000	95000	0	0	63500,00	0	412500,00	100	412500,00	412500,00
2	Inesc Tec - Instituto De Engenharia	PT	132000	24000	0	0	0	39000,00	0	195000,00	100	195000,00	195000,00
3	Inova+ - Innovation Services, Sa	PT	72000	16000	0	0	0	22000,00	0	110000,00	100	110000,00	110000,00
4	Laboratorio Nacional De Computacao	BR	72000	30000	0	0	0	25500,00	0	127500,00	100	127500,00	127500,00
5	Barcelona Supercomputi ng Center -	ES	81000	24000	0	0	0	26250,00	0	131250,00	100	131250,00	131250,00
6	Consorcio Para El Diseno,	ES	96000	24000	0	0	0	30000,00	0	150000,00	100	150000,00	150000,00
7	Universidad Nacional Autonoma De	MX	0	0	0	0	0	0,00	0	0,00	100	0,00	0,00
8	Consiglio Nazionale Delle Ricerche	IT	55000	24000	0	0	0	19750,00	0	98750,00	100	98750,00	98750,00
9	Fondazione Centro Euro-mediterraneos	IT	98000	20000	0	0	0	29500,00	0	147500,00	100	147500,00	147500,00
10	Fundacao Eurocean	PT	78000	24000	0	0	0	25500,00	0	127500,00	100	127500,00	127500,00

	Total	774000	350000	95000	0	0	281000,00	0	1500000,00		1500000,00	1500000,00

4 - Ethics

1. HUMAN EMBRYOS/FOETUSES		Page
Does your research involve Human Embryonic Stem Cells (hESCs)?	○ Yes ◉ No	
Does your research involve the use of human embryos?	○ Yes ◉ No	
Does your research involve the use of human foetal tissues / cells?	○ Yes ◉ No	
2. HUMANS		**Page**
Does your research involve human participants?	○ Yes ◉ No	
Does your research involve physical interventions on the study participants?	○ Yes ◉ No	
3. HUMAN CELLS / TISSUES		**Page**
Does your research involve human cells or tissues (other than from Human Embryos/ Foetuses, i.e. section 1)?	○ Yes ◉ No	
4. PERSONAL DATA		**Page**
Does your research involve personal data collection and/or processing?	◉ Yes ○ No	39
Does it involve the collection and/or processing of sensitive personal data (e.g: health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	○ Yes ◉ No	
Does it involve processing of genetic information?	○ Yes ◉ No	
Does it involve tracking or observation of participants?	○ Yes ◉ No	
Does your research involve further processing of previously collected personal data (secondary use)?	○ Yes ◉ No	
5. ANIMALS		**Page**
Does your research involve animals?	○ Yes ◉ No	
6. THIRD COUNTRIES		**Page**
In case non-EU countries are involved, do the research related activities undertaken in these countries raise potential ethics issues?	○ Yes ◉ No	
Do you plan to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples, etc.)?	○ Yes ◉ No	
Do you plan to import any material - including personal data - from non-EU countries into the EU?	○ Yes ◉ No	

Do you plan to export any material - including personal data - from the EU to non-EU countries?	◯ Yes ◉ No	
In case your research involves low and/or lower middle income countries, are any benefits-sharing actions planned?	◯ Yes ◉ No	
Could the situation in the country put the individuals taking part in the research at risk?	◯ Yes ◉ No	
7. ENVIRONMENT & HEALTH and SAFETY		Page
Does your research involve the use of elements that may cause harm to the environment, to animals or plants?	◯ Yes ◉ No	
Does your research deal with endangered fauna and/or flora and/or protected areas?	◯ Yes ◉ No	
Does your research involve the use of elements that may cause harm to humans, including research staff?	◯ Yes ◉ No	
8. DUAL USE		Page
Does your research involve dual-use items in the sense of Regulation 428/2009, or other items for which an authorisation is required?	◯ Yes ◉ No	
9. EXCLUSIVE FOCUS ON CIVIL APPLICATIONS		Page
Could your research raise concerns regarding the exclusive focus on civil applications?	◯ Yes ◉ No	
10. MISUSE		Page
Does your research have the potential for misuse of research results?	◯ Yes ◉ No	
11. OTHER ETHICS ISSUES		Page
Are there any other ethics issues that should be taken into consideration? Please specify	◯ Yes ◉ No	

I confirm that I have taken into account all ethics issues described above and that, if any ethics issues apply, I will complete the ethics self-assessment and attach the required documents. ☒

How to Complete your Ethics Self-Assessment

5 - Call-specific questions

Extended Open Research Data Pilot in Horizon 2020

If selected, applicants will by default participate in the Pilot on Open Research Data in Horizon 2020[1] , which aims to improve and maximise access to and re-use of research data generated by actions.

However, participation in the Pilot is flexible in the sense that it does not mean that all research data needs to be open. After the action has started, participants will formulate a Data Management Plan (DMP), which should address the relevant aspects of making data FAIR – findable, accessible, interoperable and re-usable, including what data the project will generate, whether and how it will be made accessible for verification and re-use, and how it will be curated and preserved. Through this DMP projects can define certain datasets to remain closed according to the principle "as open as possible, as closed as necessary". A Data Management Plan does not have to be submitted at the proposal stage.

Furthermore, applicants also have the possibility to opt out of this Pilot completely at any stage (before or after the grant signature). In this case, applicants must indicate a reason for this choice (see options below).

Please note that participation in this Pilot does not constitute part of the evaluation process. Proposals will not be penalised for opting out.

We wish to opt out of the Pilot on Open Research Data in Horizon 2020.	○ Yes	◉ No

Further guidance on open access and research data management is available on the participant portal: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-dissemination_en.htm and in general annex L of the Work Programme.

[1] *According to article 43.2 of Regulation (EU) No 1290/2013 of the European Parliament and of the Council, of 11 December 2013, laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006.*

EU-CELAC Research Infrastructure Biodiversity Climate Network - ECLECTIC

Technical Annex | Section 1-3

List of Participants:

Participant No.	Participant Organisation Name | Short Name	Country
1 (coordinator)	Atlantic International Research Centre | AIR CENTRE	PT
2	Institute for Systems and Computer Engineering, Technology and Science | INESCTEC	PT
3	INOVA+ Innovation Services, S.A | INOVA	PT
4	Laboratório Nacional de Computação Científica | LNCC	BR
5	Barcelona Supercomputing Center | BSC	ES
6	Oceanic Platform of the Canary Islands | PLOCAN	ES
7	National Autonomous University of Mexico | UNAM	MX
8	CONSIGLIO NAZIONALE DELLE RICERCHE - ISTITUTO DI SCIENZE MARINE | CNR-ISMAR	IT
9	Euro-Mediterranean Center on Climate Change | CMCC	IT
10	The European Centre for Information on Marine Science and Technology | EUROCEAN	PT

Contents

1. Excellence

1.1. Objectives

The main goal of this project is to strengthen cooperation between countries in the EU and CELAC regions in the areas of biodiversity and climate change, with special focus on research infrastructures from both regions supporting collection, curation, storage, preservation, exchange and interoperability and provisioning of ocean- and coastal-related data, in order to leverage data-driven research and policy development on key areas for the resilience of coastal ecosystems and communities to the effects of climate change.

ECLETIC will bring together relevant research infrastructures and institutions, national and regional stakeholders from the public and private sector and the civil society to address global societal challenges, to contribute to the achievement of the United Nations sustainable development goals and to advance science and technology for the preservation of marine and coastal ecosystems and for the benefit of all people living the Atlantic coastal areas.

ECLETIC will promote a structured dialogue between research infrastructures to improve data sharing, to maximise the Return-On-Investment on research infrastructures and promote inclusive scientific excellence to accomplish its main goal. Other important goals are sharing good practices, developing capacity and supporting policy making.

ECLETIC will build upon many existing multilateral conventions, agreements and protocols as well as international infrastructures aimed at collecting and sharing data. It will work with and along all of these initiatives – it will not replace nor duplicate the existing efforts – to stimulate effective scientific collaboration in the EU-CELAC region.

ECLETIC will bridge the gap between different levels of infrastructure development in the EU-CELAC countries, with emphasis to Small Island Developing States (SIDS), aiming to improve knowledge transfer, technology uptake and exploitation capabilities to assemble a mission-oriented critical mass of researchers in the area of climate change and biodiversity, for drawing new users, attracting additional funding and supporting more efficient research and innovation environments. Moreover, the ECLETIC will connect climate change and biodiversity services and data providers to end users in governments, academia, industry and communities, who need actionable information for decision- and policy-making.

The main expected outcomes are a robust mechanism and clear roadmap for a sustainable, inclusive and productive collaboration framework centred on research infrastructures for biodiversity and climate change in the EU and CELAC regions, which will foster open access to data, services and other resources related to climate change and biodiversity for all scientists across Europe, Caribbean and Latin America. But ECLETIC will go much beyond promoting access to infrastructures, by stimulating public outreach, discovering new potential users and supporting decision making at community level. It will also gather new user needs and functional requirements for user-oriented data services and applications that could be of added value for the existing infrastructures.

The activities will include organisation of annual or bi-annual conferences with pilot project demonstrations, dedicated workshops and meetings between research infrastructures, government, academia, industry and civil society to identify opportunities for cooperation and mobility of researchers and international outreach of European research infrastructures, such as EMSO, EMBRC, LifeWatch and ICOS, among others, in addition to the strategic assessment of human capital and institutional capabilities for biodiversity and climate change in the EU and CELAC region and the development of a strategy-led roadmap for collaboration on research infrastructures.

1.2. Relation to the work programme

ECLECTIC aims at respond the call topic Policy and international cooperation measures for research infrastructure ID: INFRASUPP – 01-2018-2019.

Challenge	How **ECLECTIC** responds to the challenge
The focus of this action is to set the conditions for effective investment and optimise the use of research infrastructures of European interest	The project will allow to optimise the use of research infrastructures in the domains of climate change and biodiversity by setting guidelines for common data curation and sharing, thus promoting the wider access to the data already available at the research infrastructures. By defining policies for staff exchange and promoting best practices for data collection and curation the project will contribute to the improvement of existing research infrastructures and to expand and diversify their users.
Ensuring the necessary complementarities on the international scene required to address research challenges with a global dimension by optimising the use of the available resources	The project will contribute to provide a clear picture on the current state-of-the art in terms of Research Infrastructures and available resources in the participating countries regions that will allow to understand how these Research Infrastructures are complementary and how they can cooperate in a more efficient manner to address the global research challenges in particular in the domains of climate change and biodiversity which have a global dimension and require an international and multi-disciplinary perspective.

Scope	How **ECLECTIC** responds to the scope
Support the identification of priorities for regional and bi-regional cooperation based on the respective strategic road-mapping exercises	The project will support the identification of priorities for cooperation in the areas of climate change and biodiversity, as these are key factors that need to be considered in most of strategic areas of cooperation such as health, sustainable urbanisation and sustainable agriculture.
Foster the exchange of best practices between the EU and CELAC on issues of common strategic relevance such as regional road-mapping processes, research infrastructure (RI) management, RI staff development	The project will define common policies for staff exchange, best practices for physical and virtual access to research infrastructures, and guidelines for common data management and distribution, strengthening the exchange of best practices between the EU and CELAC. The project will include an Advisory Board and the outcomes of the project and the progress of cooperation between EU and CELAC institutions will be regularly reported to the EU-CELAC Research Infrastructures working group.

Scope	How **ECLECTIC** responds to the scope
Support the identification of a limited number of Research Infrastructures of bi-regional interest on which the project will have to conduct pilot cooperation demonstrators comprising: • *The organisation of dedicated workshops and meetings between the EU and CELAC involved communities (research infrastructures, ministries, funding agencies). This can also be supported by bi-regional staff exchange activities, dedicated thematic training programmes (e.g. summer schools);* • *The development of specific roadmaps for cooperation for each of the pilot thematic dimensions and the initial implementation of identified actions, such as supporting reciprocal access to Research Infrastructures in the two regions by covering travel and subsistence costs;* • *The regular reporting to the EU-CELAC RI WG on the progress, for which an advisory board should be set up.*	The project will implement two Symposia between EU and CELAC communities in a format that is expected to be continued on an annual basis afterwards in a sustained cooperation mode. Thematic working groups will be formed based on the identification of needs and common interests, and active cooperation will be supported by workshops enabling dedicated thematic cooperation and training. The project will implement at least one demonstrator illustrating the added value of cooperation between EU and CELAC research infrastructures, including data sharing and exchange of expertise, in a specific problem in the domain of climate change and biodiversity, e.g. the impacts of disruptive climate events (such as hurricanes or marine heatwaves) on coastal ecosystems and communities. Common strategies for staff exchange between EU and CELAC institutions will be defined in the project. Funding will be provided for enabling actual staff exchange initiatives to take place during the project (about 20 staff exchange activities anticipated). A roadmap will be created in the project for a common EU-CELAC user-oriented collaboration including relevant challenges, topics, common actions, and data policies, with specific reference to climate and biodiversity.

1.3. Concept and methodology

1.3.1 Overall concept

Climate change and biodiversity are key factors that need to be considered when addressing common EU-CELAC challenges such as health, coastal sustainable urbanisation, or sustainable agriculture. By supporting the identification of cooperation priorities on climate change and biodiversity between research infrastructures, ECLECTIC will strengthen the EU-CELAC cooperation addressing these cross-cutting challenges.

Extreme weather or climate events, such as hurricanes or marine heatwaves, have the potential to break the resilience of coastal ecosystems and communities by damaging critical infrastructure and disturbing biological processes with the capacity to restructure entire ecosystems. Such disruptive events are expected to become more intense, and some of them more frequent, in the context of global warming. To enable resilience of these coastal communities and ecosystems to climate change, it is necessary to accurately anticipate changes in disruptive events to facilitate the

implementation of suitable adaptation measures, and to precisely understand the impacts that these climate events have on local communities and ecosystems.

This project aims to strengthen cooperation between EU and CELAC by starting to identify research infrastructures, programmes and initiatives, stakeholders and key users relevant for the EU-CELAC cooperation in the domains of climate change and biodiversity, mobilising a diverse and representative network for development of joint initiatives. This network will provide inputs and insights for the definition of a shared vision well aligned with Sustainable Development Goals, for a throughout collection of needs from both research infrastructures and their users, and for the definition of common strategies for data sharing and service provisioning.

In this project the cooperation between EU and CELAC institutions will be implemented by supporting thematic workgroups addressing the priorities previously identified by the network, by implementing staff exchange activities, and by demonstrating the added value of cooperation and data sharing in a specific topic, such the impacts of disruptive climate events (such as hurricanes or marine heatwaves) on coastal ecosystems and communities. This demonstrator will enable to illustrate how data sharing across different institutions can contribute to a very relevant scientific and societal application.

This proposal lays the foundation for improved understanding of relevant risk and impacts from disruptive climate events to coastal ecosystems and communities, and enable adaptation and resilience, in two ways:

(1) The identification, mapping and coordination of Research Infrastructures in the EU-CELAC regions, the identification of users and stakeholders, and the assessment of available ocean observation data collected and curated by mapped Research Infrastructures, will promote and implement recommendations for data sharing and staff exchange initiatives (Tasks 2.2, 3.23 and 4.2), that will facilitate research activities linking observations of ocean biology and socio-economic variables and climate conditions. A specific demonstrator case (Task 3.3) to illustrate how the strengthened collaboration and exchange as an outcome of ECLECTIC will enable future research activities, will focus on the relationship between disruptive climate events and the local ocean data. Combining the large data amount of ocean observations with climatic data, using artificial intelligence, promises exciting new research directions and insights that eventually help to strengthen the resilience of local communities and ecosystems.

(2) The implementation of effective local, regional and bi-regional adaptation strategies to ensure resilience of coastal ecosystems and communities to climate change requires accurate predictions of relevant regional climate conditions for the coming years and decades. By including institutions with leading expertise in the field of climate prediction, the ECLECTIC proposal enables the creation of shared roadmaps for the provision of highest quality climate change information for the coming years and decades to local communities and stakeholders.

1.3.2 Description of initiatives linked to ECLECTIC

This project will avoid the duplication of efforts in cooperation initiatives between research infrastructures and the current efforts for developing services, data products and coherent data management strategies, particularly in the domains of climate change and ocean biodiversity. ELECTIC will complement, rather than overlap with currently ongoing initiatives, listed in Table 1.3a, contributing to better policies and the dissemination of best practices in both EU and CELAC institutions.

Table 1.3a Examples of other ongoing initiatives with relevance to ECLECTIC

Initiative	Description
EMSO	Formally EMSO is a European Research Infrastructure Consortium (ERIC), legal framework created for pan-European large-scale research infrastructures. EMSO **offers data and services** to a large and diverse group of users, from scientists and industries to institutions and policy makers. It is an extraordinary infrastructure to provide **relevant information for defining environmental policies based on scientific data.**
ESFRI	The European Strategy Forum on Research Infrastructures. The mission of ESFRI is to support a coherent and strategy-led approach to **policy-making** on research infrastructures in Europe, and to facilitate multilateral initiatives leading to the better use and development of research infrastructures, at EU and international level.
AANChOR	A multi-stakeholder platform to identify collaborative activities, building on national and international ongoing initiatives such as the **All Atlantic Ocean Research Alliance** and addressing activities aimed at **reinforcing capacity building**, promoting **academia-industry knowledge transfer** for an enhanced ocean innovation, developing common standards, enhancing citizen awareness and ocean literacy and converging and aligning R&I infrastructure initiatives.
FORWARD	A European initiative to improve research in EU outermost regions, since these play an important role in climate change and biodiversity impacts, and are the European analogue to CELAC island states/regions.
AORA Atlantic Ocean Research Alliance	AORA aims at building an Atlantic community of researchers, policymakers, businesses and citizens extending across and along the Atlantic Ocean. AORA facilitates common research and knowledge exchange to provide healthy, resilient oceans for the future generations.
ATLANTOS - Optimizing and Enhancing the Integrated Atlantic Ocean Observing System	Project aiming to develop in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources.
ENVRIPLUS	Implementation and operation of cross-cutting services and solutions for clusters of ESFRI and other relevant research infrastructure initiatives in the environmental domain.
OCEANERANET	The objective of OCEANERA-NET is to coordinate funding programmes between European countries and regions to support research and innovation in the ocean energy sector.

ECLECTIC SWOT – Strengths, Weaknesses, Opportunities and Threats in relation to the initiatives ongoing:

Strengths:	**Weaknesses:**
▪ All-Atlantic context and high-level link to several governments ▪ Data Research Infrastructures and Competence from EU and CELAC ▪ Thematic and geographic collaboration targets coincide with ongoing efforts	▪ Formal representation of CELAC in consortium limited ▪ UN agencies not on board in the planned leading role but as subcontractors ▪ Limited previous collaboration
Opportunities:	**Threats:**
▪ Enable an effective RI cooperation between the two regions ▪ Articulation with high-level initiatives in regions and all-Atlantic ▪ Increase scientific performance ▪ Contribute substantially to addressing pressing issues for CELAC (and EU) populations	▪ Fail to involve further key players in CELAC ▪ Fail to achieve sufficient visibility in both geographic regions ▪ Insufficient mobilisation of critical mass (know-how, networks, finance) for association or other sustained cooperation

1.3.3 Concept and methodology: quality of the measures

As one of the early building stones towards the implementation of the Common Research Area (CRA), the activities in ECLECTIC are designed closely along the lines of the pillars three pillars mentioned in the Roadmap for EU - CELAC S&T cooperation: mobility of researchers, access to research infrastructures and jointly addressing common challenges.

Landscape analysis and network building

Having in view the relatively unstructured collaboration landscape between EU and CELAC in the thematic fields of climate and biodiversity, the building of an effective and open network is the starting point, where support especially from UN agencies UNOOSA and IOC-UNESCO will contribute to a meaningful outcome.
Assessments of policy and infrastructure at country level for disaster management and emergency response will be part of the thematic priorities within which stakeholders are sources. Large infrastructures in terms of their contribution to the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals will be assessed.
Thematic working groups will be created in order to ensure scientific substance in the collaboration platform envisaged. It is anticipated to have 3 groups (climate change, biodiversity and cross-cutting). They are composed of experts from the ECLECTIC consortium and international observers both from EU and CELAC, complemented by data and e-infrastructure experts from ECLECTIC partners. The working groups will perform an extensive landscape

analysis that improves the understanding of the characteristics and capacities of the RIs ecosystem, the complementarities and synergies of EU and CELAC infrastructures, modus operandi and activities, and identifies gaps and future trends.
Existing common initiatives such as the EU-CELAC platform (https://www.eucelac-platform.eu/) will be actively approached and work is articulated and integrated as much as possible.
The final outcome of the landscape analysis and network building will be agreeing on a mechanism for sustained cooperation in these fields, including a business plan for at least 5 years following the termination of ECLECTIC. This mechanism could be the creation of a dedicated non-profit association, or the integration of a sub-network with clear, independent but articulated management and financial contributions, under one of the stakeholders' organisational structure (e.g. AIR Centre).

Mobility and joint actions

In addition to a number of thematic workshops and user-provider interaction by dedicated events mostly in the first project period, a significant number of staff exchange activities is foreseen, in order to implement the harmonization of activities between the two geographic regions.
In addition, and reflecting the importance of data-intensive application for the thematic areas of ECLECTIC, at least one specific demonstrator will be developed to make the case how the strengthened exchange of expertise, research infrastructure and data will benefit future research activities and users. This demonstrator will e.g. focus on facilitating research exploring the impacts of disruptive climate events on coastal ecosystems and communities. A targeted workshop to achieve this, we will foster the exchange of relevant data including observations of marine biology and socio-economic activities (such as tourism, fisheries) on the one hand, and climate data on the other hand will be organised during the first Symposium, as a starting point.
These exchange activities of the different data will be fostered at the first symposium and through a targeted workshop bringing together local data producers, data collators and climate and impacts researchers to address together the user needs highlighted. The workshop will focus on 2 or 3 specific case studies that will be identified based on discussions at the first symposium and based on climatic relevance, location of occurrence matching well-observed spots and relevant ecosystems or socio-economic activities. During the workshop, the participants including local data providers and researchers will describe the available data and review their usefulness (e.g. temporal and spatial coverage and resolution) to characterise the chosen case study events. The final outcome will be to provide a preliminary pilot analysis illustrating how the (non-climatic) aspects observed in marine ecosystems or socio-economic sectors responded to the chosen climate events. This exploratory analysis fostered at the workshop will ultimately enable new research pathways to robustly and comprehensively understand the causal linkages on larger temporal and spatial domains, using more complete datasets and advanced artificial intelligence techniques to link the different data.
Therefore, building on this pilot analysis and the data exchange facilitated by ECLECTIC, we will aim to submit research proposals including several of the partners and stakeholders gathered through this symposium/association in response to suitable calls by the upcoming Horizon Europe framework programme (in which the mission of "Healthy Oceans" is anticipated to be a key priority). This is one of the key pillars for ensuring sustained collaboration beyond the duration of ECLECTIC.

Roadmap

A transparent and rigorous approach to roadmap development requires national delegations with a mandate within relevant infrastructures, which will be ensured by the network building. A strong communication effort to inform the national research authorities and science communities of the new Roadmap process is implemented through the Advisory board, composed of international experts from regional and international entities, like e.g. GEO Blue Planet, GEO MBON, UNOOSA, IOC-UNESCO and/or Regional governments and Research Organisation. Through the Advisory Board, regular (6-monthly) reporting to the EU-CELAC RI WG on the progress of the cooperation platform in general and the roadmap development in particular, will be ensured.

The process will be initiated with the First Symposium, which will explain the criteria and procedures discussed so far in the working groups and the consortium work towards a sustained cooperation platform.
In the subsequent project phase, recommendations of policies and best practices will be elaborated having in view the existing differences and practices. Common standards/protocols for data/service sharing and curation will be elaborated to ensure optimal use of exiting (large) data sets and minimising errors of interpretation. The Roadmap for a common EU-CELAC user-oriented collaboration framework, relying on key infrastructures in the field of climate change and biodiversity will be developed, focusing on a set of thematic priorities elaborated in the working groups, and a comprehensive outline of funding strategies and other mechanisms for sustained cooperation. The results will be the central topic of the Second Symposium, which will be held in the format that is proposed for the continuation of the cooperation after termination of ECLECTIC.

Periodic monitoring of the work in all three phases is ensured by the Advisory board, its feedback into the EU-CELAC RI WG, as well as active articulation by the consortium lead with other collaboration platforms in the same geographic context.

1.3.4 Gender dimension

ECLECTIC project and its consortium recognizes the importance of promoting gender balanced participation on the project, as such, its methodology is built on a framework for engagement and participation that ensures that both men and women, are represented at every step of ECLECTIC project.
To do so, ECLECTIC project will mainstream gender equality in all its activities, including at a project management level. This includes equality, non-discrimination, participation, empowerment and accountability.
Engagement materials and tools will take into account the gender dimension assuring a gender neutrals language.
Besides that, all ECLECTIC events, including in both symposia, will have a balanced panel of speakers. Both women and men will be invited and have the possibility to attend and speak freely at the events and activities that will be organized by this project.

