



EUROPEAN COMMISSION
Directorate-General for Research and Innovation
Research & Industrial Infrastructures



ANNEX 1 (part A)

Coordination and support action

NUMBER — 871140 — EU-CELAC ResInfra

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1.1. The project summary

Project Number ¹	871140	Project Acronym ²	EU-CELAC ResInfra
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One form per project

General information

Project title ³	Towards a new EU-CELAC partnership in Research Infrastructures
Starting date ⁴	The first day of the month after the signature by the Commission
Duration in months ⁵	30
Call (part) identifier ⁶	H2020-INFRA-SUPP-2019-1
Topic	INFRA-SUPP-01-2018-2019 Policy and international cooperation measures for research infrastructures
Fixed EC Keywords	
Free keywords	International Cooperation; Research Infrastructures; EU-CELAC cooperation; Political dialogue

Abstract ⁷

EU-CELAC ResInfra will identify a number of CELAC RIs that may be considered eligible for the construction of a bi-regional collaboration. This will be carried out through the definition of minimal key requirements these RIs would need to develop in the coming years.

To this aim, the Project will build on the prioritisation results of the EU-CELAC Senior Official Meeting on Science and Technology (SOM) Research Infrastructure (RI) Working Group (WG) and, more specifically, will take as a reference the mapping exercises developed in previous EU funded projects.

In addition, EU-CELAC ResInfra will develop a map of National and Regional Research Infrastructure policies, and their corresponding strategies and plans, included funding mechanisms that might be used to support the construction and operation of future EU-CELAC RIs.

Finally, EU-CELAC ResInfra will use all the results and information obtained for drafting a Sustainability Plan, which will be presented to the EU-CELAC RI WG for discussion and endorsement. The Plan will include specific actions to support the bi-regional collaboration in a mid-term perspective. The objective is to design specific variable geometry instruments for co-funding RIs of common interest, and to design measures that pursue the strengthening of the bi-regional RI cooperation, seeking to maximise the impact of the RI collaboration in the construction of the EU-CELAC Common Research Area.

In parallel, the Project aims to show the feasibility of the EU-CELAC RI collaboration through existing examples thanks to the development of four pilots in different scientific domains that are linked to some existing Research Infrastructures: INSTRUCT-ERIC, LIFEWATCH-ERIC, E-RIHS and RICAP.

1.2. List of Beneficiaries

Project Number ¹	871140	Project Acronym ²	EU-CELAC ResInfra
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List of Beneficiaries

No	Name	Short name	Country	Project entry month ⁸	Project exit month
1	MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES	MICINN	Spain	1	30
2	MINISTERIO DE EDUCACION Y CULTURA	MEC	Uruguay	1	30
3	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DLR	Germany	1	30
4	AGENCIA ESTATAL DE INVESTIGACION	AEI	Spain	1	30
5	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	FCT	Portugal	1	30
6	SECRETARIA DE GOBIERNO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN PRODUCTIVA	SGCTEIP	Argentina	1	30
7	CONSIGLIO NAZIONALE DELLE RICERCHE	CNR	Italy	1	30
8	CONSEJO NACIONAL DE CIENCIA Y TECNOLOGIA	CONACYT	Mexico	1	30
9	Teknologian tutkimuskeskus VTT Oy	VTT	Finland	1	30
10	COMISION NACIONAL DE INVESTIGACION CIENTIFICA Y TECNOLOGICA	CONICYT	Chile	1	30
11	SOCIEDADE PORTUGUESA DE INOVACAO CONSULTADORA EMPRESARIAL E FOMENTO DA INOVACAO SA	SPI	Portugal	1	30
12	CONSELHO NACIONAL DE DESENVOLVIMENTO CIENTIFICO E TECNOLOGICO	CNPQ	Brazil	1	30
13	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	UEFISCDI	Romania	1	30
14	Ministerio de Ciencia y Tecnologia de Costa Rica	MICITT	Costa Rica	1	30
15	DEPARTAMENTO ADMINISTRATIVO DE CIENCIA, TECNOLOGIA E INNOVACION - COLCIENCIAS	COLCIENCIAS	Colombia	1	30
16	INSTRUCT-ERIC	INSTRUCT-ERIC	United Kingdom	1	30
17	E-SCIENCE EUROPEAN INFRASTRUCTURE FOR BIODIVERSITY AND ECOSYSTEM RESEARCH	LIFEWATCH	Spain	1	30

1.2. List of Beneficiaries

No	Name	Short name	Country	Project entry month ⁸	Project exit month
18	CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT	CIEMAT	Spain	1	30

1.3. Workplan Tables - Detailed implementation Associated with document Ref. Ares(2019)7166327 - 20/11/2019

1.3.1. WT1 List of work packages

WP Number ⁹	WP Title	Lead beneficiary ¹⁰	Person-months ¹¹	Start month ¹²	End month ¹³
WP1	Ethics requirements	1 - MICINN	N/A	1	30
WP2	CELAC RI Landscape	12 - CNPQ	14.00	1	12
WP3	EU and CELAC strategies on RI prioritisation and funding models	6 - SGCTEIP	24.50	6	20
WP4	PROMOTING THE EU-CELAC RI AREA THROUGH THE COLLABORATION BETWEEN RIs FROM EUROPE AND CELAC: PILOTS.	3 - DLR	44.00	1	28
WP5	Support to the SOM RI Working Group and links with research infrastructures related bodies	2 - MEC	19.50	1	30
WP6	Communication and Dissemination	11 - SPI	36.00	1	30
WP7	Project Management and Quality Control	1 - MICINN	25.50	1	30
Total			163.50		

1.3.2. WT2 list of deliverables

Deliverable Number ¹⁴	Deliverable Title	WP number ⁹	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D1.1	POPD - Requirement No. 1	WP1	1 - MICINN	Ethics	Confidential, only for members of the consortium (including the Commission Services)	6
D2.1	Report on the criteria, scientific areas and methodology to develop the CELAC RI landscape	WP2	9 - VTT	Report	Confidential, only for members of the consortium (including the Commission Services)	4
D2.2	Updated report on CELAC RIs	WP2	14 - MICITT	Report	Public	8
D2.3	CELAC landscape analysis including SWOT and state of the art on current collaborations and best practices in EU-CELAC RI cooperation	WP2	12 - CNPQ	Report	Public	12
D3.1	Benchmarking report on CELAC RI Policies and funding models & European RI relevant showcases	WP3	6 - SGCTEIP	Report	Public	12
D3.2	Report on EUCELAC RI cooperation models and practices	WP3	4 - AEI	Report	Public	20
D4.1	Reporting Plan	WP4	3 - DLR	Report	Confidential, only for members of the consortium (including the Commission Services)	4
D4.2	Periodical report	WP4	8 - CONACYT	Report	Confidential, only for members of the consortium (including the Commission Services)	24
D4.3	Final Report	WP4	3 - DLR	Report	Confidential, only for members of the consortium (including the Commission Services)	28

Deliverable Number¹⁴	Deliverable Title	WP number⁹	Lead beneficiary	Type¹⁵	Dissemination level¹⁶	Due Date (in months)¹⁷
D5.1	Activity and results reports to the EU-CELAC RI WG	WP5	2 - MEC	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D5.2	Minutes of the RIIB meetings	WP5	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D5.3	EU-CELAC Sustainability Plan	WP5	2 - MEC	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D6.1	Project Communication and Dissemination plan	WP6	10 - CONICYT	Report	Confidential, only for members of the consortium (including the Commission Services)	3
D6.2	Final Communication and Dissemination Report	WP6	11 - SPI	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D6.3	Final Conference Conclusions	WP6	1 - MICINN	Report	Public	30
D7.1	Project Handbook	WP7	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	3
D7.2	Research Infrastructures International Board Terms of Reference	WP7	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	3
D7.3	Quality Plan	WP7	13 - UEFISCDI	Report	Confidential, only for members of the consortium (including the	4

Deliverable Number¹⁴	Deliverable Title	WP number⁹	Lead beneficiary	Type¹⁵	Dissemination level¹⁶	Due Date (in months)¹⁷
					Commission Services)	
D7.4	Intermediate technical and financial report	WP7	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	16
D7.5	Final technical and financial report	WP7	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	30

1.3.3. WT3 Work package descriptions

Work package number ⁹	WP1	Lead beneficiary ¹⁰	1 - MICINN
Work package title	Ethics requirements		
Start month	1	End month	30

Objectives

The objective is to ensure compliance with the 'ethics requirements' set out in this work package.

Description of work and role of partners

WP1 - Ethics requirements [Months: 1-30]

MICINN

This work package sets out the 'ethics requirements' that the project must comply with.

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D1.1	POPD - Requirement No. 1	1 - MICINN	Ethics	Confidential, only for members of the consortium (including the Commission Services)	6

Description of deliverables

The 'ethics requirements' that the project must comply with are included as deliverables in this work package.

D1.1 : POPD - Requirement No. 1 [6]

The host institution must confirm that it has appointed a Data Protection Officer (DPO) and the contact details of the DPO are made available to all data subjects involved in the research. For host institutions not required to appoint a DPO under the GDPR a detailed data protection policy for the project must be kept on file. In case personal data are transferred from the EU to a non-EU country or international organisation, confirmation that such transfers are in accordance with Chapter V of the General Data Protection Regulation 2016/679, must be submitted as a deliverable. In case personal data are transferred from a non-EU country to the EU (or another third state), confirmation that such transfers comply with the laws of the country in which the data was collected must be submitted as a deliverable. Detailed information on the informed consent procedures in regard to data processing must be kept on file. Templates of the informed consent forms and information sheets (in language and terms intelligible to the participants) must be kept on file.

Schedule of relevant Milestones

Milestone number ¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
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Work package number ⁹	WP2	Lead beneficiary ¹⁰	12 - CNPQ
Work package title	CELAC RI Landscape		
Start month	1	End month	12

Objectives

The objective of WP1 is to update the mapping of the CELAC RI ecosystem which will be the basis for the bi-regional RI collaboration. The exercise will start with the study and definition of the list of the eligibility criteria to be applied for the inclusion of RIs in the CELAC mapping and the definition of the scientific areas in which the RI will be grouped. The CELAC mapping exercise will not be a new exercise, but an update of the exercises already developed and available of the previous cooperation projects e.g. ALCUE NET, ERA-Net-LAC, EULAC Focus. The added value of the updated mapping will be the inclusion of information identifying the existing RI-relevant collaborations between RIs at intra-CELAC, EU-CELAC and when available CELAC-non EU countries.

Description of work and role of partners

WP2 - CELAC RI Landscape [Months: 1-12]

CNPQ, FCT, VTT, MICITT, COLCIENCIAS

Task 1.1: Analyzing existing CELAC- RI mappings. (M1-M6)

Task Leader: VTT Contributors: MICITT, CNPq, COLCIENCIAS

Having in mind the concept of RI of the European Charter for Access to RI, accepted by ResInfra as the definition of RI applicable to the proposal, and considering that for the matching with the European region the mapping of European infrastructures is already done by ESFRI -last version ESFRI Roadmap 2018, <http://roadmap2018.esfri.eu> and EU funded projects such as MERIL (Mapping of the European Research Infrastructure Landscape) and RISCAPÉ (European Research Infrastructures in the International Landscape).

This task aims to update information regarding CELAC infrastructures by conducting a research and analysis that will lead to:

- Carrying on the study and definition of the list of eligibility criteria to be applied for the inclusion of RIs in the CELAC mapping and the definition of the scientific areas in which the RIs will be grouped. Criteria and areas, which will be submitted to the JIRI RI WG for its adoption, will be the basis for the mapping exercise.
- Identifying the information available on CELAC RI mapping by analyzing the pertinent deliverables of EU, CELAC or Multilateral funded projects (e.g. ALCUENET, EuroRISNET, ERANet-LAC & EULAC Focus) as well as the National mapping exercises;
- Determining the information gaps regarding the mapping of CELAC RI.
- Establishing a methodology for deepening the already existing mapping where needed and providing information in those cases (scientific areas or countries) where such information is not available.

Task 1.2: Deepening the CELAC RI mapping and elaborating the CELAC RI landscape (M6-M12)

Task Leader: CNPq. Contributors: FCT, MICITT, VTT

This task aims to elaborate the CELAC Landscape Analysis following the criteria and scientific areas agreed upon. As a result of the application of the methodology defined in Task 1.1. The landscape will be enriched with additional information on CELAC RIs as existing RI-relevant collaborations between RIs at intra-CELAC, EU-CELAC and CELAC-non EU cooperation, availability for transnational access and best practices in mutual openness, management, RI staff development, etc.

Actions to be developed:

- Analysis of conditions for transnational access of each of the CELAC RI and capacity to develop compatible access models to resources and data.
- Inclusion of existing RI-relevant collaborations between RIs at intra-CELAC, EU-CELAC areas (special interest will have the collaborations with ESFRI RIs) and CELAC-non EU countries.
- Elaboration of the CELAC landscape analysis describing the state of play of RI in the corresponding thematic areas selected under Task 1.1, their contribution to support frontier research and to provide key-data necessary to address the Grand Challenges

Participation per Partner

Partner number and short name	WP2 effort
5 - FCT	2.00
9 - VTT	4.00
12 - CNPQ	4.00
14 - MICITT	2.50
15 - COLCIENCIAS	1.50
Total	14.00

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D2.1	Report on the criteria, scientific areas and methodology to develop the CELAC RI landscape	9 - VTT	Report	Confidential, only for members of the consortium (including the Commission Services)	4
D2.2	Updated report on CELAC RIs	14 - MICITT	Report	Public	8
D2.3	CELAC landscape analysis including SWOT and state of the art on current collaborations and best practices in EU-CELAC RI cooperation	12 - CNPQ	Report	Public	12

Description of deliverables

D1.1 Report on the criteria, scientific areas and methodology to develop the CELAC RI landscape (M4)– VTT
D1.2 Updated report on CELAC RIs (M8) - MICITT
D1.3 CELAC landscape analysis including SWOT and state of the art on current collaborations and best practices in EU-CELAC RI cooperation (M12)–CNPq

D2.1 : Report on the criteria, scientific areas and methodology to develop the CELAC RI landscape [4]
The report will include the list of eligibility criteria to be applied to CELAC RI, its scientific areas and the methodology that will be followed for developing the report on CELAC RIs

D2.2 : Updated report on CELAC RIs [8]
The report will update the information already available, prepared under EU, CELAC and/or Multilateral funded projects, deepening the existing mapping when needed and providing new data if gaps are found.

D2.3 : CELAC landscape analysis including SWOT and state of the art on current collaborations and best practices in EU-CELAC RI cooperation [12]
The document will include RI relevant collaborations (intra-CELAC, UE-CELAC and CELAC-non EU countries) and best practices.

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS1	Criteria for eligibility of CELAC RI for the mapping exercise approved by the EU-CELAC RI WG	9 - VTT	4	The selection of the criteria for selecting the CELAC RI which will be included in the mapping exercise of WP2 is crucial for developing correctly the task. These criteria, as well as the scientific areas in which the RIs will be grouped will be presented to the JIRI RI Working Group for approval.
MS2	Interim report on CELAC RI	14 - MICITT	7	The report on CELAC RIs, as one deliverable of WP2, must be published in due time.

Work package number ⁹	WP3	Lead beneficiary ¹⁰	6 - SGCTEIP
Work package title	EU and CELAC strategies on RI prioritisation and funding models		
Start month	6	End month	20

Objectives

The objective of WP2 is to collect data and to create a portfolio of EU and CELAC RI roadmapping strategies, funding models and policy instruments in order to select the promising practices and lessons learnt, both as a result of WP2 tasks and the Pilot Actions of WP3 to be shared. These will contribute to the design of the Sustainability Plan for developing the bi-regional RI Roadmap.

Description of work and role of partners

WP3 - EU and CELAC strategies on RI prioritisation and funding models [Months: 6-20]
SGCTEIP, DLR, AEI, FCT, CNR, VTT, CNPq, UEFISCDI, MICITT, COLCIENCIAS
Task 2.1 CELAC RI Policies and funding models (M6-M12)
Leader: SGCTEIP Contributors: CNPq, MICITT, COLCIENCIAS
 There is a large diversity of RI policies across the CELAC region. Some are aligned with RI policies in EU, but others are very context-dependent. In this task, existing policies for prioritization and monitoring (including the measurement of socio-economic impact), RI funding, roadmapping, access, data management, training and innovation at RI will be collected and analyzed.
 This will be the basis for benchmarking at the CELAC level and reports for stakeholders on both continents on opportunities to optimize cooperation.
Task 2.2 European RI funding and governance models relevant to EU-CELAC collaboration. (M6-M12)
Leader: CNR Contributors: UEFISCDI, FCT, VTT
 The analysis of European RI models of funding and participation has been already accomplished, e.g. InROAD H2020 project. Nevertheless, under this task the goal is to identify which models can be applied to EU-CELAC cooperation on one hand, and the CELAC region on the other. To this scope, a specific survey will be carried out. On the basis of work done till now by WP1 and the output of EU-LAC Focus funded project, policy makers, managers of RI, will be identified and contacted.
 A set of ESFRI RIs representing the different models will be the object of the analysis. It will take into account aspects such as funding and sustainability models, access policies, governance, management and data management, among others.
 E-infrastructures will deserve a specific analysis, due to their importance and possibilities of collaborations at the international level.
Task 2.3 EU-CELAC Research Infrastructure promising collaboration models and practices (M13-M20)
Leader: AEI Contributors: SGCTEIP, CNPq, VTT, DLR
 There are ongoing EU-CELAC RI collaborations that justify an in-depth analysis and benchmarking exercise on their own, such as the collaborations of CERN with several CELAC countries, as they are showcases from which to extract best practices and lessons on which to base the Sustainability Plan.
 Some of these EU-CELAC collaboration examples were presented during the 1st EU-CELAC Research Infrastructures Working Group meeting, held in Brussels on the 14th of March 2018, and additional information will be available as outcome of Task 1.2.
 In this sense, information about ongoing and past RI-based collaborative efforts, from priority areas for the EU-CELAC RI collaboration will be collected and analyzed following a SWOT analysis, selecting those good practices that can serve as a model for further collaboration activities to be included in the Sustainability Plan.
 Considering deliverables D1.2 & D1.3 as a base of the updated landscape for RI for the CELAC region and the identification of collaborations with the EU also done under WP1; and in addition to the efforts made under 2.1 and task 2.2; this task will produce a report that will identify cooperation models and practices to work that will be a key input for the Sustainability Plan to be done under WP4.
 A consultation process will be implemented every trimester through web conferences in order to prepare the Report on EU-CELAC RI cooperation models and practices that will be delivered in M20.

Participation per Partner

Partner number and short name	WP3 effort
3 - DLR	1.00
4 - AEI	3.00
5 - FCT	1.50
6 - SGCTEIP	6.00
7 - CNR	4.50
9 - VTT	1.50
12 - CNPQ	2.00
13 - UEFISCDI	1.50
14 - MICITT	1.50
15 - COLCIENCIAS	2.00
Total	24.50

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D3.1	Benchmarking report on CELAC RI Policies and funding models & European RI relevant showcases	6 - SGCTEIP	Report	Public	12
D3.2	Report on EUCELAC RI cooperation models and practices	4 - AEI	Report	Public	20

Description of deliverables

D2.1- Benchmarking report on CELAC RI Policies and funding models & European RI relevant showcases (M12) - SGCTEIP

D2.2- Report on EU-CELAC RI cooperation models and practices (M20) – AEI

D3.1 : Benchmarking report on CELAC RI Policies and funding models & European RI relevant showcases [12]

The report will include information on CELAC RI policies and funding models, as well as those European RI funding models and participation that are relevant for CELAC

D3.2 : Report on EUCELAC RI cooperation models and practices [20]

The report will identify cooperation models and practices for EU-CELAC RIs, being a key input for the Sustainability Plan of WP5

Schedule of relevant Milestones

Milestone number ¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS3	Set-up of surveys	7 - CNR	7	In order to identify the models that can be applied to EU-

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
				CELAC RI cooperation on one hand, and the CELAC region on the other, a specific survey will be carried out.
MS4	Analysis of srveys results	7 - CNR	12	An analysis of the surveys received will be perfomed to obtain conclusions on RI funding and governance models relevant to CELAC RI and EU-CELAC cooperation.
MS5	Report on EU-CELAC RI cooperation models and practices delivered	4 - AEI	20	The report on EU-CELAC RI identifying cooperation models and practices must be prepared and submitted

Work package number ⁹	WP4	Lead beneficiary ¹⁰	3 - DLR
Work package title	PROMOTING THE EU-CELAC RI AREA THROUGH THE COLLABORATION BETWEEN RIs FROM EUROPE AND CELAC: PILOTS.		
Start month	1	End month	28

Objectives

The objective of this WP is to support the construction of the RI EU-CELAC collaboration area establishing bridges between the pan-European RI, especially those included in the Roadmap of ESFRI, and national RIs with regional potential in their CELAC counterpart region.

With this aim, an analysis of the outcomes of the thematic workshops and study visits of the RI EU-CELAC WG planned for 2019 will be carried out, as well as inputs from WP1 and WP2 which will allow to define and propose additional specific actions and recommendations will be considered in the elaboration of the Sustainability Plan for the development of the WG's works.

In addition, as part of the WP and with the intention to contribute to the construction of the RI EU-CELAC collaboration, four pilots will be developed.

In the selection of the pilots a variety of aspects have been considered: coverage of the thematic areas prioritized by the WG such as environment/biology and topics in which there is a demonstrated interest in collaborating, such as cultural heritage or supercomputing; their readiness and willingness to establish sustainable bi-regional collaborations; their capacity to develop specific activities to support the exchange of best practices and capacity building in those topics identified as critical by the WG, such as, governance, access, training, innovation, internationalisation (construction of global infrastructures). On this point, it is also interesting to underline that, in order to add value to the exercise; the pilots have been chosen in different phases of their life-cycle (pan-European RI in operation and producing science, ESFRI Projects under implementation, networks of national/regional infrastructures). Recommendations on how the construction of the collaboration may be affected by the status of development of the RIs will be drafted and addressed to the WG as part of the WP deliverables.

The Pilots, as partners in the project, will receive funds in order to encourage and promote their activities towards the identification of specific areas of common interest for the bi-regional collaboration and synergies between the research infrastructures. Each of them will produce a specific roadmap to sustain the collaboration in the future, including concrete actions for the development of regional research networks around the pilots for strengthening the future of the EU-CELAC infrastructures. These actions will be defined together with the RI-pilots in a kick-off workshop. They will depend on the mentioned thematic priorities and the level of maturity of each RI involved, they may vary from e.g. the organisation of summer schools, the capacity building for RI managers and exchange of technical staff. The main focus lays on the concrete needs and interests of the Research Infrastructures.

The pilots will serve to probe the construction of the bi-regional collaboration viability with real examples in the specific topics addressed. The formalisation of the collaboration by means of Memorandum of Understanding & cooperation agreements will be encouraged.

Description of work and role of partners

WP4 - PROMOTING THE EU-CELAC RI AREA THROUGH THE COLLABORATION BETWEEN RIs FROM EUROPE AND CELAC: PILOTS. [Months: 1-28]

DLR, CNR, CONACYT, INSTRUCT-ERIC, LIFEWATCH, CIEMAT

Task 3.1 EU-CELAC RI WG Follow-up and Pilots coordination (M1-M28)

Leaders: CONACYT and DLR

Coordination of the Pilots, overview of their activities and milestones, establishment of synergies and communication between them.

Analysis of the outcomes of RI EU-CELAC WG activities, in particular in what refers to the Workshops and Study Visits, as well as developments of WP1 and WP2 with the aim to identify and propose additional specific actions to be developed through the pilots, or recommendations to be included in the Sustainability Plan that will be proposed to the WG to support the follow-up of its works. Individual as well as horizontal actions might be identified and be proposed for their development mainly through the RIs involved in the Pilots but also through the participation of invited RIs and Projects.

Task 3.2 Pilot on Infrastructure cooperation and coordination on Structural Biological for Health (M6-M24)

Leader: INSTRUCT-ERIC

Health is one of the top societal challenges faced by all communities. While certainly Health is a complex matter, one key approach to gain information on the basic principles underline health and disease states is through a molecular/atomic understanding of the cell. To reach this level of information, large and varied infrastructures are needed, demanding substantial investments. In this pilot we propose to develop a set of actions between the European Research Infrastructure for Structural Biology (SB) Instruct-ERIC and Latin American countries so that an efficient mechanism to access infrastructures will be jointly developed. It should be noted that Latin America was selected as one of the areas for Instruct-ERIC to explore and efforts in this direction have already started within a H2020-INFRADEV-2016 project named Instruct-Ultra, with Instruct-Portugal and Instruct-Spain leading these activities, although in a context of quite reduced budgets. The overarching objective of the current Pilot aims at building on practical cases, so that we contemplate the mutual opening and access of infrastructures at Instruct-ERIC and LA countries, the sharing of best practices, the capacity building and, finally and based on this practical experience, the making of an analysis of the current situation and the best ways to achieve a productive interaction.

Specifically, we propose: (1) To have a detailed analysis of the different national Roadmaps in the SB area and how they could be coordinated, (2) To mutually open international infrastructures in an exploratory, yet sustainable manner, (3) To establish common “best practices” and access procedures, (4) To make an in-depth analysis based in the acquired experience.

Besides selecting Health for its obvious socio-economic impact, Instruct-Portugal coordinates a successful research proposal to CYTED with a very suggestive title of “Um mundo-uma sude: abordagens integrativas em biologia estrutural e criomicroscopia”, where pressing health issues formed the core of a combination of efforts in Structural Biology involving 19 LA countries. Among CYTED partners were scientists located at the very epicenter of last Zika outbreak, directly involved in the connection of Zika and microcephaly, but with no Structural Biology experience. On the institutional front, Instruct-ERIC has signed Memoranda of Understanding (MoU’s) with leading Latin American institutions (Univ. of Sao Paulo, Instituto Leloir (Argentina), Centro de Biología Estructural del MercoSur (CeBEM), Instituto de Biología Molecular del Rosario, Centro de Biología Estructural (CBE, Venezuela), Universidad de la Republica (Uruguay), Institute Pasteur Montevideo, Instituto de Investigaciones Bioquímicas de La Plata “Prof. Dr. R.R.Brenner”, Instituto de química y fisicoquímica biológicas (Argentina). It is, therefore, very clear, that both Institutional and Research Infrastructures fronts have already been the subject of intense preliminary work, paving the grounds for the current Pilot proposal.

These general objectives will be implemented through the following sub-tasks:

- Subtask 3.2.1: Understanding how Structural Biology is being prioritised at the different countries (M6-M12)

It will be accomplished through a survey workshop on “Structural Biology in the Road Map of the different LA countries”, which will involve both the previous gathering of information as well as a direct personal exchange of views and information between political-science representatives from the different countries, Instruct-ERIC as well as some of the institutions among those with signed Instruct MoU’s. The best way to organize this activity will be in conjunction with a meeting of countries representatives, where this activity will be one of the Agenda points.

In order to maximize productivity, this meeting will be coordinated with a training activity.

- Subtask 3.2.2: Implementing translational access (M6-M24)

Instruct-ERIC has the Instruct Council approval for an exploratory Access Call in which up to 10 Access Projects will be selected among LAC institutions for which a MoU is in place. Instruct-ERIC will provide access to its top level infrastructures at no cost to these projects, but travel and lodging is not included in the call. Naturally, this activity can be very fruitfully combined with on-site training of the scientists involved in the Access Project.