2. Impact

2.1. Expected impacts

Table 2.1a How ECLECTIC will reach the Expected Impacts in INFRASUPP-01-2019

Expected Impact in INFRASUPP-01-2019	**How ECLECTIC responds to the expected impact**
Strengthen the development of a consistent cooperation agenda with CELAC	▪ Identification of common priorities between EU-CELAC (T2.4) ▪ Implement a strategic methodology able to tackle the common problems identified: • Identify existent Research Infrastructures and relevant stakeholders (T1.1 and T1.2) • Develop a cooperation platform able to tackle the common problems • Implement a roadmap for a common EU-CELAC user-oriented collaboration framework (T4.3) • Implement common standards/protocols for data/service sharing and curation (T4.2)
Develop the international outreach of the European research infrastructures' ecosystem	▪ Recommendation of policies and best practices (T4.1) ▪ Common standards/protocols for data/service sharing and curation (T4.2)

Expected Impact in INFRASUPP-01-2019	How ECLECTIC responds to the expected impact
	▪ Roadmap for a common EU-CELAC user-oriented collaboration framework (T4.3)
Foster a global research area vision and the development of global research infrastructures	▪ Assessment of existing infrastructures, digital platforms, projects, programmes, initiatives, policies and international agreements (T1.1) ▪ Identification of relevant stakeholders and potential key end users in the EU-CELAC region (T1.2) ▪ Development of cooperation platform (incl. thematic workgroups) (T1.3) ▪ Assessment of shared vision and goals and alignment with Sustainable Development Goals (T2.1) ▪ Roadmap for a common EU-CELAC user-oriented collaboration framework (T4.3)
Contribute to capacity building and research infrastructures human capital development in targeted/relevant regions	▪ Organisation of thematic workgroup meetings, capacity and institution building events (T3.1) ▪ Staff exchange initiatives (T3.2) ▪ Development and execution of demonstrators as 'success stories' (T3.3)
Enhance the role of the Union in multilateral fora	▪ Fostering the relevance of European research infrastructures for promoting/facilitating the use of EU data / services in the CELAC community in regards to climate change and biodiversity (WP4)

2.2. Measures to maximise impact

The initial stage of the project will be focusing on the development of a strong collaboration between EU - CELAC countries to establish a road map of Research Infrastructures data acquisition on climate change and biodiversity. During the project, a communication and dissemination plan will be implemented to reach out to the researchers for cooperation, and for outreach of the project´s results and impacts to stakeholders. Moreover, as the project aims at identify a research infrastructure road-map for existing data and promote their exchange, it will facilitate future research directions to understand the impact of climate on coastal ecosystems and communities. At the final stage of the project implementation, the consortium will ensure the communication and visibility of the project targets a wider audience, namely non-participating countries/research infrastructures that can be interested in exploiting the results and impact achieved with ECLECTIC in the future.

a) Dissemination and Exploitation of results

Dissemination

Dissemination is the process of providing information on the objectives, outcomes of the project and the quality, relevance and effectiveness of the results to a desired target group. Among interested stakeholders and networks, partners highlight the following target groups, organised at different levels and include:

- Scientific community: Research Infrastructures comprehend any institution conducting research and fostering innovation (universities, institutes, industry);
- Local/ Regional stakeholders: regional policy makers, influencers/ lobbyist, industrial key players;
- National stakeholders: National policy makers, ministries, funding agencies, influencers/ lobbyists, industrial key players;
- EU-CELAC institutions: European Institutions, Organizations to foment collaboration EU-CELAC, Organizations to foster development in CELAC countries
- The general public: the general public of the partner´s regions.

Within the framework of WP5: Communication and Dissemination, the ECLECTIC will communicate the aims and the proposed activities to attract the scientific community and implement the Research Infrastructures network, which cooperatively will allow the mobilization of relevant data on key concerning aspects on the Climate Change and biodiversity. Moreover, on the second stage of the proposal the dissemination plan will allow the easy access of the data by Research Infrastructures to foster innovation, and stakeholders to promote decisions based on scientific data.

The communication and dissemination plan is a work package transversal to the project, and the success of the ECLECTIC is dependent on the efficient engagement strategy within WP5 – raise awareness among the scientific community to be part of a **cooperative Research Infrastructure network** of data sharing and collection.

Thus, the dissemination strategy is focused on maximizing the impact of the project and its results, also **expanding the ECLECTIC beyond the European funding**.

The "Dissemination and Exploitation Plan" (to be further detailed within the project (T5.1) guides the consortium in its activities. This plan benefits from partners' strengths and cooperation in designing an effective dissemination strategy using a combination of off- and on-line tools and cross-referencing them to maximize visibility in a wider audience.

During the project the Dissemination and Exploitation Plan will be regularly updated according to the project needs and learnings to integrate new actions and objectives. The dissemination and communication toolbox already drafted in Task 5.1 will be fine-tuned in the early beginning of ECLECTIC with the detail of the content and timing as well as responsibilities of the various dissemination activities.

Dissemination activities are aligned with the target audience requirements – education level, socioeconomic status, country, cultural background. The ECLECTIC website will be a central piece and important link of all dissemination and communication activities. The table below presents the project's Dissemination and Exploitation Plan, detailing the dissemination activities and foreseen target audiences.

Dissemination activities

Table 2.2a- Main dissemination activities, key indicators to measure impact and target values

Dissemination activities	Measurable result	Target audience
ECLECTIC website	▪ Number of visitors ▪ Average visit duration ▪ Number of downloads ▪ Number of online dissemination actions	All relevant

Dissemination activities	Measurable result	Target audience
International events	▪ Participation in international events (at least 10) ▪ Two symposia (with live broadcast) > 500 participants in total	All ECLECTIC target groups
National events	▪ Organizing 2 national seminars, 1 in each participating country, to present the ECLECTIC and its results to national stakeholder > 200 pp	National/Regional and Local level organizations
Scientific events	▪ Presentations highlighting the aims and achievements of the ECLECTIC	Scientific community
Press releases and publications	▪ Press releases set out to relevant media and publication in relevant journals	All relevant
Video	▪ Promotional video about the ECLECTIC to be exhibited always as relevant >1 (comprehensible in all the consortium languages)	All relevant
Email subscription notification	▪ As relevant, or according to subscription plan.	All relevant

The full impact aimed for ECLECTIC will only be achievable through an intensive campaign of engagement, information, communication, awareness raising and interaction with multiple stakeholders (scientific community and policy makers) from an early stage of the project and that will continue after the project ends, which will be achieved not only through ECLECTIC exploitable results, but also trough partners commitment in ECLECTIC's dissemination also after the project ends.

Exploitation

Exploitation consists of the use of the projects results to achieve the expected impacts and ultimately to provide science based data for policy making, consequently resolving the unmet needs identified at the beginning of the project.

The data collected on climate change and biodiversity, will be shared and used by research infrastructures and policy makers.

The data will be collected, analysed and make available in platforms to be easily access by the stakeholders.

Data on Climate change and biodiversity	Exploited by	Expected impact
Common concerns between EU-CELAC countries	▪ Scientific community ▪ Policy makers	Collaboration among countries to form a task force to resolve a common problem; Foster global research and encourage human capital development;

Methodology	Description
Training materials/scientific materials	Scientific community will make use of the research infrastructures identified in the project and the data collected and made accessible to analyse it and perform meta-analysis, scientific publications, algorithms for scenarios prediction, etc.
Policy strategies	Policy makers will use the data collected and analysed to base their decisions on valid scientific data.
Business scenarios	Stakeholders will take advantage of the results acquired in the project to implement business strategies, business investments, influence businesses development, etc.
Case studies	Development and execution of demonstrators as "success stories" which may be used to derive best practises and examples of collaboration between EU-CELAC partners for what concerns climate and marine issues. The case studies will make use of first sets of ocean data collated and exchanged as part of this project, in relation to climate data, to demonstrate the feasibility for new research understanding climate impacts on marine biology and economy.

Uniquely, each partners will facilitate and encourage the use of ECLECTIC outputs beyond the project:

Table 2.2b ECLECTIC's partners role in the project exploitation

PARTNER	Potential role in exploitation beyond the project
Air Centre	Promote the project and model for sustained cooperation within its All-Atlantic network, including the annual High-Level Industry-Science Government Dialogue; actively seek funding opportunities and EU-CELAC consortia for new collaboration projects in research, capacity-building and dissemination of climate and biodiversity issues.
INESC TEC	Support data-driven cooperation strategies between EU and CELAC, to promoting research on data collection, sharing, curation and analysis across research infrastructures; strengthen links between science, policy and business through data science approaches and services.
INOVA+	Support the continuous update on the social platforms and events to be performed and engage with interested users to foster the promotion of ECLECTIC results and impacts achieved.

PARTNER	Potential role in exploitation beyond the project
LNCC	Promote research on data-driven computational methodologies that target the identified requirements for large-scale data analysis imposed by the combination of several heterogeneous data sources related to climate and biodiversity research.
BSC	Promote research to use the multitude of identified data from ECLECTIC with the aim to better understand the impact of climate events on coastal ecosystems and communities, including fishing and aquaculture, and provide expertise on expected climate changes over the coming decades to enable suitable adaptation ensuring resilience for coastal communities.
PLOCAN	Support the continuous exploitation activities through its network of relevant contacts and key stakeholders. Contribute to the update on the social platforms and events to be performed and engage with interested users to foster the promotion of ECLECTIC results and impacts achieved.
UNAM	Support the continuous exploitation activities through its network of relevant contacts and key stakeholders in Mexico and Latin America. Contribute to the release and update on the social platforms and events in their geographical area to foster the promotion of ECLECTIC results and impacts achieved.
CNR-ISMAR	Support and promote the cooperation strategies between EU and CELAC, promoting the use of common approaches for the research data collection, sharing, curation and analysis across research infrastructures.
CMCC	Promote and support a stronger collaboration between EU and CELAC institutions, engage with new users and experts in climate change and biodiversity.
EUROCEAN	Promote the international outreach of the European research infrastructures and the project´s virtual research platform (WP3) strengthen the links between research and policy.

b) Communication activities

Communication is to keep all the parties informed, engaged and committed to the project and to convey information through the exchange of thoughts, messages or information to the non-project participants. A comprehensive set of communication activities is required to ensure that ECLECTIC reaches its goals and that the target groups are informed of the work and impact of the ECLECTIC project.

The consortium is aware of the present times and the European situation, thus it will make the efforts to communicate effectively to the general society that the European investments are fostering research - ERA roadmap, and tackling real societal problems.

The communication approach to reach the targeted audience will be aligned with the requirements needed: age, gender, cultural background, socioeconomic landscape. Moreover, the strategy to be efficient will be aligned to keep the attention and awareness – of the stakeholders and scientific communities of the ECLECTIC countries; raise the

interest and be attractive, demonstrating advantages and benefits of the ECLECTIC outcomes; and ultimately will foster proactivity and the implementation of actions – innovation, policies and guidelines.

The efficient communication of the project will sustain the stakeholder's interest for the ECLECTIC outcomes and scale up the reached audience. Moreover, an efficient communication strategy will enable the perennial broadcast of the ECLECTIC as a research infrastructure of excellence among stakeholders - **the scientific community will liaise for research and policy makers will use to support the decisions.**
The project will use different tools and actions to communicate the activities and results of the project and to mobilise target groups for action. This includes:

- Visual identity and templates: The project identity will be supported by a "branding guide" and includes the logo and key messages to ensure coherence in communication. A set of templates will be developed in simple formats covering communication and dissemination tools such as press releases; internal documentation templates; PowerPoint templates for project presentation at events; book/report template for publication; etc.
- Non-digital communication: A project leaflet will be developed to present the project's objectives and expected results, serving as a key message for all interested stakeholders enabling its usage towards the project implementation. Also, a roll-up poster for events will be produced aiming to present the project objectives using the "branding guide" narrative.
- ECLECTIC's Website: The communication channel preferred by the consortium to disseminate the project results to the community. It will fulfil a community-building role by attracting people interested in the project topics. It will be easily accessible through various search engines; this will allow an easy access and a fast communication of the project results. It will provide information on the project objectives, consortium, work plan, progress, outcomes (e.g. public deliverables), and funding. It will also provide information about what the project is about, **why is it important,** what are the **benefits**, **expected results** and **potential impact.** All the website content is to be available in English, translating the main features and massages to consortium languages as well, and allows the possibility to redirect the user for specific national actions of relevant interest.
- Social network: The ECLECTIC consortium acknowledges the need to raise awareness among stakeholders, and social network fulfils this need. **LinkedIn, Twitter, Facebook**, and its effortless sharing of content and being available by all, are the perfect tool to scale up the awareness of the ECLECTIC to a wider audience. Aligned to this, the partners with social media presence will use their organization's account to implement the interaction campaign focused on consumers, taking advantage of the followers they already have. Project profiles on social media will be constantly updated with information about project progress. The aim is to have a place where people can easily learn and share the knowledge conducted by ECLECTIC and find relevant information on the topics related to the project. ECLECTIC is thus the curator of information to a broader audience, enabling a larger portion of the identified stakeholders to get involved and to be reached.
- Subscription emailing list: Updates on project milestones will be communicated via dedicated emailing to project partners' distribution lists, stakeholders identified in task 1.2, as well as interested audience who subscribe on the website.
- Press releases: Major developments (such as the launch of the project, the road map strategy, symposia; and relevant policy developments) will be communicated via press releases.
- Video: The ECLECTIC will have a promotional video, communicating the project's initiative, approach and resources. The video will be exhibited when pertinent, in events covering the concept of the ECLECTIC, on TV before the press release, as examples.
- Dissemination at national and international events/conferences: it will allow disseminating project outcomes at main inter-disciplinary conferences such as the American Geophysical Union fall meeting and the European Geosciences Union general assembly, and also at topical meetings on climate change and biodiversity in both EU and CELAC venues.

- ECLECTIC symposia: in the First Symposium, the consortium will organize an international event as pilot for the annual Symposium series, with focus on concluding the process of identification of challenges, existing means and gaps (Task 2.4); in the Second Symposium, the consortium will organise a second International event in a format that is expected to be continued on an annual basis afterwards (Task 3.4). Focus of the second edition is the kick-off of roadmap elaboration, which is the basis for WP4. It is anticipated that in the following Symposium (outside this project), a first review of the roadmap implementation and example ('success') cases will be the topic. In addition, the project's outcomes and results will be presented as well as a vision on how to continue beyond the European funding.

The communication with and through the **Advisory Board members** has two main directions: (a) strategic and technical inputs built from their wide representativeness and (b) outwards dissemination through their own networks and associates.
The dissemination potential is, thus, largely multiplied by bringing these Advisory Board members to our own meetings, symposia and events and making them interested parties.
On top of all this, based on the ECLECTIC methodologies and techniques, they will produce relevant reports and generate policies and guidance. This will surely add extreme value to the project itself, since many direct stakeholders (members and associates of our Advisory Board entities) will be given such insights during the final stage of the project, but mostly even beyond that.

All partners are committed to disseminate the project both at a national level - through local stakeholders identified in each country and an international scope - through initiatives and networks where partners are already integrated. Besides communication actions defined for the whole consortium, each partner will be responsible for the continuous and regular promotion of communication, networking and events at national and EU-CELAC levels as well as registering the activities implemented, supporting evidences and feedback received, namely by:

- Networking with relevant stakeholders - sending out emails and establishing direct contact;
- Promoting or attending meetings for project presentation;
- Promoting or attending workshops, summer schools, events/ conferences where the project could be presented;
- Publication of press releases, newsletters, news, articles, etc.;
- Distribution of brochures, poster or other materials;
- Promoting project events with the target groups (focus groups, others);
- Publication of news in institutional websites.

The communications component of the project will be used

- to invite scientific elements in key research infrastructures to collaborate in the ECLECTIC,
- to connect with target groups to participate in project activities and disseminating the outcomes,
- as a tool to assist the effort to understand and address their needs and expectations,
- to share easily data to be used by stakeholders,
- to engage with the community EU-CELAC.

Communication activities will be implemented through the life-cycle of the project and afterwards, in line with the dissemination and exploitation targets.

3. Implementation

3.1. Work plan — Work packages, deliverables

3.1.1 OVERALL STRUCTURE OF THE WORK PLAN

The work plan will be divided in 6 work packages (as presented in Figure 1). Work packages 1 to 4 have a sequential logic, described below.

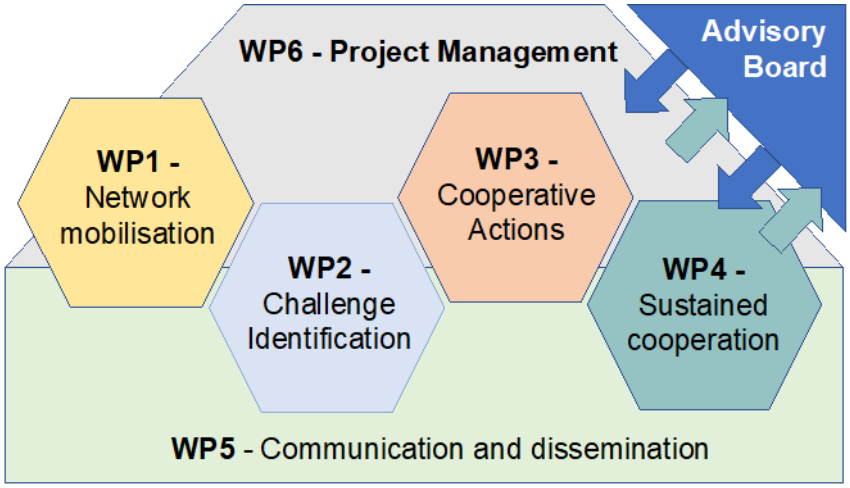


Figure 1 – Work package structure and relations between the different WPs. The interface between the WP6 and the EU-CELAC RI WG (entity that is not part of the CSA) is done through the Advisory Board, which recommends potential joint pilot actions and receives feedback from the RI WG.

First, in WP1, we will identify infrastructures, stakeholders, users and advisors for whom the collection, exchange and processing of data regarding the focus areas of the project (coastal biodiversity and resilience of ecosystems and communities to climate change) in EU-CELAC regions are important, as well as bi-regional common priorities of EU-CELAC. In line with the identified priority areas, cooperation mechanisms that ensure sustained cooperation (that continues after the end of the project) will be studied. In this work package, we will also define the methodologies to collect key information from the identified stakeholders and users.

In the second stage (WP2), we will collect information from the users and stakeholders identified in the previous work package, to assess a shared vision and shared goals in line with the UN 2030 Strategic Development Goals and the Paris Agreement on Climate Change. We will collect user needs using state-of-the-art methodologies studied in WP1, and define common strategies for data sharing and service provisioning using and improving existing RIs and cooperation networks. This work package includes the organization of a symposium in which we will gather interested associated parties from EU-CELAC in the identification of common challenges and cooperation strategies.

The third work package (WP3) aims to build specific cooperation activities building on the priorities and needs previously identified. These include: i) the organisation of workshops enabling the previously formed thematic groups to perform common initiatives in targeted topics; ii) the definition of guidelines and common protocols for staff exchange, and their implementation in actual staff exchanges between EU and CELAC institutions; iii) the design and implementation of at least one demonstrator illustrating the added value of cooperation between EU and CELAC research infrastructures, including data sharing and exchange of expertise, in a specific problem in the domain of climate change and biodiversity, e.g. the impacts of disruptive climate events (such as hurricanes or marine heatwaves) on coastal ecosystems and communities

WP4 summarizes the results achieved in the previous packages, providing: i) specific recommendations on policies and best practices; ii) common standards for data sharing and curation; iii) a roadmap for EU-CELAC cooperation.

WP4 also aims to set a basis for sustained cooperation in order to ensure that the advances achieved in this project in terms of EU-CELAC cooperation will endure after the end of the project.

WP5 deals with the generic items of Dissemination and Communication, including project website, promotional material and workshop/event preparation support. The Symposia are led by the task leaders of WPs 2 and 3, as the main difficulty lies in the identification and involvement of expert contributions. These flagship events of ECLECTIC count on organisational support from this WP.

In WP6, Project Management, overall governance and management of the project are secured, including project-internal risk management, quality assurance, set up and management of the Advisory Board (through which the information to and articulation with the EU-CELAC Research Infrastructure Working Group is ensured), and networking with other relevant initiatives.

3.1.2 TIMING OF THE DIFFERENT WPs AND THEIR COMPONENTS – GANTT CHART

Table 3.1a. List of work packages

WP #	Work Package Title	Lead Participant # / Short Name		PM	Start (M)	End (M)
1	Network mobilisation and modality of cooperation mechanism	6	PLOCAN	25	1	36
2	Challenge Identification and First Symposium	1	AIR CENTRE	28	3	36
3	Cooperative actions and demonstrators	10	EUROCEAN	45	6	36
4	Sustained cooperation through convergence and alignment of initiatives	9	CMCC	34	18	36
5	Communication and dissemination	3	INOVA+	18	1	36
6	Project Management	1	INESC-TEC	9	1	36
				Total PM	159	

Figure 3.1b Gantt chart of the ECLECTIC project

3.1.3 DETAILED WORK DESCRIPTION

Work package No	**1**			**Lead Beneficiary**		***PLOCAN***				
Work package title	**Network mobilisation and modality of cooperation mechanism**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**
Person months per participant	**4**	**2**	**0**	**0**	**1**	**10**	**0**	**4**	**1**	**3**
Start Month	***1***			**End Month**		***36***				
Objectives	O1.1. Identify priorities for EU-CELAC cooperation on the climate change and biodiversity domain O1.2 Identify existing innovation and research infrastructures of interest and their specific characteristics O1.3 Identify stakeholders and end-users – create forum O1.4. Consolidate advisory board O1.5 Set up the platform for sustained cooperation									
Description of the Work	Task 1.1 Assessment of existing infrastructures, platforms, projects, programmes, initiatives, policies and international agreements | M1-M3| Task Participants: AIR, INESC TEC, PLOCAN, UNAM, CMCC, EUROCEAN, CNR-ISMAR Existing infrastructures, (digital) platforms, projects, programmes, initiatives, policies and international agreements that have the capacity to resolve the priorities identified for EU-CELAC cooperation will be assessed. Lead by initial agreement on parameters and priorities, the current panorama of Research Infrastructures, along with the projects and initiatives they are involved in, as well as the identification of their most promising articulation points will be summarised in a report, which will be input for Task 2.1 and discussed in the first Symposium. Starting point is existing documentation, provided by partners (e.g. EurOcean_KG) and existing initiatives such as the ALCUE NET, the ERANet-LAC and the Belmont Forum. Task 1.2 Identification of relevant stakeholders and potential key end users and advisors in the EU-CELAC Atlantic regions | M2-M6| Task Participants: AIR, PLOCAN, UNAM, EUROCEAN, CNR-ISMAR									

	Starting from the entities identified in Task 1.1, stakeholders both from Infrastructures and their existing and potential users will be identified with the objective to involve them actively in the cooperation platform. While the focus for the users is mainly to understand their needs and ensure consistent offering of capacity and services, the infrastructure representatives will play an active role in the building of the sustained cooperation platform in Task 1.3. The target is to identify 40-60 relevant stakeholders in EU and CELAC together, outside the consortium, with a balanced geographic coverage. Input will be gathered from this group into working documents for Task 2.1, as well as leading to propositions in Task 1.3. It is expected that a significant part of these users will participate in the Symposia (Tasks 2.4 and 3.4), as well as in the user need and local workshops (Tasks 2.3 and 3.1). Task 1.3 – Development of cooperation platform (incl. thematic workgroups) | M3-M30| Task Participants: AIR, PLOCAN, CNR-ISMAR Under consideration of the EU-CELAC research and innovation policy documents, as well as the policy documents from the various states involved in the project, potential mechanisms for a sustained cooperation will be analysed. By identifying priority topics and creating thematic working groups, thematic substance is ensured. Existing networking structures within the consortium, especially AIR, will be assessed with respect to their capacity to ensure continuation of the effective cooperation started within ECLECTIC during a period of at least 5 years post-project, in particular with respect to the flagship event, the annual Symposium. Task 1.4 – Methodology Development for workshops | M1-M5| Task Participants: AIR, PLOCAN, The user needs workshops in Task 2.3, as well as the local/regional workshops in Task 3.1 follow a pre-agreed patter, in order to ensure articulation within the project and substance for sustained operation. Especially the user needs, including a framing and benchmarking of existing and potential users for the infrastructure network, require a systematic approach, which will be elaborated in this task.
Deliverables	D1.1 Report on existing Research Infrastructures, policies, programmes and projects [M4] D1.2 Report on potential stakeholders and end-users [M6] D1.3 Preliminary report on sustained cooperation mechanisms [M12] D1.4 Final report on sustained cooperation mechanism and Business Plan [M36]

Work package #	**2**			**Lead Beneficiary**		***AIR CENTRE***				
Work package title	**Challenge Identification and First Symposium**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**
PM per participant	**4**	**3**	**2**	**4**	**3**	**5**	**0**	**2**	**2**	**3**
Start Month	***3***			**End Month**		***36***				
Objectives	O2.1. Identify opportunities for cooperation and develop a continuous improvement mechanism O2.2 Understand current status aligned with national priorities with global challenges, such as Paris Agreement for Climate Change and the UN 2030 Sustainable Development Goals O2.3. Identify other needs and expectations - Assessment of shared vision and goals, barriers, bottlenecks, gaps and needs for international cooperation O2.4 Define common strategies for data sharing and service provisioning - Collect data of interest mobilised in WP1 and respond to an unmet need identified in WP1									
Description of the Work	T2.1 – Assessment of shared vision and goals and alignment with Sustainable Development Goals | M3-M36| Task Leader: AIR; Participants: All the consortium In an effort broadly distributed over the consortium, the common baseline for the cooperative work is set, by involving the stakeholders joined in WP1. Focus is on the assessment of vision and goals of Research Infrastructures and their alignment to global agendas, such as Paris Agreement for Climate Change and the UN 2030 Agenda for Sustainable Development, as well as recommendations for short-term medium targets, with a focus on SDG 13 (Climate Action) and SDG 14 (Life Below Water). After an initial state-of-play report (deliverable 2.1), the task will be monitored until the end of the project, continuously identifying and updating the thematic areas of common interest for collaboration. Deliverable 2.1 will be updated at M24 and M36. T2.2 – Define common strategies for data sharing and service provisioning | M6-M12| Task Participants: LNCC, AIR, INESC TEC, BSC, PLOCAN, UNAM, CMCC, EUROCEAN, CNR-ISMAR Based on user requirements (see Task 2.3) and common practice and state-of-the art techniques, a joint approach to share large data sets is elaborated, including the									

	transformation of data into applied services. By consulting related areas and assessing predictable near-future developments, ambition targets will be set, and a first discussion basis for the roadmap development (WP4) created. The findings will be presented in a report (deliverable 2.2) and discussed in the First Symposium (Task 2.4). T2.3 – Collect and categorize user needs, elicit requirements for future projects and identify gaps | M3-M12| Task Participants: AIR, INESC TEC, LNCC, EUROCEAN, CNR-ISMAR The information collected in WP1 will be assessed, and among the stakeholders user needs will be identified and categorize, requirements for future projects elicited, data and service availability gaps identified, as well as the institution needs and gaps. Key stakeholders in the user groups in this process will be the research community collaborating in climate change and biodiversity related tasks, as well as authorities and regional decision-makers. Including 2-3 dedicated (regional) user needs workshops will be organised, in which the requirements of (data-intensive) climate change and biodiversity issues will be surveyed for a path towards increased EU-CELAC cooperation. The deliverable 2.3 will be elaborated as a report summarising the findings of this process with focus on the barriers for cooperation. The budget of approx. 2000EUR per organisation of a local user need workshop is reserved in the OTHER costs of the partners identified for local organisation in the kick-off-meeting. This budget (10kEUR for 5 workshops) is initially included in the coordinator's budget. T2.4 – First Symposium: international event for identification of challenges, existing means and gaps | M6-M15| Task Leader: AIR; Participants: All the consortium A Pilot edition of the Symposium as key pillar for continuous cooperation will be organised, focusing on three topics: (i) present the format of the cooperation platform (association, networks integrated in existing fora) for discussion, (ii) finalise the identification process of challenges/means/gaps, (iii) fine-tune the symposium for following runs – develop a continuous improvement process. The Symposium will be organised by AIR Centre and aims at a target audience of approx. 100 relevant stakeholders. A budget of 20k EUR is foreseen to support the venue plus catering of the 1-2 day event, to be held in a CELAC country.
Deliverables	D2.1 Report on the match between the vision and goals of Research Infrastructures to the SDGs (UN Sustainable Development Goals) regarding climate change and biodiversity in partner countries [M6, M24 and M36] D2.2 Report on data sharing strategy and ambitions [M12] D2.3 Report on barriers to the cooperation between Research Infrastructures and relevant stakeholders [M12] D2.4 Report from First Symposium - Report on barriers to the cooperation between Research Infrastructures and relevant stakeholders [M15]

Work package #	**3**			**Lead Beneficiary**		***EUROCEAN***				
Work package title	**Cooperative Actions, Demonstrator and Second Symposium**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**
PM per participant	***4***	***5***	***4***	***9***	***10***	***4***	***0***	***1***	***3***	***5***
Start Month	***6***			**End Month**		***33***				
Objectives	O3.1 Promote researchers mobilization O3.2 Implement staff exchange initiatives O3.3 Implement pilot demonstrators									
Description of the Work	Task 3.1 Organisation of thematic workgroup meetings, capacity and institution building events | M6-M12| Task Participants: EUROCEAN, AIR, INESC TEC, INOVA+, LNCC, BSC, PLOCAN Using a jointly elaborated format, local/regional workshops of the thematic work groups established in Task 1.3 will be organised, in order to give substance to the building of sustained cooperation platform. External key stakeholders will be involved to promote a brainstorm on the emergent common areas of interest. In addition, capacity building actions will be delivered in connection to the user needs workshops in Task 2.3, in particular related to data handling and cooperation possibilities. A report of the local workshop outcomes will be presented as deliverable 3.1. A budget of 8000 EUR each is included and other costs of the partners participating in this task, to enable the organisation of the local/reginal workshops (venue, logistics, catering). Task 3.2 Staff exchange initiatives | M6-M24| Task Participants: AIR, LNCC, BSC, UNAM, CMCC, EUROCEAN, CNR-ISMAR A funding pool for limited secondment activities between EU and CELAC institutions will be established, in order to help operationalise the cooperation. Simple									

	applications will be made to 3 calls during project duration, each with a total budget allowing for 6 to 8 researcher exchange/secondment activities with duration of at least 2 weeks. The exchange program will be managed by the coordinator, but methodology and selection of applications will be the responsibility of the Steering Committee. Priority will be given to secondment applicants who can demonstrate realistic chances to raise concrete project funding within the priority topics of the project. A final report collating the activities during the secondments will be presented as deliverable 3.2. A total of 60k EUR (3 times 20kEUR) is included in the budget of the coordinator, in order to finance the additional costs originating in the staff exchange (total benchmark 20 exchanges). Task 3.3 Development and execution of demonstrator(s) as "success story" | M12-M30| Task Participants: INESC TEC, LNCC, CMCC, BSC, UNAM At least one specific demonstrator will be developed to make the case how the strengthened exchange of expertise, research infrastructure and data will benefit future research activities and users. This demonstrator will e.g. focus on facilitating research exploring the impacts of disruptive climate events (such as hurricanes or marine heatwaves) on coastal ecosystems and communities. A targeted workshop to foster the exchange of relevant data including observations of marine biology and socio-economic activities (such as tourism, fisheries) on the one hand, and climate data on the other hand will be organised during the First Symposium (Task 2.4), as a starting point. The final outcome will be to provide a preliminary pilot analysis illustrating how the (non-climatic) aspects observed in marine ecosystems or socio-economic sectors responded to the chosen climate events, presented as deliverable 3.3. Based on this pilot analysis and the data exchange facilitated by the ECLECTIC, we will aim to submit research proposals including several of the partners and stakeholders. Task 3.4 Second Symposium: International event for roadmap preparation | M20-M30| Task Leader: AIR; Participants: All the consortium The Second Symposium will be held in a format that is expected to be continued on an annual basis afterwards. There will be a focus theme for every Symposium. This event will be the kick-off of roadmap elaboration, which is the basis for WP4. In addition, the Pilot(s) developed in Task 3.3 will be presented and discussed as example/reference cases. It is anticipated that in the following Symposium (outside this project), a first review of the roadmap implementation and example ("success") cases will be the topic in deliverable 3.4.
Deliverables	D3.1 Report on workshops of thematic workgroups and capacity building [M24] D3.2 Report collating the staff exchange activities [M30] D3.3 Pilot analysis to understand the vulnerability of marine ecosystems or socio-economic sectors to climate events [M33] D3.4 Report from Second Symposium [M30]

Work package #	**4**			**Lead Beneficiary**	***CMCC***					
Work package title	**Sustained cooperation through convergence and alignment of initiatives**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**
PM per participant	**3**	**7**	**1**	**5**	**3**	**4**	**0**	**3**	**7**	**1**
Start Month	***18***			**End Month**	***36***					
Objectives	O4.1. Identify mechanisms to foster the perennial sustainability of the project and analysis of future challenges and opportunities O4.2. Proposal of guidelines and mechanisms for EU-CELAC data-driven cooperation - Require monitoring and evaluation of the advisory board O4.3. Development of a sustainability plan for future collaboration									
Description of the Work	Task 4.1 Recommendation of policies and best practices | M18-M36| Task Participants: INESC TEC, AIR, INOVA+, LNCC, BSC, PLOCAN, UNAM, CMCC, EUROCEAN, CNR-ISMAR This task collects inputs from various outputs of the project activities, including Task 1.1, all Tasks of WP2 and all Task of WP3. The aim is to reflect on the different results, user's requirements and experts' elicitations, to categorise them and to reorganize them in terms of recommendations for improving the current policies of data sharing and common infrastructures and for producing key best practises for a successful EU-CELAC collaboration. Task 4.2 Common standards/protocols for data/service sharing and curation | M18-M36| Task Participants: CMCC, AIR, INESC TEC, INOVA+, LNCC, BSC, PLOCAN, UNAM, EUROCEAN, CNR-ISMAR This task follows the outcomes of Task 2.2 in which common strategies for data sharing and service provisioning are identified, and of Task 3.3 about the demonstrator execution. Common standards and protocols for enhancing and maintaining data sharing will be identified, in consideration of different languages. For example, in the									

	case of marine data usually provided in NetCDF format, a THREDDS Data Server (TDS), which is web server that provides metadata and data access for scientific datasets using a variety of remote data access protocols, could be proposed, in alternative to FTP platform. In other cases, where NetCDF is not familiar, another common approach will be identified, e.g. by using JSON (for a limited amount of data). Data protection and accessibility will be taken into account for drawing the common standards. Task 4.3 Roadmap for a common EU-CELAC user-oriented collaboration framework | M24-M36| Task Participants: INESC TEC, AIR, INOVA+, LNCC, BSC, PLOCAN, UNAM, CMCC, EUROCEAN, CNR-ISMAR In a synergic way with partners, advisory board and stakeholders/users, a roadmap for future collaboration including relevant challenges, topics, common actions, data policies, with specific reference to climate and biodiversity, will be defined. This activity follows the outcomes of Task 4.1 and Task 4.2, and will be built on the shared vision and alignment with SDGs identified in Task 2.1. Task 4.4 - Outline funding strategy and other mechanisms for sustained cooperation | M30-M36| Task Participants: CMCC, AIR, INESC TEC, INOVA+, LNCC, BSC, PLOCAN, UNAM, EUROCEAN, CNR-ISMAR In view of ensuring a long lasting cooperation between EU and CELAC, mechanisms for funding and sustaining new projects and initiatives will be investigated at all levels (from local to national to international).
Deliverables	D4.1 Report on suggested guidelines and recommendation [M36] D4.2 Report on the protocols applicable for good practice on data sharing facilitation [M36] D4.3 Report exhibiting the Roadmap created [M36]

Work package #	**5**			**Lead Beneficiary**		***INOVA+***				
Work package title	**Communication and dissemination**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**

PM per participant	***3***	***1***	***10***	***0***	***1***	***1***	***0***	***1***	***1***	***0***
Start Month	***M1***			**End Month**	***M36***					
Objectives	O5.1. To design a targeted communication and dissemination strategy for ECLECTIC that will ensure the development and strengthening of a Research Infrastructure cooperation network among EU-CELAC countries, during the entire project duration. O5.2. To Communicate and disseminate ECLECTIC strategy, action plan, activities, results, impact and events to reach an international awareness of the developed Research Infrastructures ecosystem, during the entire project duration. O5.3. To mobilize, connect and inform, in organized events, relevant policy makers, ministries, funding agencies, key stakeholders and increase their awareness of the economic and societal issues at stake. O5.4. To produce dissemination content to enrich and keep updated the ECLECTIC platforms and website. O5.5. To exploit the results/impacts generated by ECLECTIC to relevant stakeholders and policy makers at a regional, national and EU-CELAC perspective. O5.6. To create a virtual platform to be accessed by stakeholders and policy makers for the exchange of information and strengthens the gap in the concept of Research Infrastructures in Europe and CELAC countries.									
Description of the Work	***Description of work*** The WP will define a dissemination and communication strategy and the communication and dissemination toolbox (Task 5.1), which will be aligned with the stage of the project and the targeted audience to be mapped and define in Task 5.2. Task 5.3 will ensure a successful dissemination of the information on the project results and impacts, including the organization of events. Task 5.1 Creation of a communication and dissemination strategy and toolbox | M1-M36| Task Leader: INOVA+; Participants: All the consortium ***Creation of a dissemination and communication strategy*** The project communication is kicked-off by constructing and fine tuning the communication strategy, engaged by and distributed to the project partners. During T5.1 the consortium will agree on the common communication channels and an elaborated communication strategy, herein the communication indicators of the project. This phase will be used to include the project partners in how to best involve and communicate to the targeted audience. Communication Objectives ▪ To raise awareness of key Research Infrastructures in EU-CELAC countries, to engage with the consortium for data sharing – on the issues addressed in the ECLECTIC project; ▪ To raise awareness of the global researchers to foster the development of a global Research Infrastructure;									

- To create powerful relationships between the partners and the policy makers and stakeholders to enable the sustainable cooperation between the involved organizations during and after the project concludes;
- To raise awareness of the needs in the relevant regions to foster capacity building and promote skilled human resources;
- To set the path for the exploitation of the project results beyond the project duration by communicating the project results in different ways, align with the targeted audience;

Creation of a communication and dissemination toolbox

- Create a visual identity – create a logo, document templates, platforms designs, etc. The design of the virtual platforms (website and social network) will be outsourced, in line with the project´s visual identity.
- Implement the project website – starting points to engage with the general public and policy makers. It will be updated and maintained regularly throughout the project to make it engaging and dynamic. The project website will be organized, designed and managed in as user-friendly a manner as possible. The website should be a place for stakeholders and interested parties to learn about the project in general and to keep updated with the latest news on research and publications. Having a format of a "presentation" website, the website is also created with the element of sustainability in mind, meaning the website will live after the project has ended, summing up all the project results and relevant information.
- Develop non digital communication tools – leaflets, roll up poster, which will be translated to reach the different regions included in the Research Infrastructure network.
- Issue press releases – major hallmarks of the project (the launch of the project, the road map strategy, two symposia, events; and relevant policy developments) should be announced by the partners (in the country of interest) in the different press platforms.
- Develop a video to be shown at relevant conferences.
- Implement and update social network - to reach a large audience and in the quest of sharing the project result on a global scale, the project will run Twitter, Facebook and LinkedIn. These platforms will be used to share updates on the findings, publications, open meetings and events. In addition there will be a focus to share all and any relevant information on the project topics through the page. The aim is to have a place where people can easily learn and share the knowledge conducted by the project and find relevant information on the topics related to the project. ECLECTIC is thus the curator of information to a broader audience, enabling a larger portion of the identified stakeholders to get involved and be reached. In addition, each partner is free to use their personal social network platforms to disseminate the project actions, which already have many followers, playing a crucial role in sharing the posts and information and likewise, promoting relevant articles and input form their own organizations. Using their own social network accounts, is an advantage, as the page can then live after the project has finished, while still displaying all the relevant information.
- The project will be presented at international events, using these events to disseminate project achievements.
- Updates on project milestones will be communicated via email to the consortium, via dedicated subscription emailing list to those who signed up in the ECLECTIC website, and to the targeted audience mapped in T1.2.

- ECLECTIC will promote a two symposia, conveying the consortium, partners from the research infrastructure who joined the project when this was ongoing, policy makers and key stakeholders, ministries and funding agencies representatives.

Task 5.2 Mapping of key stakeholders at EU-CELAC-level| M6-M36| Task Leader: INOVA+; Participants: To be completed

On this task a detailed overview of target groups will be performed, aligned with the definition of the methodology on how to approach them and aligned with the stage of the project. At the beginning of the project the communication will target key Research Infrastructures to be part of the network for data sharing. Thus, the communication will be driven to present the ECLECTIC project and how can they benefit from the collaboration. As the project develops and impacts and results are conquered the targeted audience will include researchers that can take advantage of the data collected in the ECLECTIC to foster innovation. Stakeholders and policy makers, will be aware and have accurate knowledge to take decision based actions.

The mapping of the stakeholders is conducted with the input of all project partners. In the process of mapping stakeholders, a newsletter list for dissemination purposes will be also created. The mapping is to be seen as a dynamic mapping that the consortium will be continuously update.

Contact database will be created for dissemination purpose (all GPRD procedures will be considered).

Task 5.3 Dissemination of the information on project outcomes | M13-M36| Task Leader: INOVA+; Participants: All partners

This task aims at implementing the communication and implementation toolbox created in task 5.1, namely by:

- Disseminating the information on the online tools (Website, and social networks), as well as policy recommendations, to stakeholders mapped in task 1.2.
- Sharing the press releases
- Distributing project leaflet
- Presenting ECLECTIC project in international events
- Organizing two symposia, to present to the key stakeholders ECLECTIC concept, aims, and outcomes
- Organizing events throughout the project to present its concept and outcome to a targeted audience: summer schools and workshops as examples

The principal objective dissemination is to ensure that appropriate information reaches the defined target audiences in the most cost-effective accurate manner, and to the maximum possible extent within the limits of available resources.

Deliverables

D5.1 Dissemination and communication plan (M12, updated when necessary) – EU and national plans for ECLECTIC communication and dissemination and collection of communication and dissemination materials (EN, ECLECTIC countries languages)

	D5.2 Database of key stakeholders at EU - CELAC level (M12) and then updated (M24) – Report on the list, approach strategy and feedback to EU relevant audience (researchers, policy makers and stakeholders) (EN) D5.3 Dissemination and Communication reports (1st report: midterm, Final report: M36) – Report on communication and dissemination activities at EU, ECLECTIC countries and non-ECLECTIC countries level (EN)

Work package #	**6**			**Lead Beneficiary**		***INESC-TEC***				
Work package title	**Project Management**									
Participant number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Short name of participant	**AIR**	**INESC TEC**	**INOVA**	***LNCC***	**BSC**	**PLOCAN**	**UNAM**	**CNR-ISMAR**	**CMCC**	**EUROCEAN**
PM per participant	***2***	***6***	***1***							
Start Month	***M1***			**End Month**		***M36***				

Objectives	*Description of work*

INESC-TEC will monitor project execution, timely completion of deliverables, and support AIR for liaison with the European Commission (EC) and organisation of project meetings. General objectives of WP6 are:

- Initiating project phases, complete all administrative tasks required by the EC.
- Overseeing project planning, to avoid delays and overspending.
- Managing efficient internal communication.
- Scheduling and organizing project meetings
- Define and monitor quality standards for the whole project.
- Ensuring timely financial monitoring and control of overall project according to contract.
- Ensuring EC's reporting requirements are met.
- Enabling project cohesion and promote co-operation and communication between partners.
- Resolving conflicts within the consortium (if necessary).
- Ensuring response to the EC in a timely manner and with the required quality.

Description of the Work	Task 6.1 Overall coordination of the project | M13-M36| Task Leader: INESC-TEC At the beginning of the project, INESC-TEC will prepare a Management Handbook (deliverable 6.1) with all essential information about the project's aims, activities, management structure, and partners' contact details, administrative and financial procedures. Activities in this task encompass: i) work planning and management of the project, including the scheduling and issuing of internal and external reporting and documentation; ii) managing resolution of conflicts; iii) conducting financial, legal and administrative management with regard to the project, and; iv) support AIR for liaison with the EC. Four consortium meetings with all partners will be organised within this task. Apart from the analysis of the current situation of the work done, during these meetings, remarks and decisions will also be considered as a result of quality control and risk management carried out under Task 6.2. Elaboration of mandatory reports and review meetings to and with the EC will be also provided under this task. Task 6.2 Quality Control and Risk Management | M13-M36| Task Leader: INESC-TEC In order to deliver high quality analyses and reports, quality criteria are determined for each deliverable. Internal audits by the project manager will be carried out periodically to verify the status and quality of the deliverables against the determined criteria. Risk management is foreseen in order to timely address adversities during the project implementation. All partners are committed and aware of the quality principles that shall guide the execution of all tasks. Both quality and risk management procedures will be detailed in deliverable 6.2 Task 6.3 Creation and coordination of the Advisory Board | M13-M36| Task Leader: INESC-TEC; Participants: AIR This task will focus on the creation of the Advisory Board, and its communication and cooperation with the consortium (more details on section 3.2). The Advisory Board will be responsible for supporting the consortium in achieving the project objectives by providing recommendations and inputs.
Deliverables	D6.1: Management Handbook (M2) D6.2: Quality and Risk Management Plan (M3)

Table 3.1c: List of Deliverables

Deliverable		Work package #	Short name of lead participant	Type	Dissemination level	Delivery date (Months)
#	Name					
D1.1	Report on existing Research Infrastructures, policies, programmes and projects	1	PLOCAN	Report	P	4
D1.2	Report on potential stakeholders and end-users	1	PLOCAN	Report	P	6
D1.3	Preliminary report on sustained cooperation mechanisms	1	PLOCAN	Report	P	12
D1.4	Final report on sustained cooperation mechanism and Business Plan	1	PLOCAN	Report	P	36
D2.1	Report on the match between the vision and goals of Research Infrastructures to the SDGs (UN Sustainable Development Goals) regarding climate change and	2	AIR	Report	P	6, 24 and 36

Deliverable		Work package #	Short name of lead participant	Type	Dissemination level	Delivery date (Months)
#	Name					
	biodiversity in partner					
D2.2	Report on data sharing strategy and ambitions	2	AIR	Report	P	12
D2.3	Report on barriers to the cooperation between Research Infrastructures and relevant stakeholders	2	AIR	Report	P	12
D2.4	Report from First Symposium - Report on barriers to the cooperation between Research Infrastructures and relevant stakeholders	2	AIR	Report	P	15
D3.1	Report on workshops of thematic workgroups and capacity building	3	EUROCEAN	Report	P	24
D3.2	Report collating the staff exchange activities	3	EUROCEAN	Report	R	30

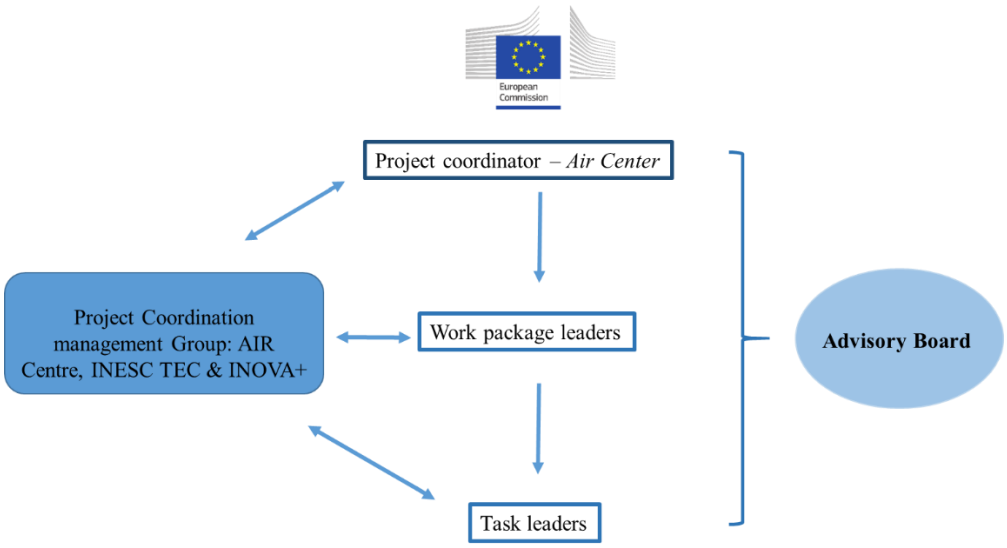
Deliverable		Work package #	Short name of lead participant	Type	Dissemination level	Delivery date (Months)
#	Name					
D3.3	Pilot analysis to understand the vulnerability of marine ecosystems or socio-economic sectors to climate events	3	EUROCEAN	Report	P	33
D3.4	Report from Second Symposium	3	EUROCEAN	Report	P	30
D4.1	Report on suggested guidelines and recommendation	4	CMCC	Report	P	36
D4.2	Report on the protocols applicable for good practice on data sharing facilitation	4	CMCC	Report	P	36
D4.3	Report exhibiting the Roadmap created	4	CMCC	Report	P	36
D5.1	Dissemination and communication plan	5	INOVA+	Report	R	12 & updates
D5.2	Database of key stakeholders at EU - CELAC level	5	INOVA+	Database	P	12 and 24

Deliverable		Work package #	Short name of lead participant	Type	Dissemination level	Delivery date (Months)
#	Name					
D5.3	Dissemination and Communication reports	5	INOVA+	Report	R	18 & 36
D6.1	Management Handbook	6	INESC TEC	Report	R	2
D6.2	Quality and Risk Management Plan	6	INESC TEC	Report	R	3

Legend: P- Public; R- Restricted

3.2. Management structure and procedures

The management structure of the project is structured to assure the commitment and engagement of the partners in the strategic objective of long-term collaboration and achieving a position of excellence in the concerned field in the eyes of the European Commission.
Effective project management will secure the smooth unroll of the project with harmony among the partners. Moreover, will assure and completion of the tasks of the proposal to the highest-standards and in a timely and efficient manner. The management structure has the mitigation mechanisms in place to take action as soon as the project deliveries start to diverge from initial planning.



The management structure will incorporate the following operational elements:

1. Project Coordinator (PC): Air Centre, as Project Coordinator, will be the sole intermediary between the partners and the European Commission (EC), retaining all formal and contractual responsibilities. The PC will be responsible to ensure the smooth running, and ease the communication among all partners involved in the project. Each partner will contribute to the co-ordination of the project whenever requested by the PC. The PC will be responsible for the collection, monitoring and integration of the financial and administrative data from partners and for writing (and consolidating the Periodic Activity Reports to be delivered to the EC at the end of the first year of the project as well as at the end. José Luis Moutinho, from Air Centre is the nominated person and the point of contact who will be responsible for the project coordination.

2. Project Coordination and Management Group (PCMG): The PCMG is the primary governing body with full responsibility for the operational management of the project. The PCMG is composed of AIR CENTRE, INESC TEC, and INOVA+ and is chaired by PC, who will ensure that all relevant documents pertaining to the PCMG are promptly circulated among all partners. INESC TEC and INOVA+ have a long-standing and proven experience in the management of large EU funded projects and will therefore support AIR Centre in the coordination and management activities, in order to guarantee the smooth and efficient implementation of all project activities, whether administrative, financial or technical. The PCMG will physically meet during the consortium meetings (M1, M12, M24, M36), as well as bi-monthly whenever necessary (together with Work Package Leaders), via virtual meetings to monitor the progress of each WP and Task and to plan schedule updates reflecting possible deviations. Each PCMG meeting will be followed by detailed minutes and assigned To Do's for the respective partners to be circulated for comments. The first meeting, the Kick-off meeting, will act as the springboard for the project.