On the financial front, the Task presented in the current Pilot will provide funds for travelling and accommodation, as well as the PM’s required for training, effectively removing potential cost barriers (note that it is very normal to have between 1 to 3 people travelling in association to an Access Project, depending of the infrastructure, since most of these instruments work 24hours per day and have day and night shifts)

In a parallel manner, the cryoEM Center of Brazil is considering to host selected Instruct-ERIC projects under conditions similar to those of the Instruct-ERIC call.

- Subtask 3.2.3: To establish common “best practices” and access procedures (M6-M18)

This action will be established through a best practices workshop together with staff visits to facilities others than theirs. Best practices will address different areas, such as: How access is channelled, how proposals are reviewed, how data are handled and how adhesion to data FAIR (Findable, Accessible, Interoperable, and Reusable) principles is considered. Note that, as in Task 1, the best practice workshop could be combined with a training activity.

- Subtask 3.2.4: Elaboration of a LA-EU Transnational Access Report (M18-M24)

In this task, and based on the experience generated in the three previous ones, we will elaborate a Report where an analysis of the situation with respect to Structural Biology Infrastructure Access between Europe and LA will be done. We will address topics such as the existing and foreseen map of resources, the sustainability of the experience of translational access, the way to keep coordinated regarding best practices and the overall need of training (note that we

have not included training as an additional Task because we have included it, through workshops and on-site training, in all previous Tasks).

Task 3.3 Pilot on Cultural Heritage. E-RIHS (M6-M24)

Leader: CNR-INO

Preservation of cultural and natural heritage is a global challenge for science and society at large. The European research infrastructure E-RIHS integrates national facilities of recognized excellence in heritage science making up a distributed RI with a sustainable plan of activities, including joint research, access to a wide range of high-level scientific instruments, methodologies, data and tools, advancing and sharing knowledge in conservation, interpretation and management of heritage. E-RIHS is building a global dimension via the establishment of a steady relationship at institutional and ministerial level on the definition of international organizations and research infrastructures, concerning scientific, data management and governance topics.

This pilot aims to strengthen the bi-regional cooperation in cultural & natural heritage to be built on sound cooperation and mutual interest in developing transatlantic collaboration within the Heritage Science (HS) domain through scientific cooperation, access to research facilities and training programmes.

The main objectives of the pilot are to:

- Demonstrate how the exchanging of data between research infrastructures in EU and CELAC countries leads to true and effective cooperation and the potential role of mutually opening data for science and cultural diplomacy.
- Establish a pilot technical framework, including case studies, for exchanging heritage science data between E-RIHS and CELAC research infrastructures for heritage science, using the two hubs as promoters of the cooperation initiative.

Specific objectives of the pilot:

- Establishing pilot examples of heritage science data exchange, on specific datasets.
- Pave the path for the development of a common interoperable digital repository which is crucial for international cooperation.
- Develop working groups to extend the discussion under the umbrella of the RDA.
- Develop pilot on-line training modules on data exchange to enable scientists on both sides to benefit from the results of the cooperation.

Activities:

- Establishment of working groups involving experts from CELAC countries and E-RIHS
- Organisation of thematic workshops in Brazil, Mexico and the EU
- Participation to the bi-lateral/multi-lateral workshops organized by the project
- Development of dedicated thematic on-line training modules
- Planning for the development of common interoperable digital repositories
- Contribution/organisation/participation to the annual EU-CELAC Research Infrastructure Working Group. The E-RIHS pilot action will take care of the session devoted to the heritage science field and SSH at large.

Task 3.4 Pilot on Ecosystem & supporting e-Biodiversity Services “LifEuLAC” (M6-M24)

Leader: LifeWatch

LifeWatch ERIC is the e-Science European Distributed Infrastructure focused on how to measure the impact of Global Climate Change issues on Earth Biodiversity and Ecosystem Research (<https://www.lifewatch.eu>). Its expected impact is to be a structuring tool for the European Research Area (ERA), also supporting policy decision making addressing Societal Challenges which demand scientific knowledge in a Global Climate Change context, including Citizen Science activities. This mission is achieved by providing access to a multitude of data sets, services and tools enabling the construction and operation of Virtual Research Environments –VRE- which provide the environments for integrating (big and long tail) data, software and computation as developed in pan European Research (e-)infrastructure cooperation, by also considering the duly engagement with recently established of such initiatives, as the European Open Science Cloud –EOSC- and Copernicus (Remote Sensing) programmes, taking also benefit of the use of cutting-edge technologies such as Blockchain (“LifeBlock” platform), Deep Learning & Artificial Intelligence. LifeWatch ERIC is establishing a Thematic Centre on Atlantic-Latin America-Caribbean Biodiversity Ecosystem Services by taking benefit of the use of Andalusia Region (Spain) ERDF (Structural Funds) in synergy with other H2020 and INTERREG funding resources.

As a consequence of the working meetings of the EU-CELAC RI WG, particularly after the 1st meeting of the EU-Latin America and the Caribbean Working Group on Research Infrastructures held at Brussels (Belgium) on March 14th 2018, LifeWatch ERIC was identified as the 1st RI of interest scored by EU-LAC RI Communities.

In order to establish synergies with EU-CELAC objectives, Task 3.4 will release concrete deliverables at strategic, tactical and operational levels:

Objectives:

Strategic: Creation of an EU-CELAC Board-Committee of Researchers & Policy-Decision Makers on Biodiversity & Ecosystem Services for defining “essential” shared strategic actions in a Global Climate Change Scenario. (M9). There will be at least 1 face-to-face kick-off meeting, then supported by the corresponding on-line collaborative e-Tools.

Tactical: Reinforcement of identified existing world-class examples of Biodiversity & Eco-system Research Communities-of-Practice and initiatives in the EU-LAC area. E.g. Belmont Forum & BiodivERrsA; www.recibio.net; <http://www.gbif.es/proyecto/coopbioplat/>, etc. among others. (M15). There will be a provision of a networking e-Tool to strengthen their collaboration with related Research Infrastructures.(M24)

Operational: Since the Millennium Ecosystem Assessment was published, several initiatives have started, including different definitions of the concept of "Ecosystem Services": The Millennium Ecosystem Assessment defined Ecosystem Services as “the benefits people derive from ecosystems”. Cices (Common International Classification of Ecosystem Services – EEA): contributions that ecosystems (i.e. living systems) make to human well-being. Being outputs of ecosystems (whether natural, semi-natural or highly modified), these are considered final products that affect most directly the well-being of people. SEEA (System of Environmental-Economic Accounting - UN): ecosystem services, which are the contributions and benefits of ecosystems to economic and other human activity. UNDP publication: “Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean and Economic Valuation of Ecosystems”. Therefore, and under the scope of the concept of ecosystem services:

Development a framework and a planning model to generate scientific-based knowledge and capacity for the effective valuation of natural systems through different processes including policy-making and market mechanisms through the co-design, development and deployment of a proper Virtual Research Environment –VRE- connected with LifeBlock (LifeWatch ER-IC Blockchain-based platform), and duly engaged with the European Open Science Cloud –EOSC- and Copernicus initiatives, among other EU relevant ones. This will allow the establishment of processes aimed at obtaining findings and recommendations for the broader picture of the management of ecosystem services focusing on possibilities that management frameworks schemes may result in reinvestment on biological diversity conservation and sustainable development.

Task 3.4 and the associated deliverables will be also developed in tightly collaboration with the “Observatorio Iberoamericano de Desarrollo Sostenible y Cambio Climático, La Rábida” (www.observatoriarabida.com), to meet the Sustainable Development Goals. (<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>)

All the above mentioned Deliverables of LifeWatch-ERIC will be included in D3.2 and D3.3.

Task 3.5 Pilot RICAP (M6-M24)

Leader: CIEMAT

The aim of this pilot, led by CIEMAT, is to demonstrate how a multidisciplinary field, such as computation is, can deserve important outcomes for a fruitful collaboration in the EU-CELAC region acting as an articulated skeleton targeting multiple fields.

The Ibero-American High Performance Computing Network (RICAP, <http://www.red-ricap.org/>) has been working on providing the EU-CELAC region with a strategic infrastructure in the field of High Performance Computing (HPC). RICAP brings together 14 computer centres sited in 9 different countries (Argentina Brazil, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Chile, Spain, and Uruguay). Several of them use case providers in different scientific and technological fields, and one of the world's largest supercomputing companies. A high computing power has been made available to the community, which is a real alternative to proprietary services located outside the region. This access is for free and made under competitive calls following the PRACE concept.

RICAP encompasses different impacts: effective interconnection of high performance open services from RICAP clusters (both supercomputing and cloud access); the implementation and subsequent promotion of software-based solutions for the access and exploitation of this network; the design and development of open source tools that will improve the computational efficiency of the infrastructure in an unattended and dynamic way, especially in an environment such as the cloud; the promotion of the transfer of knowledge and the impact of RICAP through the provision of tutorials and seminars for administrators and end users with the latest technologies in the fields of HPC and HTC; and, the collaboration with other national and regional initiatives, namely EOSC, RedCLARA, PRACE, and others.

Thanks to RICAP and its multidisciplinary aspect, it is being possible to carry out new scientific and technological activities on Physics, Chemistry, Computational Science, Health, Environment, Humanities, etc. by different EU-CELAC groups as well as several students and scientist are being trained on simulation skills. European and CELAC institutions partnering RICAP have been part of European projects since VI FP.

In other words, the impact of EU-CELAC ResInfra is clearly enhanced by this pilot who continuously tackles a plethora of different scientists and policy-makers from different fields.

RICAP Pilot will contribute to WP3 to the identification of priorities for regional and bi-regional cooperation based on strategic road-mapping exercises following a bottom-up approach from their expertise supporting CELAC research

entities on different fields and through the ongoing collaborations with European and Latin American cornerstone RIs and major research centres.

RICAP Pilot will promote the exchange of best practices between the EU and CELAC regions on issues of common strategic relevance (regional road-mapping procedures, research infrastructure management, RI staff development, etc). As a successful big collaboration covering Europe and Latin America, RICAP Pilot also will foster the adoption of European success stories on RI to the CELAC regions such as PRACE, EOSC, or GEANT, through direct contact with major initiatives such as Pierre Auger Observatory (PAO), Latin American Giant Observatory (LAGO), European Southern Observatory (ESO), etc.

RICAP Pilot will contribute to strengthening the collaboration in the EU-CELAC region on RIs, by means of the participation of key personnel in the fora in which the interests of the EU-CELAC RI WG fit. The objective will be pursued on a two-fold basis. First, dedicated workshops and meetings between the EU and CELAC involved communities will be organ-ised/participated by the project and will count on the participation of RICAP strategic staff; second, bi-regional staff exchange activities (e.g. reciprocal access to Research Infrastructures in the two regions) and dedicated thematic training programmes (e.g. summer schools) will be organised as well in order to exchange ideas and build up from such experience. As a result, a comprehensive transfer of knowledge will be achieved in the EU-CELAC region.

Being RICAP Pilot multidisciplinary, different RIs can be approached producing a clear and complementary enrichment of the final transfer of knowledge.

Participation per Partner

Partner number and short name	WP4 effort
3 - DLR	7.00
7 - CNR	8.00
8 - CONACYT	8.00
16 - INSTRUCT-ERIC	5.00
17 - LIFEWATCH	8.00
18 - CIEMAT	8.00
Total	44.00

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D4.1	Reporting Plan	3 - DLR	Report	Confidential, only for members of the consortium (including the Commission Services)	4
D4.2	Periodical report	8 - CONACYT	Report	Confidential, only for members of the consortium (including the Commission Services)	24
D4.3	Final Report	3 - DLR	Report	Confidential, only for members of the consortium (including	28

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
				the Commission Services)	

Description of deliverables

D3.1 Reporting Plan (M4) - DLR
 Calendar of reviews, including deadlines and minimal content requirements for the Pilots re-ports.

D3.2 Periodical report. A six-monthly report will be drafted including the corresponding Pilots reports. (M6, M15, M24) - CONACYT

D3.3 Final Pilot Report. (M28) - DLR
 WP Report on the activities carried out, including Timeline, coordination actions, additional activities, summary of the pilots activities, and transversal actions, final conclusions and rec-ommendations for the Sustainability Plan. The report should incorporate the reports of the 4 Pilots, which needs include information on the actions developed, their results, the thematic roadmaps proposal and recommendations to be proposed for their inclusion in the Sustainable Plan that will be addressed to the RI SOM WG (including guidelines, which will enhance fu-ture bi-regional RI collaboration).

D4.1 : Reporting Plan [4]
 It will include the calendar of reviews, including deadlines and minimal content requirements for the RI Pilots' Reports.

D4.2 : Perdioidal report [24]
 A six-monthly report on the achivementes of the WP will be prepared, including the corresponding Pilots reports

D4.3 : Final Report [28]
 It will be a complete WP report on the activities carried out, results achieved, final conclusiones and recommendations for the Sustainability Plan. it will include the Timeline, coordinatiiona actions carried out, addional activities, summary of the Pilots activities and trasversal actions of the WP.

Schedule of relevant Milestones

Milestone number ¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS6	Kick-off meeting of each Pilot organised and activity plan of each pilot defined	3 - DLR	6	The 4 RI pilots must their activity plans and kick-off meetings organised by Month 6
MS7	Pilot roadmaps for future bi-regional activities formulated	3 - DLR	24	On the basis of the work performed under WP4 and the results of the 4 RI pilots, a roadmap for future EU-CELAC activities will be elaborated and by Month 24, finished.
MS8	Guidelines enhancing uture bi-regional collaboration formulated	3 - DLR	28	The guidelines for enhancing future bi-regional RI collaboration should be finalised by Month 28.

Work package number ⁹	WP5	Lead beneficiary ¹⁰	2 - MEC
Work package title	Support to the SOM RI Working Group and links with research infrastructures related bodies		
Start month	1	End month	30

Objectives

The aim of this WP is to inform and support the policy activities of the SOM RI Working Group, as well as establishing links with RI related groups such as the Group of Senior Officials on Global Research Infrastructures (GSO-GRI), the OECD, Global Science Forum (OECD-GSF) & ESFRI. The goal is to communicate effectively the results of the project and facilitate the decision making of the RI WG taking into account the findings of the CSA, but also the results achieved by and the opinions of the GSO-GRI, OECD-GSF & ESFRI.

Description of work and role of partners

WP5 - Support to the SOM RI Working Group and links with research infrastructures related bodies [Months: 1-30]
MEC, MICINN, DLR, AEI, CONACYT, VTT, SPI, COLCIENCIAS
 4.1 Sustainability plan to support and strengthen EU-CELAC RI collaboration. (M12-M30)
 Leader: MEC Contributors: AEI, CONACYT, VTT, DLR, SPI
 The main goal of this task is to define an Sustainability Plan with a timeline of 5 years including specific measures to enhance the EU-CELAC RI collaboration.
 The Sustainability Plan will include concrete actions and measures to enhance RI bi-regional cooperation, containing the description and timeline for activities such as the preparation of a EU-CELAC joint call for RI cooperation; bi-regional study visits; staff exchanges between RI researchers and managers; etc.
 The deliverables of WP1, 2 and 3, as well as the results of the activities of the EU-CELAC RI WG, will feed the Plan, which is expected to be presented officially at the EU-CELAC RI WG meeting of 2022 for its adoption. Once officially adopted, it will be presented by the EU-CELAC RI WG to the EU-CELAC SOM of 2022.

4.2 Reporting Board to the EU-CELAC RI WG (M1-M30)
 Leader: MEC Contributors: MICINN
 The main goals of this task are:

- To act as Reporting Board to the EU-CELAC RI WG, facilitating the development of its technical aspects as needed and requested, e.g. background research, preparation of technical documentation as a basis for decision-making, additional specific requests, etc. This will be done in coordination with the Service Facility in charge of financial and administrative aspects of the Working Group meetings.
- To regularly inform of the project activities, reports, deliverables and any other project output of interest for the WG, mainly during the official meetings of the group.
- To follow-up the results of the first study visits organised in the context of the WG, expected to start in 2019, and guarantee the communication of such results to WP3 leaders in order to take them into account for future pilots.
- To obtain feedback and final approval of the Sustainability Plan to support and strengthen further collaboration of EU-CELAC RIs.

This will be achieved by:

- Establishing a Reporting Board led by Uruguay and Spain as WP4 leaders who will be in charge of informing and updating the EU-CELAC RI WG on the progress made by the project and taking into account their suggestions, comments and proposals for the CSA activities.
- Articulating with the EU-CELAC RI WG the overall goals set for EU-CELAC collaboration on RIs and specific details on such collaboration to be included in the Strategic Roadmap for the collaboration planned in task 2.1.

Due to the specificities of the EU-CELAC RI WG, we have considered that it is necessary to have a leader and a co-leader representing both regions of the world, on one side MEC representing the Latin America and Caribbean RI, and on the other MICIU, representing the European RI.

Task 4.3 Liaison with the Group of Senior Officials on Global Research Infrastructures, OECD-GSF and ESFRI. (M2-M30)
 Leader: MICINN Contributors: CONACYT.
 The main goals of linking with the above mentioned groups are:

- To count with the validation of the activities of the CSA for the establishment of the RI bi-regional collaboration,

- To give visibility and promote the activities of the CSA in these groups,
- To establish synergies, use of standards and recommendations applicable to the CSA activities to support the bi-regional collaboration.

In the specific case of ESFRI, as a follow-up of the International Cooperation seminar that took place in Vienna in 2018, it will facilitate the exchange of information in aspects like: governance and structure of the ESFRI Forum as strategic incubator body for RIs, working procedures and methodologies developed for roadmapping and monitoring, landscape analysis procedures and RI policies related to data management, and innovation among others.

As result of this activity the EU-CELAC RI WG will be assured of the alignment of the activities of the CSA with international standards, being updated via the Reporting Board on the overall activities of the mentioned Groups in important aspects such as: RI as drivers for innovation, sharing and managing scientific data or exploring the potential for existing re-search infrastructures to be opened up to international partners.

In the search of a good functioning of the interlinking proposed, GSO-GRI, GSF and ESFRI representatives will be invited to participate in the CSA as members of the Research Infra-structures International Board (RIIB), along with representatives of the other international organisations such as the Ibero-American Programme on Science and Technology for De-velopment (CYTED), the Ibero-American General Secretariat (SEGIB) and representatives of the European funded project RISCAPE. This will allow the project consortium to receive advice, while facilitating the cooperation, communication and feedback from both sides based on the rules of functioning of the RI International Board, to be developed under WP6.

Members of the RIIB will be invited to the annual project meetings and regular communication will be done via conferences calls, looking to be financially and time-efficient.

Participation per Partner

Partner number and short name	WP5 effort
1 - MICINN	6.00
2 - MEC	7.00
3 - DLR	0.50
4 - AEI	1.00
8 - CONACYT	2.00
9 - VTT	1.00
11 - SPI	0.50
15 - COLCIENCIAS	1.50
Total	19.50

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D5.1	Activity and results reports to the EU-CELAC RI WG	2 - MEC	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D5.2	Minutes of the RIIB meetings	1 - MICINN	Report	Confidential, only for members of the consortium (including	30

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
				the Commission Services)	
D5.3	EU-CELAC Sustainability Plan	2 - MEC	Report	Confidential, only for members of the consortium (including the Commission Services)	30

Description of deliverables

D4.1 Activity and results reports to the EU-CELAC RI WG (M12, 21, 30) - MEC
D4.2 Minutes of the RIIB meetings (M18, M30) - MICINN
D4.3 EU-CELAC RI Sustainability Plan (M30) – MEC

D5.1 : Activity and results reports to the EU-CELAC RI WG [30]
Every year, a report will be sent and presented to the EU-CELAC JIRI RI Working Group. The goal is to regularly inform the members of the Working Group and obtain useful feedback for the project activities.

D5.2 : Minutes of the RIIB meetings [30]
The Research Infrastructures International Board (RIIB) will be formed by representatives of international organisations and European funded projects related with RIs, such as the Group of Senior Officials on Global RI, OECD-GSF, ESFRI, the Ibero- American Programme on Science and Technology for Development (CYTED), the Ibero-American General Secretariat (SEGIB), STR-ESFRI and the project RISCAP. This deliverable will be composed by the minutes of their meetings.

D5.3 : EU-CELAC Sustainability Plan [30]
The Sustainability Plan will be prepared with the objective of supporting and strengthening further collaboration of EU-CELAC RIs proposing specific measures. It will have a timeline of 5 years.

Schedule of relevant Milestones

Milestone number ¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS9	Research Infrastructures International Board set-up	1 - MICINN	4	As part of the liaison activities with official groups leading with RI, an International Board on Research Infrastructures will be created by month 4.
MS10	Delivery of reports to EU-CELAC RI WG	2 - MEC	30	At least once a year during the life of the project, reports of the impacts, results and conclusions of the project will be presented to the SOM RI WG.
MS11	Presentation of the Sustainability Plan to the EU-CELAC RI WG	2 - MEC	30	The Sustainability Plan that will result as one of the main results of the projet, will be

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
				presented to the SOM RI WG by the end of the project

Work package number ⁹	WP6	Lead beneficiary ¹⁰	11 - SPI
Work package title	Communication and Dissemination		
Start month	1	End month	30

Objectives

This WP aims to develop an effective strategy to communicate, disseminate the project activities, results and outcomes in order to optimize them, generating thus impact and sustainability beyond the consortium, as well as fostering the engagement of different target groups.

Description of work and role of partners

WP6 - Communication and Dissemination [Months: 1-30]

SPI, MICINN, MEC, DLR, AEI, FCT, SGCTEIP, CNR, CONACYT, VTT, CONICYT, CNPQ, UEFISCDI, MICITT, COLCIENCIAS, INSTRUCT-ERIC, LIFEWATCH, CIEMAT

5.1. Elaboration and update of the project communication and dissemination plan (M1-M3).

Leader: CONICYT. Contributors: SPI

A communication and dissemination plan will be elaborated by month 3 of the project, building upon the basis already setup in section 2 of this proposal (impact), in order to support the project development, raise awareness of the project outcomes and facilitate engagement with stakeholders. It will include the communication and dissemination objectives, indicators and targets, describe which messages will be communicated through which channels to which target groups, while outlining the impact measurement tools. The dissemination plan will combine off-line and on-line activities, in order to reach a wider audience and thus, the best possible dissemination of the project's results. This strategy is framed via several dissemination and exploitation activities as described in this WP. All these aspects of the dissemination and communication plan have been already outlined in chapter 2 of this proposal.

In M18 the communication and dissemination plan will be updated, taking into account the results and lessons learnt from its first period of implementation. Such results and lessons learnt will come from the periodical reporting of dissemination and communication activities that each partner will submit to the WP coordinators every six months.

Building upon the guidance of the ESFRI 2018 Roadmaps and Strategy Report on Research Infrastructures, as well as on the conclusions of the Ad Hoc Working Group on Innovation, especial attention will be given to the engagement of the industry sector in the implementation of dissemination and communication activities of the project, regarding industrial players as full partners of RI, both as suppliers and as users.

The project dissemination will focus on the countries participating in the project and the EU-CELAC Working Groups, as well as the target groups specified in point 2.2.1. "Dissemination and Exploitation of Results".

5.2. Deployment of the project digital strategy for dissemination and communication (M1-M30)

Leader: SPI Contributors: All partners

This task comprises the design, implementation and update of the project website, as well as the outline, execution and maintenance of the project social media engagement.

The website will be a user-friendly tool developed by M3 of the project, using Open Source technologies, mainly based on PHP and MySQL environments. It will act as a multiple information sharepoint about three main aspects:

- the project in general – project concept, consortium partners, major activities and events organized there in (calendar, venues, programmes, etc.), news, etc.
- the EU-CELAC RI WG dialogue on research infrastructure – including strategic documents, upcoming events, news, etc.;
- the mapping of Research Infrastructures both Europe and Latin America building up-on initiatives in Europe (such as the Mapping of the European Research Infrastructure Landscape – MERIL, or the RICH 2020 Observatory) as well as building upon the outcomes of WP1 with regards to the mapping of Research Infrastructures in Latin America.

Furthermore, it will be a collaboration platform for project activities, interlinking with an internal repository area to be embedded to the web site, for internal use by the Consortium. This web platform will follow the W3C accessibility guidelines. It will be continuously up-dated, to incorporate the step-by-step outcomes of the project. GoogleAnalytics will enable automatic monitoring of website traffic and user behaviour, giving evidence for impact creation. Special attention will be given to have an easy-to-follow menu. User Registration and Profiling for the intranet of the project consortium will be supported based on security procedures provided. Full compliance with GDPR regulation will be enacted, providing explicit opt-in clauses whenever applicable.

With regards to social media for stakeholders interaction, the project will have profiles and pages created in LinkedIn, Twitter and Facebook by M3. These pages should be constantly fed in with news about the project progress, activities and results, as well as with general news about the EU-CELAC dialogue on research infrastructure. Project activities will be also promoted through social networks such as LinkedIn and Twitter. This will enable "super distribution" of messages and news, interaction with different stakeholders.

5.3. Implementation of complementary dissemination and communication activities and materials (M1-M30)

Leader: CONICYT Contributors: All partners

This task comprises the definition of the design and layout of different dissemination and communication materials, as well the outline and deployment of distinctive dissemination and communication activities, ultimately helping the project to achieve a broader audience and higher impacts.

The following actions are included:

- Preparation and release of 5 press releases, in English, Spanish and Portuguese, at key project milestones. They will be released in each national agency webpage participating in the project.
- Preparation and release of 5 electronic newsletters, in English, Spanish and Portuguese wrapping up the project achievements during a given period;
- Preparation of short videos on the project and its results and outcomes;
- Writing of abstracts and articles to be submitted and presented at national and inter-national conferences related to research infrastructures, as the International Conference in Research Infrastructures (ICRI) 2020 to be held in Ottawa, and in the ICRI 2022.

These materials will be used on the occasion of the project events, in LAC and Europe. They will be used by the project partners during conferences, congresses and other dissemination events attended by partners to further promote the project and its results.

5.4 Planning, organization and implementation of the Final Conference (M26-M30)

Leader: MICINN Contributors: SPI, CONICYT, CNR

The final conference of the project will take place in M30. It will be a 2-day conference to take place in Europe, with a twofold goal:

- a. Summarise the most relevant discussions, conclusions and outcomes of the project;
- b. Provide an open debate and recommendations for the future EU-CELAC cooperation on research Infrastructures, building upon the 5-year Sustainability Plan written under Task 4.1.

It is expected a participation of around 80 participants. The core target group of attendants (which will be duly invited) comprise high representatives of EU and CELAC ministries and secretaries with competences in the field of R&I; SOM delegates; EU and CELAC R&I funding agencies; EU and CELAC Research Infrastructures representatives; CELAC countries' Science Counsellors at the respective embassies in Brussels and representatives of the European Commission. Still, the Conference is expected to be open for the public, upon registration. Live streaming of the event will be assured for those not able to physically attend the event.

Wide dissemination of the Conference will be undertaken in due time. Periodical announcements will be made at the project's website and social media, as well as through the partners' digital media tools. Dissemination of the Conference will also be secured through the Events page of DG RTD and through websites of key stakeholders, such as ESFRI, MERIL, RISCAPE and of all the Research Infrastructures in EU and CELAC involved somehow in the project. Dissemination and engagement of social communication will also be timely ensured, in order to maximize the external visibility and impact of the event.

A first "save the date" invitation to the core target group will be sent on M18, 1 year ahead of the Conference, after defining the dates and place of the event. A draft programme of the Conference will be released by M22, including names of speakers, even if with a TBC status. Periodical reminders to register at the Conference will be sent out every two months up to M24, when reminders will become monthly. The overall logistics of the event (venue, suggestion of hotels, catering, etc.) is expected to be fully arranged by M24.

A Background Paper, working as a general executive summary of the project main outcomes, will be prepared and distributed to registered attendants up to 3 weeks before the event. A Citizens' Summary of the Sustainability Plan of task 4.1 will also be produced and distributed alongside.

A Pre-Conference Webinar will be organized within the 2 weeks before the Conference. The goal of this webinar is to present the discussion questions that will guide the debate during the Final Conference, as well as to briefly present the Background Paper and the Citizens' Summary of the Sustainability Plan, ultimately ensuring all the attendants have the same level of information and are duly prepared to take part at the Conference on a constructive manner.

5.4. Liaisons with other related projects and initiatives (M6-M30)

Leader: CNR; contributors: CONICYT and SPI

The aim of this task is to ensure that the project has a constant level of interaction and cooperation with other key initiatives taken place at regional and global levels, with regards to research infrastructure cooperation, especially those involving either EU or CELAC countries.

The task leader will act as ambassadors of the project. In such position, they will develop quarterly information briefings of the project activities, including as well recommendations for upcoming initiatives of the project. These information briefings will be taken into consideration by the project consortium and, most importantly, will be disseminated and presented to the EU-CELAC Research Infrastructure Working Group. Particular attention will be given for the liaison with initiatives and projects identified like EU-CELAC FOCUS, EU-CELAC Interest group actions, RI NCPs and other identified in task 1.3.

Participation per Partner

Partner number and short name	WP6 effort
1 - MICINN	2.00
2 - MEC	0.50
3 - DLR	0.50
4 - AEI	0.50
5 - FCT	0.50
6 - SGCTEIP	0.50
7 - CNR	3.00
8 - CONACYT	0.50
9 - VTT	0.50
10 - CONICYT	10.00
11 - SPI	14.00
12 - CNPQ	0.50
13 - UEFISCDI	0.50
14 - MICITT	0.50
15 - COLCIENCIAS	0.50
16 - INSTRUCT-ERIC	0.50
17 - LIFEWATCH	0.50
18 - CIEMAT	0.50
Total	36.00

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D6.1	Project Communication and Dissemination plan	10 - CONICYT	Report	Confidential, only for members of the consortium (including the Commission Services)	3

List of deliverables

Deliverable Number¹⁴	Deliverable Title	Lead beneficiary	Type¹⁵	Dissemination level¹⁶	Due Date (in months)¹⁷
D6.2	Final Communication and Dissemination Report	11 - SPI	Report	Confidential, only for members of the consortium (including the Commission Services)	30
D6.3	Final Conference Conclusions	1 - MICINN	Report	Public	30

Description of deliverables

D5.1 Project Communication and Dissemination plan: Description of target groups, channels, promotional materials and planned dissemination activities (M3) – CONICYT
 D5.2 Final Communication and Dissemination Report: description and assessment of project activities and results achieved throughout the grant period (M30) – SPI
 D5.3 Final Conference conclusions (M30) – MICINN

D6.1 : Project Communication and Dissemination plan [3]
 It will contain a description of target groups, channels to be used, promotional materials to be prepared and planned dissemination activities.

D6.2 : Final Communication and Dissemination Report [30]
 Description and assessment of project communication and dissemination activities and results achieved throughout the grant period

D6.3 : Final Conference Conclusions [30]
 By the end of the project, a two-day final conference will be organised and held. This deliverable will contain the main conclusions on future EU-CELAC cooperation on RI, derived from the debates held during the conference.

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS12	Website and social media profiles online	11 - SPI	3	The website and social media accounts must be public by month 3 of the project
MS13	Release of the 1st Newsletter	11 - SPI	6	Newsletters will be part of the communication and dissemination activities. The 1st one should be published by month 6
MS14	Update of the Communication and Dissemination Plan	10 - CONICYT	18	In M18 the communication and dissemination plan will be updated, taking into account the results and lessons learnt from the first period of implementation
MS15	Publication of the 4th Press Release	10 - CONICYT	24	The 4th press release must be published by month 24

Schedule of relevant Milestones

Milestone number¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS16	Final Conference held	1 - MICINN	30	The final conference will be held at the last month of the project.

Work package number ⁹	WP7	Lead beneficiary ¹⁰	1 - MICINN
Work package title	Project Management and Quality Control		
Start month	1	End month	30

Objectives

This WP aims to guarantee the correct running of the project through the follow-up of activities performed, the quality and appropriate timing of deliverables, the coordination of legal and financial requirements and the establishment of an effective communication among the consortium and its management structures.

The specific objectives of the WP6 are:

- Guaranteeing an active project monitoring
- Supporting consortium members and WP leaders on a day to day basis to ensure timely execution of the work plan and production of the deliverables;
- Managing the project intranet, accessible to the consortium members and used as the main medium for exchanging project internal documents;
- Taking care of the resource management, financial bookkeeping and funding distribution;
- Managing the contractual aspects (Grant agreement, Consortium agreement, amendments), reporting to and liaising with the Commission;
- Ensuring quality control of deliveries.
- Ensuring an effective problem solving and risk management

Description of work and role of partners

WP7 - Project Management and Quality Control [Months: 1-30]
MICINN, MEC, DLR, AEI, FCT, SGCTEIP, CNR, CONACYT, VTT, CONICYT, SPI, CNPQ, UEFISCDI, MICITT, COLCIENCIAS, INSTRUCT-ERIC, LIFEWATCH, CIEMAT
 Task 6.1 – Project coordination (M1-M30)
 Leader: MICINN

This task is focused on the monitoring and internal communication in order to guarantee a well-timed and effective flow of the information among the partners and between the Coordinator and the WP Leaders, as members of the Steering Committee (SC).

The MICINN, as work package leader, will be in charge of drafting the terms of reference of the Research Infrastructures International Board (RIIB), including selection process, functioning rules and roles of the Board and relation with the EU-CELAC ResInfra consortium members and Steering Committee, to be approved by written vote of the consortium members by majority (half+1 of votes).

The members of the RIIB will be formed by gender-balanced representatives of international organisations and European funded projects related with RIs, such as ESFRI, the Ibero-American Programme on Science and Technology for Development (CYTED), the Ibero-American General Secretariat (SEGIB), STR-ESFRI and the project RISCAP.

It will be the task of MICINN to guarantee that the interrelation between consortium members, the Steering Committee and the Research Infrastructures Board is efficient and the roles of each of the groups is performed as expected.

A Project Handbook will be provided as a reference for all Consortium members regarding internal procedures that should be applied to daily and project tasks activities, internal communications, templates, etc.

An intranet will be created to ensure that all the project documentation is available and shared conveniently, including the Consortium Agreement, deliverables, the Project Handbook and minutes of meetings.

The main channels of communication among the project partners on a day-to-day basis will be by e-mail, teleconference, videoconference and meetings and regular contacts with the consortium members will be organised in order to prevent problems or lack of involvement of the partners.

Consortium meetings will take place at least once a year, back to back to workshops, EU-CELAC SOM or any other meeting of interest for the project, in order to reduce travel expenses but without losing personal communication, video or phone conferences will take place every 2 months to guarantee a correct evolution of the project and updating of the project evolution.

MICINN, as project coordinator, will be in charge of organizing project meetings, as well as the setting up and circulation of agendas and minutes.

The kick-off meeting will take place in a two months period after the start of the project, in Madrid. During this meeting the general planning of the project and the obligations as H2020 beneficiaries regarding technical and financial reports will be explained and doubts, if any, solved.

The activities under this task are:

- Regular follow-up of the project, planning and preparation of meetings, agendas and minutes and travel arrangements for the RIIB and associated members;
- Regular and effective communication with EC;

Task 6.2 Financial and technical reporting (M12-M30)

Leader: MICINN Contributors: All partners

This task covers the area of resource management, financial bookkeeping and funding distribution among partners, as well as the financial reporting to the European Commission respecting the timetable indicated in the Grant Agreement. In those cases needed, the Coordinator will assist partners on financial issues.

The Coordinator and WP leaders will be in charge of monitoring and checking that the deliverables are available on-time and with the necessary quality.

The specific activities under this task will be:

- Technical and financial reporting to the Commission and assistance to project partners for reporting;
- Internal project control and preparation of annual progress technical and financial report;
- Ensure completion of all deliverables;

Task 6.3 Quality Plan (M1-M30)

Leader: MICINN Contributor: UEFISCDI

The collection and technical quality of deliverables and reports stated in the DoW will be assured through this task.

The Coordinator will carry out continuous monitoring of the project activities, to guarantee the adequate progress of the project towards fulfilment of the objectives within the budget limits. The Steering Committee (Coordinator + WP coleaders) will develop a Quality Assurance Plan (QAP) to be approved by the General Assembly (GA), to guarantee appropriate activities and the quality of the deliverables, and the application of corrective measures if needed.

For assuring the quality of the project results, the connection with the Work package coleaders is crucial. For each WP (except WP6) it has been designed a co-leading approach with one Partner from EU or associated country to H2020 and another one from a CELAC country. These Work Package Coleaders will be responsible for ensuring that project objectives associated with their WP are met on time and in good quality. They are also responsible, with the support from the coordinator, for the coordination and integration of results with the other WPs, ensuring the interaction and the liaison of the tasks and the results achieved within the specified timeframe. Thus, first quality assessment of deliverables will come from these WP coleaders.

Participation per Partner

Partner number and short name	WP7 effort
1 - MICINN	15.00
2 - MEC	0.50
3 - DLR	0.50
4 - AEI	0.50
5 - FCT	0.50
6 - SGCTEIP	0.50
7 - CNR	0.50
8 - CONACYT	0.50
9 - VTT	0.50
10 - CONICYT	0.50
11 - SPI	0.50
12 - CNPQ	0.50

Partner number and short name	WP7 effort
13 - UEFISCDI	2.50
14 - MICITT	0.50
15 - COLCIENCIAS	0.50
16 - INSTRUCT-ERIC	0.50
17 - LIFEWATCH	0.50
18 - CIEMAT	0.50
Total	25.50

List of deliverables

Deliverable Number ¹⁴	Deliverable Title	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷
D7.1	Project Handbook	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	3
D7.2	Research Infrastructures International Board Terms of Reference	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	3
D7.3	Quality Plan	13 - UEFISCDI	Report	Confidential, only for members of the consortium (including the Commission Services)	4
D7.4	Intermediate technical and financial report	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	16
D7.5	Final technical and financial report	1 - MICINN	Report	Confidential, only for members of the consortium (including the Commission Services)	30

Description of deliverables

D6.1 Project Handbook (M3)– MICINN
D6.2 Research Infrastructures Board Terms of Reference (M3)- MICINN
D6.3 Quality Plan (M4) - UEFISCDI
D6.4 Intermediate Technical and financial report (M16) - MICINN
D6.5 Final technical and financial report (M31) - MICINN
D7.1 : Project Handbook [3]

The Project Handbook will contain internal procedures that should be applied to daily and project tasks activities, internal communications, templates, etc. It will be provided to all consortium members

D7.2 : Research Infrastructures International Board Terms of Reference [3]

The terms of reference will include information on the selection process, functioning rules, roles and relation with the consortium members and Steering Committee.

D7.3 : Quality Plan [4]

The goal is to guarantee that during the project life, appropriate activities are developed and the deliverables have the expected quality.

D7.4 : Intermediate technical and financial report [16]

Followint the Grant Agreement rules, an intermediate financial and technical report will be sent to the EC.

D7.5 : Final technical and financial report [30]

By the end of the project, and as stated in the Grant Agreement, a final technical and financial report will be sent to the EC.

Schedule of relevant Milestones

Milestone number ¹⁸	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS17	Kick-off meeting held	1 - MICINN	1	The kick-off meeting will crucial for starting the project, organising tasks, solving possible doubts concerning the management of the project, etc.
MS18	Selection of the Research Infrastructures International Board Members	1 - MICINN	3	The selection of the members of the RII Board should be finished by month 3
MS19	Project Handbook	1 - MICINN	3	The Project Handbook should be finished and distributed to consortium members by month 3, as a guide to facilitate the management of the project and the internal rules concerning communication, etc.
MS20	Intermediate meeting	1 - MICINN	16	The intermediate meeting, to be held in month 16, is an important milestone since it will serve to review the progress of the project and allow any corrective measures needed
MS21	Final Meeting	1 - MICINN	30	The final meeting will be held during the last month of the project, as a wrap up of the activities and achievements of ResInfra.

1.3.4. WT4 List of milestones

Milestone number ¹⁸	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months) ¹⁷	Means of verification
MS1	Criteria for eligibility of CELAC RI for the mapping exercise approved by the EU-CELAC RI WG	WP2	9 - VTT	4	The selection of the criteria for selecting the CELAC RI which will be included in the mapping exercise of WP2 is crucial for developing correctly the task. These criteria, as well as the scientific areas in which the RIs will be grouped will be presented to the JIRI RI Working Group for approval.
MS2	Interim report on CELAC RI	WP2	14 - MICITT	7	The report on CELAC RIs, as one deliverable of WP2, must be published in due time.
MS3	Set-up of surveys	WP3	7 - CNR	7	In order to identify the models that can be applied to EU-CELAC RI cooperation on one hand, and the CELAC region on the other, a specific survey will be carried out.
MS4	Analysis of surveys results	WP3	7 - CNR	12	An analysis of the surveys received will be performed to obtain conclusions on RI funding and governance models relevant to CELAC RI and EU-CELAC cooperation.
MS5	Report on EU-CELAC RI cooperation models and practices delivered	WP3	4 - AEI	20	The report on EU-CELAC RI identifying cooperation models and practices must be prepared and submitted
MS6	Kick-off meeting of each Pilot organised and activity plan of each pilot defined	WP4	3 - DLR	6	The 4 RI pilots must their activity plans and kick-off meetings organised by Month 6
MS7	Pilot roadmaps for future bi-regional activities formulated	WP4	3 - DLR	24	On the basis of the work performed under WP4 and the results of the 4 RI pilots, a roadmap for future EU-CELAC activities will be elaborated and by Month 24, finished.
MS8	Guidelines enhancing future bi-regional collaboration formulated	WP4	3 - DLR	28	The guidelines for enhancing future bi-regional RI collaboration should be finalised by Month 28.
MS9	Research Infrastructures	WP5	1 - MICINN	4	As part of the liaison activities with official groups leading with RI,

Milestone number ¹⁸	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months) ¹⁷	Means of verification
	International Board set-up				an International Board on Research Infrastructures will be created by month 4.
MS10	Delivery of reports to EU-CELAC RI WG	WP5	2 - MEC	30	At least once a year during the life of the project, reports of the impacts, results and conclusions of the project will be presented to the SOM RI WG.
MS11	Presentation of the Sustainability Plan to the EU-CELAC RI WG	WP5	2 - MEC	30	The Sustainability Plan that will result as one of the main results of the project, will be presented to the SOM RI WG by the end of the project
MS12	Website and social media profiles online	WP6	11 - SPI	3	The website and social media accounts must be public by month 3 of the project
MS13	Release of the 1st Newsletter	WP6	11 - SPI	6	Newsletters will be part of the communication and dissemination activities. The 1st one should be published by month 6
MS14	Update of the Communication and Dissemination Plan	WP6	10 - CONICYT	18	In M18 the communication and dissemination plan will be updated, taking into account the results and lessons learnt from the first period of implementation
MS15	Publication of the 4th Press Release	WP6	10 - CONICYT	24	The 4th press release must be published by month 24
MS16	Final Conference held	WP6	1 - MICINN	30	The final conference will be held at the last month of the project.
MS17	Kick-off meeting held	WP7	1 - MICINN	1	The kick-off meeting will be crucial for starting the project, organising tasks, solving possible doubts concerning the management of the project, etc.
MS18	Selection of the Research Infrastructures International Board Members	WP7	1 - MICINN	3	The selection of the members of the RII Board should be finished by month 3
MS19	Project Handbook	WP7	1 - MICINN	3	The Project Handbook should be finished and distributed to consortium members by month 3, as a guide to facilitate the management of the project and the

Milestone number¹⁸	Milestone title	WP number⁹	Lead beneficiary	Due Date (in months)¹⁷	Means of verification
					internal rules concerning communication, etc.
MS20	Intermediate meeting	WP7	1 - MICINN	16	The intermediate meeting, to be held in month 16, is an important milestone since it will serve to review the progress of the project and allow any corrective measures needed
MS21	Final Meeting	WP7	1 - MICINN	30	The final meeting will be held during the last month of the project, as a wrap up of the activities and achievements of ResInfra.

1.3.5. WT5 Critical Implementation risks and mitigation actions

Risk number	Description of risk	WP Number	Proposed risk-mitigation measures
1	Limited experience in international research and innovation consortiums.	WP1, WP2, WP3, WP4, WP5, WP6, WP7	Previous experience in FP7 and H2020 projects is a very important asset to secure mutual understanding, transparency and effective communication, clear definition of common goals and expectations between partners.
2	Different project technical and financial management experience.	WP7	Previous experience with the infrastructures project is a very significant advantage to deal with specific issues (lack of administrative experience with H2020, etc.) that could arise especially from all partners
3	Low commitment and engagement of relevant stakeholders.	WP1, WP2, WP3, WP4, WP5, WP6, WP7	The project depends on the active involvement of various stakeholder groups, such as Research and Innovation policy makers; EU-CELAC SOM members; Research Infrastructures, etc. throughout the project implementation. The consortium partners will contribute with their experience, engagement and contacts at political and technical level to look for alternative solutions to the possible problems.
4	Underestimation of the needed efforts in specific tasks	WP2, WP3, WP4, WP5, WP6, WP7	The proposed internal control and management carried out by the coordinator during the project lifetime will be enough to avoid delays in the submission of deliverables & achievement of milestones. Similarly, the project coordinator, with the collaboration of the partners, will study the reallocation of efforts and resources in order to ensure that goals are reached.
5	Failure of WP leadership	WP1, WP2, WP3, WP4, WP5, WP6, WP7	Since nearly all the WPs have coleadership, this risk is low. If it happens, a redistribution of tasks will be agreed by the Steering Committee.
6	Unavailability to host one or more Workshops	WP4, WP6	Alternative partners and venues will be sought, with the corresponding funding and efforts redistribution.

1.3.6. WT6 Summary of project effort in person-months

	WP1	WP2	WP3	WP4	WP5	WP6	WP7	Total Person/Months per Participant
1 - MICINN	✓	0	0	0	6	2	15	23
2 - MEC		0	0	0	7	0.50	0.50	8
3 - DLR		0	1	7	0.50	0.50	0.50	9.50
4 - AEI		0	3	0	1	0.50	0.50	5
5 - FCT		2	1.50	0	0	0.50	0.50	4.50
6 - SGCTEIP		0	6	0	0	0.50	0.50	7
7 - CNR		0	4.50	8	0	3	0.50	16
8 - CONACYT		0	0	8	2	0.50	0.50	11
9 - VTT		4	1.50	0	1	0.50	0.50	7.50
10 - CONICYT		0	0	0	0	10	0.50	10.50
11 - SPI		0	0	0	0.50	14	0.50	15
12 - CNPQ		4	2	0	0	0.50	0.50	7
13 - UEFISCDI		0	1.50	0	0	0.50	2.50	4.50
14 - MICITT		2.50	1.50	0	0	0.50	0.50	5
15 - COLCIENCIAS		1.50	2	0	1.50	0.50	0.50	6
16 - INSTRUCT-ERIC		0	0	5	0	0.50	0.50	6
17 - LIFEWATCH		0	0	8	0	0.50	0.50	9
18 - CIEMAT		0	0	8	0	0.50	0.50	9
Total Person/Months		14	24.50	44	19.50	36	25.50	163.50

1.3.7. WT7 Tentative schedule of project reviews

Review number ¹⁹	Tentative timing	Planned venue of review	Comments, if any
RV1	16	Brussels	

1. Project number

The project number has been assigned by the Commission as the unique identifier for your project. It cannot be changed. The project number **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

2. Project acronym

Use the project acronym as given in the submitted proposal. It can generally not be changed. The same acronym **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

3. Project title

Use the title (preferably no longer than 200 characters) as indicated in the submitted proposal. Minor corrections are possible if agreed during the preparation of the grant agreement.

4. Starting date

Unless a specific (fixed) starting date is duly justified and agreed upon during the preparation of the Grant Agreement, the project will start on the first day of the month following the entry into force of the Grant Agreement (NB : entry into force = signature by the Commission). Please note that if a fixed starting date is used, you will be required to provide a written justification.

5. Duration

Insert the duration of the project in full months.

6. Call (part) identifier

The Call (part) identifier is the reference number given in the call or part of the call you were addressing, as indicated in the publication of the call in the Official Journal of the European Union. You have to use the identifier given by the Commission in the letter inviting to prepare the grant agreement.

7. Abstract

8. Project Entry Month

The month at which the participant joined the consortium, month 1 marking the start date of the project, and all other start dates being relative to this start date.

9. Work Package number

Work package number: WP1, WP2, WP3, ..., WPn

10. Lead beneficiary

This must be one of the beneficiaries in the grant (not a third party) - Number of the beneficiary leading the work in this work package

11. Person-months per work package

The total number of person-months allocated to each work package.

12. Start month

Relative start date for the work in the specific work packages, month 1 marking the start date of the project, and all other start dates being relative to this start date.

13. End month

Relative end date, month 1 marking the start date of the project, and all end dates being relative to this start date.

14. Deliverable number

Deliverable numbers: D1 - Dn

15. Type

Please indicate the type of the deliverable using one of the following codes:

R	Document, report
DEM	Demonstrator, pilot, prototype
DEC	Websites, patent filings, videos, etc.
OTHER	
ETHICS	Ethics requirement
ORDP	Open Research Data Pilot
DATA	data sets, microdata, etc.

16. Dissemination level

Please indicate the dissemination level using one of the following codes:

- PU Public
- CO Confidential, only for members of the consortium (including the Commission Services)
- EU-RES Classified Information: RESTREINT UE (Commission Decision 2005/444/EC)
- EU-CON Classified Information: CONFIDENTIEL UE (Commission Decision 2005/444/EC)
- EU-SEC Classified Information: SECRET UE (Commission Decision 2005/444/EC)

17. Delivery date for Deliverable

Month in which the deliverables will be available, month 1 marking the start date of the project, and all delivery dates being relative to this start date.

18. Milestone number

Milestone number: MS1, MS2, ..., MSn

19. Review number

Review number: RV1, RV2, ..., RVn

20. Installation Number

Number progressively the installations of a same infrastructure. An installation is a part of an infrastructure that could be used independently from the rest.

21. Installation country

Code of the country where the installation is located or IO if the access provider (the beneficiary or linked third party) is an international organization, an ERIC or a similar legal entity.

22. Type of access

- VA if virtual access,
- TA-uc if trans-national access with access costs declared on the basis of unit cost,
- TA-ac if trans-national access with access costs declared as actual costs, and
- TA-cb if trans-national access with access costs declared as a combination of actual costs and costs on the basis of unit cost.

23. Access costs

Cost of the access provided under the project. For virtual access fill only the second column. For trans-national access fill one of the two columns or both according to the way access costs are declared. Trans-national access costs on the basis of unit cost will result from the unit cost by the quantity of access to be provided.

EU-CELAC ResInfra

Towards a new EU-CELAC partnership in Research Infrastructures

History of changes

Date	Change
10/09/2019	List of acronyms corrected
20/10/2019	New CONACYT partners included
22/10/2019	Clarification of the employment status of Juan Climent (AEI) and Douglas Thompson and Andrés Barbosa (SPI).
22/10/2019	Ethics description included
22/10/2019	Open Research Pilot Data: non participation included in 2.3.2 Knowledge management and protection.
22/10/2019	Updated work packages; Work package relation and Gantt Chart
22/10/2019	Inclusion of WP and activity per budget in table 3.4b
25/10/2019	<p>Resources to be committed: Inclusion of a reference to the travel costs of INSTRUCT-ERIC and Lifewatch.</p> <p>Participants: clarification of the role of participating experts of INSTRUCT-ERIC and Lifewatch</p> <p>Update of CONACYT team members</p>

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List of abbreviations

CeBEM	Centre for Structural Biology of MERCOSUR
CELAC	Comunidad de Estados Latinoamericanos y Caribeños
CERN	European Organization for Nuclear Research
CRA	Common Research Area
CYTED	Ibero-American Programme on Science and Technology for Development
EOSC	European Open Science Cloud
E-RIHS	European Research Infrastructure for Heritage Science
ESFRI	European Strategy Forum on Research Infrastructures
ESO	European Southern Observatory
GA	General Assembly
GSF	Global Science Forum
GSO-GRI	Group of Senior Officials on Global Research Infrastructures
HPC	High Performance Computing
HTC	High-Throughput Computing
IGOs	International Governmental Organizations
INSTRUCT-ERIC	European Research Infrastructure in Structural Biology
JIRI	Joint Initiative for Research and Innovation
KPI	Key Performance Indicator
LAGO	Latin American Giant Observatory
MERIL	Mapping of the European Research Infrastructure Landscape
PRACE	Partnership for Advanced Computing in Europe
QAP	Quality Assurance Plan
RB	Reporting Board
RedCLARA	Cooperación Latinoamericana de Redes Avanzadas
RI NCPs	Network of National Contact Points for the Research Infrastructures programme
RICAP	Ibero American High Performance Computing Network
RIIB	Research Infrastructures International Board
RISCAPE	European Research Infrastructures in the International Landscape
SC	Steering Committee
SEGIB	The Ibero-American General Secretariat
SOM	Senior Official Meeting on Science and Technology
EU-CELAC RI WG	SOM Research Infrastructures Working Group
SWOT	Strategic Planning Technique (Strengths, Weaknesses, Opportunities and Threats)
VREs	Virtual Research Environments

1. EXCELLENCE

The EU-CELAC bi-regional cooperation in research and innovation has a long history and it is key in the political agenda of both regions. Back in 2010, the bi-regional EU-CELAC Madrid Summit endorsed the development of the EU-CELAC Knowledge Area¹ as a priority for the two regions under the on-going Joint Initiative for Research and Innovation (JIRI)². Since then, high-level Senior Officials from national bodies of the EU and CELAC countries meet regularly in the Senior Official Meeting (SOM) configuration with the objective to implement the EU-CELAC JIRI.

The fifth SOM held in Brussels the 14 March 2016 identified *the international outreach of research infrastructures as a strategic pillar for the EU-CELAC Common Research Area (CRA)*, together with the mobility of researchers and addressing global challenges.

A year later, on 14 March 2017, the 42 countries participating in the sixth JIRI SOM held in Brussels, agreed to continue working on strengthening the strategic regional partnership in research and innovation under the EU-CELAC Common Research Area and to ensure that appropriate functioning and activities were defined to develop each of the three pillars mentioned above.

More specifically, under the Research Infrastructures strategic pillar the Participants acknowledged the political and socio-economic importance of promoting a structured dialogue on research infrastructures and therefore endorsed, as a first step, *the establishment of a working group on research infrastructures*, the so-called SOM Research Infrastructure Working Group (EU-CELAC RI WG). The group aims to ensure bi-regional policy coordination through sharing of good practices, mapping of capacities and development of strategic actions related to RIs.

The main activities of the EU-CELAC RI WG according to its Terms of Reference are:

1. Information exchange on EU-CELAC policies and RI priorities;
2. Identification of RIs with potential to strengthen bi-regional cooperation.

The EU-CELAC RI WG members recognise how important are the state-of-the-art global RIs in producing excellent science to tackle global challenges, to foster innovation, and to promote the mobility and training of researchers. In this regard, the members express their strong willingness to strengthen the EU-CELAC cooperation in Science, Technology and Innovation through the reinforcement of collaboration in RIs. It is in this context that the EU-CELAC ResInfra Project will be key to support the mandate of the EU-CELAC RI WG mandate.