3. Work Package Leaders (WPL): For each one of the six (6) WPs proposed, from the beginning of the project, it will be defined a WPL. The WPL are specifically responsible for the management of the work of the partners working on the WP tasks´ and consequently for ensuring that the implementation of the WP is consistent with the overall work plan and with the other project components. The consortium has appointed the following WPL as presented in Table 3.2a.

Table 3.2a. Project Management Group members and WP Leaders

WP	WP Leaders
1	PLOCAN
2	AIR
3	EUROCEAN
4	CMCC
5	INOVA+
6	INESC TEC

4. Task leaders (TL): Task Leader will be responsible for proper management and execution of each one of the tasks proposed. TLs will report to the WPL technical/ strategic regarding its status on a regular basis. TLs will monitor the progress of the Task (in terms of timing and quality of work) and will coordinate the activities to be undertaken at task level. In case of delays impacting on other tasks, work packages or deliverables, TLs will inform the WPL and PC immediately.

5. Advisory Board (AB): The advisory board is constituted by external experts and opinion leaders. The elements constituent of the advisory board have the competencies to support the consortium achieving its goals and leading the ECLECTIC´s action in to the right direction. The advisory board will intervene to validate the methodologies, provide feedback on the impacts achieved and keep the project within the scope of the EU-CELAC Research Infrastructure Working Group. By representing ministries and funding agencies, the members of the AB will contribute to ensure that the outcomes of the ECLECTIC project are addressing the needs and trends submitted in the proposal, and they will serve as an exploitation and dissemination vehicle of the ECLECTIC results, for the duration of the implementation period. Several of these experts have already endorsed expressions of interest to join the ECLECTIC AB. These Letters of Interest have been attached to the end of section 4.

Table 3.2b. Proposed AB members

Member	Organization	Key areas of expertise
Frank Muller-Karger	University of South Florida	Marine Science
Milton Kampel	INPE	
Mark J. Costello	Institute of Marine Science, University of Auckland,	Marine Science
Nicolas Diaz	Region Guadeloupe	Strategic for the marine activities
Isabel Sousa Pinto	CIIMAR – Centro de investigação Marinha e Ambiental	Aquatic biodiversity

3.2.1 LIST OF MILESTONES

The following table provides a non-exhaustive list of project milestones.

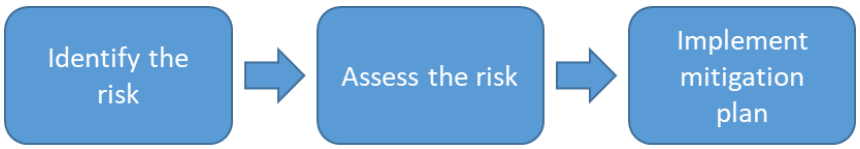
Table 3.2d. List of milestones

Milestone number	Milestone name	Related WP (s)	Due date (in month)	Means of verification
M1	**Kick off meeting**	**WP1**	**1**	**Minutes of meeting**
M2	**First draft of common standards/protocols**	**WP4**	**30**	**Internal report**
M3	**First draft of collaboration roadmap**	**WP4**	**30**	**Internal report**

3.2.1 RISK MANAGEMENT

One of the major challenges encountered in projects is caused by a failure to carry out an adequate risk analysis. Possible risks for the project implementation include:

- Operational risks: possible barriers to be overcome to reach WP objectives, activities required to overcome these risks, personnel allocation necessary to perform the tasks;
- Time risks: early identify any possible delay in established timeframe of the project and evaluate the impact of the overall progress of the project.
- Competence risks: identify the staff with the right competences to perform the tasks of the project and check their availability (possible work overload or conflict with already established deadlines of other projects);
- Budget risks: make sure that WP budget and overall project budget are respected; early identify any possible deviation and communicate it to the coordinator (with relative explanations and justifications of deviation), who will report to the Commission and look for a solution (eventual compensation within the overall project budget).



Identified risks are prioritized based on the probability that they will occur and the impact they would have on the project. For the high risks items, a risk response strategy will be devised. INESC TEC as leader of WP6, will monitor risks throughout the lifetime of the project and will update the list and the response strategy if necessary as not all risks may be known at the beginning of the project. For this reason, the kick-off meeting will include a risk management session to identify, analyze and mitigate exposition. Each WP Leader should work closely with INESC TEC Quality management Person /team, to implement a risk management process that will consist in a regular assessment of advancement and risks towards progresses. Their straight collaboration will be backed a set of milestones that were established to act as control points of the WP execution. The WP leader of each task together with the INESC TEC as Project management leader and AIR as the project coordinator will also be responsible

to present some contingency plan to address the specific risks identified along the project in the Project meetings.

Table 3.2e. Foreseen risks and mitigation measures

Foreseen risks (Likelihood: Low/Medium/High)	Work package(s) involved	Mitigation measures
Concerning Project Management and internal communication: ▪ Partner leaves consortium ▪ Partner is not able to provide the resources or skills foreseen ▪ Partner does not deliver contribution to the work plan, creating severe gaps and delays ▪ Change in key staff during the project ▪ Partner does not provide financial information on time **Likelihood: Low**	All WPs	Appropriate project management (e.g. regular meetings), tools and procedures where many of these risks can be anticipated and addressed. Risk mitigation measures will be included in the Consortium Agreement covering e.g: (i) in case of partner withdrawal, a new partner will be promptly identified and a plan will be defined for its rapid integration; (ii) delays and failures by partners to provide the required resources and results will be monitored regularly (e.g. internal reporting, regular meetings, etc.); (iii) in severe misconduct by a defaulting partner, there is the possibility to suspend payments and exclude the partner - the consortium will immediately react by shifting resources internally to limit the impact on the Project.
Concerning implementation of the methodology: ▪ Dependencies among activities (delay or poor achievement of some tasks may block the development of others). ▪ Poor performance in implementation of activities ▪ Research methods are not adequate to the target groups ▪ Available and accessible data ▪ Administrative bureaucracies different between EU-CELAC delay the implementation of tasks **Likelihood: Low**	WP1 WP2 WP3 WP4	Project well designed in terms of timing and resources/efforts to be implemented. Activities closely monitored by the Project Coordinator and WPL, so that any potential setback will be identified on time. All critical interfaces between WPs carefully planned with wide deadlines. Involvement of target groups and continuous monitoring of requirements during the development of the project results. Gathering some of the most relevant market actors in its consortium, namely EU - CELAC and national industry associations, several of which have endorsed support and a strong engagement with the national experts. Acquire on time information on the different administrative bureaucracies to avoid delays due to differences between EU-CELAC countries involved and not involved in the consortium.

Foreseen risks (Likelihood: Low/Medium/High)	Work package(s) involved	Mitigation measures
		Use of templates for collecting information, to guarantee harmonized data gathering and aggregation before analysis.
Concerning the engagement of target-groups: ▪ Difficulty in set cooperation between EU-CELAC relevant research infrastructures; ▪ Difficulty in obtaining relevant data from the relevant stakeholders; ▪ Difficulty in engaging stakeholders for research and consultation activities; ▪ Difficulty in engaging policy makers ▪ Difficulty in engaging the national experts' fora **Likelihood: Medium-high**	WP1 WP2 WP3 WP4	Careful selection of target groups, sound methodology for approaching target groups and collecting information, partners' networks of contacts, as well as measures enhance the interest of relevant stakeholders. Sound and attractive dissemination and communication plan with a carefully identification of the right channels and tools to reach each one of the target groups. Good definition and communication of the benefits to foster cooperation and of the activities, implementation of tailored stakeholder engagement methods and a solid exploitation strategy. Free open access to the project's public results. Organization of meetings / workshops /focus groups in different geographical regions improving the accessibility of the stakeholders; attendance to several events where the key actors can be represented, and promotion of activities which can be provided online.
Concerning the implementation of demonstrators as "success stories": ▪ Difficulty in gathering sufficient data; ▪ Difficulty in involving stakeholders in the demonstrators ▪ Delays or concerns about exchange of data needed for demonstrator ▪ Insufficient access to (or lack of) suitable observations to underpin the demonstrator **Likelihood: Low-Medium**	WP3	Link with project activities with stakeholders, including meetings and workshops, reinforcing active participation; Use of existing data, information and networks in the concerned countries; Proving added value of demonstrator to stakeholders and users**.** Careful identification and targeting of stakeholders and institutions taking observations in general, and early communication of the benefits of contributing to the initiatives in ECLECTIC will be the basis for inviting such institutions the specific workshop at the first symposium where the needs for the demonstrators will be clarified. In case local observations are lacking or not made available from sites where impacts from climatic events are expected, the use of other data sources (such as remote sensing) will be considered to derive suitable data proxies to execute the demonstrators. It is expected that such demonstrators relying on alternative data sources will mobilise other data providers to support exchange initiatives in ECLECTIC.

Foreseen risks (Likelihood: Low/Medium/High)	Work package(s) involved	Mitigation measures
Concerning the communication and dissemination plan: ▪ Inadequate communication and dissemination strategy and tools; ▪ Geographical spread beyond the participating countries **Likelihood: Low**	WP5	A Communication and Dissemination Plan will be produced right from the beginning of the project and it will require the contribution of all partners in its implementation. Solid definition of calendar for communication actions to ensure timely delivery of key information about project activities and outcomes release. Good identification of targets: infrastructures and audiences will be defined form the beginning. Good definition and communication of the benefits of the project activities and outcomes, and a solid exploitation strategy. All other partners are well-networked throughout Europe and CELAC countries. All partners will use their institutional channels to support the dissemination of the project among key actors.

3.3. Consortium as a whole

ECLECTIC consortium is constituted by multidisciplinary partners with the knowhow, excellence, expertise and preparation to commit into the ECLECTIC proposal to harmonize the EU-CELAC research infrastructures concept, identify and fulfil the existent gaps to the highest standards and leave a legacy beyond the EU fund call.

The task force elected to develop ECLECTIC was gathered by the expert in articulating and joining initiatives – **AIR**, will take advantages of the existent synergies and initiatives to better positioning the project into tackling the unmet need in the field of climate change and biodiversity. **INESC TEC** will take advantage of its values and ambition to transfer the results acquired in ECLECTIC and to bring in value to Industry. The consortium includes Research Infrastructures settled on the data acquisition of marine - **EUROCEAN** and coastal areas – **UNAM**, Research Infrastructures managers - **CNR-ISMAR,** partners able to provide tools and methodologies to acquire *in situ* data on marine biodiversity – **PLOCAN** and partners experts in big data analysis – **BSC**, mathematical models development – **LNCC** and climate change modelling – **CMCC**. **INOVA+** adds value to the proposal, through its experience in collaborating with consortia and leading the WP on **communication dissemination and exploitation**.

The common link among the partner is the extensive network in EU-CELAC countries, enabling the engagement and consequent cooperation of research infrastructures, the clear awareness, know-how and perception of the initiatives ongoing, the current reality and a clear idea on how to resolve the challenges imposed by this call.

Portugal

AIR, the fomenter of the proposal concept, is an international initiative to create a multinational distributed organisation for transatlantic scientific collaboration and innovation, with particular attention to both sides of the tropical and South Atlantic area. AIR centre is being articulated to improve the **development of large-scale joint initiatives**, projects and integrated actions, taking advantage of synergies of existing and connected distributed infrastructures, institutions and resources in the Atlantic

region. It aims to improve the mutual understanding and **collaboration among countries**, regions and entities connected by the Atlantic Ocean, by strengthening cooperation with the European Union and by harnessing the capabilities of its outermost Atlantic territories. Ultimately, it seeks to materialise the benefits of the blue economy in the Atlantic, promoting the skills, knowledge and technological solutions necessary to address this social and economic challenge.

INESCTEC, is an Associate Laboratory with 30 years of experience in R&D and technology transfer, is a private non-profit research institution working in the interface between the academic world and the industrial and service companies, as well as the public administration. The activity at INESC TEC runs under the paradigm of the knowledge to value production chain: Knowledge and **results generated at basic research** are typically injected in technology transfer projects and therefore they receive added **social relevance**. The existence of an Innovation and Technology Transfer Unit assures the effectiveness of this model.
INESC TEC achieves advancement in science and technology and enables science-based innovation through the transfer of new knowledge and technologies to industry, services and public administration.

INOVA+, is one of the leading private European consultancy groups in innovation services, delivering highly specialized services in research exploitation, technology transfer, innovation management and ICT. It was established with the mission to provide world-class consultancy services in business innovation, such as innovation audits, benchmarking and exploitation of academic research, knowledge transfer, technology watch, business intelligence, technology development and marketing, and start-up of innovative firms. Some of these services are connected and financed through EU Programs related to Research and Technological Development and Innovation
INOVA+ has managed over 40 international innovation projects (with a role of the coordinator in several projects with large consortia and budgets of over 1 Million Euro). INOVA+ regularly supports the dissemination and exploitation of research funded projects, with in-house methodologies to analyse and evaluate market perspectives and needs.

EUROCEAN, is an independent scientific non-governmental organisation whose membership comprises leading European marine research, funding and outreach organisations. Its aim is to facilitate information exchange and generate value-added products in the field of marine sciences and technologies between a wide range of governmental and non-governmental bodies.
EurOcean provides comprehensive databases of information on topics related to marine science and technology in Europe with priority given to three main domains: 1) Marine Knowledge Management, 2) Marine Research Infrastructures and 3) Ocean Public Outreach and Awareness activities.
EurOcean is an active participant in a number of European Framework Programme 7 and Horizon 2020 funded projects and it contributes to initiatives aiming to promote a Blue Society and the implementation of the European Maritime Policy.

Spain

BSC, The Barcelona Supercomputing Center, combines unique high performance computing facilities and in-house top research departments on Computer, Life, and Earth sciences, and in computational applications in science and engineering. It is the main provider of public supercomputing services in Spain, coordinating the Red Española de Supercomputación and representing Spain in international initiatives such as PRACE. Within the Earth Science Department, the Climate Prediction Group (CPG) has a long experience in seasonal to decadal climate prediction, which has been reflected in its active participation to several European FP7 and H2020 projects. The CPG currently participates to 16 European projects and 6 national projects. The group has been expanding its research activities on prediction, and is contributing to the development of the CMIP6 version of the EC-Earth climate model, which now provides climate simulations underpinning the IPCC (Intergovernmental Panel on Climate Change) upcoming 6th Assessment Report. The group strongly contributes to DCPP (Decadal Climate

Prediction Project), and C4MIP (Coupled Climate-Carbon Cycle Model Intercomparison Project). In addition, members of the group are currently testing several techniques to produce optimal initial conditions for decadal predictions of climate and global carbon cycle.
The BSC will contribute to this project with its expertise in **climate change, climate prediction** and **climate impacts**. In particular, BSC will promote research to use the multitude of identified data from ECLECTIC with the aim to better understand the impact of disruptive climate events on coastal ecosystems and communities, including fishing and aquaculture, and provide expertise on expected climate changes over the coming decades to enable suitable adaptation ensuring resilience for coastal communities.

PLOCAN, represents a multipurpose service centre with land-based and sea-based novel infrastructures to support research, technology development an innovation in the marine and maritime sector. Its mission is to promote long-term observation and sustainability of the ocean, providing a combination of services, such as observatories, test site, base for underwater vehicles, training and innovation hub.
PLOCAN contributes with the hosting of equipment, devices and marine technologies, for testing, validation and demonstration activities and/or any other necessary experiments in its marine test site.

Italy

CMCC, aims at investigate and modelling the climate system and its interactions with society to provide reliable, rigorous, and timely scientific results, which will in turn stimulate sustainable growth, protect the environment, and develop science driven adaptation and mitigation policies in a changing climate. The CMCC excellence is supported by a straight collaboration with experienced scientists, economists, and technicians, which work together in order to provide full analyses of climate impacts on various systems such as agriculture, ecosystems, **coasts, water resources,** health, and economics. CMCC also **supports policymakers** in setting and assessing costs, mitigation, and adaptation policies. CMCC accounts for a rich portfolio of EU funded projects: : 37 in FP6 and FP7, 53 funded projects in H2020 and 228 funded projects under other EU and international research grants.

CNR-ISMAR, is the main public research organization in Italy, reporting directly to the Ministry of the Education, University and Research. CNR mission is to carry out, promote, spread, transfer and improve research activities in the main sectors of knowledge growth, with its applications for the scientific, technological, economic and social development. It is organized in 7 Departments coordinating the activities of more than 100 Institutes in the main fields of knowledge, from life sciences to engineering, from earth system science to humanities, and **managing the research infrastructures**. The Institute of Marine Sciences of CNR (CNR-ISMAR), interest´s is in the marine science, focusing its activities on the marine, coastal and transitional environments, from geological, biological and physical perspectives. In the last decade, it has developed great experience in using multidisciplinary tools, modern measurement and sampling techniques - developing modelling skills. In the last years, CNR-ISMAR has developed competences in the fields of data management and interoperable spatial data infrastructures in different EU and national projects.

Mexico

UNAM´s values is to conduct research aimed at solving general engineering problems, to collaborate with government and private entities to improve the national engineering practice, and to render engineering services to different sectors of our society. The Institute has focused on disseminating the result of its research projects to contribute to the national development and the wellbeing of society. The institute bring in value for being a Research Infrastructures of excellence in Mexico. The Institute has several experimental facilities, specifically related to coastal areas, where two wave flumes are available. As the most important Mexican University, the relationship between UNAM and Latin-American institutions is straight and wide spread, allowing the bridge of the consortium into other relevant Research Infrastructures in the CELAC.

Brazil

LNCC, expertise lays on developing and application of mathematical and computational models and methods to the solution of scientific and technological problems. In this context, the current strategic areas of research include modelling of complex systems; algorithms and numerical methods; systems, control, and signals; data science; and high performance computing. LNCC also performs applied research activities with different partner institutions in multidisciplinary topics, such as computational biology, medicine and healthcare assisted by computing, and computational modelling applied to the oil industry.

3.4. Resources to be committed

Table 3.4a. Summary of staff effort

Partner name	WP1	WP2	WP3	WP4	WP5	WP6	PM / Partner
1- AIR Centre	4	4	4	3	3	2	20
2 - INESC TEC	2	3	5	7	1	6	24
3 - INOVA+	0	2	4	1	10	1	18
4 - LNCC	0	4	9	5	0	0	18
5 - BSC	1	3	10	3	1	0	18
6 - PLOCAN	10	5	4	4	1	0	24
7 - UNAM	0	0	0	0	0	0	0
8 – CNR-ISMAR	4	2	1	3	1	0	11
9 - CMCC	1	2	3	7	1	0	14
10 - EUROCEAN	3	3	5	1	0	0	12

Table 3.4 b. 'Other direct cost' items (travel, equipment, other goods and services)

1 / AIR CENTRE	Cost (€)	Justification
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000);

		6000 -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities
Equipment		Not applicable
Other goods and services	**10 000** **60 000** **40 000** **30 000**	**2000** per user needs workshop (5 estimated in total) for organisation per workshop (logistics, venue, catering) at facilities of partner to be decided in KOM **3000** in average for each secondment / staff exchange action in WP3, estimated total amount 20 exchanges. Incudes travel and subsistence costs and eventual additional costs for event participation or minor consumables/materials etc. Paid will be researchers from the consortium and the wider network, budget is centrally managed by coordinator. **20 000** in average per Symposium, 2 project Symposia. Despite co-organised with a country-partner from the consortium (to be distributed in KOM), the venue, catering, logistics/audio-visuals and additional dissemination costs (including potential invitation of key speakers) will be centrally managed by the coordinator. **3*10 000** annual participation costs (travel, subsistence, enrolments + other costs; incl. for local stakeholder event) for partner UNAM, who cannot directly receive from EC due to administrational issues.
TOTAL	**164 000**	

2 / INESC TEC	**Cost (€)**	**Justification**
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities
TOTAL	**24 0000**	

3 / INOVA+	Cost (€)	Justification
Travel	**16 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **2500** -- 3*500 + 1000 for participation in external events for project dissemination
TOTAL	**16 000**	

4 / LNCC	Cost (€)	Justification
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (CELAC or EU, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 1500 (CELAC)+3000 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities.
Other goods and services	**6 000**	**6000** – 1-2 local/regional stakeholder event organisation in beginning and mid of project; includes venue/catering/logistics/audio-visuals/other means, possibly invitation of key stakeholders
TOTAL	**30 000**	

5 / BSC	Cost (€)	Justification
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share);

		4500 -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities.
TOTAL	**24 000**	

6 / PLOCAN	**Cost (€)**	**Justification**
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities.
TOTAL	**24 000**	

7 / UNAM	**Cost (€)**	**Justification**
TOTAL	*(a total of 24 000 + 6 000 = 30 000 is included and described in AIR budget, for UNAM participation, due to administrational issues this cannot be formally included here)*	

8 / CNR-ISMAR	**Cost (€)**	**Justification**
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities.

TOTAL	**24 000**

9 / CMCC	**Cost (€)**	**Justification**
Travel	**20 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **500** -- for participation in external event.
TOTAL	**20 000**	

10 / EUROCEAN	**Cost (€)**	**Justification**
Travel	**24 000**	**9000** -- 3000 per year (3x) for attending annually 2 project meetings (EU or CELAC, 1 or 2 persons = 2*750+1500=3000); **6000** -- 2 internal events including workgroup meeting per year (3*2000); **4500** -- 3000 (CELAC)+1500 (EU) Symposium attendance (including catering share); **4500** -- 3* 1500 avg. for participation in capacity building actions, external events and /or additional networking activities.
TOTAL	**24 000**	

CSA Coordination and Support Action – Single stage

Title of Proposal: **EU-CELAC Research Infrastructure Biodiversity Climate Network**

Acronym of Proposal: **ECLECTIC**

List of participants

Participant No	Participant organisation name	Country
1 (Coordinator)	Atlantic International Research Centre | AIR	Portugal
2	Institute for Systems and Computer Engineering, Technology and Science | INESCTEC	Portugal
3	INOVA+ Innovation Services, S.A | INOVA	Portugal
4	Laboratório Nacional de Computação Científica | LNCC	Brazil
5	Barcelona Supercomputing Center | BSC	Spain
6	Oceanic Platform of the Canary Islands | PLOCAN	Spain
7	National Autonomous University of Mexico | UNAM	Mexico
8	Consiglio Nazionale delle Ricerche - Istituto di Scienze Marine | CNR-ISMAR	Italy
9	Euro-mediterranean Center on Climate Change | CMCC	Italy
10	The European Centre for information on Marine Science and Technology | EUROCEAN	Portugal

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4. PARTICIPANTS (Applicants)

Atlantic International Research Centre – AIR CENTRE (PT)

Participant number	1	Participant name	Atlantic International Research Centre	Participant short name	AIR

Description

The Atlantic International Research Center (AIR Center) is a Non-Profit Association (International Research Network Organisation), based on the international initiative to create a multinational distributed organisation for transatlantic scientific collaboration and innovation, with particular attention to both sides of the tropical and South Atlantic area. Its main purpose is to strengthen research and innovation cooperation among the Atlantic countries to address the challenges of developing a more integrated and connected sustainable blue-economy in the Atlantic basin. It focuses on enhancing scientific and technological collaboration between public and private entities in a wide range of areas related to the marine and maritime environment, based on a network with the capacity to attract scientists and technology-based companies. It aims to accelerate the generation and flow of knowledge of excellence and its valuation in the field of blue economy, including aspects such as climate change, food and energy security, circular economy, maritime technologies and the conservation of marine natural resources.

AIR Centre is a distributed network of nodes being articulated to improve the development of large-scale joint initiatives, projects and integrated actions, taking advantage of synergies of existing and connected distributed infrastructures, institutions and resources in the Atlantic region. It is capable of reaching a more significant population segment in a faster and more efficient way, accelerating the connectivity and interaction of the regions in this space. It pursues the use and management of the marine and oceanic environment in a more intelligent, sustainable and inclusive way. The United Nations agenda for 2030 is an important reference for AIR Centre, which works to achieve its objectives, developing effective, viable capacities, knowledge and technologies for the region. It aims to improve the mutual understanding and collaboration of countries, regions and entities connected by the Atlantic Ocean, by strengthening cooperation with the European Union and by harnessing the capabilities of its outermost Atlantic territories. Ultimately, it seeks to materialise the benefits of the blue economy in the Atlantic, promoting the skills, knowledge and technological solutions necessary to address this social and economic challenge.

From a geopolitical point of view, the AIR Centre initiative has been led by Portugal with the collaboration of Spain, as well as several other countries involved to varying extent. It intends to be an additional instrument to develop in its greater dimension the transatlantic partnership that will be the agreement of Belem, established by the European Union to counterbalance the framework of cooperation generated from the Galway Statement.

As such, AIR Centre is suited to be the coordinator of the ECLECTIC project, as well as leader of WP2 ensuring substantial impact by articulation between different regions, enabling policy integration and increasing the chances of a future large-scale, inter-regional approach to the global challenges related to

Biodiversity and Climate Change.