Under WP1 the Project will identify a selected number of CELAC RIs eligible for participating of the RI bi-regional collaboration. The selection will be carried out in relation to the RIs capacity for the production of high quality-excellent science, the portfolio of services offered; the access policy the RI performs, including the transnational access; the

¹[Towards the EU-Latin America & Caribbean Knowledge Area\(2012\)](#)

² Document on the Joint Initiative for Research and Innovation [JIRI](#)

maturity of the infrastructure in terms of long term sustainability, management and Human Resources policies among others.

The Project's WP2 will focus on analysing existing national and regional research and innovation policies through the collection of published strategies and plans with the objective to design the bi-regional RI Roadmapping Exercise. A special interest will be placed on the identification and analysis of the funding tools that support the construction and operation of the future EU CELAC RI collaboration.

WP4 will focus on the design of the RI **Sustainability Plan** once the results of WP1 and WP2 are available. The Sustainability Plan will not only include the analysis in terms of RI capacity, but as well in terms of their feasibility. Based on a variable geometry it will aim to determine the co-funding actions for constructing, upgrading, improving operative capacities and effectiveness, and as well it will agree upon actions that raise the international outreach of these RIs in the framework of the EU-CELAC collaboration.

With the intention of going further into the construction of the EU-CELAC Common Research Area (EU-CELAC CRA), WP3 will implement actions through a number of proposed **pilot projects**. They will be first tries in the construction of the bi-regional collaboration on RIs. These actions will be considered initial examples which will serve as references for supporting Ministries, funding agencies, RIs and scientific communities to build together the EU-CELAC CRA and to show the real possibilities and capacities for working together in the development of RIs of common interest.

While the proposal is constructed with a well-established definition of the four pilots, it will also offer certain flexibility to shape and widen their scope in such a way that additional activities may be included as result of the follow up of the works of the EU-CELAC RI WG, and in some case for widening the participation of countries beyond the initially ones involved. The goal is to allow the participating countries that express their willingness to participate in the pilots to be included in a scheme of variable geometry, in line with their interest and capacities. EU-CELAC ResInfra will implement a learning process during its lifetime, where the experiences obtained from the different activities will be shared among all the stakeholders involved, and they will be made available to the EU-CELAC RI WG.

The Project will use the ESFRI rules of work, procedures and methodologies as a reference during its actuations and exercises of selection, mapping and planning. As a starting point, it will be necessary to agree in a number of definitions and standards for guiding the exercise. In particular, all the partners will need to agree to a common definition of "Research Infrastructure" and a list of minimal key requirements to be asked for on the eligibility of the RIs. The CELAC landscape definition will be agreed upon, too. Aspects like uniqueness, production of excellent science, opening to transnational access, data policies or existing sustainable funding, will be taken into consideration for a general agreement before the process of selection, mapping and planning occurs.

It is important to state that EU-CELAC ResInfra will build upon the mapping exercises delivered in previous EU granted projects like EURORISNET+, EULAC FOCUS, RICH and on the national and regional Roadmapping exercises. The results and deliverables of these projects will be the basis for EU-CELAC ResInfra research and they will be considered accordingly among the participants with the objective to raise the effectiveness of our actions.

1.1 Objectives

The main goal of the EU-CELAC ResInfra project is to enhance the bi-regional collaboration on Research Infrastructures matter, building on the outputs of the established EU-CELAC RI WG and supporting the WG with the preparation of a Sustainability Plan together with pragmatic and concrete actions deployed through a number of proposed Pilots which will help to probe the feasibility of the collaboration, boosting it.

Recognising the value of the RIs as one of the pillars for the construction of the EU-CELAC Common Research Area (CRA) and considering the dissimilar development of the RIs landscape in both regions, the purpose of the project is to build on lessons learnt and exchange of good practices facilitating a framework of common understanding on RIs. To this purpose EU-CELAC ResInfra will follow ESFRI procedures and methodologies, which will be adapted to the special particularities of the CELAC region.

One of the first challenges faced by the cooperation in EU-CELAC Research Infrastructures is to assume a common definition of the concept of RI. In this Project, RI is understood according to the European Charter for Access to RI: *“facilities, resources and services used by the science community to conduct research and foster innovation. Some examples are: major scientific equipment (e.g. vessels, observatories), resources such as collections, archives, laboratories or scientific data, e-infrastructures such as data and computing systems, and communication networks. They can be single-sited (a single resource at a single location), distributed (a network of distributed resources), or virtual (the service is provided electronically).”*³

In this context to deliver the main goal of EU-CELAC ResInfra, the Project will:

1. **Identify a list of CELAC RIs** to be considered in the construction of the EU-CELAC RI collaboration. To this purpose it is necessary to define a set of minimal key requirements in terms of uniqueness, production of excellent science, maturity, services portfolio, opening to transnational access, and capacity for internationalisation which will be requested to the RIs for being considered eligible to be part of the RI collaboration scenario. EU-CELAC ResInfra will build on the mapping exercises of previous EU Projects such as ALCUENET or EULAC FOCUS.
2. **Gather and analyse information on strategies, policies, national roadmaps**, and funding tools at national and regional level to support the construction and operation of RIs within the CELAC science and technology systems. The results of this analysis will be considered to be part of the Sustainability Plan which will include proposals of joint activities, and the appropriate funding modalities in a co-funding approach to support long term activities of the RI EU-CELAC collaboration.
3. **Develop pilots** aimed to enhancing the cooperation and coordination between European and CELAC RIs at both policy and practical implementation levels. The EU-CELAC ResInfra project will construct upon examples. In this regard 4 Pilots will be developed on areas of interest for the EU-CELAC RI WG, among others, environment-biodiversity, BIO/health-structural biology, socio cultural innovation/natural & cultural

³https://ec.europa.eu/research/infrastructures/pdf/2016_charterforaccessto-ris.pdf

heritage, e-infrastructure-supercomputing. The Pilot projects will be mainly focused in activities within their scientific domain and will be targeted to develop a roadmap within its scientific area. They will also contribute to the development of other activities beyond that, by supporting activities targeted to work general aspects on the construction and operation of the RI, among others: governance, management, access policies, financial issues, innovation or sustainability. All of the before-mentioned essential building blocks for the setting-up of the basis for the RIs bi-regional collaboration. Another aspect, which will help to enrich the results obtained by EU-CELAC ResInfra is the fact that the selected pilots are in different stage of the life cycle. While some are landmarks and are implemented and offering services to the users, others are in their preparatory stage, working in all the aspects required for its implementation. This may affect the development of the bi-regional collaboration and it is considered as another element that will enrich the EU-CELAC ResInfra outcomes.

4. **Define and implement a proactive and comprehensive Communication and Dissemination Plan** to ensure optimal dissemination and uptake of the Project results for the benefit of the RI community in both regions;
5. Propose actions for the continuity of the collaboration beyond the end of the Project. The elaboration of a **sustainability plan** for the continuation of the RI EU-CELAC collaboration. The participation of funding institutional partners in the consortium is essential not only for the preparation of the collaboration, but also for the implementation of activities once the project has ended.
6. Ensure appropriate quality control of the project deliverables and communication to the EU-CELAC RI WG by the setting up of a **Reporting Board**.

1.2 Relation to the work programme

The EU-CELAC ResInfra proposal is linked to the **Call INFRASUPP-01-2018-2019**: Policy and international cooperation measures for research infrastructures, Coordination and support actions for the 2019 deadline.

The following table shows the relation between the project’s objectives and the Work Programme.

Table 1.2. Relation of EU-CELAC ResInfra to the Work Programme.

TOPIC	EU-CELAC ResInfra
Support the identification of priorities for regional and bi-regional cooperation based on the respective strategic road-mapping exercises	Under WP1 & WP2 EU-CELAC ResInfra will build on the developments of previous EU funded projects to perform a mapping of the RI Landscape in CELAC Region, including the identification of relevant stakeholders, policy strategies to support RIs, existing cooperation best practices between the EU and CELAC RIs together with any other relevant information on this regard
Foster the exchange of best practices between the EU and CELAC on issues of common strategic relevance	Through the different WPs is pursued better coordination and cooperation of the European Research infrastructures with their CELAC counterparts pro-

	<p>moting the collaboration of European researchers with CELAC RIs and reciprocally, for CELAC researchers to collaborate with European RIs.</p> <p>WP3 Pilots will also serve to develop specific roadmaps for cooperation for selected thematic areas, including the initial implementation of identified actions.</p>
<p>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</p>	<p>Under WP3 four Pilots are proposed to develop the bi-regional cooperation covering different aspects of interest, such as access, training, transnational access, data management, etc.</p>
<p>Strengthen the development of a consistent cooperation agenda with CELAC.</p>	<p>EU-CELAC ResInfra will contribute to strengthening the bi-regional collaboration on RIs, thanks to a better understanding of the existing possibilities in both regions for the setting-up of the collaboration. The exchanges of experiences in matters like definitions, procedures and methodologies for the identification of priorities, implementation, monitoring, and decisions on funding models, as foreseen in WP1 and WP2, will promote the cooperation.</p> <p>EU-CELAC ResInfra activities are fully aligned with the bi-regional cooperation agenda and particularly with the bi-regional policy dialogue on STI and, even more specifically, on RI. A dedicated WP for liaising with EU-CELAC RI WG is foreseen (WP4) and a specific Sustainability Plan will be designed in such WP, helping to move forward a long term sustainable bi-regional cooperation on RI. Also, the WP1, WP2 and WP3 deliverables on the landscape, benchmarking and cooperation models and practices on RI in the context of EU-CELAC will provide useful inputs to develop a more consistent cooperation agenda.</p>
<p>Develop the international outreach of the European research infrastructures' ecosystem</p>	<p>EU-CELAC ResInfra will support the internationalization of the European RI. The collaboration will be constructed on the basis of the lessons learnt in ESFRI, and the application of its procedures and guides adapted to the particularities of the CELAC region. The pilots to be implemented in WP3 are built on a number of selected ESFRI's RIs that have been selected taking into account their willingness to promote their internationalization. While initially the pilots will propose collaboration with a limited number of countries, the intention is to extend the participation to as many countries as possible. The</p>

	<p>four pilots propose activities, which will definitely contribute to this end, proposing joint actions in a scheme of co-funding, which will facilitate the capacity building and RI human capital development in CELAC region.</p>
<p>Foster a global research area vision and the development of global research infrastructures</p>	<p>The Research Infrastructures International Board (RIIB) setup in WP6 will comprise representatives of initiatives beyond the EU-CELAC context, namely from the Group of Senior Officials on Global Research Infrastructures (GSO-GRI) and from the OECD Global Science Forum, for example.</p> <p>The involvement of such representatives will help taking key results of EU-CELAC ResInfra – such as the Final Pilot Report (D3.3) and the Action Plan (D4.3) – beyond the context of EU-CELAC cooperation, enabling the identification of lessons learnt good practices and challenges that may be applicable or affect research infrastructures cooperation globally.</p>
<p>Contribute to capacity building and research infrastructures human capital development in targeted/relevant regions</p>	<p>WP4 will contribute to capacity building and research infrastructures human capital development in both regions.</p> <p>It will foster multi-lateral cooperation of both European and CELAC RIs, promoting and facilitating the mutual openness.</p>
<p>Enhance the role of the Union in multi-lateral fora</p>	<p>The project will enable European RI to further engage on international cooperation initiatives with their Latin American and Caribbean counterparts. This is particularly taking place in WP3, in which the pilot actions may bring lessons learnt and good practices that could ultimately be applied in other cooperation contexts. Furthermore, by constantly dialogue with the policy cooperation structures, through WP4, EU-CELAC ResInfra will ensure the necessary conditions for a political uptake to progress on the cooperation on RI. Ultimately, therefore, EU-CELAC ResInfra will provide the conditions for European policy actors and European RI to take an active leading role in promoting RI cooperation – initially at the bi-regional context, but ultimately transposing it to the multilateral level.</p>

1.3 Concept and methodology; quality of the measures

The main objective of the EU-CELAC ResInfra project is to contribute to fostering the bi-regional collaboration on Research Infrastructures by means of concrete actions through a number of Pilots and exchanges of best practices.

EU-CELAC ResInfra is focused on the construction of the EU-CELAC CRA with regards to RIs. Taking this into account, EU-CELAC ResInfra has been organized to cover aspects that have not been considered in previous EU funded projects. First, the project will focus on all the organizational and financial aspects required for the implementation of the EU-CELAC RI collaboration. Second, the tasks will be focused on the development of concrete activities through the Pilots to contribute to the construction of the EU-CELAC CRA from the RI perspective in the four scientific areas selected, offering certain flexibility to extend it to new Pilots or additional tasks of the proposed pilots depending on the outcomes of the EU-CELAC RI WG. Finally, the project will focus on the definition of co-funding activities to guarantee the sustainability of the collaboration beyond the end of the Project.

The activities of EU-CELAC ResInfra will be well linked to European and well known worldwide initiatives. The project will establish links through the Research Infrastructures International Board with ESFRI, and its RIs, OECD Global Science Forum which counts with a group specifically dealing with RIs, the Group of Senior Officials on Global Research Infrastructures, the Ibero-American Programme on Science and Technology for Development (CYTED) or the Ibero-American General Secretariat (SEGIB). The RI International Board will also serve to the Project as an external review process to assure an appropriate quality control of the project deliverables.

EU-CELAC ResInfra will benefit from the co-operation with other EU projects and initiatives in the European research infrastructures development to ensure coherence, like RISCAPÉ, which will provide international landscape analysis, or the results of InRoad project, learning from the results related to a better harmonisation and synchronisation of priority-setting, funding, evaluation and life-cycle management of Research Infrastructures (RI) in the European and national perspectives.

Regarding gender, EU-CELAC ResInfra will develop neither research content nor design of research topics for call proposals, although future calls will be planned in the **Sustainability Plan** developed under WP4. However, this project will consider the gender dimension of research in future developments of joint funding activities in the research infrastructures promoted in this CSA.

EU-CELAC ResInfra is committed to advance **gender equality** in research infrastructures from international cooperation initiatives as this is a cross-cutting issue for Horizon 2020. This project will focus on gender balance in decision-making at the highest level of the Ministries involved in the development of RI, as well in the promotion of women's participation in all the activities organized in the framework of this project. EU-CELAC ResInfra will ensure in particular that:

- The Research Infrastructures International Board and the EU-CELAC SOM Reporting Board will take into account women's perspectives and leadership.
- The four pilot coordination activities will include gender balance as a quality criterion of research infrastructures.

- Sex-disaggregated data and gender indicators will be yearly collected in order to provide the EC and the consortium with information regarding its gender impact.
- Additional activities agreed during the lifetime of this project such as promotion of mutual learning workshops and capacity-building programmes will consider gender balance among the peers and attendees as well as the gender dimension of the content when appropriate.
- The project coordinator will count on the advice by gender experts of the institution when needed during the lifetime of the activities.

2. IMPACT

2.1 Expected impact

EU-CELAC ResInfra project main impacts will be related to the development of a stable framework of cooperation and a realistic roadmap that will impact on the internationalization of RI from both regions, reinforce the EU-CELAC cooperation, and perform human capital development and capacity building, use demonstrative collaboration experience to facilitate research activities, do joint research actions and access high level scientific instruments, methods and data as well as research infrastructures management.

The project will have an impact in the awareness of the general population in EU and CELAC countries focused on the importance of using RIs as producers and facilitators of excellent sciences, creators of highly skilled jobs, on creating ecosystems to foster innovation and on creating economies of scale and effectiveness through collaboration. It is important to raise awareness of the need of collaboration to face the high costs the construction and operation of RI generates, indeed very difficult to be faced by a single country on its own. The Project will aim to raise the awareness among the research and entrepreneurial stakeholders as direct users of RI that should know about the different RI capacities and the possible added value that the use of RIs can bring to their activities.

The project is expected to have a long-term impact in different contexts:

- **Scientific Impact:** EU-CELAC ResInfra will create a framework for the EU-CELAC collaboration in RI and aware about the added value that represents for stakeholders and pilot actions to promote aspects related to management, good practices, capacity building or human capital development
- **Economic impact:** In a long term period is expected an increase in the use of RIs by innovators actors that will generate a better performance and settings, enhancing the competitiveness of their actions.
- **Policy impact** will have an important relevance because the openness of RI (including e-RI) their own country or participating RI from other countries required international agreements between countries or regions.

EU-CELAC ResInfra main stakeholders, major benefits and key performance indicators are summarized in table 2.1:

Stakeholders	Expected benefits	KPI
RI Users	<ul style="list-style-type: none"> - Easy identification of CELAC RIs available for the implementation of the collaboration. - Facilitate the transnational access on RIs among EU-CELAC regions through the pilots actions - Capacity building and training through the RI Pilot actions - Improve quality of the research groups. 	<ul style="list-style-type: none"> - Number of CELAC RIs ready to participate in the EU-CELAC collaboration - Number of users on the Pilot actions - CELAC countries participating in the EU-CELAC ResInfra project. - Capacity building actions developed in the EU-CELAC ResInfra project. - Number of training actions developed in the EU-CELAC ResInfra project. - Number of research groups interested.
RI Managers	<ul style="list-style-type: none"> - Identification of CELAC RIs capacities for future collaborations. - Improve resources and capacities - Promotion of best practices in sharing RI that will increase excellence in future projects. - Increase the visibility of RIs from both regions and maximize their use for R&D and innovator actors. - Signing of MoU or agreements for sharing RIs 	<ul style="list-style-type: none"> - CELAC countries participating in the EU-CELAC ResInfra initiative through the Pilots actions. - Number of RI best practices promotion actions implemented in the EU-CELAC ResInfra project. - Number of communication actions implemented in the EU-CELAC ResInfra initiative. - Number of joint actions proposed
Policy makers and program managers at national funding agencies	<ul style="list-style-type: none"> - Share a vision of research priorities - Create and/or update conditions of EU-CELAC research priorities based on RI - Create conditions for RI sharing and access to stakeholders. - Avoid duplication of activities and investments in RIs among both regions. 	<ul style="list-style-type: none"> - Number of policy makers from EU and CELAC participating in the EU-CELAC ResInfra initiative. - Number of priority areas of cooperation on RI detected in the EU-CELAC ResInfra initiative corresponding to H2020 Social Challenges.

	<ul style="list-style-type: none"> - Share vision of societal challenges and research priorities and detect RIs from both regions that can be shared to better fulfill these priorities - Signing of MoU or agreements for sharing RIs 	- Number of MoU or agreements signed or proposed to be signed for sharing RIs
International governmental organizations (IGOs)	- New opportunities to use RIs for international collaborative projects with the long term goal of fostering economic growth.	- Number of future actions of collaboration in RIs planned at the end of the EU-CELAC ResInfra initiative.

2.2. Barriers and obstacles preventing the achievement of the expected impacts

External barriers and obstacles are identified based on a brief PESTEL analysis, as shown below:

- **Political** – absence of priority given to research infrastructures cooperation in the context of the bi-regional policy agenda;
- **Economic** – lack of sufficient financial resources to implement an effective cooperation among research infrastructures;
- **Social** – disparities and imbalances on the qualification and work conditions of managers and other staff of research infrastructures;
- **Technological** – fierce competition from other global innovation players (such as USA, Japan or China), leading EU and CELAC to adopt a more innovation follower-like status;
- **Legal** – bureaucracy and administrative complexities hindering the potential for cooperation among EU and CELAC research infrastructures;
- **Environmental** – the possible environmental impact associated to the implementation of RI cooperation.

EU-CELAC ResInfra is supported by a **comprehensive and extremely relevant consortium**, which comprises several key policy actors from both Europe and Latin America with political, legal and financial responsibilities over RI, thus helping to step away from the risks identified in those areas. The **effective engagement of research infrastructures, their staff and their end users** will also help identify measures to mitigate or even to overcome the technological and environmental barriers identified here in. Finally, it is also important to refer that EU-CELAC ResInfra designed customized management structure and procedures (as depicted in section 3.2), with partners carrying out specific roles and responsibilities in the overall coordination and implementation of the project. This will be complemented with more detailed and operational measures in the Project Handbook (D6.1) ultimately ensuring that all major obstacles and barriers have an identified exit strategy.

2.3 Measures to maximise impact

EU-CELAC ResInfra project main impacts will be related to the development of a stable framework of cooperation and a realistic roadmap that will impact on the internationalization of RIs from both regions, the strengthening of the EU-CELAC cooperation, the human capital development and capacity building, using demonstrative collaboration experience to facilitate researching activities, offering joint research and access to high level scientific instruments, methods and data as well as sharing research infrastructures management experiences.

In addition to the expected impact as defined in the work program, the project will continue building on the EU-CELAC policy relations, acting as a relevant actor for science diplomacy. Such as in the previous projects (EULARINET, EU-LAC Health, ALCUE-NET, ERANet-LAC), this one project will strengthen the links between the two regions, supporting also at the highest political level the proposals made in the framework the EU-CELAC Joint Initiative on Research and Innovation (JIRI) adapting as much as possible its requested measures.

The project will have an impact in raising awareness of the general population in EU and CELAC countries on the importance of using RIs as means to produce excellent science, to create highly skilled jobs and to foster innovation, as well as the importance of the RIs cooperation to face the extremely high cost of the construction and operation of the RIs, impossible to be afforded by a single country on its own. And finally, special awareness will be placed to research and entrepreneurial stakeholders as direct users of RIs, meaning that they need to know about the different RI capacities and the possible added value that the use of RIs can bring to their activities.

The project is expected to have a long-term impact in different contexts:

- **Scientific Impact:** EU-CELAC ResInfra will create a framework for the EU-CELAC collaboration in RIs and awareness on the added value that represents for the stakeholders the collaboration on RIs. To this purpose the Pilots coordination action will be essential to promote aspects related to management, good practices, capacity building or human capital development.
- **Economic impact:** In the long term, an increase in the use of RIs by innovation stakeholders is expected, i.e.: innovation actors that will generate a better performance and settings, enhancing the competitiveness of their enterprises.
- **Policy impact:** will have an important relevance because of the open access of RIs (including e-infrastructures) of a country and whilst promoting the participation on RIs from other countries, something that will require of international agreements between countries or regions.

2.3.1 Dissemination and exploitation of results

The Dissemination and Communication Plan will be structured into the following sections: (i) objectives; (ii) target groups; (iii) channels and tools; (iv) indicators and targets; (v) tentative calendar. The Plan will be updated and fin tuned at the beginning of the project implementation, under task 5.1.

The Plan will have as objectives:

- To increase and maximize visibility, awareness and impact of EU-CELAC ResInfra objectives, activities and outcomes, both for the general public and for specific target groups;
- To help mobilising different target groups (and Research Infrastructures in particular) to get involved in EU-CELAC ResInfra activities. The target groups are: policy actor; Research infrastructures, including their staff and managers; user of RI (researchers, enterprises and others);
- To disseminate information of relevance and interest concerning Research Infrastructures both in Europe and in CELAC regions;
- To influence and leverage the agenda of the bi-regional policy dialogue on RI using the project outcomes (exploitation).

The Dissemination Plan will include 3 different types of channels– in-paper materials, online tools and live events – each one broken down into different types of tools. Key deliverables of the project will also be used for dissemination and exploitation purposes, through the preparation of a publishable executive summary of such documents.

2.3.2 Knowledge management and protection

As a coordination and support action, RESINFRA is neither expected to collect personal or sensitive data nor to generate scientific knowledge requiring specific protection measures.

Nevertheless, the consortium ensures a full implementation of GDPR standards. Informed consent and opt in clauses will be made explicit to any stakeholders whenever a data collection procedure is at stake (to subscribe the project newsletter, to register at the project website, etc.). No import/export of EU-based organizations data is expected to take place, but compliance and enforcement of GDPR standards will be requested to non-European partners of the consortium.

The Project Handbook (D6.1) will further detail any data management related issue. As the project coordinator and leader of this deliverable, MICINN will be responsible for indicating a Data Protection Officer at D6.1.

EU-CELAC ResInfra consortium will also rule any possible exploitation of scientific knowledge of the project through Intellectual Property Rights (IPR) clauses laid down at the Consortium Agreement. An Open Access Policy will be implemented for non-commercial results of the project. Each partner will own its IP background; foreground will be shared among partners who contributed to it. Access to IP of commercial solutions will be restricted, and foreground owned by contributors to the development of each solution.

Any academic article aimed for publication, including conference papers and proceedings, will be granted open access, in full respect of H2020 guidelines on open access to scientific publications and research data and of EC's Open Access Strategy. The Open Access principle will also be used for the RI involved in the pilot actions of WP3.

EU-CELAC ResInfra will not participate in the Open Research Pilot Data due to the fact that the project is a Coordination and Support Action, and therefore it will not provide research data.

2.4 Communication

This section indicates how external communication activities of EU-CELAC ResInfra will be performed – internal communication is addressed in the context of WP6, as it is essentially an internal management component.

Building upon a common a clear visual identity of the project (with its own logo, template and layout), a constant flow of information will be ensured, through the project dissemination channels, making sure that the project achievements and progresses are duly communicated.

The liaison and mobilisation of relevant projects, networks and initiatives will play a key role in this process. This encompasses EU-LACPerMed, EULAC FOCUS, EU-CELAC Interest Group actions and RI NCPs, CYTED, among others.

To communicate EU-CELAC ResInfra activities, project partners will also participate in seminars, workshops and international conferences, as speakers, moderators, exhibitors or in any other applicable role, to disclose information on the project achievements and outcomes.

3. Implementation

3.1 Work plan – Work packages and deliverables

The project is structured in 6 Work Packages:

WP1. Ethics Requirements. Under this WP, the ethics requirements that the project must comply with will be defined, taking into account the GDPR standards.

WP2. CELAC RI Landscape aims at updating the existing mapping of the CELAC RI ecosystem, as the basis for the bi-regional RI collaboration.

WP3. EU and CELAC strategies on RI prioritization and funding models. WP2 objective is to collect information and to create a portfolio of EU and CELAC RI roadmapping strategies and funding models in order to select the promising practices and lessons learnt to be shared.

WP4. Promoting the EU-CELAC RI Area through the collaboration between RIs from Europe and CELAC- Pilots will support the construction of the RI EU-CELAC collaboration area establishing bridges between the pan-European RIs, especially those included in the Roadmap of ESFRI, and national RIs with regional potential in their CELAC counterpart region;

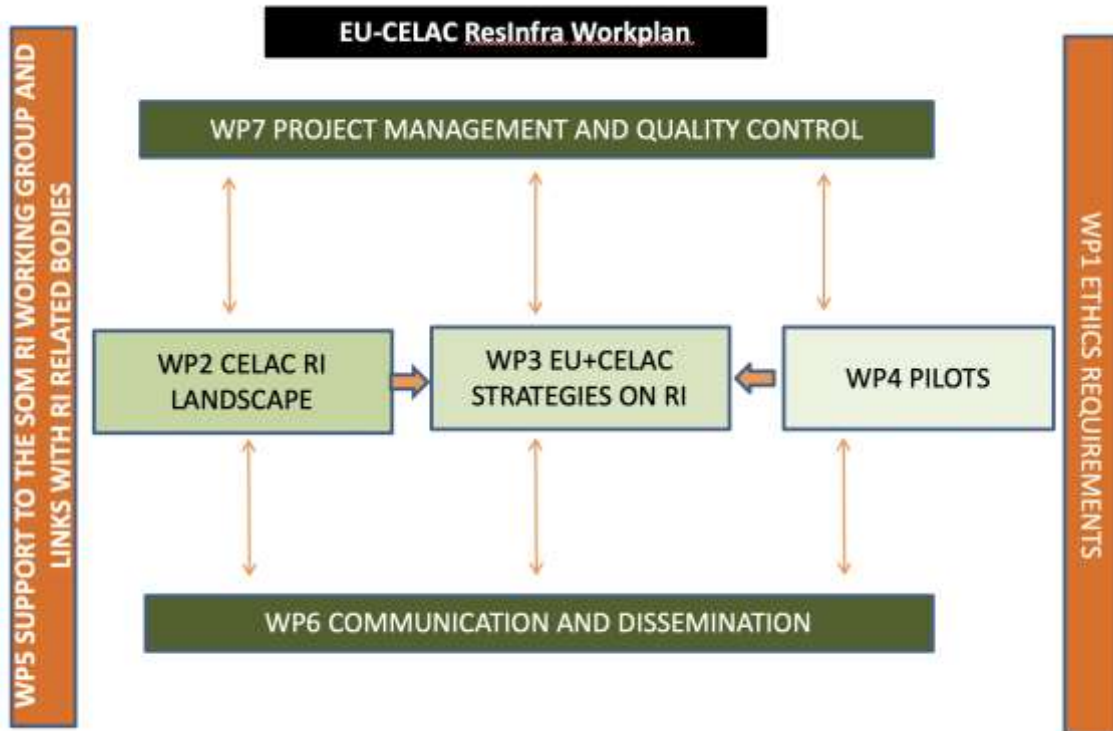
WP5. Support to the EU-CELAC RI Working Group and links with Research Infrastructures Related Bodies will be based on the information and support the policy activities of the EU-CELAC RI Working Group, as well as establishing links with RI related groups such as the Group of Senior Officials on Global Research Infrastructures (GSO-GRI), the OECD Global Science Forum (OECD-GSF) & ESFRI.