Key Personnel

***José Joaquín Hernández-Brito, Prof. (*Male),** is the CEO of AIR Centre, having been Science, Technology and Innovation Manager of PLOCAN until end of 2018. As a researcher, he has been focused on Marine Chemical Pollution. He is Professor at the University of Las Palmas de Gran Canaria, where he has also been Dean of the Faculty of Marine Sciences, Director of the Technology Transfer Office and the Science and Technology Park and Vice-rector for Research. He has served as Director of the Canary Islands Institute of Marine Sciences and as Innovation Director of the Technological Institute of the Canary Islands. He has been the coordinator of several EU funded projects including TROPOS, POMME, MARMAC, COPRANET, CLIMAAT I and II and has participated in several relevant FP and H2020 projects (e.g. NEXOS, LEANWIND, FIXO3, GROOM, EUROSITES, ATLANTOS, COLUMBUS, AORAC-SA, AANCHOR) as a researcher.

Jose Luiz Moutinho, MSc (Male), is the Business Developer of AIR Centre, and has been a key part of the AIR Centre Implementation team of AIR Centre during 2018. Graduated in Biology at the Federal University of Rio de Janeiro in 1981, he obtained the degree of Architect in 1988 from the University of Santa Ursula in Rio de Janeiro. He completed his master's degree in "Engineering Policy and Management of Technology" at IN + Instituto Superior Técnico in 2005 and has extensive experience with technical services in the countries of the Southern Hemisphere, especially Angola where he worked for 5 years in the area of computer security for government entities. In 1995, he created the first Portuguese Internet company, Tinta Invisível, which became one of the market leaders, before merging with other companies that were successively bought by the multinational Cemex. In 2007, he created the company Mirror Neurons, specialized in innovation, research and development in the service area. Until 2017 he has worked in the company Neutrons in Angola, connecting people and relevant know-how.

Frank Neumann, BSc (Male) is the Project Developer/Engineer, having been responsible for team coordination and day-to-day management of the AIR Centre Implementation Team until the end of 2018. He was active in the creation and was Deputy Director of WavEC Offshore Renewables until 2011. Civil engineer (hydraulic structures) trained in Karlsruhe (KIT) in Germany, he participated in the sea tests of the wave energy device Archimedes Wave Swing in 2004 and was responsible for the recovery project of the Pico CAO plant in 2005-2007. He created and coordinated the activities of the two networks Marie Curie Wavetrain RTN and wavetrain2 (FP6/7; 2004-2010), and initiated several partnerships at European level. He was responsible for several national and international specialized consulting services under WavEC, and was Director of the European Ocean Energy Association (EU-OAS) in 2011. In 2012 he joined the Norwegian Seaweed Energy Solutions (SES), where has been the coordinator of marine technology, and was responsible for large-scale pilot farming in Frøya / Norway from 2014 to 2016.

Tânia Li Chen, PhD (Female) is a Project Officer and has been the office coordinator of the AIR Centre Implementation team. Graduated in Applied Biology (Animal Resources, variant: Marine Resources) from the University of Lisbon, Portugal, and holds a PhD in Biochemistry and Molecular Biology from the University of Maine, USA. Her experience as a research assistant (University of Southern Maine, USA) focused on Marine Environmental Toxicology, and was involved in sea expeditions, such as in the Gulf of Mexico after the Deepwater Horizon Explosion in 2010. She has significant experience in project management and has actively participated in science communication activities.

Relevant publications, products or services (up to 5)

Publication/Product: “Atlantic Interactions” High-Level Conference Series:

Organisation of 1-2 international High Level Industry-Science-Government Dialogues with 100+ participants from government (Ministry level), Industry and Science leaders, along and across Atlantic countries.

Service: AIR Centre Data Intelligence Network (AIR_DataNET):

Data foundry for AIR Centre and its network partners: Collaboration of FCT (Portuguese Research Foundation), Barcelona Supercomputing Center (BSC) and Minho University (UMinho), since 2018 (increasing partnership under discussion). Enable and **support large capacity federated data infrastructure** providing ready-to-use data focused on the scientific domains of the AIR Centre and to provide a one-stop shop data management facility for Open Data storage, processing and retrieval facility, a FAIR Data & Metadata Catalogue, Persistent IDs and versioned mid & long-term storage.

Service/Product: Workshop series to enable Ocean and Coastal Information in Support of Marine Resources and Biodiversity:

Joint initiative with GEO Blue Planet, Future Earth Coasts and the Marine Biodiversity Network (MBON): Coordination and execution of workshop series to define scientific and technological initiatives in the Macaronesia and Sao Tome and Principe region.

Service: Azores EO Node; establishment of an Azores Earth Observation node:

In collaboration with the Regional Government of the Azores (RGA), GEO Blue Planet and GEO MBON, a specialist team of 6-10 people is in the preparation phase for installation in the AIR Centre, to articulate with GEO Blue Planet, GEO MBON and others.

Relevant previous national/international projects or activities of the team members

Due to the recent establishment of AIR Centre (mid 2018), there is no formal project history with existing contracts. However, numerous collaborative proposals have been submitted:

AtlanticGEOSS - Cooperation for a Better Understanding of the Atlantic: initiative lead by DEIMOS Engenharia, in early stage towards establishing a potential funding strategy. Goals are to develop an integrated EO framework that promotes collaboration and growth within the Atlantic countries, and to engage with communities to identify and potentiate opportunities for EO information and services, serving the region's societal needs. Context is the increasing demand for cooperation between countries in order to work towards the 2030 Sustainable Development Goals (SDGs), which were defined as a new set of strategies to promote sustainable development for the next 15 years in the United Nation Summit 2015. Target is an Atlantic community and ecosystem for Earth Observation services for the Atlantic. The AtlanticGEOSS will be proposed as an official GEO Initiative in 2019.

MACARATLAN – Institutional Cooperation Network for the Improvement of the Governance and Promotion of Blue Economy in the European Regions of Macaronesia and the Caribbean; partnership with Regional Science and Technology Agencies from Azores and Madeira (PT), PLOCAN (ES), NOSI (Cape Verde): promotion of the meeting of the Macaronesia region with the counterpart space of the Caribbean by promoting the effective participation of these regions in European strategies and plans for the Atlantic. Articulation of a Network of Institutional Cooperation in Blue Economy of the Mid-Atlantic (RECIAM) with a joint strategy and action plan to extend collaboration and maximize the results of the most competitive groups and projects in Blue Growth.

Atlantic Margins - from Local to Global Atlantic Scale; initiative lead by Instituto Superior Técnico (IST, Portugal), involving UFRJ, UERJ, UFPR, UFPA (Brazil) and Puertos del Estado (Spain) (extension under discussion). Creation of a platform with the several functionalities including: simulation of oil spills, search and rescue, visualization of time series, calculation of integrated parameters relevant for coastal regional management (e.g. Marine Framework Strategy Directive, Habitats Directive, Regional Planning Directive). Use of data from local and regional studies carried out at a national/regional level to improve the Global Atlantic solution, which in turn can be subsequently used to improve local/regional solutions.

Relevant infrastructure, technical equipment

AIR Centre's scientific and technological activities are performed primarily through its network consisting of well-established institutions in the respective fields.
Several leading Spanish Research Institutes area articulated with PLOCAN as main representative of the Spanish node of AIR Centre: Instituto Español de Oceanografía - IEO; Spanish National Research Council - CSIC; Barcelona Supercomputing Center - BSC; Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas - CIEMAT; Instituto Astrofísica de Canarias - IAC; Centro para el Desarrollo Tecnológico Industrial - CDTI; EIT Climate-KIC Spain. These provide a wide range of know-how, equipment and research infrastructures - including research vessels, autonomous vehicles, tank facilities, an offshore research platform and supercomputing facilities.
For Portugal, the Collaborative Laboratories CoLAB +ATLANTIC (Earth Observation and Energy) and CoLAB DTX (Data Science) are the key pillars on National level. These CoLABS have been recently created to join the capacities of industry and academics to build National Competence Clusters focused on Earth Observation and Marine Technology, Energy and Data Science. Significant access to observation equipment and networks is also provided.
Further, MoUs with the following institutions have been signed, having in view the mutual use of resources and increasing levels of collaboration: UNOOSA (together with Portuguese Ministry of Science and Technology), INPE (BR), PSU (Pennsylvania State, USA), UFRJ (Rio de Janeiro Federal University, BR), GEO Blue Planet, GEO MBOM, LifeWatch ERIC.
In late 2018, a Letter of Intent for Infrastructure Collaboration within AIR Centre was signed between EMBRC-ERIC, EMSO-ERIC, LifeWatch ERIC and Sintef (NO).

Third parties involved in the project	
Does the participant plan to subcontract certain tasks? (Y/N)	**Y**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

Subcontracting by AIR Centre:

The two UN organisations **UNOOSA** and **IOC-UNESCO** were working as part of the consortium for the proposal preparation. However due to too narrow time windows and complex authorisation procedures it was not possible to formalise these commmitments in time. It was agreed to involve both organisations as subcontractors instead, mainly with support in Tasks 1.1, 1.2 (IOC-UNESCO) and 2.1 (UNOOSA). UNOOSA's role in WP2 will make a significant contribution to the alignment of the vision with the **2030 Agenda for Sustainable Development** (towards Sustainable Development Goals, SDGs) in particular on the Earth Observation domain. UNOOSA, together with the European Global Navigation Satellite Systems Agency, has done an analysis of how Copernicus and the European Global Navigation Satellite Systems support the Sustainable Development Goals. In a similar way, IOC-UNESCO's involvement in building up the organisation and stakeholder network in WP1, as well as support to WP2 will ensure clean alignment with the SDGs for the marine part, in particular having in view the **Decade of the Oceans**.

UNOOSA will assume the main responsibility for DEL 2.1, which is anticipated to be a UN publication similar to the report on Copernicus and EGNSS supporting the SDGs (about 400-500 copies), using inclusively a special assistant with knowledge in UMOJA, the UN reporting system. Foreseen total cost for **UNOOSA** are **60 000 EUR** (35 000 personnel, 10 000 travel, 6000 publications, 9000 OH). Corresponding costs for **IOC-UNESCO** are **35 000 EUR** (25 000 personnel, 10 000 travel).

Institute for Systems and Computer Engineering, Technology and Science - INESC TEC (PT)

Participant number	2	Participant name	Institute for Systems and Computer Engineering, Technology and Science	Participant short name	INESCTEC

Description

INESC Technology and Science – INESC TEC is an Associate Laboratory with 30 years of experience in R&D and technology transfer, is a private non-profit research institution having as associates the University of Porto, INESC and the Polytechnic Institute of Porto. With around 800 researchers (350 PhD), working in the interface between the academic world and the industrial and service companies, as well as the public administration, the activity at INESC TEC runs under the paradigm of the knowledge to value production chain - knowledge and results generated at basic research are typically injected in technology transfer projects and therefore they receive added social relevance. The existence of an Innovation and Technology Transfer Unit assures the effectiveness of this model.

Key Personnel

Alípio Jorge, PhD (Male), Associate professor and chair of the Department of Computer Science of the Faculty of Science of the University of Porto. Coordinator of LIAAD, the Artificial Intelligence and Decision Support Lab of INESC TEC. Head of the Department of Computer Science at FCUP. Director of the Masters on Data Science. Alípio Jorge has been representing Portugal at the DG-Connect (European Commission) in the European Strategy for Artificial Intelligence.

Holds a PhD in Computer Science, University of Porto, 1998, a MSc in Foundations of Advanced Information Technology, Imperial College, London, 1991 and a BSc in Applied Mathematics/Computer Science, University of Porto, 1989. His research interests are on Data Mining and Machine Learning, in particular association rules, distribution learning, web intelligence, recommender systems, text mining and data mining for decision support. At the Faculty of Economics, he launched, with other colleagues, the MSc. on Data Analysis and Decision Support Systems, which he coordinated from 2000 to April 2008. Lectures regularly at the PhD program MAPi and is currently supervising one student.

He has been involved in leading roles in European and national research projects on data mining and web intelligence; supervision of 10 completed PhD theses (plus 4 ongoing) and 30 Msc dissertations.

Hélder P. Oliveira, PhD (Male), was born in Porto, Portugal, in 1980. He graduated in Electrical and Computer Engineering in 2004, received the M.Sc. degree in Automation, Instrumentation and Control in 2008 and the Ph.D. degree in Electrical and Computer Engineering in 2013 at the Faculty of Engineering of the University of Porto (FEUP), Portugal.

He is currently working as Senior Researcher at INESC TEC - Institute for Systems and Computer Engineering, Technology and Science, a R&D institute affiliated to the University of Porto. He is the Leader of the Information Processing and Pattern Recognition Area, member of the coordination council of the Centre for Telecommunications and Multimedia, and takes part of the Visual Computing and Machine Intelligence Group (VCMI) and in the Breast Research Group. He is also one of the coordinators of the Data Science Hub at INESC TEC.

He is also working at the Computer Science Department of the Faculty of Sciences of the University of Porto as an Invited Assistant Professor. Between 2014 and 2016 he was contracted as Invited Assistant Professor at Informatics Engineering Department of FEUP. Previously between 2008 and 2011 was working as Invited Assistant in the same Faculty and Department.

Hélder Oliveira is the principal investigator in 2 funded research projects (LuCaS, MICOS), project member in 5 projects (S-MODE, HEMOSwimmers, LEGIBlE, BCCT.Plan and NanoSTIMA), and responsible at INESC TEC for other 2 projects related with technological transfer with industry, the project Evo3DModel

with Adapttech - Adaptation Technologies and the project FollicleCounter with Saúde Viável. In the past was also project member in 3 other funded projects (one European and 2 National) and 3 other as research assistant.
He was the founder member and coordinator (between 2010 and 2013) of the Bio-related Image Processing and Analysis Student's Group (BioStar) at FEUP.
Since 2007 has co-authored 14 articles on international journals, all except one with impact factor, with an average value of 4.138, according to the Journal Citation Reports 2017. He has 1 patent pending, 3 book chapters and also 47 works in major refereed international conferences, 25 articles in national refereed conferences and participated in the creation of 3 public datasets. In total, these publications have attracted over 495 citations and correspond to an h-index of 13, using Harzing's Publish or Perish application on February 13, 2019.
He is one of the mentors and belongs to the organizer committee of the VISion Understanding and Machine Intelligence (VISUM) summer school in 6 of the 7 editions of the event. He also participated in the organization of other 11 events and was invited as keynote speaker in 2 international events. Hélder Oliveira is currently supervising 6 PhD Students, co-supervise 1 other and has 1 Phd Student concluded as supervisor in 2018. During his career supervised (or co-supervised) 40 MSc students. Currently supervises 5 research fellows in projects at INESC TEC. Hélder Oliveira participated as principal jury in 2 PhD and 10 MSc defences.
Hélder Oliveira is member of Portuguese Association of Pattern Recognition (APRP) and was been elected for president of the fiscal council in 2017.
His research interests include medical image analysis, bio-image analysis, computer vision, image and video processing, machine learning, data science, computer science, programming, and 3D modelling.

Susana Alexandra Barbosa, PhD (Female), graduated in Physics/Applied Mathematics (Astronomy) in 1998 followed by a master degree in Computational methods (FEUP, 2000) and a PhD in Surveying Engineering Thesis: *Sea level change in the North Atlantic from tide gauges and satellite altimetry* (UP, 2006). She was a postdoc from 2006 to 2009, working on sea-level change and satellite altimetry at the Danish National Space Center (2006/7), and on radon monitoring and the analysis of radon time series at the Geological Survey of Israel (2008/9). From 2009 to 2015 she worked at the University of Lisbon (IDL) and was the PI of the IDL research group on Earth Observation and Space Geodesy. Since 2015 she works at INESC TEC as a senior researcher.
Susana Barbosa co-edited a book on "*Nonlinear Time Series Analysis in the Geosciences - Applications in Climatology, Geodynamics and Solar-Terrestrial Physics*", and 3 topical volumes. She is the author of 3 book chapters and 50 papers in international peer-reviewed journals. Susana Barbosa research work is highly interdisciplinary, with a strong emphasis on data science, particularly time series analysis of environmental data. She has expertise on the analysis of climate records and satellite data, focusing on the assessment and quantification of climate change (trends, changes in seasonality, extremes). She has also experience on the field monitoring of environmental radioactivity (in soil, air and water) and on the analysis and interpretation of radiation variability in the context of Sun-Earth interactions.
She was the PI of the "Radioactiivty and atmospheric electric field monitoring campaign" at the Hyytiälä research infrastructure (2017). She is also the PI of the "Gamma radiation monitoring campaign" at the Eastern North Atlantic (ENA) ARM research infrastructure (2015-2020) in the Graciosa island (Azores). She is keen on ensuring that the monitoring data is FAIR and open, as attested by her 7 published and made publicly available datasets.
Susana Barbosa current research interests focus on Coastal climate change and sea level change; Underwater radioactivity; and Atmospheric radioactivity and space-earth interactions.

Nuno Moniz, PhD (Male), was born in Horta (Azores), Portugal, in 1987. He first graduated in Computer Engineering in 2009 from the Polytechnic Institute of Porto (ISEP), earning a Research Integration Scholarship from the National Foundation for Science and Technology (FCT) and was associated to the

research centre CISTER (Research Centre in Real-Time Computing Systems). Afterwards, in 2012, he completed his MSc also in Computer Engineering at the Polytechnic Institute of Porto and was awarded a merit diploma for outstanding academic performance by the referred institution. He went on to complete his PhD in Computer Science at the Faculty of Sciences of the University of Porto (FCUP) in 2017, which was fully funded by a scholarship awarded by FCT (Portuguese Foundation for Science and Technology), and his final PhD dissertation was awarded in the Fraunhofer Portugal Challenge 2017. During his PhD, Nuno was associated with INESC TEC - Institute for Systems and Computer Engineering, Technology and Science, an R&D institute affiliated to the University of Porto, as a PhD Researcher. He was also a Visiting Researcher in Brunel University (2015, London, UK) with Professor Allan Tucker, and at San Jose State University (2015, San Jose, California, USA) with Professor Magdalini Eirinaki.
Since 2017, he is holding a position of PostDoc Researcher at INESC TEC, associated to the Laboratory of Artificial Intelligence and Decision Support (LIAAD), where he is also one of the coordinators of the Data Science Hub at INESC TEC, an interface with public administrations and industry for knowledge transfer projects related to Data Science. During this time he has been a project member in 2 projects for technological transfer with industry. He is also working at the Computer Science Department of the Faculty of Sciences of the University of Porto as an Invited Assistant Professor.
Since 2012, Nuno Moniz has co-authored 4 articles in international journals and 11 publications in international peer-reviewed conferences. He was also co-organizer of three international workshops: the 1st and 2nd International Workshop on Learning with Imbalanced Domains: Theory and Applications, co-located with ECML/PKDD 2017 and 2018, and the International Workshop on Cost-Sensitive Learning, co-located with SIAM SDM 2018, which in all three cases led to edition of book proceedings by the series Proceedings of Machine Learning Research (PMLR). He has also created 1 public dataset (available in UCI Machine Learning Repository) and 2 software packages for the R statistical programming language. Nuno Moniz is part of the program committee in several top-tier international conferences in the field of data science, such as KDD 2019, IJCAI 2019 and AAAI 2019, and has been invited as keynote speaker in two national events. He is currently supervising 5 MSc students and has participated in 3 MSc defences as the principal jury.
His research interests include machine learning, data science, privacy and security in AI, green machine learning, imbalanced domain learning with an emphasis on the prediction of extreme values in real-world scenarios, and data analytics. Nuno Moniz is a member of the Portuguese Association for Artificial Intelligence (APPIA).

João Vinagre, PhD (Male), holds a MSc degree in Computer Systems and Network Engineering from the Faculty of Sciences of the University of Porto (FCUP, 2010) and obtained his PhD in Computer Science from the MAPi consortium formed by the Universities of Minho, Aveiro and Porto in 2016, with the thesis: "Scalable Adaptive Collaborative Filtering", supported by a scholarship awarded by the Portuguese Foundation for Science and Technology (FCT).
Since 2016, he is a post-doc researcher at INESC TEC's Laboratory of Artificial Intelligence and Decision Support (LIAAD), being also in the coordinating team of the Data Science Hub, an platform in INESC TEC dedicated to the promotion of internal and external collaborations in Data Science projects. He has participated in several projects with national and and international public funding (Palco 3.0, RECAP, TEC4Growth) as well as direct contracts with industry partners.
Since 2018 he holds a position as an Invited Assistant Professor at the Computer Science Department in FCUP, where he lectures disciplines related to programming languages. He is currently the main supervisor of 1 MSc student.

Relevant publications, products or services (up to 5)

Dataset: Gamma radiation dataset doi:10.5439/1441191

Publication: **Barbosa S,** Huisman JA, Azevedo EB, 2018. Meteorological and soil surface effects in gamma radiation time series-Implications for assessment of earthquake precursors. Journal of Environmental

Radioactivity 195, 72-78

Publication: **BarbosaSM**, Miranda P, Azevedo EB, 2017. Short-term variability of gamma radiation at the ARM Eastern North Atlantic facility (Azores). Journal of Environmental Radioactivity, 172, 218-231

Publication: **BarbosaSM**, 2016. Trends in extreme mean sea level quantiles from satellite altimetry. Marine Geodesy 39, 165-177

Publication: **BarbosaSM**, Donner RV, 2016. Long-term changes in the seasonality of Baltic sea-level. Tellus A 68, 30540

Publication: **BarbosaSM**, Gouveia S, Scotto MG, Alonso AM, 2016. Wavelet-Based Clustering of Sea Level Records. Mathematical Geosciences, 48, 149-162

Relevant previous national/international projects or activities of the team members

Acronym: AnyPLACE

Title: Adaptable Platform for Active Services Exchange
Funding: H2020
Contract nº: 646580

AnyPLACE was an European project that developed a modular energy management system capable of monitoring and controlling local devices according to the preferences of end-users.
It allowed end-users to manage their energy expenditure and to become more efficient. Users are able to take part in new energy services and take advantage of dynamic price tariffs to minimise their energy costs.

Acronym: SafeCloud

Title: Secure and Resilient Cloud Architecture
Funding: H2020
Contract nº: 653884

SafeCloud re-architected cloud infrastructures to ensure that data transmission, storage, and processing can be:

- partitioned in multiple administrative domains that are unlikely to collude, so that sensitive data can be protected by design;
- entangled with inter-dependencies that make it impossible for any of the domains to tamper with its integrity.

Acronym: ScalABLE4.0

Title: Scalable automation for flexible production systems
Funding: H2020
Contract nº: 723658

ScalABLE4.0 aims to have effects on an European level, cooperating with other projects, influencers, and initiatives, like Industry 4.0 or European Robotics. Besides the advances in technology, ScalABLE4.0 will also contribute with new standards for the production lines of the future.

Acronym: STRONGMAR

Title: STRengthening MARritime Technology Research Center
Funding: H2020
Contract nº: 692427

Provide services and open access to the European academic and industrial communities.
Become a recognized maritime research asset.
Build a well-designed and coherent plan for knowledge transfer and exchange of best practices.

Acronym: EXPLORE

Title: Extended Exploitation Of European Research Projects Knowledge And Results
Funding: FP7
Contract nº: NA

The EXPLORE project aims at unleashing the full potential of the accumulated knowledge base at the European level through projects funded by the EC in the area of production technologies. It promotes the industrial exploitation of research results mainly by identifying new opportunities for demonstrators and pilot lines.

Relevant infrastructure, technical equipment

INESC TEC has an extensive research infrastructure adapted to its diversified areas of activity:

- Immersive and augmented reality laboratory;
- Microgeneration and Electrical Vehicles Laboratory, composed by simulators of smart networks and simulators of integration of electrical vehicles into the power grid;
- Robotics Laboratory, composed by tanks for testing submarine robotics and soccer field for testing football robots;
- Optoelectronics Laboratory, composed by optical and electronic test equipment for R&D in optical sensors and optical and broadband communications;
- Data processing infrastructure, composed by an extensive array of servers and dedicated software for big data research.

Third parties involved in the project

Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**Y**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

INESC TEC will use in-kind contributions provided by third parties free of charge (Article 12 of the General Model Grant Agreement).
INESC TEC shall allocate to this project human resources made available to it by Universidade do Porto (UP); Instituto Politécnico do Porto (IPP); Universidade de Trás-os-Montes e Alto Douro (UTAD); Universidade do Minho (UM), on the basis of a prior agreement, under whichUP; IPP; UTAD and UMmake available to INESC TEC a certain number of members of its staff, so that they may participate in the research and development of activities carried out by the latter and to be used at its management discretion.
The relation between INESC TEC and the universities was made explicit in its bylaws: “INESC Porto, to pursuit its objectives, will sign specific protocols with its Associates, in order to assure that the human and material resources will be provided by these Associates” (article 23, n. 1).

These protocols were effectively signed and are in use, until the present day.

For all contractual purposes, INESC TEC assumes full responsibility for the involvement of these researchers in the project, since they are members of its research team.

INOVA+ - INOVA (PT)

Participant number	3	Participant name	INOVA+	Participant short name	INOVA

Description

INOVA+ is one of the leading private European consultancy groups in innovation services, with offices in Portugal, Belgium, Poland and Germany. Since its creation in 1997, INOVA+ delivers highly specialized services in research exploitation, technology transfer, innovation management and ICT. It was established with the mission to provide world-class consultancy services in business innovation, such as innovation audits, benchmarking and exploitation of academic research, knowledge transfer, technology watch, business intelligence, technology development and marketing, and start-up of innovative firms. Some of these services are connected and financed through EU Programs related to Research and Technological Development and Innovation.

INOVA+ is internally divided into three main departments:

1. INOVA International – supporting the development and promotion of international innovative initiatives and frequently providing its services to the European Commission and related EU bodies;

2. INOVA Consultancy – supporting Portuguese organizations and cities in identifying opportunities of public financing to support and valorise R&D activities, and to promote RTD projects, at national and European level and to support to the creation of new companies of technological basis;

3. INOVA Digital – improving companies' competitiveness through research, development and technology transfer, by developing applied research and research services in the areas of health, transport, security and defence, industrial and business automation.