WP6. Communication and Dissemination will develop an effective strategy to communicate and disseminate the project activities, results and outcomes, generating impact and fostering the engagement of different target groups.

WP7. Project Management and Quality control aims to guarantee the correct running of the project through the follow-up of the activities performed, the checking of the quality and timing of deliverables, the coordination of financial and technical requirements and the establishment of an effective communication and efficient work-flow among the consortium and the management structures of EU-CELAC ResInfra.

The following diagram represents graphically the relation among Work Packages:

Figure 3.1 Work package relations.



GANTT CHART

WP/Task	WORK PLAN	PM	Start Month	End Month	Duration	MONTHS																																		
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
WP	WP1 Ethics Requirements	0	1	30	30																																			
WP	WP2 Mapping Research Infrastructures and supporting policies in CELAC	14	1	12	12																																			
T	T2.1 Analysing existing CELAC RI mapping																																							
T	T2.2: Deepening the CELAC RI mapping and elaborating the CELAC RI landscape	5,5	1	6	6																																			
T		9	6	12	7																																			
WP	WP3 EU and CELAC STRATEGIES ON RI PRIORITISATION AND FUNDING MODELS	24,5	6	20	15																																			
T	T3.1 CELAC Policies and funding models	6,5	6	12	7																																			
T	T3.2 European RI funding and participation models applicable to international cooperation	7	6	12	7																																			
T	T3.3 EU-CELAC Research Infrastructure promising cooperation models and practices	10	13	20	8																																			
WP	WP4 PROMOTING THE EU-CELAC RI AREA THROUGH THE COLLABORATION BETWEEN RIs FROM EUROPE AND CELAC: PILOTS.	44	1	28	28																																			
T	T4.1 EU-CELAC RI WG Follow-up and Pilots coordination	15	1	28	28																																			
T	T4.2 Pilot on Health. INSTRUCT-ERIC	8	6	24	19																																			
T	T4.3 Pilot on Cultural Heritage. E-RHS	0	8	20	13																																			
T	T4.4 Pilot on Ecosystem & supporting e-Biodiversity Services "LifeEuLac"	8	12	24	13																																			
T	T4.5 Pilot RICAP	8	12	24	13																																			
WP	WP5 Support to the EU-CELAC RI Working Group and links with Research Infrastructures Related Bodies	19,5	1	30	30																																			
T	T5.1 Sustainability plan to support and strengthen EU-CELAC collaboration.	14	12	30	19																																			
T	T5.2 Reporting Board to the EU-CELAC RI WG	5	1	30	30																																			
T	T5.3 Liaison with the Group of Senior Officials on Global Research Infrastructures, OECD-GSF and ESFR	4	2	30	29																																			
WP	WP6 Communication and Dissemination	35,5	1	30	30																																			
T	T6.1 Elaboration and update of the project communication and dissemination plan	4	1	3	3																																			
T	T6.2 Deployment of the project digital strategy for dissemination and communication	12	1	30	30																																			
T	T6.3 Implementation of complementary dissemination and communication activities and materials	10,5	1	30	30																																			
T	T6.4 Planning, organization and implementation of the Final Conference		26	30	5																																			
T	T6.5 Liaisons with other related projects and initiatives	6	6	30	25																																			
WP	WP7 Project Management	25,5	1	30	30																																			
T	T7.1 Project coordination	15	1	30	30																																			
T	T7.2 Financial and technical reporting	5	12	30	19																																			
T	T7.3 Quality plan	4	1	30	30																																			

3.2 Management structure and procedures

The management of EU-CELAC ResInfra has been designed to ensure the successful completion of the tasks and contractual obligations, while ensuring an efficient and timely flow of information and a dynamic and transparent decision-making. The Consortium Agreement will describe with detail the processes and bodies related with the management, including the procedures for problem-solving.

The Management structure of EU-CELAC ResInfra will be composed by four gender-balanced bodies:

1. **General Assembly (GA)**, composed by one representative of each of the consortium partners. It will be chaired by the Project Coordinator. It is the main body responsible for the project management and decision making.

2. **Steering Committee (SC)**, formed by the coordinator and WP leaders, will be in charge of following-up the planning of work in their work packages and for ensuring that specific tasks and deliverables are completed according to the WP plan.
3. **Reporting Board (RB)**, composed by representatives of MEC and MICINN, will be in charge of reporting the main findings, conclusions and reports of the project to the EU-CELAC RI WG. It will also be responsible for transferring the feedback, needs and suggestions of the EU-CELAC RI WG to the General Assembly in order to decide if specific actions are needed in the context of the CSA.
4. **Research Infrastructures International Board (RIIB)**, formed by representatives of international organisations and European funded projects related with RIs, such as the Group of Senior Officials on Global RI, OECD-GSF, ESFRI, the Ibero-American Programme on Science and Technology for Development (CYTED), the Ibero-American General Secretariat (SEGIB), STR-ESFRI and the project RISCAP. Its role will be mainly to act as Advisory Board, facilitating the feedback, communication and impact of the project results.

3.3 Consortium as a whole

The project's consortium has been selected with the technical and political goals in mind, on one hand to report periodically to the EU-CELAC RI WG, providing updated information of the results of EU-CELAC ResInfra activities, and receiving feedback from the Senior Officials that could contribute to improve the impact of the project, and on the other to enhance the bi-regional cooperation of RIs in its widest sense.

The project presents a well-balanced participation of 18 relevant partners from both regions, counting with Ministries acting as policy makers, Research Funding Organisations, Research Performing Organisations and Research Infrastructures.

The consortium counts with the needed knowledge to guarantee the success of the project and the political importance for being able to propose to the EU-CELAC RI WG future activities. In this sense, EU-CELAC ResInfra will benefit of the good knowledge of the reality of the RI in CELAC region together with a good knowledge of ESFRI and its RIs, H2020 RI Programme, and ERIC status and its application thanks to the involvement of the European partner institutions in all of these activities, included the Research Infrastructures partners in the Pilots.

Finally, the collaboration among the partners will facilitate the future policy-making in EU-CELAC RI cooperation and the future funding of common activities and mutual openness, while counting with the expertise, interests and know-how of the Research Infrastructures.

3.4 Resources to be committed

Table 3.4 b ‘Other direct cost’ items (travel, equipment, infrastructure, goods and services)

1. MICINN	Cost (€)	Justification
Travel	6.000 3.000 15.000	WP5: travels to SOM RI WG meetings (EU+LAC) WP6: travels to workshops WP7: travels of RIIB members to meetings + 1 meeting LAC+ 1 meeting EU
Other goods and services	9.000 20.000 2.000	WP7: Kick-off meeting (catering, conference room) WP6: Final conference (5 travels for speakers, conference room, catering) WP6: Dissemination materials (flyers, posters)
Total	55.000	

2. MEC	Cost (€)	Justification
Travel	4.000 8.000	WP5: travels to SOM RI WG meetings (1EU + 1 intra-LAC) WP7: attendance to project meetings (2 travels EU + 1 intra-LAC)
Other goods and services	10.000	WP5: Intra-CELAC meeting costs
Total	22.000	

3. DLR	Cost (€)	Justification
Travel	20.000 10.000	WP4: travels for visiting Pilots RI WP4: External participant’s travels for E-RIHS Pilot WP7: 2 EU + 1 LAC project meetings travels
Other goods and services	12.000	WP4: Pilots kick-off seminar costs
Total	42.000	

4. AEI	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

5. FCT	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

6. SGCTEIP	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

7. CNR	Cost (€)	Justification
Travel	6.000 10.000 7.500	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings 2 travel WP4: travels of E-RISH pilot participant personnel.
Other goods and services	9.000	WP4: Meetings organised by E-RISH pilot
Total	32.500	

8. CONACYT	Cost (€)	Justification
Travel	4.000 4.000 7.000	WP4: travels for visiting Pilots RI WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Other goods and services	10.000	WP4: Meetings with Pilots
Total	25.000	

9. VTT	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

10. CONICYT	Cost (€)	Justification
Travel	4.000 8.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Other goods and services	5.000 11.500	WP6: Project videos for communication WP7: Intermediate meeting costs (catering + room)
Total	28.500	

11. SPI	Cost (€)	Justification
Travel	4.000 8.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Other goods and services	500	WP6: Project web domain and hosts
Total	12.500	

12. CNPq	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

13. UEFISCDI	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

14. MICITT	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

15. COLCIENCIAS	Cost (€)	Justification
Travel	4.000 7.000	WP6: Workshop attendance WP7: 2 travel EU, 1 travel LAC for project meetings
Total	11.000	

16. INSTRUCT-ERIC	Cost (€)	Justification
Travel	37.500	WP5:Travels to LAC and EU for participants in Pilot activities. They will include travel and subsistence costs of the experts José María Carazo, Margarida Arder and Alberto Daniel Podjarny, who will not charge personnel costs.
Other goods and services	12.000	WP5:Pilot Meetings, trainings and workshops costs
Total	49.500	

17. LIFEWATCH	Cost (€)	Justification
Travel	22.500	WP5:Travels to LAC and EU for participants in Pilot activities, including travel and subsistence costs of the experts Jesús Miguel Santamaría and Francisco Pando, who will not charge personnel costs.
Other goods and services	12.000	WP5:Pilot Meeting and workshop costs
Total	34.500	

18.CIEMAT	Cost (€)	Justification
Travel	22.500	WP5:Travels to LAC and EU for participants in Pilot activities
Other goods and services	12.000	WP5:Pilot Meeting and workshop costs
Total	34.500	

Section 4: Members of the consortium

4.1. Participants

Participant: Ministry of Science, Innovation and Universities
Short name: MICINN
Description of the legal entity
<p>The Ministry of Science, Innovation and Universities is responsible to propose and execute the Government's policy regarding Universities, scientific research, technological development and innovation in all sectors.</p> <p>Ministry of Science, Innovation and Universities promotes and coordinates the scientific research, the Spanish participation in the R + D + I programmes promoted by the European Union, within the scope of its competences. As well as the coordination of the Spanish participation in the preparation and monitoring of European R & D & I policies, including the Framework Program for research and innovation, and the Spanish representation in other programmes, forums and organizations of a European nature.</p> <p>The Ministry is responsible of the strategic planning, coordination, development, monitoring and representation of Spain in Large Research and technological facilities and International Organizations. The formulation and the coordination of the Spanish position in international fora, and the proposal or designation, where appropriate, of those who will represent Spain in the international organizations.</p> <p>The impulse of the knowledge by the citizenship of the activity developed by the scientific community, without prejudice to the activity of other organs of the department.</p> <p>The promotion, development and coordination of the activities of the public research bodies attached to the General Secretariat for Scientific Policy Coordination, including especially the management of personnel.</p> <p>Strategic planning, coordination, monitoring and representation of large national scientific-technical facilities with Autonomous Communities, and strategic planning, coordination, monitoring and representation of actions related to national large scientific facilities.</p> <p>The Ministry is also responsible of the named Singular Scientific and Technical Infrastructure (ICTS), the national Research Infrastructures, term that refers to facilities, resources or services necessary to develop state-of-the-art research of the highest quality, as well as for the transmission, exchange and preservation of knowledge, the transfer of technology and the promotion of innovation. They are unique or exceptional in their kind, with a very high investment, maintenance and operation cost, and whose importance and strategic nature</p>

justify their availability for the entire R + D + i collective. The ICTS have three fundamental characteristics, they are publicly owned infrastructures, they are unique and they are open to competitive access.

The ICTS are distributed throughout the national territory and are included in what is called the "Map of Singular Scientific and Technical Infrastructures (ICTS)".

In relation with the particular content of the Proposal, the Ministry through the Vice-Directorate General for Internationalisation of Science and Innovation, represents the Ministry in the Large Research International Organisations where Spain is Member, e.g. CERN, EMBL, ESO, ESRF, ILL, F4E, INL, EFI, GBIF, among others. Contributes jointly with the rest of the Members to the strategic steering of the organisations and its funding.

In addition, the Ministry is also responsible of the coordination and promotion of the participation of Spain and its Institutions in the European Research Infrastructures. Participating in the multilateral negotiations for the implementation of the Infrastructures, and at National level of the internal proceedings through the Ministries of Finances and Foreign Affairs for their accession.

The Ministry Represents Spain in ESFRI, and in those ESFRI Landmarks where Spain is Member, such as, European Spallation Source-ERIC, INSTRUCT-ERIC, EMBRC-ERIC, EATRIS-ERIC, ECRIN-ERIC, SKA, European XFEL, ELIXIR, CTA, EuroArgo-ERIC, EMSO-ERIC or ACTRIS, among others. Deserve special mention LIFEWATCH-ERIC, who has its statutory seat in Spain, and EU-SOLARIS-ERIC who is in the final Steps for its creation and will have also the Statutory Seat in Spain, Almería or the projects who were most recently proposed to be included by Spain to the ESFRI Roadmaps and were successfully evaluated and included: EST (European Solar Telescope), ESFRI Roadmap 2016 and IFMIF-DONES ESFRI Roadmap 2018.

The Vice-Directorate represents the Ministry in the Horizon2020 Programme Committee for Research infrastructures and ERIC Committee.

The Ministry through the Vice-Directorate for Internationalisation of Science and Innovation coordinates the activities to promote the International Cooperation policies in R+D+I. In this regard the Ministry Represents Spain in the OECD Global Science Forum; SFIC, the ERAC Group for International Cooperation, or the Ibero-American Program of Science and Technology for Development (CYTED).

Curriculum vitae of the participants

Inmaculada Figueroa (female) is Deputy Vice-Director General for Internationalisation of Science and Innovation. She has worked with international cooperation and international and European infrastructures since 2009. Ms. Figueroa holds an Engineer degree in Industrial Engineering (Madrid Polytechnic University) and master on Electronic & Control (Madrid Polytechnic University). She joined the Ministry in 2009 after 17 years working in the National Institute for Aerospace Research (INTA) where she was involved in tasks re-

lated to Assembly, Integration and Verification of Scientific Instruments of different Payloads of National and ESA Space Missions. She has been involved with ESFRI and ESFRI Projects since 2009. She is member of the ESFRI Executive Board since 2017, being currently Vicechair. She represents Spain in different Governmental Boards of ESFRI Projects such as SKA, PRACE, CTA, EMBRC, INSTRUMENT or EST. She is Council Member of ESO, and has been chair of its Financial Committee in the period 2016-2018.

Ms Figueroa is representative on behalf of Spain to the H2020 Programme Committee for RI, and of the ERIC Committee. And she has been involved in the group related to RI in the OECD Global Science Forum and the corresponding in Science Europe.

She is also involved in International Cooperation activities, participating on behalf of Spain in bilateral joint meeting, and multilateral forums like SOM CELAC. In particular Inmaculada Figueroa is representative of Spain in the RI EU-CELAC SOM WG.

José Ramón Sánchez Quintana (male) is a civil servant in MICINN. He has worked in international cooperation and international infrastructures since 2008. Mr Sanchez holds an Engineer degree in Aeronautics (Madrid Polytechnic University) and master on Satellite Communications (Madrid Polytechnic University). He has been involved with ESFRI projects related to the **renewal energy, environmental aspects and upgrade of radiation scientific facilities. Collaboration on Research and Innovation and international cooperation**, including the on-going Middle East infrastructure and Ibero-American Program of Science and Technology for Development (CYTED).

Relevant publications, products and services

As representative on behalf of Spain in Councils and Financial Committees of International Organisation for Research (CERN, ESO, EMBL, F4E, ESRF, ILL, INL) and ESFRI Projects, MICINN counts with a deep knowledge on the reality of the construction, upgrading, operation and dismantling of RIs.

In addition, MICINN is responsible of the Map of National Research Infrastructures (ICTS), more than 50 unique R+I Infrastructures along the Spanish territory in all the scientific domains. Therefore MICINN has a strong experience in roadmapping, evaluation and planning of RIs as well as monitoring and upgrading.

Another important point that deserves being underlined in this point is the experience of MICINN in the development and management of National/Regional Research and Innovation Strategies for Smart Specialisation, a useful instrument to construct an efficient landscape of RIs, built upon the prioritisation of the different regions in the basis of their capacities and funding availabilities. Related to this, MICINN has also experience in the use of European Structural & Investment Funds (ESIF) for RIs.

As ESFRI representatives, MICINN has a deep knowledge of ESFRI methodologies, procedures and planning.

Previous projects or activities

EULANEST (European - Latin American Network For Science and Technology) was a project funded by ERA-Net scheme of the European Union FP6 (2006-2010). EULANEST prepared its partners towards the implementation and development of a first transnational joint call and thus intended to support a more coherent approach of the EU towards scientific cooperation with emerging Latin American countries, like Chile, Argentina or Brasil. It was a precursor project and laid the ground for ERANet-LAC.

EULARINET (European Union - Latin American Research and Innovation Networks) (FP7 INCO-Net 2008-2012) intended to strengthen the bi-regional dialogue on S&T between EU Member States (MS), Associated States (AS) and Latin American Partner Countries (LAPC) at policy, programme and institutional level: It stemmed from the agreed common vision for S&T cooperation between Latin America (LA) and the EU. EULARINET established a network between European and LA stakeholders (research entities, universities, industry, policy-makers, programme managers and civil society), as well as multidisciplinary partnerships identifying priorities of mutual interest and benefit for both regions and as such can be considered the precursor project for ALCUE NET.

ALCUE NET - Latin America, Caribbean and European Union Network on Research and Innovation (ALCUE NET), FP7 (2013 – 2017), outlines a Research and Innovation policy support project aimed at supporting the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative. It promoted do so by promoting bi-regional and bilateral partnerships for jointly societal challenges, working to develop the attractiveness of Europe in the world, and by promoting the establishment of a level-playing field in Research and Innovation. The project contributed to the definition and implementation of joint strategic agendas for research, development and innovation focusing on the thematic areas discussed under the JIRI: Energy; Information + Communication Technology; Bioeconomy; Biodiversity & Climate Change. Furthermore, the project established a technical secretariat to support the SOM. The thematic orientation of both, ALCUE NET and ERANet-LAC to the thematic areas discussed under the JIRI (ICT, biodiversity /climate change, energy, bioeconomy and health) lead to close coordination between both projects and thus to a strong mutual support for identifying topics for joint calls and for leveraging funding and implementing the joint activities

ERANET LAC - Network of the European Union (EU), Latin America and the Caribbean Countries (LAC) on Joint Innovation and Research Activities, FP7 (2013-2018). It supported the political process of implementing the Joint Initiative for Research and Innovation (JIRI), which was endorsed by the “Madrid Action Plan 2010-2012 - Towards a new stage in the bi-regional partnership: innovation and technology for sustainable development and social inclusion adopted by the EU-LAC Summit“ in Madrid in 2010. ERANet-

LAC strengthened the bi-regional partnership in Science, Technology and Innovation by planning and implementing concrete joint activities and by creating a sustainable framework for future bi-regional joint activities. Research and innovation funding agencies, programme owners and programme managers as well as other relevant stakeholders from both regions actively involved in the process in order to promote and enhance the opening of programmes and infrastructures efficiently and fostering long-term partnerships. Focusing on the priorities defined in the JIRI process, ERANet-LAC implemented three joint calls and organise concrete joint activities seeking to coordinate and cluster research programmes, mutually open research infrastructures and coordinate and open innovation programmes.

Research Infrastructures

LIFEWATCH ERIC: the e-Science European Research Infrastructure for Biodiversity and Ecosystem Research. ESFRI Landmark focused on how to measure the impact of Global Climate Change issues on Earth Biodiversity and Ecosystem Research.

EMSO ERIC: The European Multidisciplinary Seafloor and water column Observatory (EMSO) aims to explore the oceans, to gain a better understanding of phenomena happening within and below them, and to explain the critical role that these phenomena play in the broader Earth systems.

EURO-ARGO ERIC: It is a pilot project endorsed by the Climate Research Program of the World Meteorological Organization, GOOS, and the Intergovernmental Oceanographic Commission. The Argo network is a global array of more than 3500 autonomous instruments, deployed over the world ocean, reporting subsurface ocean properties to a wide range of users via satellite transmission links to data centres.

ACTRIS: It is the European Research Infrastructure for the observation of Aerosol, Clouds and Trace Gases. ACTRIS is composed of observing stations, exploratory platforms, instrument calibration centres, and a data centre. ACTRIS serves a vast community of users working on atmospheric research, climate and Earth system and air quality models, satellite retrievals, weather analysis and forecast systems by offering high quality data and research infrastructure services for atmospheric aerosols, clouds, and trace gases. (ESFRI Roadmap).

EU-SOLARIS: The EU-SOLARIS is the ESFRI Project devoted to the research in Concentrating Solar Thermal (CST) and Solar Chemistry technologies. EU-SOLARIS aims the deployment of the mentioned technologies by enhancing the use of research infrastructures and Research and Technology Development (R&D) coordination. EU-SOLARIS is expected to be the first of its kind, where industrial needs and private funding will play a significant role (ESFRI Roadmap).

IFMIF-DONES: International Fusion Materials Irradiation Facility – DEMO Oriented Neutron Source. A single-sited novel Research Infrastructure for testing, validation and qualification of the materials to be used in a fusion reactor. It is based on a unique neutron source with energy spectrum and flux tuned to those expected for the first wall containing future fusion reactors.

ESS ERIC: The European Spallation Source (ESS) is a European Research Infrastructure Consortium (ERIC), a multi-disciplinary research facility based on the world's most powerful neutron source. Its vision is to build and operate the world's most powerful neutron source, enabling scientific breakthroughs in research related to materials, energy, health and the environment, and addressing some of the most important societal challenges of our time.

CTA, Cherenkov Telescope Array. Research Infrastructure for ground-based very high-energy gamma-ray astronomy. With two host sites in the southern and northern hemispheres – on the European Southern Observatory (ESO) at Paranal grounds in Chile and at the Instituto de Astrofísica de Canarias (IAC) in Roque de los Muchachos Observatory in Spain – it will extend the study of astrophysical origin of gamma-rays at energies of a few tens of GeV and above, and investigate cosmic non-thermal processes.

Square Kilometre Array (SKA). SKA is an international project to build the world's largest radio telescope, with over a square kilometer (one million square meters) of collecting area. The SKA will use thousands of dishes and up to a million low-frequency antennas that will enable astronomers to monitor the sky in unprecedented detail. Two sites South Africa's Karoo region and Western Australia's Murchison Shire were chosen as co-hosting locations. The HQ will be located in Manchester (UK)

EST, European Solar Telescope: a 4-metre class telescope dedicated to study the fundamental processes in the Sun that control the solar atmosphere and its activity and the physical conditions in the heliosphere.

PRACE: The Partnership for Advanced Computing in Europe (PRACE) is a pan-European supercomputing Research Infrastructure providing access to world-class computing and data resources and services through a peer-review process, for large-scale high-impact scientific and engineering application. PRACE also seeks to strengthen the European users of High Performance Computing (HPC) in industry through various initiatives

INSTRUCT-ERIC: The Integrated Structural Biology Infrastructure (INSTRUCT) is a distributed Research Infrastructure that provides peer-reviewed access to a broad palette of state-of-the-art technology and expertise as well as training and technique development in the area of integrated structural and cell biology, with the major goal of underpinning fundamental research and promoting innovation in the biological and medical sciences.

EMBRC-ERIC: the pan-European Research Infrastructure for marine biology and ecology research. With its services, it aims to answer fundamental questions regarding the health of oceanic ecosystems in a changing environment, enabling new technologies to support life-science breakthrough discoveries with the use of marine biological models, and continue long-term marine monitoring. EMBRC-ERIC is a driver in the development of blue biotechnologies, supporting both fundamental and applied research activities for sustainable solutions in the food, health and environmental sectors.

ECRIN-ERIC: The European Clinical Research Infrastructure Network (ECRIN) is a distributed RI that supports the conduct of multinational, high-quality, transparent clinical trials by overcoming the obstacles caused by fragmentation and poor interoperability of the national, clinical research environment in Europe.

EATRIS-ERIC: The European Advanced Translational Research Infrastructure in Medicine (EATRIS) is a distributed RI that provides a unique one-stop access to the combined expertise and high-end technologies, required to develop new products for translational medicine, from target validation to early clinical trials.

OPENSREEN-ERIC: The European Infrastructure of Open Screening Platforms for Chemical Biology (EU-OPENSREEN) is a distributed Research Infrastructure that develops novel small chemical compounds which elicit specific biological responses on organisms, cells or cellular components.

ELIXIR: The distributed infrastructure for life- science information (ELIXIR), coordinates and develops life science resources across Europe so that researchers can more easily and, analyse and share data, exchange expertise, and implement best practices, and gain greater insights into how living organisms work.

EUBI: The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences (Euro-BioImaging, EuBI) provides a large-scale open physical user access to state-of-the-art imaging technologies for life scientists.

MIRRI, Microbial Resource Research Infrastructure: the pan-European distributed Research Infrastructure for microbial resources. MIRRI serves public and private bioscience users by facilitating access to a broad range of high quality bioresources and data in a legal compliant way.

Participant: Ministry of Education and Culture

Short name: MEC

Description of the legal entity

The Ministry of Education and Culture is responsible for the coordination of national education, promotion of the country's cultural development and preservation of artistic, historical and cultural heritage of the nation, as well innovation, science and technology as the promotion and strengthening of the observance of human rights. In addition, it is responsible for the development of the state multimedia system and for promoting the digitized access of all information to the population.

Among its Guidelines and strategic objectives, it can be found: promote the training of human resources in science and technology prioritizing the areas of knowledge required for their development in the country; develop the National Innovation System, strengthening the relationships between its actors and articulating the availability of knowledge and its potential applications; promote national research at all levels, prioritizing the one that is oriented to the solution of relevant national and local problems; maximize innovation in all national activities and promote scientific and technological development and boost the growing participation of the private sector.

The International Cooperation and Projects Directorate (DCIP), of the Ministry, acts as a cross-link to all areas of competence of MEC, with the outside in terms of cooperation, contributing to social development through exchange and collaboration. It promotes coordination and cooperation between national and foreign agencies and institutions, in order to exchange ideas, information and experience and provide mutual support to programs and projects that are proposed in cultural, educational and scientific technological management.