With currently over 60 employees in Portugal, a turnover of about 5 million Euros and a constant high profitability, INOVA+ has managed over 40 international innovation projects (with a role of the coordinator in several projects with large consortia and budgets of over 1 Million Euro). INOVA+ regularly supports the dissemination and exploitation of research funded projects, with in-house methodologies to analyse and evaluate market perspectives and needs.

Key Personnel

Gil GONÇALVES, Prof. (Male), Chief Scientific Officer of INOVA+, responsible for the technical and scientific coordination of the overall group. Assistant Professor at FEUP - Faculdade de Engenharia da Universidade do Porto since 1998 and researcher at Instituto de Sistemas e Robótica - Porto since 1994. He received the Engineering Degree in 1993, M. Sc. degree in Electrical and Computer Engineering in 1996, and the Ph.D. degree in Electrical and Computer Engineering in 2015, from the University of Porto. Researcher in over 35 National and European RTD projects and Principal Investigator (from INOVA+ or Porto University) in over 20. Gil has been the Principal Investigator (PI) in several research and innovation actions. He authored over 90 publications in areas related with innovation, ICT, eHealth, eGovernment, entrepreneurship, manufacturing, robotics and control.

Aurélie Delater, MSc (Female), holds a Degree from Sciences Po Toulouse, where she specialized in International Cooperation and Development, and a Master Degree in Project Management from Paris 12 University in France. She has worked in Brazil, for five years, at the Pontifical Catholic University of Rio de Janeiro, as the Project Coordinator of the Institute of International Relations. Aurélie is currently working within the International Cooperation Unit at INOVA+, where she dedicates to the management of

international grants, using her skills and experience in the elaboration of proposals for various European funding programmes (Erasmus+, tenders, H2020), implementation, coordination and reporting. She participates in various studies for the European Commission. Her areas of research and special interests are Creative Industries and Innovation.

Ana Costa, MSc (Female), project manager of the International Cooperation Unit, Ana Costa cooperates within the coordination and participation in EU and International funded projects, and the elaboration of proposals to submit to EU and International funding programmes within its several fields. In addition, Ana regularly identify opportunities within EU and International funding programmes and establish contacts with international organisations for the formation of consortia. These responsibilities include working on proposals and projects (both technical and financial parts). Previously, Ana Costa worked as a consultant and project manager in other consulting companies, working in the fields of environmental engineering and management, urban and strategic planning and funding programmes (national and transnational).
She holds a master's degree in Environmental Engineering from the College of Biotechnology, Catholic University of Portugal and she's also doing a PhD in Sociology, where she's being studying the impact of the social sciences in EU programmes.

Relevant publications, products or services (up to 5)

"Meeting the Challenge of Europe 2020 — The Transformative Power of Service Innovation" - Report by the Expert Panel on Service Innovation in the EU – co-author – Eurico Neves (INOVA+), 2011

Future innovation policy development actions: Options for future structure and implementation of EU innovation funding", Study for DG Enterprise, released June 2011

Relevant previous national/international projects or activities of the team members

Creative Tracks – supporting young entrepreneurs in the cultural and creative sectors across the world (DG EAC, 2015-2017).

Creative Tracks aims to connect young creative professionals worldwide with the purpose to encourage cross-cultural collaboration and foster creative entrepreneurship in fashion, media, ICT, music, animation, audio-visual, design, among other areas. It is expected that more than 70 networks of young creative entrepreneurs and associations worldwide will interact through Creative Tracks. The Creative Tracks project evolves around two interrelated components: i) The digital platform www.creativetracks.org that will enable networking, exchanges, partnership and cross-cultural collaboration amongst creative entrepreneurs, cultural associations, artists, investors, public authorities; ii) Several international events and workshops, including two large international conferences and seven thematic events (in Europe and outside Europe).

FWC Services for the Implementation of External AID 2018 (FWC SIEA 2018) / EuropeAid/138778/DH/SER/Multi: Lot 4: Human development and safety net [EuropeAid; 2018-2020]:

Within Lot 4, INOVA is leader of the theme Research and Innovation. Missions under this FWC can take place in any country, especially in developing countries.
https://ec.europa.eu/europeaid/sites/devco/files/en-b_-_ii_-_b_-_detailed_description_lots.1.pdf

Assistance to the Development and Running of the Marie Curie Alumni Association [EC – DG EAC; 2016-2020]:

Providing attractive and relevant services for the effective development, rapid expansion and smooth management of the alumni association in order to establish it as a relevant, value-generator community (>13000 members). Support and assistance to the chapters worldwide, including in Brazil and Argentina.

Relevant infrastructure, technical equipment

INOVA+s´ main premises with an area of over 700 m^2 are located in the Innovation Centre of Matosinhos, owned by the City Municipality, in the fast-growing business district in the Porto area, between the sea and the city park. Over 60 full-time staff of INOVA+ works in these premises which have full office equipment, including an R&D lab for ICT Health Applications. Furthermore, close to its main premises in Matosinhos, INOVA+ has set up an incubator for high-tech start-ups in its previous office space. Its own premises of over 300 m^2, four companies are already established, employing about 15 people. The premises are fully equipped for office, including computers, printers, and R&D equipment. The company also has offices in Brussels and in Lisbon that may be used for the project. In Brussels, the company occupies an ample central office just off Arts' Loi Metro station, 130 m^2, including a large meeting room and office space for 8 people, provided with all the modern office equipment. In Lisbon, the office is in Parque das Nações, an economic and cultural center, which concentrates different companies and services, privileged in terms of transport. The office has about 35 m^2 and is equipped with all the equipment necessary to its functioning, with a capacity for 4 employees.

Third parties involved in the project	
Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

Laboratório Nacional de Computação Científica - LNCC (BR)

Participant number	4	Participant name	Laboratório Nacional de Computação Científica	Participant short name	LNCC

Description

LNCC is the National Laboratory for Scientific Computing, a research unit of the Brazilian Ministry of Science, Technology, Innovations, and Communications (MCTIC), located in Petrópolis, RJ, Brazil. Typically, researchers at LNCC have backgrounds in engineering, computer science, physics, or mathematics, while some in biology. The mission of LNCC is to perform research, development, and human resource formation in Scientific Computing, in particular in the building and application of mathematical and computational models and methods to the solution of scientific and technological problems. In this context, the current strategic areas of research include modeling of complex systems; algorithms and numerical methods; systems, control, and signals; data science; and high performance computing. LNCC also performs applied research activities with different partner institutions in multidisciplinary topics, such as computational biology, medicine and healthcare assisted by computing, and computational modelling applied to the oil industry. Building upon these multidisciplinary activities, LNCC also runs a multidisciplinary graduate program (Masters and PhD) in computational modeling. Concerning the computational infrastructure, LNCC hosts the Santos Dumont Supercomputer (http://sdumont.lncc.br), the main high performance computing facility in Latin America dedicated to scientific purposes. The SDumont supercomputer is actually composed of different computing architectures that are available to the Brazilian scientific community. More information about LNCC can be found at http://www.lncc.br.

Key Personnel

Artur Ziviani, PhD (male), is a Senior Researcher at the Data Extreme Lab (DEXL) of the National Laboratory for Scientific Computing (LNCC), a research unit of the Brazilian Ministry of Science, Technology, and Innovation (MCTI) located in Petrópolis, Brazil. In 2003, he received a Ph.D. in Computer Science at the LIP6 laboratory of the Université Pierre et Marie Curie (Paris 6) - Sorbonne Universités, Paris, France, where he has also been a lecturer during the 2003-2004 academic year. He received a B.Sc. degree in Electronics Engineering in 1998 and a M.Sc. degree in Electrical Engineering (emphasis in Computer Networking) in 1999, both from the Federal University of Rio de Janeiro (UFRJ), Brazil. From September 2008 to January 2009, he was a visiting researcher at INRIA in France. He serves on the Editorial Board of IEEE Communications Surveys & Tutorials and Computer Networks (Elsevier). His current research interests include network characterization, modeling, and analysis; network science; data science; and interdisciplinary research with a networking approach. He is a Member of SBC (the Brazilian Computer Society), an Affiliated Member of the Brazilian Academy of Sciences (2013-2017), and a Senior Member of both IEEE and ACM. *Ref: http://www.lncc.br/~ziviani*

Fabio Porto, PhD (male), holds a PhD and MSc in Informatics from PUC-Rio, in 2001 and 1997, respectively. During the PhD,has worked at INRIA-Rocquencourt, France, under the supervision of Prof. Patrick Valduriez. From 2004 and 2009, he was a Senior Researcher at EPFL, Switzerland, in the group of Prof. Stefano Spaccapietra. Since 2009, he has been a Researcher at LNCC, in Brazil, where coordinates the Data Extreme Lab (DEXL). The main research interests include, but are not restricted to: Scientific Data Management; Parallel and Distributed Query Processing; Data modeling and Representation. At the DEXL Lab, the focus is on developing high-level research and software on Big Data management and processing.

Luiz Gadelha, PhD (male), has a B.Sc. degree in mathmatics from the University of Brasilia (UnB) in 1997,

a M.Sc. degree in Computer Science from the University of Brasilia (UnB) in 2000, and a Ph.D in Systems and Computational Engineering from the Federal University of Rio de Janeiro (UFRJ) in 2012. Currently, he is a Senior Technologist at the Data Extreme Lab (DEXL) of the National Laboratory for Scientific Computing (LNCC). He has experience in the areas of managing scientific data, high performance computing, and computational security, acting mainly in the following topics: data provenience, parallel and distributed scientific workflows, bioinformatics, and biodiversity informatics.

Relevant publications, products or services (up to 5)

Publication: explores recent advances in the area called biodiversity informatics (or e-Biodiversity) by covering each stage of the life cycle of biodiversity data (planning, collection, certification, description, preservation, discovery, integration, and analysis), discussing its methodologies, tools, and challenges on managing and analyzing this kind of data.

L. Gadelha, P. C. de Siracusa, **A. Ziviani,** et al., **A Survey of e-Biodiversity: Concepts, Practices, and Challenges**, 41 pages, September 2018. Under submission, but available as a preprint on arXiv: https://arxiv.org/abs/1810.00224

Publication: A MultiAspect Graph (MAG) is a graph generalization able to model time-varying graphs, multilayer networks, and other complex high-order network structures that may be useful to modeling and analyzing data from the project that are structured in a complex networked way.

K. Wehmuth, E. Fleury, **A. Ziviani, On MultiAspect Graphs**, Theoretical Computer Science (TCS), Elsevier, vol. 651, pp. 50-61, October 2016.

Publication: The paper investigates efficient techniques to map coordinate values in numerical simulations to evenly distributed cells in array chunks with the use of equi-depth histograms and space-filling curves.

H. Lustosa, **F. Porto**, P. Blanco, P. Valduriez, **Database System Support of Simulation Data**, Proceedings of the VLDB Endowment, v. 9, p. 1329-1340, 2016.

Publication: proposes a four-level architecture that aims at integrating, publishing and retrieving ecological data making use of linked data.

A M. C. Moura**, F. Porto,** V. Vidal, R. P. Magalhães, M. Maia, M. Poltosi, D. Palazzi, **A semantic integration approach to publish and retrieve ecological data**. International Journal of Web Information Systems, v. 11, p. 87-119, 2015.

Publication: investigates the biodiversity and health status of a particular seamount in the Atlantic Ocean (the Vitória-Trindade Seamount Chain - VTC) in order to detect potential conservation problems, via benthic community and fish surveys, metagenomic and water chemistry analyses, and water microbial abundance estimations, thus performing a kind of study that directly correlates with some of the project goals.

P. Meirelles et al**. (L. Gadelha** is a co-author), **Baseline Assessment of Mesophotic Reefs of the Vitória-Trindade Seamount Chain Based on Water Quality, Microbial Diversity, Benthic Cover and Fish Biomass Data**. Plos One, v. 10, p. e0130084, 2015.

Relevant previous national/international projects or activities of the team members

Acronym: HPC4E
Title: High Performance Computing for Energy
Funding: H2020-EU.2.1.1.
Contract nº: 689772

The HPC4E project aims to apply the new exascale HPC techniques to energy industry simulations, customizing them, and going beyond the state-of-the-art in the required HPC exascale simulations for different energy sources.

Relevant infrastructure, technical equipment

LNCC hosts the Santos Dumont supercomputer (http://sdumont.lncc.br). This computational infrastructure is the main high performance computing facility in Latin America dedicated to scientific purposes. The SDumont supercomputer is actually composed of different computing architectures that are available to the

Brazilian scientific community.	
Third parties involved in the project	
Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**Y**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

Proposed third party: General Coordination for Oceans, Antarctica and Geosciences of the Brazilian Ministry of Science, Technology, Innovation and Communications.

This third party could be invited to participate in the general discussions and workshops that should happen along the different stages of the project. Such participation may bring the official scientific view and input of the Brazilian government on the topics related to the project.

Barcelona Supercomputing Center - BSC (SP)

Participant number	5	Participant name	Barcelona Supercomputing Center	Participant short name	BSC

Description

The Barcelona Supercomputing Center-Centro Nacional de Supercomputación (BSC, https://www.bsc.es) combines unique high performance computing facilities and in-house top research departments on Computer, Life, and Earth sciences, and in computational applications in science and engineering. It is the main provider of public supercomputing services in Spain, coordinating the Red Española de Supercomputación and representing Spain in international initiatives such as PRACE. The Earth Sciences (ES) Department is structured around four groups with more than 90 researchers and support staff. It is a highly productive scientific entity that has published more than 160 research peer-reviewed articles over the last 5 years, many in high-impact journals. Within the ES Department, the Climate Prediction Group (CPG) aims at developing regional and global climate prediction capability for time scales ranging from a few weeks to a few decades into the future.The CPG also performs regular assessments of the system's predictive capacity and compares it with other operational and quasi-operational systems in the world. The CPG has a long experience in seasonal to decadal climate prediction, which has been reflected in its active participation to several European FP7 and H2020 projects (see the list below). The CPG currently participates to 16 European projects and 6 national projects. The group has been expanding its research activities on prediction, and is contributing to the development of the CMIP6 version of EC-Earth, which now provides climate simulations underpinning the IPCC (Intergovernmental Panel on Climate Change) upcoming 6th Assessment Report. The group strongly contributes to DCPP (Decadal Climate Prediction Project), and C4MIP (Coupled Climate-Carbon Cycle Model Intercomparison Project). In addition, members of the group are currently testing several techniques to produce optimal initial conditions for decadal predictions of climate and global carbon cycle.

The BSC will contribute to this project with its expertise in climate change, climate prediction and climate impacts. In particular, BSC will promote research to use the multitude of identified data from ECLECTIC with the aim to better understand the impact of disruptive climate events on coastal ecosystems and communities, including fishing and aquaculture, and provide expertise on expected climate changes over the coming decades to enable suitable adaptation ensuring resilience for coastal communities.

Key Personnel

Markus Donat, PhD (Male) is an expert in studying climate extremes and climate variability, mechanisms driving or amplifying extremes, and climate model evaluation focussing on their fidelity to simulate climate extremes. He is now co-leader of the Climate Prediction group at the BSC, after holding Postdoctoral and Senior Research Fellow positions over the past eight years at the University of New South Wales in Sydney (Australia). Markus has published more than 65 peer-reviewed journal articles since 2010, eight of these in Nature-family journals, and has contributed to the IPCC 5th Assessment Report. He is Associated Investigator with the Australian Research Council Centre of Excellence for Climate Extremes, and Associated expert with the World Meteorological Organization (WMO) Commission of Climatology (CCl) Expert Team on Data Development and Stewardship. Based on his achievements he has been awarded the World Climate Research Program (WCRP) / Global Climate Observing System (GCOS) International Data Prize 2017. Dr Markus Donat will be the main contact and repsponsible of this proposal at BSC.

Pablo Ortega, PhD (Male) is co-leader of climate prediction group at the BSC, and has a broad expertise in

decadal climate variability and predictability in the North Atlantic region. His research background includes the development of new ocean initialization strategies, the realization and analysis of perfect model experiments, and the investigation of physical mechanisms and climate impacts through the development of process-based studies. He supervises the work of 8 postdocs and 1 PhD student and is currently leading the BSC activities in two H2020 projects (APPLICATE, INTAROS), a Spanish national project (DANAE), and a Belgian project (PARAMOUR).

Francisco Doblas-Reyes, Prof. (Male) is the Director of Earth Science Department at BSC. He is involved in the development of the EC-Earth ESM, and has been since its inception. Prof. Doblas-Reyes is a worldwide expert in the development of seasonal-to-decadal climate prediction systems and has more than 20 years of experience in weather and climate modelling, climate prediction, as well as the development of climate services. For his work in seasonal forecasting, he was awarded the Norbert Gerbier-MUMM International Award from the UN World Meteorological Organization (WMO) in 2006. He serves in several panels of the World Climate Research Programme (WCRP) and the World Weather Research Programme (WWRP) under the UN WMO (among them the steering group of the Polar Prediction Project), is a member of the European Network for Earth System modelling HPC Task Force and has participated in numerous national and European FP6, FP7 and H2020 projects. Currently, Prof. Doblas-Reyes is the principal investigator (PI) or co-investigator in 6 H2020 European projects, was coordinator of the FP7 collaborative SPECS-308378 project, he is also leading two COPERNICUS actions (C3S512 and C3S 51 QA3SEAS) and supervises numerous postdoctoral scientists and software engineers. He has won 50 Million hours of computing time for the High Resolution Ensemble Climate Modeling project through the PRACE network. He is a lead author of the IPCC and member of the steering group of the Polar Prediction Project. Overall, Prof. Doblas-Reyes has authored and co-authored more than 120 peer-reviewed papers on climate modeling and prediction, as well as climate services, and currently has a total of 6737 citations with a h-index of 41.

Raffaele Bernardello, PhD (Male), holds a PhD in Oceanography from the Universitat Politecnica de Catalunya-BarcelonaTech. He is a senior researcher in the climate prediction group at BSC where he coordinates all the activities related to the global carbon cycle. His expertise and research interests are in the broad context of the interactions between climate dynamics and global carbon cycle. As part of his Marie-Curie fellowship, Dr. Bernardello worked on the assessment of the decadal predictability of biogeochemical properties in the upwelling systems of the Atlantic Ocean. He has participated to 3 national projects (Spain: OAMMS-CTM2008-03983 UK: BATMAN-NE/K015613/1 USA: NOAA-NA10OAR4320092), one FP6 project (SESAME-36949) and one ESA project (ENVISAT-A0290). At present, Dr. Bernardello supervises one postdoctoral researcher and he is the PI of a Spanish project (DeCUSO-CGL2017-84493-R) dedicated at investigating the decadal predictability of carbon uptake in the Southern Ocean, serving at the same time,as an external collaborator in the UK project CUSTARD with focus on Southern Ocean biogeochemical processes.

Relevant publications, products or services (up to 5)

Publication: showed for the **first time** that numerical forecast systems have a higher predictivie capacity in comparison to traditional simple alternatives, such as climatological and persistence forecasts.

Caron, L.-P., L. Hermanson, A. Dobbin, J. Imbers, L. Lledó and G.A. Vecchi (2018). How skilful are the multi-annual forecasts of Atlantic hurricane activity?, Bulletin of the American Meteorological Society, 99, 403-413, doi:10.1175/BAMS-D-17-0025.1

Publication: links ecosystem data to ocean temperature extremes and identifies where ecosystems are at large at threat to climate change.

Smale et al (including **M. Donat**) Marine heatwaves threaten global biodiversity and the provision of ecosystem services. Nature Climate Change (published online), doi: s41558-019-0412-1.

Website: hosted and maintained at the BSC, gathers the most recent tropical cyclone forecasts from different forecasting centers around the world.

Seasonal Cyclone Predictions website: http://seasonalhurricanepredictions.bsc.es/

BSC has **been endorsed** as the global producing center of decadal forecasts by the **World Meteorological Organisation (WMO)** – the BSC assumes the leading role in the line of production and analysis of decadal climate predictions.

Copernicus contract: QA4Seas - Quality Assessment for Strategies for Multi-model Seasonal Forecasts. The completed Copernicus contract aimed at developing a strategy for the evaluation and quality control of the multi-model seasonal forecasts provided by the Copernicus Climate Change Service to respond to the needs identified among a wide range of stakeholders.

Relevant previous national/international projects or activities of the team members

Acronym: EUCP
Title: European Climate Prediction system
Funding: 12,999,515€
Contract nº: 776613

The overarching objective of the European Climate Prediction (EUCP) system is to develop an innovative European regional ensemble climate prediction system based on a new generation of improved and typically higher-resolution climate models, covering timescales from seasons to decades initialised with observations, and designed to support practical and strategic climate adaptation and mitigation decision-taking on local, national and global scales.

Acronym: ClimatEurope
Title: European Climate Observations, Modelling and Services - 2
Funding: 2,994,372.50€
Contract nº: 689029

Coordinate and support Europe's knowledge base to enable better management of climate-related risks and opportunities, thereby creating greater social and economic value.

Acronym: IS-ENES3
Title: Infrastructure for the European Network for Earth System modelling - Phase 3
Funding: 9,802,612.50€
Contract nº: 824084

IS-ENES3 will deliver the third phase of the distributed e-infrastructure of the European Network for Earth System Modelling (ENES).

Acronym: PREFACE
Title: nhancing prediction of tropical Atlantic climate and its impacts
Funding: 8,999,433€
Contract nº: 603521

Model based prediction of Tropical Atlantic climate and its global socio-economic impacts are highly uncertain on all timescales. PREFACE takes on the challenge to redress this situation through the first comprehensiveassessment of the Tropical Atlantic.

Acronym:TRIATLAS
Title: Tropical and South Atlantic - climate-based marine ecosystem prediction for sustainable management
Funding:9,663,462.50€
Contract nº: 817578

Enable sustainable management of human activities in the Atlantic Ocean as a whole, by closing knowledge gaps on the status of the South and Tropical Atlantic marine ecosystem and developing a framework for predicting its future changes, from months to decades.

Relevant infrastructure, technical equipment
BSC is the National Supercomputing Facility of Spain and hosts a range of high-performance computing (HPC) systems including MareNostrum IV the new supercomputer, will be 12.4 times more powerful than the current MareNostrum 3 that will have a performance capacity of 13, 7 Petaflop/s. The general purpose element, will have 48 racks with more than 3,400 nodes with next generation Intel Xeon processors and a central memory of 390 Terabytes. The second element of MareNostrum 4 will be formed of clusters of three different technologies that will be added and updated as they become available. These are technologies currently being developed in the US and Japan to accelerate the arrival of the new generation of pre-exascale supercomputers. The BSC is a key element of and coordinates the Spanish Supercomputing Network, which is the main framework for granting competitive HPC time to Spanish research institutions. Furthermore, BSC-CNS is one of six hosting nodes in France, Germany, Italy and Spain that form the core of the Partnership for Advanced Computing in Europe (PRACE) network. PRACE provides competitive computing time on world-class supercomputers to researchers in the 25 European member countries.

Third parties involved in the project	
Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**Y**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

BSC applies a Third Party modality with the **Institut Català de Recerca i Estudis Avançats (ICREA)**. It is a foundation supported by the Catalan Government and guided by a Board of Trustees. ICREA works hand in hand with Catalan universities and research centres to integrate ICREA research professors in the Catalan research system. ICREA offers permanent, tenured positions to researchers from all over the world to come and work in Catalonia. Over the years these positions have become a synonym of global academic excellence.

As third party ICREA is making its resources available to the beneficiary under Article12 of the Grant Agreement - Use of in-kind contributions provided by third parties free of charge. According to this situation, ICREA will not carry out any part of the work and just lends resources to the beneficiary. These resources are directly used by the beneficiary, the work is performed in its premises and there is no reimbursement by the beneficiary to the third party. The third party makes available resources (dedicated time of Prof. Francisco J. Doblas-Reyes, who is employed by ICREA) to the beneficiary BSC, which does not reimburse the cost to the third party, but which charges the costs of the third party as an eligible cost of the project. Its costs will be declared by the beneficiary in its Form C but must be recorded in the accounts of the third party. The salary of Francisco J. Doblas-Reyes is shared by both institutions: 34.03% comes from BSC and 68.97% from ICREA.

Oceanic Platform of the Canary Islands - PLOCAN (SP)

Participant number	6	Participant name	Oceanic Platform of the Canary Islands	Participant short name	PLOCAN

Description

The Oceanic Platform of the Canary Islands (PLOCAN) is a joint initiative between the Spanish and the Canary Islands governments, with the support of the European Regional Development Fund. It represents a multipurpose service centre with land-based and sea-based novel infrastructures to support research, technology development an innovation in the marine and maritime sector. Its mission is to promote long-term observation and sustainability of the ocean, providing a cost-effective combination of services, such as observatories, test site, base for underwater vehicles, training and innovation hub. The PLOCAN hosts a mobile observing system comprising a fleet of underwater and surface gliders and ROVs able to cover missions for long periods in coastal and open ocean areas.

PLOCAN contributes with the hosting of equipment, devices and marine technologies, for testing, validation and demonstration activities and/or any other necessary experiments in its marine test site. The housing services imply rights and regulated conditions to use the facilities and its 23Km^2 of marine test area, as well as associated services such as transport, installation, maintenance, monitoring, decommissioning, permits, accommodation, and insurance among others.

Associated to its Marine Test Site PLOCAN main facilities and services also include:

(a) Fixed Offshore platform: located both close to the coast and near of the edge of the continental shelf, in shallow waters. It has a net surface around 2,500 m^2 of research capacity, space for laboratories, instrumented containers and capacity to accommodate permanently researchers distributed in a multi-storey building with a main dock of 1,000 m^2.

(b) The European Station for Time series in the Ocean, Canary Islands (ESTOC): a multidisciplinary mooring located in open ocean in the Central Eastern Atlantic at 29º10'N, 15º30'W with over 15 years of continuous surface and mid-water meteorological, physical and biogeochemical monitoring.

As for training, PLOCAN organises high specialisation training courses with the aim to provide knowledge and practical skills in the use of facilities and devices for working in and accessing the deep ocean.

PLOCAN's staff and managing team have an extensive experience in the preparation, development and management of large projects in the marine and maritime sectors. Since 2012 they have participated in more than 40 national and EU funded projects both as coordinators and partners.

Due to its extensive network and experience in a broad range of activites and geographic contexts, PLOCAN will be leader of WP1 - Network mobilisation and modality of cooperation mechanism.

Key Personnel

Octavio Llinás, PhD (male) is the Director of PLOCAN. He has dedicated more than 20 years to marine research in the area of physical and chemical oceanography. He has been director of the Canary Islands

Institute of Marine Sciences for over a decade, Director of Planning and Development at the Canary Islands Government and General Director of the Spanish Institute of Oceanography. He has also been the main researcher in dozens of national projects and Group Coordinator in several international projects including some of the FP7.

Marimar Villagarcía, PhD (female) is Head of the Integrated Observatory of PLOCAN since 2013. She received a Master of Sciences at the University of Newfoundland (Canada) and a doctorate at the University of Las Palmas (Spain) in the field of Marine Sciences. She is a Certified PRINCE2™ Practitioner and holds a Proficiency of Cambridge in English; she has also experience in ocean field research on large research vessels since 1997, mainly related to the European Station for Time-series in the Ocean, Canary islands (ESTOC). She has worked as researcher and R&D project manager in several international projects in the fields of oceanography, biodiversity and ocean energy granted through the IV, V, VI,VII FP and H2020 EC programs (e.g. FIXO3, NETBIOME, OCEANERA-NET, BIODIVERSA3, ATLANTOS, FORWARD and AANCHOOR).

Ayoze Castro Alonso, PhD (male) is the head of the Innovation Unit at PLOCAN. He holds a PhD in Veterinary Sciences and after seven years of research in veterinary pathology, he moved to a R&D Project Management position. He has been Deputy project coordinator of the FP7 NeXOS project, and FLOTANT (H2020) project and involved in the management of many other EU projects at PLOCAN such us (TROPOS, ATLANTOS, FORWARD, SWARMs, MARCET, etc.). He has a wide experience in the management of national and international projects and funds (FP7, Horizon 2020, Eurostars, ERA-NETs, CIP, others). He is certified PRINCE2® Practitioner (PRojects IN Controlled Environments).

Josefina Loustau Gómez, BSc (female) is a Biologist specialized in Biochemistry. She developed the first part of her career in the field of environmental impact and landscape architecture. Since 2006 she has been working in the field of marine science and technology (R&D). In the Oceanic Platform of the Canary Islands she gives technical support to the general management department (CEO). Among others, she has managed projects related to R& D in the Macaronesian region (MaRes , CANAUTIC, SmartBlue, and RIS3NET). She is responsible for quality assurance in the organization and also for data protection. She has experience and participates in outreach and communication activities. She has the Prince2 Practitioner credit on project management.

Paula Pacheco, BSc (female) has a Bachelor in Law and Executive Master in Business Administration. She is Head of the Financial, Administrative and Personnel Area of PLOCAN.

Relevant publications, products or services (up to 5)

Publication: Marqués, M.; Franco, C.; Viera, J.; Lorenzo, A.; Morales, T.; Vega, D.; Barrera, C.; Rueda, M.J.; **LLinás, O.** (2013). Unmanned ocean vehicles: improving the marine monitoring strategy in the Macaronesian region. MARTECH 2013, Girona, Spain

Publication: E. Delory, **M. Villagarcia**, C. Barrera, D. Vega, L. Cardona, M.D. Gelado, A. Cianca, M.J. Rueda and **O. Llinás**, "The ESTOC station: an infrastructure for the continuous monitoring of open-ocean variables, including acidification", Eur-Oceans Hot Topic Conference - A Changing Ocean, 2013.

Publication: Alcaraz Real-Arce, D., Quevedo, E., Barrera, C., Hernández-Brito, J., **Llinás, O**., Barbero F., Morais A. 2016, "A New Integrated Border Security Approach: The FP7 PERSEUS Project", Marine Technology Society Journal, 50(4), p. 14-25.

Publication: Andres Cianca, Eduardo Caudet, Daura Vega, Carlos Barrera and Joaquin Hernandez Brito, "Improving the knowledge about dissolved oxygen and chlorophyll variability at ESTOC by using autonomous vehicles", Ocean Sciences meeting, 2016

Publication: Oonagh McMeel, Hans Pirlet, Jan-Bart Calewaert, Erik Buch, **Ayoze Castro**, Rogerio Chumbinho, Dina Eparkhina, Patrick Gorringe, Ann-Katrien Lescrauwaet, Belén Martín Míguez, Glenn Nolan, Jonathan Williams, "Use and sharing of marine observations and data by industry - Good practice guide" Columbus Project.

Relevant previous national/international projects or activities of the team members

ATLANTOS: "Optimizing and Enhancing the Integrated Atlantic Ocean OBSERVING SYSTEM".

H2020-BG-2014-2. EU. 2015-2019. GA- 633211-2

The overarching objective of AtlantOS is to achieve a transition from a loosely-coordinated set of existing ocean observing activities to a sustainable, efficient, and fit-for-purpose Integrated Atlantic Ocean Observing System (IAOOS), by defining requirements and systems design, improving the readiness of observing networks and data systems, and engaging stakeholders around the Atlantic; and leaving a legacy and strengthened contribution to the Global Ocean Observing System (GOOS) and the Global Earth Observation System of Systems (GEOSS). 4.2. STRATEGIC OBJECTIVES

COLUMBUS: "Monitoring, Managing and Transferring Marine and Maritime Knowledge for Sustainable Blue Growth".

H2020-BG-2014-1. EU. 2015-2018. GA- 652690

The COLUMBUS project is composed of 27 partners from 12 different Europeans countries. It aims to ensure that applicable knowledge outputs generated through EC-funded science and technology research can be transferred effectively to advance the governance of the marine and maritime sectors while improving competitiveness of European companies and unlocking the potential of the oceans to create future jobs and economic growth in Europe (Blue Growth).

AORAC-SA: "Atlantic Ocean Research Alliance Support Action".

H2020-BG-2014-1. EU. 2015-2020. GA- 652677

The Atlantic Ocean Research Alliance Coordination and Support Action (AORAC-SA) is designed to provide scientific, technical and logistical support to the European Commission in developing and implementing TransAtlantic Marine Research Cooperation between the European Union, the United States of America and Canada. The Coordination and Support Action (CSA) is carried out within the framework of the Atlantic Ocean Research Alliance (AORA) as outlined in the Galway Statement on Atlantic Ocean Cooperation.

AANCHOR: "All Atlantic Cooperation for Ocean Research and Innovation".

H2020-BG-2018-2020. EU. 2018-2022. GA – 818395

The main ambition of AANChOR is to promote the implementation of the South Atlantic Research and Innovation Flagship initiative and the Belém Statement (BS), signed by the EU, Brazil and South Africa in 2017, to upscale research and innovation cooperation within the Atlantic basin, from Antarctica to the Arctic. AANChOR will pursue this ambition by providing the EC and the BS Implementation Committee (to be established by signatories of the Statement) with a framework to identify and contribute to the implementation

of concrete long-term collaborative activities, reinforcing international cooperation between Europe and tropical and South Atlantic countries and connecting with the challenges and research needs of the North Atlantic Ocean.

FORWARD: "Unlocking the research & innovation potential of EU's outermost regions".

H2020-SwafS-22. EU. 2019-2021. GA

The FORWARD project involves the regional governments of nine outermost regions (Azores, Canary islands, Guadalupe, Guyane, la Reunión, Madeira, Martinique, Mayotte, Saint-Martin), as well as the main R&I actors in each region. FORWARD will carry out an initial analysis of R&I ecosystems and based on the results, it will develop a common strategy and thematic action plans, capacity building activities and networking, as well as activities to link research and policy development. Based on a multi-stakeholder, multidisciplinary and inter-sectoral approach, the project will also support the collaboration and networking between different representatives (academia, industry, government and civil society) at regional and EU level.

Relevant infrastructure, technical equipment

The PLOCAN disposes of the infrastructures and the equipment necessary to support the activities undertaken under the project. PLOCAN offers land-based and sea-based novel facilities to promote long-term observation and sustainability of the ocean, providing a cost-effective combination of services. PLOCAN is able to provide access and multidisciplinary logistic support through its onshore facility and two marine test sites (Taliarte harbor and offshore). The facility and test sites are located in the North-East coast of Gran Canaria Island, and the platform is integrated in the offshore test site.

The Test Site encompasses the publicly-owned area of sea and land off the north east coast of Gran Canaria. It is an area of approximately 23 Km^2, reaching maximum depths of 600metres. The authorization was approved by the Spanish Council of Ministers on March/2014 and is supported by the Coastal Law 22/1988. Its objective is to drive marine-maritime R+D+I and it is used for testing and monitoring all kinds of scientific and technological activity in the marine environment, including marine energy devices, fitted out for observing meteorological and oceanographic parameters. It will have its own electricity and communications infrastructure to feed power and data from the devices on trial at the test bed, back to shore. The general objective of the test bed is to provide companies and research groups with a chance to demonstrate how the technologies they develop work before marketing them. In 2018 PLOCAN will have available a 15MW subsea electrical and communication infrastructure that will allow connection of marine technologies testing offshore during their demo stage. It consists of two cabled berths installed at 40m water depth, ideally located on the PLOCAN Test site, approximately 2km offshore. It will be a hub between marine devices and national grid on land. It consists of two submarine medium voltage hybrid cables (13.2kVac cable for the evacuation of electricity, optical fibre for communications and 400Vcc cable for feeding auxiliary equipments).

PLOCAN test site is under the support and control of **PLOCAN fixed Platform.** It is located both, close to the coast and near of the edge of the continental shelf, in shallow waters. It has a net surface around 2,500 m^2 of research capacity, space for laboratories, instrumented containers and capacity to accommodate permanently researchers distributed in a multi-storey building with a main dock of 1,000 m^2. Furthermore, the test site has the support of the Onshore headquarter, located in Taliarte next to the Port of Taliarte, about 8km from the airport and 20km from the city of Las Palmas GC and the Ports of Las Palmas. The area has meeting rooms, assembly rooms, workshops, operation control rooms, submarine vehicle workshops and calibration tank for submarine vehicles, laboratories (wet and dry), classrooms, offices and multi-purpose rooms as well glider laboratory of 120m^2.

PLOCAN offers also a **complete Ocean and Coastal Observatory**. The mission of the PLOCAN multidisciplinary observatory is to contribute to the monitoring and modelling of coastal, regional and global ocean phenomena and ecosystems at increasing geographical scales, from shallow waters to great ocean depths and the monitoring of the environmental impact and mitigation effort for all scientific and technical experiments, such as instrumentation testing, deep-sea operations and training activities from the platform.

Finally, one of the objectives is to offer a large yet continuously controlled area for testing deep observing systems, offering instrumentation benchmarking, calibration and validation services.	
Third parties involved in the project	
Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

National Autonomous University of Mexico - UNAM (MX)

Participant number	7	Participant name	National Autonomous University of Mexico	Participant short name	UNAM

Description

The UNAM Institute of Engineering (II-UNAM) is Mexico's most productive research center in diverse branches of engineering. Our community is made up of 93 researchers, 95 academic technicians, 409 scholarship holders at the bachelor's, master's and doctoral levels and 184 clerical workers. Its facilities include 13 buildings on the UNAM campus, in Mexico City, comprising 20,000 m^2 of laboratories, cubicles, common areas, and an auditorium.

The Institute's policy has always been to conduct research aimed at solving general engineering problems, to collaborate with government and private entities to improve the national engineering practice, and to render engineering services to different sectors of our society. The Institute has focused on disseminating the result of its research projects to contribute to the national development and the well being of society.

Therefore, some projects are financed with UNAM funds and others are financed through research contracts executed with private companies and corporations, at their request. Consequently, the II-UNAM is widely recognized.

Regarding research infrastructure, the Institute has several experimental facilities and specifically related to costal areas two wave flumes are available. Being the most important Mexican Univesity, the relation between UNAM and Latinamerican institutions is wide spread.

Key Personnel

Rodolfo Silva, Prof. (Male), born in México on the 30 August 1965 holds the place of Senior Researcher and Professor of Civil Engineering at the Autonomous National University of Mexico in the Engineering Institute. Graduated with a PhD on Coastal and Port Engineering (1991-1995) from the University of Cantabria, Spain "Cum Laude"; and with a master on Coastal and Oceanographic Engineering (1990-199l) from the University of Cantabria, Spain. Is currently the Head of the coastal and oceanographic group at UNAM since 1995, and the Head of the Mexican Centre for Ocean Renewable Energies since 2016. From his work, has published as author and co-author: 105 journal publications, 25 books, 27 book chapters, 274 conference publications as extended papers and 36 as abstract papers, 4 oceanographic "Risk Atlas" and procedures and more than 100 technical reports (mainly for industry) and 2 patents.

Edgar Mendoza, PhD (Male), was born on the 1976. Graduated with a PhD in Hydraulic Engineering at UNAM in 2007. From his work, has published as author and co-author more than 50 publications on international journals, and other more than 150 including books, book chapters and national and international conferences. His research topics and interests include: coastal processes, numerical modelling of wave conditions and structures for coastal defense. He has supervised more than 50 undergraduate, Master and PhD thesis. He is coauthor of standards, procedures and manuals written for private and public institutions and has participated in more than 40 research and consulting projects regarding marine conditions characterization, coastal infrastructure and coastal processes. He is the responsible of two wave flumes at the Engineering Institute where experimental work is held on beach morphology, seabed-waves interaction, watertable effects

on beach stability, sediment transport and many others including the testing and design o WECs. He is also responsible of the coastal and oceanic field works performed at the Engineering Institute.
Relevant publications, products or services (up to 5)
Publication: Several scientific publications regarding sustainable marine energy conversion Service: Advisory to the Interamerican Development Bank on Green Infrastructure coastal protection Patent: Design of eco-friendly modular elements for artificial reef construction Project: Head of the Mexican Center for Marine Energy Research and Development
Relevant previous national/international projects or activities of the team members
Not available
Relevant infrastructure, technical equipment
Not available
Third parties involved in the project

Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

The National Research Council Institute of Marine Sciences – CNR-ISMAR

Participant number	8	Participant name	The National Research Council Institute of Marine Sciences	Participant short name	CNR-ISMAR

Description

The National Research Council of Italy is the main public research performing organization in Italy, reporting directly to the Ministry of the Education, University and Research. CNR mission is to carry out, promote, spread, transfer and improve research activities in the main sectors of knowledge growth and of its applications for the scientific, technological, economic and social development. It is organized in 7 Departments coordinating the activities of more than 100 Institutes in the main fields of knowledge, from life sciences to engineering, from earth system science to humanities, and managing the research infrastructures.

The CNR Department of Earth System Science and Environmental Technologies (CNR-DTA, www.dta.cnr.it) in one of them. Its mission is to support and coordinate the research activities carried out by its 12 associated Institutes dealing with environmental sciences, including climate change, and the development of innovative monitoring technologies. DTA is involved, with its institutes, in many Research Infrastructures (RIs) (AnaEE, **DANUBIUS-RI**, Euro-ARGO, EMSO, ACTRIS, EPOS, ICOS, LifeWatch, LTER-Europe, SIOS, SeaDataNet) and initiatives on data infrastructures and data interoperability (e.g. OpenAire, INSPIRE). The DTA is also the coordinator of BLUEMED initiative.

The Institute of Marine Sciences of CNR (CNR-ISMAR), in particular, involves 5 geographic branches (Veneto, Friuli, Emilia, Liguria, Lazio). The institute deals with marine science, focusing its activities on the marine, coastal and transitional environments, from geological, biological and physical perspectives and, in the last decade, it has developed great experience in using multidisciplinary tools, modern measurement and sampling techniques, and developing modelling skills. In this context, CNR-ISMAR has been chosen as Leading Laboratory of the ESFRI DANUBIUS-RI Modelling Node and as co-leader of the Architecture WP within the DANUBIUS Preparatory Phase CSA for constructing the pan-european RI for River-Sea Systems studies. The institute is also involved in the activities of Euro-ARGO, EMSO, LifeWatch, e-LTER. In the last years, CNR-ISMAR has developed competences in the fields of data management and interoperable spatial data infrastructures in different EU and national projects (ADRIPLAN, RITMARE, CoCoNet, PORTODIMARE, SeaDataNet, JERICO-Next, EMODNET) and it is involved in the Copernicus Marine Environment Monitoring Service (CMEMS) and in Copernicus Climate C3S_512 project. In 2019 CNR-ISMAR was also involved in the H2020 INFRAEOSC ENVRI-FAIR project on Environmental Research Infrastructures building FAIR services accessible for society, innovation and research.

Key Personnel

Georg Umgiesser, PhD (Male), is a Senior Researcher at CNR-ISMAR Venice since 2001. The research interests include lagoons and the coastal zone through numerical modelling. He is the coordinator of Italian activities within DANUBIUS-RI, the RI dedicated to studies of large river–sea systems. He also holds an associated position as lead researcher at Klaipeda University, Lithuania. He is a member of the ETWCH-4 expert team of JCOMM on Waves and Coastal Hazards and is responsible ISMAR in the MONGOOS (ex MOON) network.

Francesca De Pascalis, PhD (Female), Researcher at CNR-ISMAR since 2004, being involved in many projects. Her activities are focused on hydrodynamic modelling, hydrodynamical processes in the coastal environments and studies of anthropic in natural impacts on lagoons and coastal areas. She is one of the Italian ambassadors of the IOI-International Ocean Institute and she is now involved, as key personnel, in the DANUBIUS Preparatory Phase CSA, for the construction of DANUBIUS-RI.

Debora Bellafiore, PhD (Female), is a researcher at the CNR-ISMAR. Specialized in physical oceanography, shallow water processes, coastal and interaction processes. Involved in the climate change community, investigating effects of globally expected variations on local scale both in national and international projects. Involved in the ESFRI DANUBIUS-RI. She is one of the Italian ambassadors of the IOI-International Ocean Institute.

Relevant publications, products or services (up to 5)

Service: distribution service of the COPERNICUS CMEMS marine data with global ocean coverage.

Product: SHYFEM Hydrodynamic model
https://sites.google.com/site/shyfem/
https://github.com/SHYFEM-model
https://doi.org/10.5281/zenodo.1311736

Product/publication: Madricardo, F. et al. High resolution multibeam and hydrodynamic datasets of tidal channels and inlets of the Venice Lagoon. Sci. Data 4:170121 doi: 10.1038/sdata.2017.121 (2017).

Product: Mediterranean Marine Data (MMD) database of oceanographic measurements related to the water column, whichprovides vertical profiles and time series, analyzed and subjected to quality controlaccording to specific IOC-UNESCO. Collaboration with Sea-Data-Net 2.

Relevant previous national/international projects or activities of the team members

Acronym: BLUEMED
Title: Coordination of marine and maritime research and innovation activities in the Mediterranea)
Funding: EU
Contract nº: Grant agreement n. 727453

Coordination of marine and maritime research and innovation activities in the Mediterranean.

Acronym: DANUBIUS-PP
Title: DANUBIUS-Preparatory Phase
Funding: EU
Contract nº: Grant agreement n. 739562

Preparatory phase for the pan-european research infrastructure Danubius–RI “the international centre for advanced studies on river-sea systems.”

Acronym: JERICO-NEXT
Title: Joint European Research Infrastructure network for Coastal Observatory – Novel European eXpertise for coastal observaTories
Funding: EU
Contract nº: Grant agreement n. 654410

Joint European Research Infrastructure network for Coastal Observatory – Novel European eXpertise for coastal observaTories.

Acronym: ENVRI-FAIR
Title: Environmental Research Infrastructures building FAIR services accessible for society, innovation and research
Funding: EU
Contract nº: Grant agreement n. 824068

The overarching goal is that at the end of the proposed project, all participating RIs of the ESFRI Cluster of Environmental Research Infrastructures (ENVRI) have built a set of FAIR data services which enhances the efficiency and productivity of researchers, supports innovation, enables data- and knowledge-based decisions

and connects the ENVRI Cluster to the EOSC. wider European policies.

Acronym: EVER-EST
Title:European Virtual Environment for Research - Earth Science Themes: a solution.
Funding: EU
Contract nº: Grant agreement n. 674907

The EVER-EST project will enhance Research and Capacity Building in the Earth Science (ES) domain, by providing a generic Service Oriented-based Architecture Virtual Research Environment (VRE) tailored to the needs of the ES community.

Relevant infrastructure, technical equipment

The Institute of Marine Sciences of Italian National Research Council (ISMAR) facilities include oceanographic buoys and long-term stations for the continuous monitoring of the meteorological and physical chemical parameters in the water column and at the air-water and bottom interface. Currently, are operating in the Northern Adriatic Sea, several fixed platforms built and managed by the National Research Council: the oceanographic platform 'Acqua Alta' in front of Venice Lagoon, the coastal buoys S1 and E1 in front of the Po River Delta, the Paloma (Gulf of Trieste) and Senigallia buoys. CNR-ISMAR is member of the European Fleet of Research Vessels (the EUROFLEETS 1 & 2 IAs) ESFRI I3 JERICO (Joint European Research Infrastructure network for Coastal Observatories). Some of the observational facilities are part of national and international networks like Hydro Change network (CIESM), MARS Network (The European Network of Marine Research Institutes and Stations), Permanent Service for Mean Sea Level (PSMSL, Liverpool), Global Sea Level Observing System (GLOSS) Network, International Observation Network for Ocean Acidification, Global Sea Surface Carbon Observing System, Italian Network for Coasts (RIC). CNR-ISMAR is involved in the Copernicus Marine Environment Monitoring Service (CMEMS) and in Copernicus Climate C3S_512 project.

Third parties involved in the project

Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

Euro-mediterranean Center on Climate Change – CMCC (IT)

Participant number	9	Participant name	Euro-mediterranean Center on Climate Change	Participant short name	CMCC

Description

The Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici (Fondazione CMCC) is a non-profit research institution. CMCC's mission is to investigate and model our climate system and its interactions with society to provide reliable, rigorous, and timely scientific results, which will in turn stimulate sustainable growth, protect the environment, and develop science driven adaptation and mitigation policies in a changing climate. CMCC collaborates with experienced scientists, economists, and technicians, which work together in order to provide full analyses of cli-mate impacts on various systems such as agriculture, ecosystems, coasts, water resources, health, and economics. CMCC also supports pol-icymakers in setting and assessing costs, mitigation, and adaptation poli-cies. CMCC benefits from the extensive applied research experience of its members and institutional partners: Istituto Nazionale di Geofisica e Vulcanologia (INGV); Università del Salento; Centro Italiano di Ricerche Aerospaziali (CIRA S.c.p.a.); Università Ca' Foscari Venezia; Università di Sassari, Università della Tuscia, Politecnico di Milano; Resources for the Future.

CMCC research activities are distributed among nine research divisions that share different knowledge and skills in the field of climate science: Advanced Scientific Computing (ASC) Division; Climate Simulation and Prediction (CSP) Division; Economic analysis of Climate Impacts and Pol-icy (ECIP) Division; Impacts on Agriculture, Forests and Ecosystem Ser-vices (IAFES) Division; Ocean modeling and Data Assimilation (ODA) Di-vision; Ocean Predictions and Applications (OPA) Division; Risk Assess-ment and Adaptation Strategies (RAAS) Division; Regional Models and geo-Hydrological Impacts (REHMI) Division; Sustainable Earth Modeling and Economics (SEME) Division.

CMCC acquired portfolio of research projects includes 318 funded pro-jects: 37 funded projects in FP6 and FP7, 53 funded projects in H2020 and 228 funded projects under other EU and international research grants. In about a half of the implemented projects, CMCC acted as the coordinator.

The OPA Division, involved in the project, deals with the development of models and tools for interdisciplinary research on marine operational forecasting, on the interactions between coastal areas and the open ocean, on the development of services and applications for all maritime economy sectors, including transport, off-shore, security and manage-ment of coastal areas and marine resources, in the context of climate change adaptation problems. The team in the current project proposal represent a combined effort of scientist experts in ocean modelling and forecasting and technical software engineers, with an aim to developed an operational tool for decision support, physical (meteo-ocean) hazard mapping and forecasting. The team is expert on innovation, data gather-ing and management, observation, modelling and forecasting, web and mobile applications, decision support tools in the oceanographic field. The team is in charge of the Copernicus Mediterranean Ocean Forecast-ing Service, and the Black Sea one. Moreover, the team is in charge of the CMCC Global Ocean forecasting system and has developed very high resolution forecasting products for coastal and off-shore sites. The Team is specialized in the provision of ocean products to maritime au-thorities, shipping, oil and gas production facilities. The team has also developed oil spill forecasting, ship routing, search and rescue tools and services for supporting maritime safety activities.