For the specific cooperation with the EU, in 2008 it was established the ‘Liaison Office MEC-CUBIST/EU’ (Uruguayan Contact Bureau for Innovation, Science and Technology) with the aim of promoting the participation of researchers, companies and universities from Uruguay in the EU Framework Programs and strengthening the Bi-regional Cooperation. In order to achieve this we disseminate the calls of the EU programs through workshops, info- days and trainings; collaborate in the search of international partners, promote the participation of experts, researchers and SMEs in international consortia; advise and provide technical support in the proposals and follow-up of the projects, and process the participation data from Uruguay in the framework programs. We also participate in the political dialogue between CELAC and the EU, where we coordinate the Network of NCPs of Latin America and the Caribbean for Horizon 2020 (LAC-NCP Network) and collaborate with the Coordinator of the Working Group for Infrastructures.

Curriculum vitae of the participants

Claudia Romano (female), sociologist, and Masters in “Management and Public Policies” (Universidad de la República, Uruguay) and in “International Development Cooperation” (Universidad Complutense de Madrid, Spain). Manager of the International Cooperation and of Projects of the Ministry of Education and Culture of Uruguay.

Coordinator of the Latin American and Caribbean Network of National Contact Points (LAC NCP Networks) for Horizon 2020. Trainer in more than 12 CELAC countries (H2020). She participated in three programs of Horizon 2020 and in two programs of FP7. She works as referent of Uruguay for the UE Programs since 2008.

More than 30 years of experience in the formulation and management of projects and programs of the International Cooperation with: the European Union (Network URBAL, Multicountries: Local Authorities, three participations in Horizon 2020 y two in FP7), Inter-American Development Bank, World Bank, UNESCO, Organizations of Ibero-American States for education, science and culture. She published diverse books and articles in these subject areas.

Graciela Morelli: holds a degree in Agricultural Engineering (UDELAR), and studies of Management in Science, Technology and Innovation (National University of General Sarmiento, Buenos Aires, Argentina). Since 1993 to 2016 she worked in the Directorate of Innovation, Science and Technology for Development of MEC. Actually, she works in DCIP and she’s in charge of the International Cooperation in Science, Technology and Innovation, and it’s coordination with other state agencies. She has 20 years of experience in International Cooperation in the Region and in linking government agencies and other institutions. Since 2008, she works in coordination with the Directorate of International Cooperation and Projects of MEC in Science and Technology subjects.

Nicolás Pons (male) is the Director of International Cooperation and Projects of the Ministry of Education and Culture since 2015. He is responsible for the multilateral and bilateral cooperation in S&T&I, education and culture. He is also part of Liaison Office for S&T&I between Uruguay-UE (CUBIST) directory.

Relevant publications, products and services

1. Guidelines for the establishment of Liaison Offices with the European Union in Latin America and the Caribbean.
2. Manual de participación en el Programa Marco de Investigación e Innovación de la Unión Europea (Participation Manual in the European Union Research and Innovation Framework Program)
3. Del 7º Programa Marco de Investigación y Desarrollo al Horizonte 2020: Cooperación en ciencia, tecnología e innovación entre Unión Europea y Uruguay. (From the 7th Framework Program for Research and Development to Horizon 2020: Coopera-

tion in science, technology and innovation between the European Union and Uruguay)

Previous projects or activities

MEC has a large experience in promoting, coordinating, and managing International Cooperation in Science, Technology and Innovation. As samples, in the frame of the bilateral cooperation with the UE-URUGUAY has developed the **INNOVA I** Programme, and its second phase, **INNOVA + INTEGRA II**. In this project, MEC received a budget for strengthening the Liaison Office MEC-CUBIST/EU. By other hand, in the cooperation MERCOSUR/EU, MEC has been part of **BIOTECH MERCOSUR/EU** (BiotecSur Platform).

MEC also participated in various FP7 and Horizon 2020 Projects:

- **EULARINET**: “European Union - Latin American Research and Innovation Networks”. FP7 INCO-Net, (2008-2012)
- **ALCUE NET**: “Latin America, Caribbean and European Union Network on Research and Innovation”, FP7 EU-INCO-NET (2013 – 2017),
- **ERANET-LAC**: “Network of the European Union (EU), Latin America and the Caribbean Countries (LAC)” on Joint Innovation and Research Activities, FP7 ERANET (2013-2018)
- **NMP-DeLA**: “Nanosciences, Nanotechnologies, Materials and New production Technologies Deployment in Latin American Countries”, EU FP7-NMP, 2013-2015
- **EdiCitNet**: “Edible Cities Network Integrating Edible City Solutions for social resilient and sustainably productive cities”, H2020-SCC(2018 - 2023)
- **Net4MobilityPlus**: “Network of the Marie Skłodowska-Curie Action National Contact Points for the mobile scientific and innovation community”, H2020-MSCA-NCP (2018-2021)

Participant: German Aerospace Center
Short name: DLR
Description of the legal entity
<p>DLR (German Aerospace Center) is one of Germany’s largest project management agencies. It assists several German Federal Ministries in i) planning and implementing national research programmes in various thematic areas, ii) providing political analysis and recommendations and iii) giving support for public relation and communication activities. PT-DLR manages an overall annual research budget of 1 billion EUR (i.e. 10,200 projects) on behalf of governmental authorities (i.e. national ministries, EU). Since 2001 PT-DLR has been granted DIN EN ISO 9001:2000 certification for quality management.</p> <p>The department European and International Cooperation as part of the Project Management Agency includes the International Bureau of the BMBF (IB), the EU Bureau of the BMBF (EUB) and hosts the German EUREKA/COST Bureau. Having a strong background in R&D strategy and policy implementation with particular emphasis on international relations, IB is especially dedicated to international cooperation activities. It supports the Federal Ministry’s bilateral cooperation in science, technology and education with about 50 countries worldwide in an effort to facilitate the preparation and implementation of international cooperation activities. The EUB coordinates the German Network of National Contact Points (NCPs) and hosts NCPs for Research Infrastructures, ERC, INCO, Legal & Financial Issues etc.</p> <p>DLR has profound knowledge of the science and technology landscape worldwide and is well connected to e.g. Latin American and Caribbean (LAC) research and innovation stakeholders as well as to European organisations working in this region. For the past decade and with increasing intensity, DLR has been engaged in many regional and international coordination activities launched mainly by the European Commission/DG Research and Innovation. DLR has longstanding experience and is strongly involved in activities supporting the implementation of the JIRI and the Common Research Area. It has participated in all EU-CELAC SOM since 2011. DLR has been involved in numerous EU funded projects in the form of ERA-NETs, INCO-NETs, Access4EU projects, BILATs, National Contact Points (NCPs), EURAXESS Worldwide, and others. These projects have produced excellent contacts and fostered fruitful working relations in operational and strategic fields with representatives of various units in the European Commission and of institutions in the LAC countries, as well as of similar organisations and ministries in other EU member states. Furthermore, DLR provides policy support in international and national research infrastructures committees such as ESFRI, GSO, OECD/GSF and serves as an advisory body for implementation of single large research infrastructures projects.</p>

Within the Framework Service Contract “Service Facility in support of the Strategic Development of International Cooperation in Research and Innovation” DLR is responsible for the specific contract “Support to the EU-Latin America and Caribbean Working Group on research infrastructures”.

Through its long-lasting experience in implementing the international S&T cooperation of Germany, through the active involvement in planning and implementing the international dimension of the European Framework Programmes, and through the proactive participation in numerous EU-funded Coordination and Support Activities, IB has developed specific expertise to contribute to all elements of the EU-CELAC ResInfra project.

Curriculum vitae of the participants

Stephanie Splett-Rudolph (female): Senior Scientific Officer at DLR Project Management Agency, International Bureau (IB), is biologist (tropical ecology with focus on Brazil) by training and holds a PhD degree in Biology. She joined the DLR in 1997 and was acting as German contact point for the INCO-COPERNICUS programme (until 1998), INTAS (until 2000) and the International Science and Technology Centre ISTC (until 2000). From 1998 until 2006 she was responsible for the bilateral scientific-technological co-operation between Germany and Poland. Since the beginning of 2007 she is working in the North, Middle and South America Group of the department European and International Cooperation, being involved in numerous EU-funded projects and contracts with both regions. Since May 2008 she coordinates the aforementioned unit.

Kathrin Megerle (female), Senior Scientific Officer at DLR Project Management Agency, gained several years of experience in supporting bilateral and multilateral scientific cooperation activities. She has proven knowledge in the field of scientific diplomacy as well as in the technical and structural support of research infrastructures in Argentina. She is responsible for the activities conducted in the service contract supporting the EU-LAC Working Group on Research Infrastructures within the H2020 Framework Contract “International Service Facility”. Preliminary version - will be revised

Beate Warneck (female), Senior Scientific Officer at DLR Project Management Agency, has been Policy Officer to the Deputy Director General of German Federal Ministry of Education and Research (BMBF) and assistant of the Chair of ESFRI and has outstanding experience in the political and strategic context of pan-European Research Infrastructures. She worked for three years in the ESFRI Secretariat as Seconded National Expert (SNE) in the department of Research Infrastructures in the European Commission in Brussels where she was involved in the development of the first European Roadmap for Research Infrastructures. Since 2012, she is Senior Scientific officer at DLR and NCP of the Programme "European Institute of Innovation and Technology (EIT)". She is involved in the activities conducted in the service contract supporting the EU-LAC Working Group on Research Infrastructures within the H2020 Framework Contract “International Service Facility”.

Relevant publications, products and services

International Service Facility – contract “Support to the EU-LAC RI WG” (H2020, 09/2018 – 03/2020): The “Service Facility in support of the strategic development of International Cooperation in research and innovation” - short: International Service Facility - supports the European Commission in reinforcing bilateral, multilateral and bi-regional policy dialogues with Third Countries and Regions as well as identifying and addressing barriers to and opportunities for increased cooperation. It is a tool within Horizon 2020 and one element of the Commission’s activities in pursuing the EU R&I international cooperation strategy.

Within the Framework of the Service facility DLR is contracted for the “Support to the EU-Latin America and Caribbean Working Group on Research Infrastructure”. The activities within the service contract include the organization of three SOM working group (WG) meetings on research Infrastructures (RI), three policy workshops on RI, up to three Intra-LAC coordination meetings as well as ten study visits from EU RI to LAC and vice versa. The organisation of all meetings is conducted in close cooperation with the EC, the co-chairs of the WG, national research, innovation and higher education administrations, national and international funding agencies of RIs, national policy makers responsible for research infrastructures and Pan-European RIs, such as the European Strategy Forum for Research Infrastructure's ones (ESFRI's), the European Research Infrastructure Consortium's ones (ERICs) and other World-class RIs.

Previous projects or activities

EULAC-Focus (Giving focus to the Cultural, Scientific and Social Dimension of EU-CELAC relations, H2020, 2016-2019): EULAC Focus is a research project with a clear aim of strengthening the EU-CELAC Strategic Partnership by reinvigorating and strengthening existing initiatives and proposing new and innovative areas of cooperation between both regions in the fields of culture, scientific cooperation and social issues. DLR, work package leader of the scientific dimension, among others is responsible for the mapping and analysis of the RI landscape in CELAC, which served as preparation for the CELAC RI meeting in Sep. 2017 and the EU-CELAC RI WG meeting in Mar. 2018.

ERANet-LAC (Network of the European Union, Latin America and the Caribbean Countries on Joint Innovation and Research Activities, FP7, 2013-2018). ERANet-LAC was coordinated by DLR. The project supported the political process of implementing the JIRI and strengthened the EU-CELAC partnership in Science, Technology and Innovation by implementing concrete joint activities and by establishing an innovative and sustainable framework for future bi-regional joint activities.

ALCUE NET (Latin America, Caribbean and European Union Network on Research and Innovation, FP7 INCO-Net, 2012-2017): Under the coordination of MINCyT, ALCUE NET supports the policy dialogue between both regions and acts as secretariat for the EU-

CELAC SOM

EULANEST (European - Latin American Network For Science and Technology) was a project funded by ERA-Net scheme of the European Union FP6 (2006-2010). EULANEST prepared its partners towards the implementation and development of a first transnational joint call and thus intended to support a more coherent approach of the EU towards scientific cooperation with emerging Latin American countries, like Chile, Argentina or Brasil. It was a precursor project and laid the ground for ERANet-LAC.

EULARINET (European Union - Latin American Research and Innovation NETWORKS, FP7 INCO-Net 2008-2012) intended to strengthen the bi-regional dialogue on S&T between EU and Latin American countries at policy, programme and institutional level: EULARINET established a network between EU and Latin American stakeholders (research entities, universities, industry, policy-makers, programme managers and civil society), as well as multidisciplinary partnerships identifying priorities of mutual interest and benefit for both regions and is the precursor project of ALCUE NET.

InRoad (Synchronising research infrastructure roadmapping in Europe, H2020, 01/2017 – 12/2018) promoted the exchanges of best practices for national and European roadmap drafting and evaluation procedures for RI in order to promote comparability and synchronisation of RI priority-setting procedures and a better understanding of mutual ex-ante and ex-post evaluation mechanisms. The main objective was to contribute to a better harmonisation and synchronisation of priority-setting-, funding- and life-cycle management of RI through the exchange of best practices among the main stakeholders in member states, associated countries and at European level. DLR was work package leader for analysing the national roadmapping processes and decision making processes for prioritisation and funding of research infrastructures in European Member States and Associated countries and for developing respective good practices and guidelines. DLR collaborated closely with the other involved partners on increasing better coordination of RI funding and RI business cases for long-term sustainability of RI.

Str-ESFRI (Support to Reinforce the European Strategy Forum for Research Infrastructures, H2020, 03/2015 – 02/2019) provides support to reinforce the European Strategy Forum for Research Infrastructures (ESFRI) under the guidance of its Chair, by providing additional resources, tools and expertise for performing its activities and supporting its structures. The main objectives of this project are to provide support to the ESFRI Chair in all ESFRI related activities, to support the process for delivery of the new ESFRI Roadmap, to disseminate and exploit ESFRI related outputs to the European and Global Research Infrastructure Area, liaise with key stakeholders including the e-Infrastructure Reflection Group (e-IRG), to identify best practices and facilitate the exchange of experiences among ESFRI projects and other European and Global Research Infrastructures and finally to monitor projects on the ESFRI roadmap support ESFRI by establishing a monitoring systems (ESFRI-MOS) and conducting exchange of experience workshops for RI managers.

Participant: Agencia Estatal de Investigación

Short name: AEI

Description of the legal entity

The Spanish State Research Agency, AEI-Agencia Estatal de Investigación is a public funding agency created by a Royal Decree on November 2015. The AEI belongs to the Ministry of Science, Innovation and Universities and it is responsible for the proposal, management, monitoring and evaluation of the State programmes and the strategic actions of the State Plan for Scientific and Technical Research and for Innovation 2017-2020. All these action of the Plan are performed under the Spanish Strategy of Science, Technology and Innovation 2013-2020.

The Agency purpose is to evaluate, manage, finance and then monitoring technical research activities (mainly research projects) intended to generate, exchange and exploit knowledge as fostered by Central State Government. The Agency objectives comprise the fostering of scientific and technical research in all areas of knowledge through the efficient allocation of public resources, the promotion of excellence, duly encouraging cooperation between the System agents and providing support for generating high impact scientific and technical, economic and social knowledge, including the most serious societal challenges. As well, the Agency has established agreements with other public or private, national or international entities/bodies, in order to promote the R&D and innovation within the implicit range of its purpose and objectives.

Curriculum vitae of the participants

Dr. Joaquín Serrano (male), got his PhD in Chemistry at the Universidad Complutense of Madrid. Since May 2013 he has been appointed Deputy Director General for International Projects at the Ministry of Economy Competitiveness.

He has had other responsibilities within the Ministry mainly related with management of scientific projects and research infrastructures at National and European level. He was the Spanish Representative in various Programme Committees during the Sixth and the Seven Framework Programme of Research and Technological Development. Dr Serrano has research experience in the area of nuclear waste at the Centre for Energy, Environmental and Technological Research (CIEMAT).

Mr. Juan Climent (male) was awarded a Diploma of Advanced Studies (Doctoral Studies) in Entrepreneurship at the University of Valencia in 2011, after the degrees in Languages for Business (University of Wolverhampton), in Economics (Universidad de Valencia) and Business Administration (Universitat Oberta de Catalunya). He is Technical

Advisor in the Ministry of Science, Innovation and Universities since 2012, first as Technical Coordinator in the General Secretary for Science, Technology and Innovation, after that, in the Deputy Directorate-General for International Relations and European Affairs, and nowadays, he works as a civil servant in the Subdivision for Horizontal S & T Programs. His professional experience is focused on business administration, European project management, R&D national policy and S&T international relations.

Previous projects or activities

EULANEST (European - Latin American Network For Science and Technology) was a project funded by ERA-Net scheme of the European Union FP6 (2006-2010). EULANEST prepared its partners towards the implementation and development of a first transnational joint call and thus intended to support a more coherent approach of the EU towards scientific cooperation with emerging Latin American countries, like Chile, Argentina or Brasil. It was a precursor project and laid the ground for ERANet-LAC.

EULARINET (European Union - Latin American Research and Innovation Networks) (FP7 INCO-Net 2008-2012) intended to strengthen the bi-regional dialogue on S&T between EU Member States (MS), Associated States (AS) and Latin American Partner Countries (LAPC) at policy, programme and institutional level: It stemmed from the agreed common vision for S&T cooperation between Latin America (LA) and the EU. EULARINET established a network between European and LA stakeholders (research entities, universities, industry, policy-makers, programme managers and civil society), as well as multidisciplinary partnerships identifying priorities of mutual interest and benefit for both regions and as such can be considered the precursor project for ALCUE NET.

ALCUE NET - Latin America, Caribbean and European Union Network on Research and Innovation (ALCUE NET), FP7 (2013 – 2017), outlines a Research and Innovation policy support project aimed at supporting the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative. It promoted do so by promoting bi-regional and bilateral partnerships for jointly societal challenges, working to develop the attractiveness of Europe in the world, and by promoting the establishment of a level-playing field in Research and Innovation. The project contributed to the definition and implementation of joint strategic agendas for research, development and innovation focusing on the thematic areas discussed under the JIRI: Energy; Information + Communication Technology; Bioeconomy; Biodiversity & Climate Change. Furthermore, the project established a technical secretariat to support the SOM. The thematic orientation of both, ALCUE NET and ERANet-LAC to the thematic areas discussed under the JIRI (ICT, biodiversity /climate change, energy, bioeconomy and health) lead to close coordination between both projects and thus to a strong mutual support for identifying topics for joint calls and for leveraging funding and implementing the joint activities

ERANet-LAC - Network of the European Union (EU), Latin America and the Carib-

bean Countries (LAC) on Joint Innovation and Research Activities, FP7 (2013-2018).

ERANet-LAC strengthened the bi-regional partnership in Science, Technology and Innovation by planning and implementing concrete joint calls and by creating a sustainable framework for future bi-regional joint activities. Focusing on the priorities defined in the JIRI process, ERANet-LAC implemented implement three joint calls and organize concrete joint activities seeking to coordinate and cluster research programmes, mutually open research infrastructures and coordinate and open innovation programmes.

ERANet-LAC and the EU-CELAC Interest Group, launched a new Joint Call in November 2017 to enhance the bi-regional cooperation in science, technology and innovation. It incorporated novelties such as the sharing of large RI infrastructures in Ocean Energy.

Participant: Fundação para a Ciência e a Tecnologia

Short name: FCT

Description of the legal entity

Fundação para a Ciência e a Tecnologia is the Portuguese public agency that supports science, technology and innovation, in all scientific domains, under responsibility of the Ministry for Science, Technology and Higher Education.

FCT’s mission is to continuously promote the advancement of knowledge in science and technology in Portugal, attain the highest international standards in quality and competitiveness, in all scientific and technological domains, and encourage its dissemination and contribution to society and to economic growth.

FCT pursues its mission through the attribution, in competitive calls with peer review, of fellowships, studentships and research contracts for scientists, research projects, competitive research centres and state-of-the-art infrastructures. FCT ensures Portugal’s participation in international scientific organisations, fosters the participation of the scientific community in international projects and promotes knowledge transfer between R&D centres and industry. Working closely with international organisations, FCT coordinates public policy for the Information and Knowledge Society in Portugal and ensures the development of national scientific computing resources.

The results of FCT accomplishments are, in essence, the outcome of the work carried out by individual scientists, research groups and institutions that are funded by FCT.

Curriculum vitae of the participants

Dr. Marta Abrantes (female), has a 5-year degree in Biochemistry from the Faculty of Sciences of the University of Lisbon (UL), holds a Master degree in Pharmaceutical Chemistry from the Faculty of Pharmacy of UL and a PhD in Microbial Biology, from the Insti-

tute of Biological and Chemical Technology – New University of Lisbon. From January 2013 to October 2013 she was a Senior Scientist at the biotech company Bioalvo, working on FP7 projects. In November 2013 she joined FCT as a scientific officer at the Department of International Relations, to work in ERA initiatives and later in European Research Infrastructures.

Joana Pinheiro (female), has a 5 year graduation and a MSc in Oceanography from the University of Algarve (PT). From 2007 to 2010, she has done research in Marine Geology & Geological Oceanography. Between September of 2010 and November of 2011, she worked at FCT as scientific officer for an Infrastructure Project (EUROFLEETS). Since December of 2011, she is working in ERA-NET projects as a scientific officer, at the Department of International Relations of FCT.

Note: Other scientific officer and financial officer are likely to be involved in the project, but the final allocation of officers will be performed at a later stage.

Previous projects or activities

FCT assures Portugal’s governmental representation in a number of European Infrastructures such as CLARIN ERIC, MIRRI, ECRIN ERIC, DARIAH ERIC, etc.

Participant: SGCTeIP

Short name: Secretaría General de Ciencia Tecnología e Innovación Productiva

Description of the legal entity

The Secretariat of Government of Science, Technology and Productive Innovation (SGCTeIP) establishes policies and coordinates actions aiming to strengthen the country’s capacity to respond to priority sectorial and social problems in order to improve society’s quality of life.

The scientific and technological policy developed by the National Directorate of Cooperation and Institutional Integration of SGCTeIP in the multilateral, bilateral and other specific fields allow scientific research promotion and productive innovation between Argentinean and foreign research groups through a broad range of joint R+I projects initiatives, workshops, seminars, trainings, and human resources development grants.

Cooperation among Argentina and a large number of the countries that are currently members of the European Union (EU) has a long and productive tradition. Since 1984, the EU applies a policy of research and technological development based on multi-annual Framework Programmes (FP). A lot of researchers, groups and institutions from Argentina began to participate in the FP since 1986, thus consolidating a strategic partnership of mutual

interest.

The signing of the Agreement on Scientific and Technological Cooperation between the European Union and Argentina in 1999 strengthened this relationship. Through this instrument, Argentina became the seventh country in the world and the first in Latin America to provide legal support to joint scientific research and technological development. The Agreement also allows strengthening innovation processes in Argentina through a greater interaction between R&D capabilities from Argentina and EU, as well as the development of new productive and technology-based business linkages in areas of common interest.

Cooperation policy developed of the National Directorate of Cooperation and Institutional, Secretariat of Government of Science, Technology and Productive Innovation has proven to be effective to recognize new global scenarios and new trends in international cooperation, focusing its work on a set of dimensions framed in the country's strategy. Its main fields of action can be classified in:

- Regional integration in science and technology has been based in MERCOSUR and UNASUR also now, with a view to CELAC (LA and Caribbean) region. In this regard, it has worked successfully in strengthening relationships with strategic partners and cooperation with less developed countries in order to reduce existing asymmetries and promote a better dialogue in our region with other stakeholders in the international community.
- The work of the Liaison Office with the European Union (EU), ABEST, that since 2005, advises and reports to the Argentina scientific community about the opportunities for cooperation through the EU Framework Programmes is also essential.
- According to the recommendations from the EU-AR Policy Dialogue and the CELAC-EU S&T process strongly promoted by the Senior Officials Meetings (SOM) and the Joint Initiative for Research and Innovation Roadmap (JIRI), ABEST III has incorporated new mechanisms and instruments to encourage an innovative approach promoting S&T bilateral cooperation and the articulation with ALCUE NET project (new INCO-NET with 19 partners from EU and LAC that will continue the EULARINET project). For its strategic relevance, ALCUE NET project has been recommended as a tool to support the implementation of the SOM activities.
- Bilateral relations have been the starting point for the inclusion of Argentina in the world today and are fundamental to generate cooperation processes that contribute to economic growth and social development. Currently, Argentina has established agreements with over 150 countries.
- Multilateral relations are focused on highlighting the constant presence and participation of the country in international forums and organizations such as the OAS, UNESCO and the European Union, where Argentina has emphasized the priority lines in science and technology and therefore develops an active participation. The Ibero-American Program, CYTED, is one of the main fields of interest of the country.

Since the creation of the Liaison Office AR EU to the present day, the participation of re-

search Argentinean groups has been very successful, reaching a 25% success rate, which is above the average of non-European countries. Co-financed by SGCTeIP and the European Commission, the Liaison Office since 2005 promotes collaboration between Argentina and European scientists in the field of the Framework Programmes through counselling, training, information dissemination, fellowships, exchange good practices and continuous monitoring, with excellent results:

- More than 40 Workshops, briefings and trainings, in Argentina, Latin America and the Caribbean and the EU.
- 18 National Contact Points (NCPs) Argentine in each of the thematic priorities of Horizon 2020.
- 44 Institutional Contact Points (ABEST-Net) distributed throughout the country.
- Argentina leads the ranking of effectiveness of the region
- 157 Research projects involving 201 Argentine institutions with 14.11 million euros of funding
- 26 SME participants, beneficiaries of 2.650.000 euros.
- Top 8 researchers funded by the European Research Council (ERC) in the amount of 11.55 million euros.
- Marie Curie fellows 241 Argentine experts involved in projects that mobilized 203.39 million euros.

Thanks to the EU- Argentina S&T Cooperation Agreement, the country participated in several technological cooperation projects, having one of the highest success rate of Third Countries. The Secretariat of Government of Science, Technology and Productive Innovations participating or has participated in the following projects of the Seventh Framework Programme and H2020: BIO-CIRCLE (2008-2010), STAR-IDAZ (2011-2015), BIO-CIRCLE 2 (2011-2013), ALCUE-KBBE (2011-2013), Other thematic projects: PRO-IDEAL (2008-2011), CoopAIR-LA (2009-2010), PRO-IDEAL PLUS (2010-2012) FIRST (2010-2012), IDEAL-IST 2011 (2008-2011); EULAC Health (2011-2016), IDEAL-IST 2014 (2011-2014), AMERICAS (2011-2013), LEADERSHIP (2013-2015) NMP-DeLA (2013-2015), ENSOCIO-LA (2013-2015), the ABEST Project in its three phases (from 2005-2015), EULARINET (2008-2012); INCONTACT (2008-2013), PeopleNetwork+ (2011-2013), ALCUE NET (2012-2017), ERANet- LAC (2013-2017), ERA CoBioTech (2016-2021) ERA ENSUGI (2016-2021) MAR TERA (2016-2021), ERA MIN 2 (2016-2021) EU LAC FOCUS (2016-2019), K.I.T.F.E.M (2017-2019), NeT4Mobility (2015-2018), Idealist 2018 (2015-2018) and other FP6 projects.

We are actively involved in the Global Alliance on Infectious and Chronic Diseases as well as Observer Member in the JPIAMR.