Key Personnel

Giovanni Coppini, PhD (Male), is the Director of the Ocean Predictions and Applications Division of

CMCC. Since May 2015, he is the CMEMS Med-MFC Leader and Deputy Leader of the CMEMS Black-Sea MFC. He holds a PhD in Environmental Sciences from University of Bologna. From 2003 to 2012, he has worked at INGV in the operational oceanography division where he was responsible for environmental applications. He has several papers in peer reviewed Journals on operational oceanographic systems and applications. He co-chairs MONGOOS (Mediterranean Oceanography Network for the Global Ocean Observing System) and he is the Emergency Response Office manager the MONGOOS-REMPEC agreement. He is a member of the JCOMM Expert Team on Maritime Safety and Security (ETMSS-4). He has been contributing to the development of decision support systems such as Sea Conditions (www.sea-conditions.com), the ship routng VISIR (www.visir.com), oil spill forecasting systems called WITOIL (www.witoil.com) and the search and rescue support system called OCEANSAR (www.ocean-sar.com).

Sinoma Masina, PhD (Female), hold a PhD from Princeton University, she is the Director of the Ocean Modelling and Data Assimilation Division of the Euro-Mediterranean Centre on Climate Change Foundation. Her scientific interests focus on the understanding of the ocean role in the global climatic system. She has more than 20 years of experience in global ocean modelling and data assimilation and more than 100 scientific papers in refereed journals. She has been involved in several EU project (among the latest MyOcean and CRESCENDO) and more recently in the COPERNICUS - Marine Environment Monitoring Service (CMEMS) and Climate Change Service (C3S) for the provision of NEMO based global ocean re-analyses. She teaches “Ocean Dynamics” at the Università di Venezia Ca' Foscari, in the “Science and Management of Climate Change” Ph.D. Pro-gramme and is member of the Faculty Board since 2006. She is member of the CLIVAR Panel on Ocean Model Development, representative at the “Commissione Oceanografica Italiana” (Italian IOC-UNESCO), and member of the Scientific Council of Mercator Ocean International (MOI) since June 2018.

Silvio Gualdi, PhD (Male), is the Director of CMCC Climate Simulation and Pre-diction Division. He is expert in climate change research and provision of climate services. Main domain of competence is simulation and analysis of climate variability from intraseasonal to multi-decadal timescales and climate change. He participated to several EU funded projects (e.g. SIN-TEX, DEMETER, ENSEMBLES, CIRCE, COMBINE, CLIMRUN, FUME, CLI-MAFRICA, ORIENTGATE). He is editor of the International Journal of Climatology and Member of the MedCLIVAR Programme and of the In-ternational Scientific Steering Committee of HyMex (Hydrological Cycle in the Mediterranean Experiment). He is Member of the Faculty Board of the PhD Programme on “Science and Management of Climate Change”, University of Venice Ca’ Foscari. He holds a Ph.D in Geophysics.

Paola Mercogliano, MSc (Female), is a senior researcher with more than 12 years of research experience. She works at CMCC as head of the REgional Model and geo-Hydrological Impacts Division and at C.I.R.A. (Italian Aerospace Research Centre) as Head of research laboratory “Meteo System & Instrumentation Laboratory”. Her main areas of competence include development and use of statistical and dynamical methods and tools for regionalization of the climatic signal up to urban areas, qualitative and quantitative analysis of the variation of landslide, flood and hydrological drought hazards induced by climate change, development of GIS tools for post processing and visualization of observed and simulated atmospherical data.

She leads a research group (12-14 staff members) working on development of tools for observation and nowcasting of weather hazards event using multi-sensor satellite and multi-platform in- situ observations, development and optimization of limited area NWP model, regional climate models, Stability Analyses, Hydrologic & Hydraulic models. Furthermore the research group is expert in the development of numerical simulation chains, including climate and impact models, for the quantitative evaluation of the climate change soil impact. Paola participated in several European and other international projects. Among these projects there is the FP7 INTACT, CLUVA, IS-ENES, ALICIA, PERSEUS, NEXTDATA and ORIENTGATE. Paola holds a Master degree in Physics from the University of Naples “Federico II” and a Master in Computational Fluid Dynamics For Industrial Application And University Research at the Research Centre for advanced studies of Sardinia (C.R.S.4).

Relevant publications, products or services (up to 5)

Publication: Svitlana P. Lyubartseva, **Coppini Giovanni**, Rita Lecci, Emanuela Clement. Tracking plastics in the Mediterranean: 2D Lagrangian model. February 2018 Marine Pollution Bulletin 129(1):151–162. DOI10.1016/j.marpolbul.2018.02.019

Publication: **Coppini**, G., Marra, P., Lecci, R., Pinardi, N., Cretì, S., Scalas, M., Tedesco, L., D'Anca, A., Fazioli, L., Olita, A., Turrisi, G., Palazzo, C., Aloisio, G., Fiore, S., Bonaduce, A., Kumkar, Y., Ciliberti, S. A., Federico, I., Mannarini, G., **Agostini, P.,** Bonarelli, R., Martinelli, S., Verri, G., Lusito, L., Rollo, D., Cavallo, A., Tumolo, A., Monacizzo, T., Spagnulo, M., Sorgente, R., Cucco, A., Quattrocchi, G., Tonani, M., Drudi, M., Panzera, L., Navarra, A., and Negro, G.: SeaConditions: a web and mobile service for safer professional and recreational activities in the Mediterranean Sea, Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-176, 2016

Publication: Masina S., A. Storto, N. Ferry, M. Valdivieso, K. Haines, M. Balmaseda, H. Zuo, M. Drevillon, L. Parent, 2017. An ensemble of eddy-permitting global ocean reanalyses from the MyOcean pro-ject. Climate Dynamics, 49 (3), pp.813-841

Publication: Storto, A., Masina, S., Simoncelli, S. et al. The added value of the multi-system spread information for ocean heat content and steric sea lev-el investigations in the CMEMS GREP ensemble reanalysis product. Clim Dyn (2018)

Publication: Iturbide M., Herrera S., Rianna G., Mercogliano P., Gutiérrez G.M. Assessing variations of extreme indices inducing weather-hazards on critical infrastructures over Europe—the INTACT framework 2018, Climatic Change

Relevant previous national/international projects or activities of the team members

Acronym: Copernicus Med MFC
Title: Copernicus Marine Enviromenta Monitoring Service – Mediterranean Forecasting Center
Funding: European Com-mission ghrough Mercator Ocean International
Contract nº: 74-CMEMS-MFC-MED

The aim is to provide regular information about the physical state of the ocean and marine ecosystems for the Mediterranean Sea.
Continuous production of data about the Mediterranean Sea including: analysis, 10 days forecasts, specific and targeted products and reanalysis.
The products describe waves, currents, temperature, salinity, sea level and pelagic biogeochemistry.

Acronym: BlueHealth
Title: Linking Up Environment, Health and Climate for Inter-sector Health Promotion and Disease Prevention in a Rapidly Changing Environment
Funding: Europan Commis-sion
Contract nº: Grant agreement 666773

CMCC acts as climate data provider (high resolution data – 10 km – based on EURO-CORDEX EUR11 Regional Climate Model data). Climate parameters, comfort indexes and extreme events following different future scenarios (RCP4.5 and RCP8.5) are provided in a multimodel framework. CMCC also participate in the development of a Decision Support Tool (DST) for stakeholders based on possible future scenarios.

Acronym: IMMERSE
Title: Improving Models for Marine EnviRonment Services
Funding: European Com-mission
Contract nº: Grant agreement 821926

The aim is to deliver innovative developments to NEMO and at its interfaces for future CMEMS Earth

Observations and computing platforms and to prepare the exploitation of the next generation of high resolution observing networks within CMEMS systems and in detailed, downstream modelling systems.

Acronym: Climateurope
Title: Linking science and society
Funding: European Com-mission
Contract nº: Grant agreement 689029

The aim is to improve the resilience of European society to climate change, and mitigation of the risk of dangerous climate change through improved sharing of best practices, increased efficiency, reduced fragmentation and the creation of synergies with international research and innovation (R&I) programmes.

Acronym: CLARA
Title: Climate forecast enabled knowledge services
Funding: European Com-mission
Contract nº: Grant agreement 730482

The aim is to facilitate the development of new and enhancement of existing climate services by drawing upon the recent seasonal to decadal projections and projections developed under the Copernicus Climate Change Services (C3S); and to analyse and demonstrate the economic and social value unleashed by climate forecast enabled climate services.

Relevant infrastructure, technical equipment

The CMCC Supercomputing Center (SCC) is situated inside the Campus “Ecotekne” in Lecce and it provides dedicated technological infrastructure and computational capabilities. The main facility of the Supercom-puting Center is the Athena system based on 482 IBM iDataPlex com-pute nodes and with 160TFlops capability. Each node is a dual Intel E5-2670 processor working at 2,6 GHz. The computing architecture com-prises an IBM dx360M4 server cluster, an InfiniBand interconnection network and a storage subsystem. The huge amount of data produced by CMCC researchers is managed by a DLM system based on a hierarchical storage management solution. At the beginning of 2019, CMCC will update its supercomputing facilities by deploying new high performance computing, storage and network systems. The new supercomputer will be equipped with 12.528 cores Intel Xeon Gold 6154 at 3GHz and will be able to reach a computing capability of 1.200 TFlops. The new storage systems will provide about 10PB of total capacity across different storage tiers.

Third parties involved in the project

Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties? (Y/N)	**N**
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

The European Centre for information on Marine Science and Technology – EUROCEAN (PT)

Participant number	10	Participant name	The European Centre for information on Marine Science and Technology	Participant short name	EUROCEAN

Description

EurOcean is an independent, scientific, nongovernmental organisations whose aim is to develop information exchange and develop information products in the field of marine sciences and technologies between a wide range of governmental and non-governmental bodies. The EurOcean Foundation is presently composed of 13 Members, which are key European marine research and funding organisations as well as groups focussed on marine outreach and Blue Growth development.

Focus activities include development and maintenance of InfoBases of marine relevant information and knowledge. We have developed comprehensive experience in communications & dissemination of information on marine research activities and projects, through participation in numerous FP7 and H2020 projects.

Key Personnel

Sérgio Bryton, PhD (Male), Executive- Director of the EurOcean Centre. The role includes project and financial management, definition and implementation of work plans and the coordination of EurOcean's participation in H2020 projects. Prior to EurOcean (2019), Sérgio Bryton has been a researcher, manager, lecturer, engineer and mariner in prestigious organizations such as the European Commission Joint Research Centre, the Portuguese Directorate-General for Maritime Policy, NOVA Information Management School and the Portuguese Navy.

Cristina Costa (Female), Office Coordinator and a EurOcean Project Manager since 2009. She has extensive knowledge on European funding mechanisms and has actively coordinated participation in several H2020 and FP7 European projects such as COLUMBUS, MarineTT, STAGES, Sea for Society, EUROFLEETS and recently, as the leader of EurOcean´s con-tributions to H2020 AANChOR, which is focussed on supporting the implementation of the Belém Statement. She is also responsible for Knowledge Management activities within the organisation and has led on activities related to communications and outreach in a number of projects.

Sandra Sá, BSc (Female), EurOcean Project Manager since 2009. She is responsible for the Marine Research infrastructures activities within the organisation and has extensive knowledge on European project management currently steering EurOcean's contribution to H2020 EurofleetsPlus; CatRIS; INTAROS; Marinets and MARINA projects. Sandra is graduated in Biology and Geology and specialised in Marine and Coastal Zones Sciences.

Relevant publications, products or services (up to 5)

Service: MARINA Knowledge **Sharing Platform** (https://www.marinaproject.eu/) - An all-inclusive platform catalysing and organising the convergence of already existing networks, communities, online platforms and services to support the direct engagement of researchers, Civil Society Organisations (CSOs), citizens, industry stakeholders, policy and decision makers, research funders and communicators for improving Responsible Research and Innovation (RRI).

Service: Marine Research Infrastructures Infobase (http://rid.eurocean.org) - A comprehensive catalogue of more than 900 existing facilities in Europe and beyond, which are dedicated to marine sciences broad range of activities, including *in situ* observing systems, research vessels and under-water equipment, is a robust tool in the identification of relevant infrastructures to support the identification of priorities for regional and bi-regional cooperation based.

Service: EurOcean Marine Knowledge Gate (http://www.kg.eurocean.org) - An innovative tool that provides an inventory of over 6,000 European (13 programmes) and national funded Marine Science and Technology Projects and their Knowledge Outputs or results, a powerful tool in the identification and mapping of and coordination and communication among marine science funded projects and associated results, tools and information sources to support the identification of priorities for regional and bi-regional cooperation based.

Service: EurOcean and CPMR Co-Organised Supporting Marine Research Knowledge Exchange for Blue Growth European Parliament Event (http://www.eurocean.org/np4/263.html) - An event aimed to explore how methods, processes and engagement in knowledge exchange between different stakeholders concerned with Blue Growth could be improved.

Service: Sea For Society Factsheets - SFS Consultation Process (engage stakeholders, citizens and young people on the six key Issues of the project for the identification of challenges and barriers to achieving a Blue Society) and, Mobilisation Phase (transfer knowledge, mobilise and empower stakeholders and civil society at local and European levels) factsheets as examples of successful processes of promoting increased awareness and engagement amongst stakeholders and the general public with relevant lessons.

Relevant previous national/international projects or activities of the team members

Acronym: AANChOR
Title: All AtlaNtic Cooperation for Ocean Re-search and innovation
Funding:H2020 - SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy
Contract nº: 818395

The aim of this H2020 project is to support the implementation of the Belém Statement by bringing together and systematically connect all relevant actors around the Atlantic Ocean to identify concrete collaborative research and innovation activities with a long-lasting potential and impact across a range of key areas, thus promoting the set-up of the All Atlantic Ocean Research Community.

Acronym: MARINA
Title: Marine Knowledge Sharing Platform for Federating Responsible Research and Innovation Communities
Funding:H2020 – Science With and for Society
Contract nº: 710566

This H2020 project aims to create an all-inclusive Knowledge Sharing Platform (KSP) in order to facilitate the cooperation of every-one involved in marine issues and the effective integration of the citizens' ideas. The online platform aimed at collecting and organizing all existing networks, communities and other platforms on marine issues; engaging researchers, organizations from civil society, citizens, decision makers and industrial stakeholders, thus improving Responsible Research and Innovation (RRI). To achieve the above MARINA has developed Mobilisation and Mutual Learning (MML) workshop bringing together everyone who is interested in developing successful innovations, useful solutions and effective policies in the marine field.

Acronym: NetBiome-CSA

Title: Strengthening European research cooperation for smart and sustainable management of tropical and subtropical biodiversity in outermost regions and overseas countries and territories
Funding: FP7-Environment
Contract nº: 603710

Aiming at mobilising stakeholders and citizens to put the ocean at the centre of their lives. Public Engagement in Research (PER) is at the core of the process. SFS mobilized marine researchers, Civil Society Organisations - CSO's and individual citizens and youth in mutual learning, open dialogue to debate key societal questions related with the Ocean, extract crosscutting issues and propose challenge-driven solutions fostering sustainable management of marine eco-system services by European citizens.

Acronym: EUROFLEETS Plus
Title: An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities.
Funding: H2020 – Research Infrastrucutres
Contract nº: 824077

EurofleetsPlus will facilitate open access to an integrated and advanced research vessel fleet, designed to meet the evolving and challenging needs of the user community. European and international researchers from academia and industry will be able to apply for several access programmes, through a single-entry system. EurofleetsPlus will prioritise support for research on sustainable, clean and healthy oceans, linking with existing ocean observation infrastructures, and support innovation through working closely with industry.

Acronym: RISC-KIT
Title: Resilience-Increasing Strategies for Coasts - toolKIT
Funding:FP7
Contract nº: 603458

The project aimed to develop methods, tools and management approaches to reduce risk and increase resilience to low-frequency, high-impact hydro-meteorological events in the coastal zone. These products enhanced forecasting, prediction and early warning capabilities, improved the assessment of long-term coastal risk and optimised the mix of prevention, mitigation and preparedness measures.

Relevant infrastructure, technical equipment

EurOcean Marine Knowledge Gate InfoBase (http://www.kg.eurocean.org) an innovative tool that provides an inventory of over 6,000 European (13 programmes) and national funded Marine Science and Technology Projects and their Knowledge Outputs or results. EurOcean_KG is publicly available and is updated on a constant basis. The EurOcean_KG is a powerful tool in the identification and mapping of and coordination and communication among marine science funded projects and associated results, tools and information sources to support the identification of priorities for regional and bi-regional cooperation based.

Marine Research Infrastructures Infobase (http://rid.eurocean.org) a comprehensive catalogue of more than 900 existing facilities in Europe which are dedicated to marine sciences broad range of activities, including *in situ* observing systems, research vessels and underwater equipment. It provides information on the characteristics for each facility, as well as the links and contacts to access the further details provided by the operator. EurOcean_RID is publicly available and is updated on a constant basis. EurOcean_RID is a robust tool in the identification of relevant infrastructures to support the identification of priorities for regional and bi-regional cooperation based.

Third parties involved in the project

Does the participant plan to subcontract certain tasks? (Y/N)	**N**
Does the participant envisage that part of its work is performed by linked third parties?	**N**

(Y/N)	
Does the participant envisage the use of contributions in kind provided by third parties? (Y/N)	**N**
Does the participant envisage that part of the work is performed by International Partners? (Y/N)	**N**

5. ETHICS AND SECURITY

5.1 Ethics

No critical ethical issues have been raised in the self-assessment ethics table.

In fact, this project will deal with privately available raw information, result-oriented data processing and exchange, and act upon informed “customers” and study participants. During the feasibility study only a small group of well-informed staff will interact with each other. Beyond the study duration, GLOBAT seeks (and is limited) to work over existing suppliers-to-customers relations, thus not facing any ethics issue whatsoever in any of these types of activities (upstream or downstream of our algorithms or apps).

Nevertheless, the PROTECTION OF PERSONAL DATA self-assessment highlighted the need for processing and protecting personal data to the point that its impacts on the individuals are limited. Despite the fact that only the project team (team members), the associated pilot testing hosts (contact persons) will exchange basic personal contact information to allow the team to meet, exchange emails and relevant documentation, the GLOBAT team will implement the best practices to ensure data protection. Namely, all will respect the EU Directive 95/46/EC and limit the personal data collection to (i) informed individuals, (ii) authorized retrieval, (iii) confidential treatment, storage and use of such data.

Same will occur with the data being eventually collected from the existing documents to be provided by the customer, to implement in the case study/demonstrator. It will be stored, processed and made available under restricted access and limited to the sole purpose of developing and/or validating the project scope (documents, hardware and/or software). External dissemination of such data (raw data or processed data) will respect some principles: (i) prior knowledge and authorization from the source owners and, whenever needed/possible, (ii) anonymized and normalized values shall be used.

Regarding possible data misuse (talking about private commercial info), standard basic principles of fit-for-purpose, need-to-know and general privacy rules will apply.

5.2 Security

Please indicate if your action will involve:

- Activities or results raising security issues: NO
- 'EU-classified information' as background or results: NO

ANNEX – LETTERS OF SUPPORT AND COMMITMENT

Advisory Board Members:

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

SCIENCE
INSTITUTE OF MARINE SCIENCE

20th March 2019.

EXPRESSION OF INTEREST

Project title: ECLECTIC - EU-CELAC Research Infrastructure Biodiversity Climate Network

Topic: INFRASUPP-01-2018-2019/ Horizon 2020 Programme

This is to confirm my commitment to become an official member of the **Advisory Board of the ECLECTIC Project**. I am convinced that the project will play an important role in fostering the cooperation of research infrastructures in the EU-CELAC region. ECLECTIC aims at acquiring data, in order to leverage data-driven research and policy development on the effects of climate change and biodiversity. As a member of the **Advisory Board of the ECLECTIC Project**, I will support the consortium in implementation of the proposal now presented, specifically by providing (personally or virtually, by email or skype) non-binding advice regarding the project developments and its results. In return, the project commits to disseminate my name as an Advisory Board member of the project. Additionally, it has been agreed that the participation in the project's events will be upon invitation and all expenses related to travel and accommodation will be supported by the consortium.

Yours sincerely,

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Professor, Dr Mark J. Costello,
Institute of Marine Science, University of Auckland, Auckland 1142, New Zealand.

March 20, 2019

EXPRESSION OF INTEREST

Project title: ECLECTIC - EU-CELAC Research Infrastructure Biodiversity Climate Network

Topic: INFRASUPP-01-2018-2019/ Horizon 2020 Programme

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Sincerely yours,

Dr. Frank Muller-Karger
University of South Florida
College of Marine Science, University of South Florida
140 7th Ave. South, St Petersburg, FL 33701
Phones: (727) 553-3335 Office / (727) 553-1186 Lab.
e-mail/www: << carib@usf.edu>>/<< http://imars.usf.edu>

Centro Interdisciplinar
de Investigação
Marinha e Ambiental

EXPRESSION OF INTEREST

Project title: ECLECTIC - EU-CELAC Research Infrastructure Biodiversity Climate Network

Topic: INFRASUPP-01-2018-2019/ Horizon 2020 Programme

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Sincerely yours,

Isabel de Sousa Pinto

_____

(Signature)

Isabel Sousa Pinto
Board of Directors
Head of Aquatic Biodiversity Group

Support Letters:

19 March 2019

Subject: Support letter for ECLECTIC project

To Whom It May Concern:

REFERENCE: CALL "H2020-INFRASUPP-2018-2020" | TOPIC "Policy and International Cooperation Measures for Research Infrastructures | INFRASUPP-01-2018-2019"

We are writing to hereby express the interest of the GEO Blue Planet Initiative (https://geoblueplanet.org/) and offer our support in the project proposal **ECLECTIC** coordinated by the **Atlantic International Research Centre – Air Centre,** under the call "H2020-INFRASUPP-2018-2020" topic "Policy and International Cooperation Measures for Research Infrastructures | INFRASUPP-01-2018-2019".

The Group on Earth Observations "Oceans and Society: Blue Planet" Initiative (GEO Blue Planet) is a network of ocean and coastal-observers, data and product providers, social scientists and representatives from a variety of stakeholder groups, including international and regional organizations, NGOs, national institutes, universities and government agencies. GEO Blue Planet's mission is to advance and exploit synergies among the many observational programmes devoted to ocean and coastal waters; to improve engagement with a variety of stakeholders for enhancing the timeliness, quality and range of information delivered; and to raise awareness of the societal benefits of ocean observations at the public and policy levels. The initiative promotes, partners with and leads working groups, projects, communities and programmes that support the GEO Blue Planet mission.

We look forward to receiving information about the developments of this project and to establish future cooperation links in the research and innovation field with **EU-CELAC Research Infrastructures for Biodiversity and Climate Change (ECLECTIC)**, keeping track of the studies, consultations and disseminations activities.

We confirm that the GEO Blue Planet will engage fully with the researtch and help raise the profile of the researach within the regions. During the lifetime of the ECLECTIC programme, we will remain involved by:

(1) providing knowledge, inputs and suggestions to the definition of cooperation reasearch roadmaps and other documents through attending technical and community-building gatherings and remotely held training workshops;

(2) helping in the dissemination of ECLECTIC results and materials to appropriate end-users by listing the project as a "GEO Blue Planet promoted activity" on our website, as well as promoting the project to other regional contacts where relevant.;

(3) providing access to the research infrastructures of GEO Blue Planet for activities related to biodiversity and climate change in the EU and CELAC regions, to provide open access to

data, services, and other resources related to climate change and biodiversity across Europe, Caribbean, and Latin America.

Additionally, we will attend and collaborate on bi-annual or annual conferences, and provide input into the implementations of pilot project demonstrations and dedicated workshops to further the mission of this project. We also understand that in return, ECLECTIC will contribute to GEO Blue Planet, for example, by presenting at a GEO Blue Planet Steering Committee Meeting or GEO Blue Planet Symposium, or by providing a new article for the GEO Blue Planet website.

For this reason, we express our willingness to support the with **EU-CELAC Research Infrastructures for Biodiversity and Climate Change (ECLECTIC)**, given the interest that the project objectives, results and impacts, have to our organisation.

We wish you success with your proposal, and look forward to hearing the outcome.

Yours sincerely,

Sophie Seeyave
Co-Chair
GEO Blue Planet

Paul DiGiacomo
Co-Chair
GEO Blue Planet

March 20, 2019

EXPRESSION OF INTEREST

REFERENCE: CALL "H2020-INFRASUPP-2018-2020" | TOPIC "Policy and International Cooperation Measures for Research Infrastructures | INFRASUPP-01-2018-2019"

I, the undersigned, hereby express the interest of the Institute for Marine Remote Sensing at the University of South Florida, USA, in the project **ECLECTIC** coordinated by the **Atlantic International Research Centre – Air Centre,** under the call "H2020-INFRASUPP-2018-2020" topic "Policy and International Cooperation Measures for Research Infrastructures | INFRASUPP-01-2018-2019".

We look further to receive information about the developments of this project and to establish future cooperation links in the research and innovation field with "MBON" (the Marine Biodiversity Observation Network of GEO BON), keeping track of the studies, consultations and disseminations activities.

We engage ourselves to collaborate, according to our possibilities, with the coordinator in the following activities:

- providing knowledge, inputs and suggestions to the definition of cooperation reasearch roadmaps and other documents;
- helping in the dissemination of the project results and materials;
- providing access to the research infraestructures of [organisation name] for activities related with the project as considered pertinent by both parts.

For this reason, we express our willingness to support "ECLECTIC", given the interest that the project objectives, results and impacts, have to our organisation.

Sincerely yours,

Dr. Frank Muller-Karger
University of South Florida
College of Marine Science, University of South Florida
140 7th Ave. South, St Petersburg, FL 33701
Phones: (727) 553-3335 Office / (727) 553-1186 Lab.
e-mail/www: << carib@usf.edu>>/<< http://imars.usf.edu>

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