SGCTeIP coordinated ALCUE NET Project, the INCONet between the European Union and Latin America and the Caribbean, and hosts – through this role – the Secretariat of the S&T Senior Officials Meetings. SGCTeIP also co-leads the EU-CELAC Bioeconomy Senior Official Working Group jointly with the French Ministry of National Education, Higher Education and Research in the framework of EU CELAC Policy Dialogue.

Curriculum vitae of the participants

Mariano Jordán (male) is currently the National Director for Cooperation and Institutional Integration of the Secretariat of Government of Science, Technology and Productive Innovation. Graduated in International Relations from the University of Belgrano (UB) and Master in Diplomacy at the Brazilian Diplomatic Academy, Rio Branco Institute (Brasilia, Brazil). Since 1999, he has served in the Foreign Service of the Nation of the Ministry of Foreign Affairs and Worship, performing functions in Argentine representations abroad and various dependencies of the National State. He was a full professor of "History of International Relations of Latin America" at the University of El Salvador (USAL) and professor of "Theory of International Relations" at the Catholic University of Salta (UCASAL).

Maria Alejandra Davidziuk (female), coordinator of the Liaison Office Argentina–European Union at the National Directorate for Cooperation and Institutional Integration. More than 10 years' experience in cooperation with the European Union. Bachelor degree in Social Communication from the University of Buenos Aires, Argentina, and a Master of Arts' degree in International Affairs from the New School University, New York, with a specialization in social and economic development. Doctoral candidate in Social Sciences at IDES-UNGS (Argentina).

Agustina Velo, (female) Bachelor degree in Political Science, Master's Degree in Regional Integration; more than 5 years of experience as project officer from DNCII SGCTeIP, will be responsible for the technical and administrative issues.

Azul Irazoqui (female) Bachelor in International Relations, more than 4 years of experience in bilateral and multilateral STI cooperation programmes and initiatives from DNCII SGTeIP, will be responsible for the technical and administrative issues.

Previous projects or activities

EULANEST (European - Latin American Network For Science and Technology) was a project funded by ERA-Net scheme of the European Union FP6 (2006-2010). EULANEST prepared its partners towards the implementation and development of a first transnational joint call and thus intended to support a more coherent approach of the EU towards scientific cooperation with emerging Latin American countries, like Chile, Argentina or Brasil. It was a precursor project and laid the ground for ERANet-LAC.

EULARINET (European Union - Latin American Research and Innovation NETWORKS) (FP7 INCO-Net 2008-2012) intended to strengthen the bi-regional dialogue on S&T between EU Member States (MS), Associated States (AS) and Latin American Partner Countries (LAPC) at policy, programme and institutional level: It stemmed from the agreed common vision for S&T cooperation between Latin America (LA) and the EU. EULARINET established a network between European and LA stakeholders (research entities, universities, industry, policy-makers, programme managers and civil society), as well as

multidisciplinary partnerships identifying priorities of mutual interest and benefit for both regions and as such can be considered the precursor project for ALCUE NET.

ALCUE NET - Latin America, Caribbean and European Union Network on Research and Innovation (ALCUE NET), FP7 (2013 – 2017), coordinated by the former MINCYT (newly SGTEIP) outlines a Research and Innovation policy support project aimed at supporting the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative. It promoted do so by promoting bi-regional and bilateral partnerships for jointly societal challenges, working to develop the attractiveness of Europe in the world, and by promoting the establishment of a level-playing field in Research and Innovation. The project contributed to the definition and implementation of joint strategic agendas for research, development and innovation focusing on the thematic areas discussed under the JIRI: Energy; Information + Communication Technology; Bioeconomy; Biodiversity & Climate Change. Furthermore, the project established a technical secretariat to support the SOM. The thematic orientation of both, ALCUE NET and ERANet-LAC to the thematic areas discussed under the JIRI (ICT, biodiversity /climate change, energy, bioeconomy and health) lead to close coordination between both projects and thus to a strong mutual support for identifying topics for joint calls and for leveraging funding and implementing the joint activities

ERANET LAC - Network of the European Union (EU), Latin America and the Caribbean Countries (LAC) on Joint Innovation and Research Activities, FP7 (2013-2018). It supported the political process of implementing the Joint Initiative for Research and Innovation (JIRI), which was endorsed by the “Madrid Action Plan 2010-2012 - Towards a new stage in the bi-regional partnership: innovation and technology for sustainable development and social inclusion adopted by the EU-LAC Summit“ in Madrid in 2010. ERANet-LAC strengthened the bi-regional partnership in Science, Technology and Innovation by planning and implementing concrete joint activities and by creating a sustainable framework for future bi-regional joint activities. Research and innovation funding agencies, programme owners and programme managers as well as other relevant stakeholders from both regions actively involved in the process in order to promote and enhance the opening of programmes and infrastructures efficiently and fostering long-term partnerships. Focusing on the priorities defined in the JIRI process, ERANet-LAC implemented implement three joint calls and organize concrete joint activities seeking to coordinate and cluster research programmes, mutually open research infrastructures and coordinate and open innovation programmes.

SINCERE (2018-2022) aims to strengthen the delivery of the JPI Climate Strategic Research and Innovation Agenda (SRIA), building on existing collaborations, such as with other JPIs, the business sector and global financial institutions, and other key international research, policy and societal actors. Expanding JPI Climate to include member countries in Eastern Europe is a particular goal. Two Flagship Actions, focused on the design of research and innovation collaborations in Africa and Latin America.

AANChOR - All AtlaNtic Cooperation for Ocean Research and innovation (2018-2021) -

The main objective of AANCHOR is to upscale research and innovation cooperation within the Atlantic basin, from Antarctica to the Arctic. AANCHOR will produce 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. The project consortium comprises 16 partners from 9 countries, including Brazil and Argentina from CELAC. SPI is the coordinator of the WP dealing with blue economy, innovation and entrepreneurship.

EU LAC PerMed (2019-2022) has the ambition to engage CELAC countries in the International Consortium on Personalized Medicine (ICPerMed) and in the ERANet ERA-PerMed with the aim at advancing in the implementation of the Action Plan of ICPerMed based in the Strategic Research and Innovation Agenda, drafted by PerMed2020.

Participant: CONSIGLIO NAZIONALE DELLE RICERCHE

Short name: CNR

Description of the legal entity

The National Research Council (CNR) is the largest public research body in Italy. Founded in 1923, it is a public body since 1945. Its mission is: to perform research in its own labs both promoting innovation and competitiveness of the industrial system and providing technologies and solutions to emerging public and private needs; to promote the internationalization of the research system; to advise the Government and other public bodies on strategic themes for the Country and the collectivity; to contribute to the qualification of human resources. Its research centres/institutes/main infrastructures are divided according to the following macro-areas: Earth and Environment; Bio-Medical Sciences; Physical sciences and technologies; Engineering, ICT, Energy & Transportation; Agriculture & Food; Chemical sciences and technology of materials; Social and Human Sciences and Cultural heritage.

The Office for European and International Relations (UREI) – of CNR Directorate General is aimed at responding to the rising demand of CNR in implementing EU scientific programs. It has an active role in supporting the designing and implementation of CNR's strategies and initiatives in the fields of European Interest, it ensures a transversal approach in multidisciplinary international programs and policy issues. UREI has a head-quarter in Rome, a liaison branch in Brussels, two units: in Naples and Genoa.

CNR/INO hosts since 1990 the Heritage Science Group (HSG) working on applications of optical techniques and developing instruments for non-invasive analysis on Heritage objects. The HSG collaborates both with institutions of the Italian Ministry of Cultural Heritage and with prominent international research centres, conservation institutes and muse-

ums.

CNR/INO leads the European Research Infrastructure for Heritage Science (E-RIHS) listed in the ESFRI roadmap since 2016 and currently in the preparatory phase for the establishment of E-RIHS ERIC (tentative starting date 2021).

E-RIHS is distributed across Europe and includes the most advanced national facilities and institutions operating in the crosscutting discipline of heritage. E-RIHS advanced services to the scientific community will be provided by coupling cutting-edge tools with human resources holding first-class capacities in both heritage diagnostics and data interpretation.

Curriculum vitae of the participants

Marilena Rossano (female): Degree in Foreign Languages, Master in Business Administration and Master in Management of Public Administration, is senior technologist at CNR – International Office since 1996 and part of the UREI staff since January 2010. She is responsible of the UREI Naples Unit, focused – in particular - on the development of strategies and actions for cooperation between EU Member States and non EU Countries. She has been member of ministerial delegations for R&I cooperation with some of Mediterranean and Middle East countries (Syria, Saudi Arabia), she is member of the Group of Senior Officials for Mediterranean Area since 1996 and delegated by the Ministry of Education, University and Research to take part to JIRI-SOM for EU-CELAC cooperation. She supported the elaboration of art. 185 under H2020 and CO-FUND programme. She participated in several EU projects under 5FP, 6FP, 7FP, H2020. She is the person in charge at CNR to implement the Platform for CELAC Countries, for the joint calls of the 7FP co-funded project ERANET-LAC, for the programme of study visits to Research Infrastructures, as a follow-up initiative of VIENNA EU-LAC RI WG.

Cecilia Di Carlo (female): Technologist at CNR since 2006, she is expert in EU Research Infrastructures. Since 2012 she is in secondment at the Italian Ministry of Education, University and Research (MIUR), Department for Higher Education and Research, to support the definition of European policies and internationalization of Research. In particular, she contributed to the identification of the criteria and definitions that Italy implemented for the definition of its priorities in the frame of the European Strategic Forum on Research Infrastructures, she supported the Ministry and the Italian delegate to the different ERICs negotiation tables (application of tax exemption to ERICs, ERIC financing modalities, voting rules....), she contributed to the mapping of Italian RIs and to the editing of the National Program for Research Infrastructures, she took part in the drafting and the implementation of the Call for Proposal for strengthening of Research Infrastructures (Italian Operative Program for Research and Innovation 2014-2020). Starting from 2016 she is Italian Delegate as National Data Intermediaries - NDI in MERIL 2, and from 2018 she is the National Representative in the working group "EU-Latin America and the Caribbean Working Group on Research Infrastructures (EU-LAC RI WG)".

Nicoletta Palazzo (female) was Italian representative in ESFRI- European Strategy Forum on Research Infrastructures activities from 2006 to 2008, Italian National Contact Point and member of the Research Infrastructures Programme Committee in FP5 and FP6, and member of the ESF Forum on Research Infrastructures (2009-2012). Since 2010 she is responsible of the Genoa Unit of UREI, dedicated, in particular, to science policy development and support in the fields of Research Infrastructures and Capacity Building in the frame of European Initiatives and programs. In 2017-2018 she was involved in the *InRoad-Synchronising Research Infrastructure Roadmapping in Europe* project, funded by EC under H2020.

Anna Rita Appetito (female): she is in charge of assistance on legal financial and administrative issues to CNR researchers for presentation of proposals, negotiation, budget planning, management, financial statements, reporting in FP6, FP7, H2020 and other EU Programmes (DG Health, DG Environment, DG Justice etc..). She took part, as main contact person for administrative issues, in the second call of ERANET-LAC project.

Moreover, in WP3 for the ERIHS Pilot:

Luca Pezzati (male): he is a Physicist and Optics Specialist. Senior Researcher at CNR/INO. He started the Art Diagnostic Group of INO and the “Optical Metrology Lab for the Diagnostic of Cultural Heritage” at OPD-Opificio delle Pietre Dure in Florence in 1998. Coordinator of the ESFRI Project E-RIHS (European Research Infrastructure for Heritage Science), of its preparatory phase project (E-RIHS PP, www.e-rihs.eu) and coordinator of the integrating activity IPERION CH (www.iperionch.eu). He has been coordinator of the national nodes of E-RIHS (E-RIHS.it, www.e-rihs.it) and DARIAH ERIC (<http://it.dariah.eu>). He has managed a number of research projects. Full profile at <http://it.linkedin.com/in/lucapezzati/>

Monique Bossi (female): currently member of the E-RIHS Coordination Office at CNR/INO as “expert in international relationship and in EU projects”. She has been active in EU RTD Programme since FP5 also as coordinator of funded projects and was nominated by the Italian Ministry of Research as National Contact Point for H2020 Research Infrastructures Programme and for H2020 Legal and Financial aspects (until 2018). She is now attending the Executive Masters in Management of Research Infrastructures (MBA) at Milano Bicocca University and represents E-RIHS PP within the ERIC Forum initiative.

Relevant publications, products and services

-“Research Infrastructures in the European Research Area” – A report by the ESF Member Organisation Forum on Research Infrastructures - ISBN: 978-2-918428-94-7, March 2013, www.esf.org

-“The Monitoring Committee for RTD” in “Moving forward in the Euro-Mediterranean Research and Innovation Partnership” –2013 - Pagg.43-56 -ISBN 2-85352-513-9

-“Mapping and preliminary analysis of infrastructures, observation/data and human capac-

ity building” – D.6.1 in the frame of the FP7 project: CSA Healthy and Productive Seas and Oceans - SCS2-GA-2012-314194-CSA Oceans Website: www.jpi-oceans.eu

-“New mechanisms for human capacity building in Mediterranean Marine Research “– D.7.5.1 – WP7 - Mediterranean Region - FP7 project SEAS-ERA – Towards Integrated European Marine Research Strategy and Programmes - G.A. 249552 – www.seas-era.eu

-“Mapping and preliminary analysis of infrastructures, observation/data and human capacity building” – D.6.1 in the frame of the project: CSA Healthy and Productive Seas and Oceans - SCS2-GA-2012-314194-CSA Oceans Website: www.jpi-oceans.eu

Previous projects or activities

UREI took part in the following main projects/activities:

- **InRoad** - Synchronising research infrastructure roadmapping in Europe project co-funded under H2020 – N.730928– *Role: Partner staff*

The project aimed at contributing to a better harmonisation and synchronisation of priority-setting, funding and lifecycle management of Research Infrastructures (RI) through the exchange of best practices among the main stakeholders of EU Member States and Associated Countries while favouring a sustainable approach for RI, in line with the ERA objectives.

- **ERANET MED** – EURO-MEDITERRANEAN Cooperation through ERANET joint activities and beyond - FP7-INCO-2013 – *Role: Partner and WP leader*

The project aimed at reducing fragmentation of programming in the Mediterranean region by increasing coordination among national research programmes of EU Member States, Associated Countries and Mediterranean Partner Countries. Its action is resulted in concrete co-operation between research projects, such as networking, definition of strategic scientific activities, research structuring for long-lasting and stable cooperation. CNR-UREI was WP leader, member of the Managing Board and involved in supporting policy dialogue and the implementation of a long-lasting cooperation between EU MS and MPCs.

- **MED-SPRING** – *Mediterranean Science, Policy, Research & INnovation Gateway* – FP7 INCO – Coordination and Support Action - *Role: Partner and WP Leader*

The main aim of the project is to contribute to the quality of the Euro-Mediterranean research area, with a particular focus on the bi-regional Euro-Mediterranean S&T cooperation, research & innovation, policy dialogue and cooperation monitoring. CNR-UREI takes part in the forum of experts (EMEG), in designing policies and strategies to foster euro-med cooperation, in organizing training involved in supporting policy dialogue and the implementation of a long-lasting cooperation between EU MS and MPCs.

- **MIRA** – Mediterranean Innovation and Research Coordination Action” – FP7 INCO – Coordination and Support Action - *Role: Partner and WP leader*

The project was aimed at creating a dialogue platform; addressing training activities to improve the MPCs participation to FP7; creating an Observatory of the EU-MPC S&T cooperation; developing networks of research institutions and technological transfer services from both sides of the Mediterranean; support policy dialogue and strategic collaboration for the development of the Euro-Mediterranean Innovation Space. CNR-UREI (ex ARIE) acted as leader of the WP on Capacity Building and Member of the Managing Board. It took part in the activities the Work packages.

• **BANDIERA– “Best Action for National Development of International Expert Researchers Activities” Co-FUND** Role: *Coordinator*.

It aims at attracting incoming experienced researchers from EU Members States, Associated and Third Countries wishing to undertake interdisciplinary research and training in the fields covered by the RITMARE Flagship Project, a multi-annual large national project for marine scientific and technological research, launched within the National Plan for Research. The main objective was to contribute to the development of researchers career prospects and facilitate cooperation with their institutions and countries of origin. In total 9 contracts were awarded. The activities carried out by the fellows were integrated in the objectives of the RITMARE project in line with the European Commission Blue Paper (COM2007/575 of 10.10.2007) that highlighted the need to implement an integrated maritime and marine policy in order to “enhance Europe's capacity to face the challenges of globalisation and competitiveness, climate change, degradation of the marine environment, maritime safety and security, and energy security and sustainability.”

-UREI was one of the Funding Agencies taking part in the second call of ERANET-LAC project.

Description of any significant infrastructure

-**LIFEWATCH ERIC** –(www.lifewarch.eu/). It is an e-infrastructure on biodiversity and eco-systems for a better understanding of global factors (climate, demographic pressure, pollution, soil consumption, etc.) responsible for ongoing loss of biological diversity and ecosystem functioning, with direct impacts on the well-being and development of today's society. Understanding the evolution and functions of biodiversity and ecosystem services is now of crucial importance, not only for scientific reasons, but also to meet the demand from policy makers, managers and stakeholders for scientific-based tools

-**ACTRIS** (<https://www.actris.eu/>) is the European Research Infrastructure for the observation of Aerosol, Clouds and Trace Gases. ACTRIS is composed of observing stations, exploratory platforms, instrument calibration centres, and a data centre. ACTRIS serves a vast community of users working on atmospheric research, climate and Earth system and air quality models, satellite retrievals, weather analysis and forecast systems by offering high quality data and research infrastructure services for atmospheric aerosols, clouds, and trace gases

-SIOS Svalbard Integrated arctic Earth Observation System (<https://www.sios-svalbard.org/ObservingSystem>) aims to establish an (Arctic) Earth System Observing Facility on and around Svalbard that covers meteorological, geophysical, hydrological, cryospheric and biological processes from a set of platforms matching Earth System models (ESM). A fundamental element of SIOS will be to provide access to the Earth System Science research facilities in Svalbard to scientists from all over Europe and beyond.

-E-RIHS - European Research Infrastructure for Heritage Science (<http://www.e-rihs.eu/>) that supports research on heritage interpretation, preservation, documentation and management. E-RIHS mission is to deliver integrated access to expertise, data and technologies through a standardized approach, and to integrate world-leading European facilities into an organisation with a clear identity and a strong cohesive role within the global heritage science community.

-EURO-BIOIMAGING The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences (<http://www.eurobioimaging.eu/>) provides open physical user access to a broad range of state-of-the-art technologies in biological and biomedical imaging for life scientists. In addition, EuBI offer image data support and training for infrastructure users and providers

-INSTRUCT (<https://www.structuralbiology.eu/>) a pan-European research infrastructure in structural biology, making high-end technologies and methods available to users. Structural biology is one of the key frameworks on which we interpret molecular and cellular functions. The main experimental technologies are complementary, and increasingly link detailed atomic structure with cellular context.

-SOBIGDATA (<http://sobigdata.eu/>) a research infrastructure providing an integrated ecosystem for ethic-sensitive scientific discoveries and advanced applications of social data mining on the various dimensions of social life, as recorded by “big data”. SoBigData will open up new research avenues in multiple research fields, including mathematics, ICT, and human, social and economic sciences, by enabling easy comparison, re-use and integration of state-of-the-art big social data, methods, and services, into new research. It will not only strengthen the existing clusters of excellence in social data mining research, but also create a pan-European, inter-disciplinary community of social data scientists, fostered by extensive training, networking, and innovation activities

-ILL - Neutron for Society (<https://www.ill.eu>)

-NFFA - Nanoscience Foundries and Fine Analysis-RI is structured as a distributed research infrastructure composed of nanoscience centres, interconnected to one another and with a central management The organisational model is structured around a central hub, supported by various specific councils with different responsibilities and competences. NFFA-Trieste is creating the first prototype of Data Repository in nanoscience, aiming at recording all relevant metadata for a given nanoscience project, including growth/nanofabrication protocols so that the reproducibility of preparations and experiments will enable to compare complementary data obtained with different methods on val-

id replica samples and controlled environment conditions. **Beyond Nano** is a complementary research infrastructure and CNR is going to implement facilities of nanotechnologies and nanosciences.

Participant: Consejo Nacional de Ciencia y Tecnología

Short name: CONACYT

Description of the legal entity

The National Council of Science and Technology (CONACYT) is the Mexican federal agency in charge of implementing public policies regarding Science, Technology and Innovation (STI). CONACYT’s Direction for International Cooperation (DCI) fosters political dialogue and explores opportunities of collaboration with international partners and stakeholders in the STI sector. This has enabled the mobility of Mexican students and researchers, and the participation of CONACYT and Mexican entities in projects with partners from Europe, Latin America and the Caribbean, among other countries and regions.

Mexico’s bonds of cooperation with the European Union (EU) in STI have strengthened since the signature of the bilateral Cooperation Agreement in ST of 2004. Among the mechanisms of cooperation that CONACYT has put in place to support the collaboration between Mexican and European researchers is the co-funding mechanism which was the first put in place by a non-EU international partner country to enhance scientific and technological EU-Mexico cooperation in areas of mutual interest by propelling the participation of Mexican entities in Horizon 2020 Programme.

Curriculum vitae of the participants

Eric Harrsch, (male), Deputy Director for Bilateral Cooperation at CONACYT. Holds an MSc in Public Policy and Administration from the London School of Economics and Political Science. His 15 years of work experience includes lobbying and communications for a number of companies in the private sector, legislative affairs in the Mexican House of Representatives and the Senate, and diverse issues related to international cooperation affairs in the Public Administration.

Monserrat Peña (female), Deputy Director of International Cooperation. Monserrat holds a degree in International Affairs from the National Autonomous University of Mexico (UNAM). She has three years of experience in the public sector, where she has implementing international agreements in the science and technology sector. She also has five years of diplomatic career experience serving at the Consulate General of Chile in Mexico.

Brenda Ruiz (female), European Projects Officer at CONACYT. She has a degree in Public Accounting from the School of Accounting and Administration at the National Auton-

omous University of México. She has twelve years of experience working in the private sector. Currently, she is the person appointed to operate and monitor conjunct projects with the European Union.

Mariana Gómez (female), Bilateral Projects Officer. Mariana holds a degree in International Affairs from the Benemérita Universidad Autónoma de Puebla. She has experience working in the field of international development cooperation, specifically in NGOs. Currently, she follows up the implementation of bilateral cooperation programs in the science and technology fields.

Previous projects or activities

CONACYT coordinated all three chapters of the bilateral project for the promotion of EU-Mexico Cooperation in ST aimed at strengthening potential opportunities of collaboration among Mexican researchers and institutions in the context of the EU Framework Programmes.

The Council was a full partner in several other projects for EU-LAC bi-regional networking and cooperation in STI, such as EULARINET, ALCUE-NET and ERANET-LAC. Moreover, CONACYT has also participated in thematic projects of cooperation. Just to mention few, LEADERSHIP propelled policy dialogue in ICT; TA-P promoted cooperation in humanities and social science, and COOP-AIR-LA in aeronautics and air transport research.

Bilateral cooperation with the EU also took place by means of Mexican funding to H2020 calls for the participation of Mexican researchers in EU funded projects. Also CONACYT has negotiated coordinated and joint calls, particularly in the areas of geothermal energy, nanotechnology and High Performance Computing.

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Description of any significant infrastructure

The Large Millimeter Telescope (LMT) is a 50-m (currently 32-m) diameter single-dish telescope optimized for astronomical observations at millimeter wavelengths ($0.85 \text{ mm} < \lambda < 4 \text{ mm}$). The LMT project is a bi-national collaboration between Mexico and the United States. The institutions leading this effort are Mexico’s National Institute of Astrophysics, Optics and Electronics (INAOE) and the University of Massachusetts at Amherst (UMass) in the US. LMT’s main scientific goal is the understanding of the physical process of structure formation and its evolutionary history throughout the universe.

The High-Altitude Water Cherenkov Gamma-Ray Observatory (HAWC) is a facility designed to observe gamma rays and cosmic rays between 100 GeV and 100 TeV. TeV gamma rays are the highest energy photons ever observed. These photons are born in most

extreme environments in the known universe: supernova explosions, active galactic nuclei, and gamma-ray bursts. HAWC is located on the flanks of the Sierra Negra volcano near Puebla, Mexico at an altitude of 4100 meters (13,500 feet). The detector has an instantaneous field of view covering 15% of the sky, and during each 24-hour period, HAWC observes two-thirds of the sky. HAWC project is supported by Mexico, through CONACYT, and by the United States National Science Foundation (NSF) and Department of Energy.

CONACYT has also supported a network of more than 70 national laboratories that promote the association between research institutions and centres to find paths for intersectoral connections, public and private; high-level research, and capacity building. Laboratories were installed in different fields such as technological development, health, environment, among others.

Participant: Technical Research Centre of Finland

Short name: VTT

Description of the legal entity

VTT Technical Research Centre of Finland Ltd is the leading research and technology company in the Nordic countries. VTT has a national mandate in Finland. We use our research and knowledge to provide expert services for our domestic and international customers and partners. VTT is the largest public applied research activity in Northern Europe with a staff of 2400 and turnover M€279. Over the years, VTT has participated in more than 1000 European R&D Framework Programme projects, within various thematic programmes. We serve both private and public sectors. We have 77 years’ experience supporting our clients growth with top-level research and science-based results.

We develop new smart technologies, profitable solutions and innovative services. We cooperate with our customers to produce technology for business and build success and well-being for the benefit of society. We use over 1,000,000 hours of brainpower a year to develop new technological solutions. The benefit you gain from this spearhead research comes when we work with you to create new products, production processes, methods, and services. VTT ensures efficient utilisation of science and technology with the aid of broad international cooperation and networking.

In December 2017, VTT has been recognized with the “HR Excellence in Research” award by the European Commission as one of the first RTO’s. The award reflects VTT’s commitment to continuously improve its own human resource and leadership policies in line with the 40 principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, notably VTT’s commitment to achieve fair and transparent recruitment and appraisal procedures.

VTT has been granted an ISO9001: 2008 certificate, and our environmental system is certified in accordance with ISO14001:2004. VTT is part of Finland's innovation system and operates under the mandate of the Ministry of Employment and the Economy.

VTT’s expertise dedicated to this proposal is drawn from the team Foresight and Safety Culture. This team’s research supports strategic decisions of domestic and international innovation policy-makers, the research community and enterprises. The team develops diverse and multidisciplinary studies, which apply quantitative and qualitative methodologies and utilise VTT’s domestic and international collaboration networks. The main topics the team works with, are:

Business, Innovation and Foresight for Emerging Economies. VTT provides studies and knowledge-based solutions for emerging and developing economies. Our focus is on the development and co-design process of innovations from idea phase to commercialisation, taking into consideration countries context and needs; in addition to business devel-

opment, socio-technical changes, system modelling, sustainable solutions and industry renewal in emerging economies. Some examples of our studies are: the ELAN2 project for the creation of a European and Latin American network for innovation and cooperation, and the IKI-DIGHealth project focused on capacity building and the use of new technologies to tackle social and health challenges in South Africa.

Innovation Policy Research and Impact Assessment of R&D. VTT provides studies on the socio-economic impacts and efficiency of R&D activities and of science, technology and innovation policy. Our services cover the following key areas: studies on the content, rationale and development of science, technology and innovation policy and politics, evaluation of socio-economic impacts of R&D activities and innovation policy; commercialising research and academic entrepreneurship, evaluation methodologies of R&D activities and innovation policy.

Technology Foresight and Technology Assessment. We provide well-grounded information about future technological developments and about the prerequisites and impacts of introducing new technologies. Our foresight and assessment activities support decision-making in the development and introduction of new technologies and also related societal dialogue on these issues. Our methodological expertise covers foresight, road mapping, risk assessment and societal embedding processes: technology foresight and assessment projects in cooperation with experts from various fields, stakeholder processes supporting the introduction of new technologies of societal relevance; and Methodological and theoretical development.

Curriculum vitae of the participants

Dr. Maria Lima Toivanen (female) is a Senior Scientist at VTT's Foresight and Safety Culture team and has a doctoral degree on Innovation and Technology and Production Operations Management. In international projects (including EU's framework programs, tender-based and development aid-based), as well as in project management, Dr. Lima Toivanen's field of expertise includes different aspects of innovation, business and policy, regional and sustainable development, evaluation of science and technology, industry capabilities and innovation for societal challenges, international cooperation for research and innovation and innovation diplomacy. She has extensive work experience in different international settings and multicultural teams, focusing on Latin America and the Caribbean, Africa and ASEAN regions. She is also a member of the Senior Officials of the Joint Research and Innovation Initiative for Research and Innovation between the European Union and the Community of Latin American and the Caribbean States (EU-CELAC JIRI), co-leading its Working Group on ICT for societal challenges.

M.Sc. Giovanna Sanchez Nieminen (female) is a research scientist at VTT. She has worked with international cooperation and international security since 2013. Ms Sanchez Nieminen holds a Bachelor's degree in International Relations and a Master's degree in Peace, Mediation and Conflict Research. She has been involved with Horizon 2020 pro-

jects related to the **socio-political** and **ethical aspects** of new technologies, **Responsible Research and Innovation** and **international cooperation**, including the on-going YAKSHA and VOGAS. In addition to international cooperation and security, her research interests include emerging economies, global mobility and gender studies.

M.Sc. Heidi Auvinen (female) obtained her master's degree in energy technology from Helsinki University of Technology in 2008, and she now pursues post-graduate studies at Aalto University. Having started as a research scientist at VTT Technical Research Centre of Finland Ltd in 2009, she has worked as an expert and project manager in a variety of national and international research projects promoting sustainability and participatory foresight. Her ambition is to support decision-making and policy planning by using research approaches such as horizon scanning, roadmapping, scenarios, impact assessment, policy analysis, and systemic changes and transitions. Her current application areas include most importantly the following future-oriented research topics: transport and mobility, digital platform economy, climate change mitigation and socio-technical transitions in different fields.

Previous projects or activities

ALCUE-NET - Latin America, Caribbean and European Union Network on Research and Innovation, EU-INCO-NET, 2012-2017, <http://alcuenet.eu/>.

BRISK2 - Biofuels Research Infrastructure for Sharing Knowledge II, <https://www.brisk2.eu/>, EU H2020-INFRAIA-2016-1, 2017-2022.

ERIFORE – European Research Infrastructure for Circular Forest Bioeconomy, <http://erifore.eu/>, H2020-INFRADEV-1-2014-1, 2016-2018.

NMP-DeLA - Nanosciences, Nanotechnologies, Materials and New production Technologies Deployment in Latin American Countries, EU FP7-NMP, 2013-2015

LEADERSHIP - Latin America-Europe Advanced Dialogues to Enhance ICT Research and Innovation Partnership, EU FP7-ICT-2013-10, 2013-2015.

SATORI – Stakeholders Acting Together On the ethical impact assessment of Research and Innovation. EU FP7 SiS.2013.1.2-1; CSA, 2014-2017

EU-CELAC INNOV-AL Platform: Promotion of decentralised innovation policies in CELAC countries. Financiamiento: Comisión Europea/DG REGIO, 2018–2019.

GREAT - Governance for Responsible Research and Innovation, <http://www.great-project.eu>, EU FP7-SIS, 2013-2016.

EU-CELAC Joint Initiative for Research and Innovation. VTT's Maria Lima Toivanen is an active member of the Senior Officials Meeting, co-leading the ICT for Societal Chal-

lenges WG together with CONICYT/Chile.

Description of any significant infrastructure

VTT counts with infrastructures in several scientific areas, among others:

- VTT's state-of-the-art pilot facilities in the field of **biomass fractionation and pulping, industrial biotechnology, process chemistry and food technologies.**
- VTT has advanced pilot plants for **biomaterial processing** and converting to new innovative and sustainable industrial products.
- The **foam forming platform** enables efficient R&D from laboratory to rapid up-scaling to industrial use.
- **Bioeconomy and cleantech** research in Bioruukki.
- **PrintoCent**– R2R pilot environment for printing and hybrid manufacturing
- **ROViR Remote Operations and Virtual Reality Centre**
- **Centre of Nuclear Safety**
- **VTT MIKES Metrology**

Participant: Comisión Nacional de Investigación Científica y Tecnológica

Short name: CONICYT

Description of the legal entity

The National Commission of Scientific and Technological Research is an autonomous and functionally decentralized corporation, destined to advise the President of the Republic in the planning of scientific and technological development. Is the main national funding agency for science and technology research and advanced human capital formation.

It has three main objectives: (a) strengthen the country's scientific and technological base; (b) promote the formation of advanced human capital; and (c) promote a scientific and technological culture in the population.

Curriculum vitae of the participants

Andrés López Lara (male). He is in charge of the Scientific and Technological Equipment Program, which is the major program to support the need of advanced equipment in the Research Infrastructures, at the National Commission for Scientific and Technological Research (CONICYT), Chile. He is an Industrial Engineer with over 11 years of experience, 9 of those in management and leadership positions. He has been working for the National Commission for Scientific and Technological Research of Chile for 6 years, firstly

on the Scholarship Program, and then for 3 years in the Scientific and Technological Equipment Program. In this position he has been designated National Contact Point on the Research Infrastructure field, and has been the counterpart in the CELAC-UE Working Group of Research Infrastructure.

Andrea Cibotti (female). She is responsible for Latin America and European Union affairs in the International Cooperation Program at the National Commission for Scientific and Technological Research (CONICYT), Chile.

She has participated in several international cooperation projects, including ERANET-LAC, ERANETMED, along with Iberoamerican platforms such as CYTED and other bilateral cooperation projects with Latin American countries.

Previous projects or activities

ALCUE NET - Latin America, Caribbean and European Union Network on Research and Innovation (ALCUE NET), FP7 (2013 – 2017), outlines a Research and Innovation policy support project aimed at supporting the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative. It promoted do so by promoting bi-regional and bilateral partnerships for jointly societal challenges, working to develop the attractiveness of Europe in the world, and by promoting the establishment of a level-playing field in Research and Innovation.

CESTI (Chile-European Union STI Initiative) supported the strengthening of cooperation in science, technology and innovation between the European Union, member states, associated states, and Chile. The project contributes in this way to the implementation of the Joint Research and Innovation Initiative (JIRI) between Latin America and the Caribbean, and the European Union.

EULARINET (European Union - Latin American Research and Innovation NETWORKS) (FP7 INCO-Net 2008-2012) intended to strengthen the bi-regional dialogue on S&T between EU Member States (MS), Associated States (AS) and Latin American Partner Countries (LAPC) at policy, programme and institutional level: It stemmed from the agreed common vision for S&T cooperation between Latin America (LA) and the EU. EULARINET established a network between European and LA stakeholders (research entities, universities, industry, policy-makers, programme managers and civil society), as well as multidisciplinary partnerships identifying priorities of mutual interest and benefit for both regions and as such can be considered the precursor project for ALCUE NET.

EULAC-HEALTH project co-funded by the EU with the main aim of intensifying the cooperation between EU and CELAC on health research and coordinating by means of thematic alignment of programmes.

ERANET LAC - Network of the European Union (EU), Latin America and the Caribbean Countries (LAC) on Joint Innovation and Research Activities, FP7 (2013-2018). The ERANet-LAC project and the EU-CELAC Interest Group, launched a new Joint Call in

November 2017 to enhance the bi-regional cooperation in science, technology and innovation. Taking into account the thematic interests of both regions, it was decided to fund 6 topics in the thematic fields of Biodiversity, Bioeconomy, Energy, Health and Information and Communication Technologies (ICT).

EULAC PerMed (Personalized Medicine) Bi-regional consortium of governmental and funding organisations is shaped with the support of leading stakeholders as associated partners. This project has the ambition to engage CELAC countries in the International Consortium on Personalized Medicine (ICPerMed) and in the ERANet ERAPerMed with the aim at advancing in the implementation of the Action Plan of ICPerMed based in the Strategic Research and Innovation Agenda, drafted by PerMed2020.

Participant: Sociedade Portuguesa de Inovação

Short name: SPI

Description of the legal entity

SPI (www.spieurope.eu) is a private consulting company created in 1996 as an active centre of national and international networks connected to the SME and innovation sectors. SPI has become a leading promoter of linkages between private sector companies, science and technology institutions, and national and international public and private organizations. SPI embraces the mission of managing projects that promote regional, national and international development, stimulate entrepreneurship, innovation and knowledge management and encourage internationalization and creation of strategic partnerships and business relationships. SPI has over 75 full-time staff located in its various offices in Portugal, China, Spain, and the USA. SPI is very experienced in working with the European Commission and DG Research & Innovation, including in over 25 FP7/CIP and now 26 H2020 projects across a range of research themes and normally including a strong international component such as environment, smart energy, ICT, food, biotechnology, health, international cooperation of science, technology and innovation, nanotechnologies and space.

Main tasks in EU-CELAC ResInfra

SPI is the leader of the WP – Communication and Dissemination. SPI leads or has led dissemination and communication activities in over 10 H2020 projects, building upon its in-house design team with capability of developing websites, professional promotional and informational materials, among other aspects). SPI has competences in strategic planning of dissemination and communication activities, in preparing promotional materials, in deploying visibility actions and in implementing an online and digital dissemination strategy, as well as in the organisation of project-related conferences. The strategic positioning of SPI – as a facilitator and interface among science and technology institutions, private sector, public bodies and international organisation enables the company of being able to ade-

quately communicate the project's progress and outputs to different target audiences.

Curriculum vitae of the participants

Prof. Augusto Medina (male) is the Founder and President of SPI Board. He is an experienced academic, having directed the College of Biotechnology for more than 10 years. Prof. Medina has directed all of SPI's work since its inception in 1996. This work includes research and development, innovation, training, e-business and entrepreneurial projects in Portugal and Western Europe, as well as in Asia, Africa, the USA and South America. Prof. Medina was the Portuguese national delegate in several EU programmes, and has been a Contracted Expert on a wide range of EC projects.

Dr. Sara Medina (female) is a Member of the Board of SPI and contributes to the overall management of SPI. She is responsible for managing SPI's activities and services in Asia since 2004. She has coordinated projects for public and private sector clients in Europe and around the world, including projects for international organizations in innovation management, technology transfer, R&D, internationalisation, sector studies, establishment of partnerships and R&I policy development. Dr. Medina has a Bachelor's degree in Food Engineering, a European Master's degree in Food Studies and a Ph.D. degree in Food and Resource Economics.

Douglas Thompson (male), employee of SPI, is an experienced economist, having advised numerous private sector and public sector clients in different areas, including innovation, technology transfer, R&D, SMEs development in various areas such as water management, smart energy use, ICT, food and agribusiness, health, space, among others. He has led over 50 R&D focused projects from various framework programmes (FP7, H2020). Many of his projects have been funded by international agencies such as the European Commission, the World Bank, EBRD and the (DFID).

André Barbosa (male), employee of SPI, is a senior consultant of SPI's International Projects Team and overall responsible for the company's activities in Latin America, with a particular focus in Brazil. Within this position, André Barbosa has coordinated and managed SPI work in several projects in countries such as Brazil, Guatemala or Chile, focused on international cooperation on research and innovation (R&I) or regional development, including the H2020 project on R&I cooperation between Brazil and Europe called INCOBRA (www.incobra.eu) and the European Network of Research Centres and Hubs (ENRICH) in Brazil (brazil.enrichcentres.eu). André Barbosa has a degree in Law from the University of São Paulo (Brazil) and a Master degree in International Relations from the University of Minho (Portugal), with a dissertation focused on EU-CELAC economic and political relations.

Relevant publications, products and services

- 1. Science, Technology and Innovation Performance of China Final Report.** The report intends to assess the evolution of China's STI Performance and analyse its eco-

conomic impact on Chinese productivity and competitiveness and on the global markets, taking into account the differences between various Science and Technology fields, economic sectors and types of actors involved. (http://eeas.europa.eu/archives/delegations/china/documents/eu_china/research_innovation/4_innovation/sti_china_study_full_report.pdf)

2. **Global Entrepreneurship Monitor Study – GEM:** Initiated in 1999, the Global Entrepreneurship Monitor (GEM) research programme is an annual assessment of the national level of entrepreneurial activity in various countries. (<http://www.gemconsortium.org/report>)
3. **Smart Specialization Strategy of the Azores Region in Portugal:** fully developed by SPI in 2012 and 2013 (<http://www.azores.gov.pt/NR/rdonlyres/6DE18582-F5E5-4CB8-BA18-79B9BAFC31B0/795912/RIS3AoresRelatrioFinal1.pdf>).
4. **Comparative Scoreboard and Performance Indicators in NMP Research Activities:** The study provided a contribution to policy analysis on key issues for European NMP research policy and addressed benchmarking of Europe’s performance against its competitors. (<https://publications.europa.eu/en/publication-detail/-/publication/da56eff7-0e68-43ff-8449-bcf9b1fa9178>) (EC DG RTD)
5. **Ex-post evaluation of the impact of restructuring aid decisions on the viability of aided (non-financial) firms:** Evaluation of the EC’s ex-ante assessment of restructuring plans submitted by the Member States, in particular in regard to its objective of ensuring support is provided in the context of a restructuring plan. (<http://ec.europa.eu/competition/publications/reports/kd0116104enn.pdf>) (EC DG COMP).

Previous projects or activities

1. **Discoveries CTR – Centre of Excellence for Regenerative and Precision Medicine (2016-present):** The Discoveries CTR project, initially funded by H2020, aims to lay the foundations of a multipolar distributed research centre in Portugal in the area of regenerative and precision Medicine, named The Discoveries Centre for Regenerative and Precision Medicine. SPI acted as subcontractor in the development of the centre’s business plan and to provide strategic consultancy for its implementation (<https://thediscoveriesctr.eu/>).
2. **AANChOR - All AtlaNtic Cooperation for Ocean Research and innovation (2018-2021) -** The main objective of AANCHOR is to upscale research and innovation cooperation within the Atlantic basin, from Antarctica to the Arctic. AANCHOR will produce 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. The project consortium comprises 16 partners from 9 countries, including Brazil and Argentina from CELAC. SPI is the coordinator of the WP dealing with blue economy, innovation and entrepreneurship.

- 3. CAMPUS DO MAR – R&D clusters setup and strategic planning (2012-2013):** Campus do Mar is a marine research-based consortium of 7 universities and research centres from Portugal and Spain, led by the University of Vigo, intending to pool R&I resources and infrastructures to maximize research impact. SPI led the process of developing 4 R&D clusters within a 5-year strategic roadmapping, on the topics of: ocean observation and global change; sustainable use and management of marine resources; integrated coastal zone management; technological progress and business management. (<https://campusdomar.gal/>).
- 4. Support to Collaborative Laboratories in Portugal (CoLAB)** – Collaborative Laboratories are an instrument promoted by the Portuguese Government to stimulate the creation of qualified employment generating economic and social value in Portugal. CoLABs aim to contribute to translate the knowledge generated in universities into new products, processes and technology, strengthening the connection between companies, technology centers and universities. The conceptualization of this instrument was based on examples such as the Fraunhofer Institute. SPI supported the creation of two of the twenty CoLAB recognised by the Government.
- 5. Setup of Innovation Centre for the valorization and transfer of technology** - The University of Lisbon plans to set up an infrastructure for the valorization and transfer of technology. This infrastructure will house several types of Research and Innovation (I & I) activities in state-of-the-art facilities, in close connection between the University and the business community, increasing entrepreneurship and technology transfer in the city of Lisbon. SPI supported the University in the definition of the activities to be carried out and also in the application for funding of this infrastructure.
- 6. INCOBRA – Increasing Science, Technology and Innovation Cooperation between Brazil and the European Union (2016-2019):** INCOBRA is an H2020 project aimed at focusing, enhancing and increasing international SPI cooperation between Brazilian and European R&I actors. SPI was the coordinator of this project which comprised a partnership of 14 organisations (7 from Europe and 7 from Brazil) (www.incobra.eu).
- 7. ENRICH in Brazil – European Network of Research and Innovation Centres and Hubs in Brazil (2017-2020)** – ENRICH in Brazil is an H2020 initiative intending to create a European innovation centre in Brazil that helps to support and connect European researchers, research and technology organisations, entrepreneurs, startups and SMEs with the Brazilian market, by providing service-based activities such as training, consultancy, business intelligence and event support. SPI is the co-coordinator of the initiative (brazil.enrichcentres.eu).

Participant: Conselho Nacional de Desenvolvimento Científico e Tecnológico

Short name: CNPq

Description of the legal entity

CNPq is an independent agency (public foundation) linked to the Ministry of Science, Technology, Innovation and Communications (MCTIC), dedicated to the promotion of scientific and technological research and to the formation of human resources for research in Brazil. And has as mission to foster science, technology and innovation acting in the formulation of its policies, contributing to the advancement of the frontiers of knowledge, sustainable development and national sovereignty.

Curriculum vitae of the participants

Dr. Lelio Fellow Filho (male) holds a degree in Metallurgical Engineering from the Federal University of Rio de Janeiro (1977) and currently is a PhD student in Experimental Neuroscience Course at UNIFESP. Is a Senior S&T analyst at the National Council for Scientific and Technological Development (CNPq). Since 1983 he has worked in the area of S&T Policy, having held positions of Direction at CNPq and in The Ministry of Science Technology and Communications (MCTIC). Since 2018, Dr. Fellows acts as LEAR of the AANChOR Consortium by CNPq.

Dr. Paulo César Siqueira,(male) holds a Bachelor (1978), and Master (1991) degree in International Relations from the University of Brasília and PhD (1999) in Science Technology and

Society from The Conservatoire National des Arts Métiers (CNAM-Paris). Is a Senior S&T analyst at the National Council for Scientific and Technological Development (CNPq).

Since 1991, has worked in the field of International Relations and S&T Policy and Management, having held positions of Head of the International Cooperation Office and Coordinator at CNPq and at Brazilian Institute for Information on Science and Technology (IBICT) and in the Ministry of Science Technology and Communication (MCTIC).

From 2000 to 2004 held teaching positions at the Institute of Higher Education of Brasilia (IESB). Dr. Siqueira has published some papers and reports on international cooperation in S&T and, since 2011, acts as Brazilian scientific coordinator of some European Consortia, like APORTA, Bbice+, ALCUENET and ERANET LAC. He is also key participant of the AANChOR. Currently, is visiting researcher from the Institute of International Relations of USP.

Dr. Dileine Amaral da Cunha, (female) holds a Doctorate degree in Education in Science

from the Federal University of Rio Grande do Sul and a Master in International Relations from the University of Brasilia.

Former Chief of Cabinet, Assessor for Academic Purposes and Attorney Institutional of the Institute of Higher Education of Brasilia IESB.

Current member of the Evaluation Committee, representative of the external community of the same institution.

Analyst in Science and Technology of the National Council for Scientific and Technological Development CNPq, operating in the International Cooperation Coordination. Dr Cunha is key participant of AANChOR.

Previous projects or activities

AANChOR - All AtlaNtic Cooperation for Ocean Research and innovation (2018-2021) - The main objective of AaNCHOR is to upscale research and innovation cooperation within the Atlantic basin, from Antarctica to the Arctic. AANChOR will produce 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. The project consortium comprises 16 partners from 9 countries, including Brazil and Argentina from CELAC. SPI is the coordinator of the WP dealing with blue economy, innovation and entrepreneurship.

ALCUE NET: “Latin America, Caribbean and European Union Network on Research and Innovation”, FP7 EU-INCO-NET (2013 – 2017),

ERANET-LAC: “Network of the European Union (EU), Latin America and the Caribbean Countries (LAC)” on Joint Innovation and Research Activities, FP7 ERANET (2013-2018).

Participant: Executive Agency for Higher Education, Research and Innovation Funding

Short name: UEFISCDI

Description of the legal entity

The Executive Agency for Higher Education, Research and Innovation Funding (UEFISCDI) is a public body of the Central Administration with the mission to promote quality and leadership for higher education, research, development and innovation. UEFISCDI plays both roles of a higher education funding agency and as a main actor in funding research, development and innovation in Romania. UEFISCDI manages, partially or entirely, four out of the five programmes of the National Plan for Research, Development and Innovation 2015-2020 (PN III), as follows: „The development of the National Research and Development System”, „Increase competitiveness of the Romanian Economy through Research, Development and Innovation”, „European and International Cooperation” and „Fundamental and Frontier Research” (www.uefiscdi.gov.ro)

Along with this main role, UEFISCDI actively supports and provides advice for science, research and innovation policies targeting various types of research and innovation activities (exploratory and applied research, innovation, technology transfer and foresight). UEFISCDI constantly strives for achieving quality, leadership and institutional development in the research and innovation area by implementing forward-looking projects targeting, among others, future and internationalization of higher education, science, innovation and research infrastructures, ensuring the efficiency and effectiveness of the RDI system, enabling circulation of knowledge. In this respect, UEFISCDI has gained a vast experience by implementing many international projects under South-East Europe, EEA Grants, INTERREG IVC, FP7 and H2020.

UEFISCDI has implemented the project :” **Research Infrastructures Impact and Foresight –RIFI**”. The project set out to deliver a coherent methodological framework with a clear procedure, instructions, recommendations and instruments to conduct such an assessment for RI projects: FenRIAM – Foresight enriched Research Infrastructure Impact Assessment Methodology. <http://www.fenriam.eu/>

For the validation of the impact assessment methodology, several case studies of RIs located at the outskirts of the current borders of the EU were analyzed. More information about you can found at the link below:

<http://www.mappingforesight.eu/initiative/rifi-research-infrastructures-foresight-impact/>

Apart from financing and supporting research and innovation nationally, UEFISCDI is a promoter of international collaboration in science and excellent research. A few of the initiatives and particular priorities in this respect, aligned with Science Europe’s areas of policy activities and ERA’s objectives are:

- Development of the online community of actors - **Brain Map** - which intends to promote and share research results, innovative products, services, to facilitate collaborations and project funding opportunities using advance data analytics, cognitive computing and open data.
- UEFISCDI is also a promoter of open science and open access, has been the Romanian key-node in the European project [PASTEUR4OA](#) and is now a close collaborator of the OpenAIRE initiative.

Curriculum vitae of the participants

Dr. Adrian CURAJ (male) is the General manager of UEFISCDI. He has graduated “Politehnica” University from Bucharest, Faculty of Electronics and Telecommunications and has got his PhD in 1998 in Automatic Systems.

Mr. Adrian CURAJ has occupied several positions linked to the research activity, at national and international level, such as in the Ministry of Education and Research (2015); State Secretary-President of National Authority for Scientific Research (2009-2010); Counsellor of Prime-Minister for ICT field, Science and Innovation(2007-2008); Member of al RISE-Research, Innovation and Science Policy Expert, High Level Group European Commission (from the beginning, 2014);

Dr. Curaj is Professor, Polytechnic University of Bucharest, Faculty of Automation and Computers (from 1998); Director - Quality Management and Quality Assurance Center in Higher Education, Polytechnic University of Bucharest; and Head of UNESCO Chair for Policies in Science and Innovation at SNSPA - National School of Studies Political and Administrative (from 2012);

He has coordinated the project **Research Infrastructure- Foresight and Impact-RI-FI**, aimed at developing an integrated framework for identifying RI investment opportunities and methods for Social-Economic impact assessment of new **RI**s.

Mrs. Luciana Bratu (female) is Head of International Programmes Department at UEFISCDI. She has skills in project management (Committee Coordinator of Engineering Sciences in the framework of World Bank Project, FP6 and FP7 and Horizon 2020 programmes). **Mrs. Luciana Bratu** was the manager assistant for **RI-FI** project, and she has worked in the projects funded by EU Commission, such as: Black Sea Horizon, ERANET-LAC, BIODIVERSA, SUSFOOD, FACCE-SURPLUS, SUS-CROP. **Mrs. Luciana Bratu has a huge experience in coordination and project management; she is doing the** coordination of daily activity of department.

Mrs. Domnica Coteț (female) is project coordinator within the International Programmes Department of UEFISCDI. She graduated Faculty of Electronics and Telecommunication, (University “Politehnica” of Bucharest) and Faculty of Industrial Management, Ecological University of Bucharest. She has a Master degree in project management.

Mrs. Coteț was coordinator of BS.ER-NET - Networking on Science and Technology in

the Black Sea Region and national project officer for Black Sea Horizon, ERA-NET-RUS Plus. She is national project officer for M.ERA –Net, MarTERA, CHIST-ERA III and FLAG-ERA projects. Before UEFISCDI Domnica has worked in the Mechanical Research Institute, in designing automation equipment and later on in research activities. She has more than 25 years of experience in SMEs sector; project coordinator for more than 30 projects for SMEs, covering different industrial sectors. She has expertise in research, design and project management in the field of ICT, robotics and environment. As partner in ERA-NETs, she was in charge to support the joint calls organization, the evaluation and selection of project and other different joint activities.

Previous projects or activities

Having a strong interest for international co-operation and fostering European research, UEFISCDI collaborated and became a partner over time with Swiss National Science Foundation ([SNSF](#)), Agence Nationale de la Recherche - ANR (France), RNC Norway & RANNIS Iceland (UEFISCDI is appointed as Programme operator for EEA & Norway Financial Mechanisms 2014-2021), as well with The Netherlands Organisation for Scientific Research (NWO), Deutsche Forschungsgemeinschaft (DFG) and, outside Europe, National Science Foundation (NSF).

UEFISCDI is the promoter of the BPRC (Bologna process Researchers Conference) 2011, 2014, 2017, by which the voice of researchers in HE has been and is to be transmitted to the policy makers at the Bologna (EHEA) Ministerial Conferences and Policy Forums (<http://fohe-bprc.forhe.ro/>).

UEFISCDI is involved in over 40 international projects, most of them under ERA-NET H2020 and has strategic partnerships & cooperation agreements with international organizations.

UEFISCDI is partner in the project: ” **Facilitating macro-regional scope and link up to socio-economic actors of Research Infrastructure in the Danube Region- ResInfra @ DR**”. The project focuses on research infrastructures in the region, trying to develop specific methodologies and propose strategic tools and guidelines to support policy decisions and investments in research infrastructures so as to contribute to increasing the socio-economic impact.

Description of any significant infrastructure

UEFISCDI developed and hosts **ERRIS** (Engage in the Romanian Research Infrastructure System), the online platform acting as the unique gate to accessing services provided by the Romanian research infrastructures, connecting the research infrastructure owners with potential ‘clients’ (researchers and company representatives). Through ERRIS, UEFISCDI intends to increase visibility and enhance international collaboration between research infrastructures thus supporting cross-border science being also a key tool used in the process

of setting up RI Roadmap <https://erris.gov.ro>

Participant: Ministerio de Ciencia, Tecnología y Telecomunicaciones

Short name: MICITT

Description of the legal entity

The MICITT is responsible for creating and coordinating scientific and technological national policies, it also focuses on policy matters that relate to technical, entrepreneurial and research initiatives and best innovative practices and ideas essential greater competitiveness of the country to promote sustainable development to enhance the quality of life for all and closing gaps between society and technology. MICITT was established in 1990, by the law 7169 known as Scientific and Technological Development Promotion Law.

MICITT has experiences with European Union Programs, it was part of ALCUE NET project consortium in the FP7 program, and in the Ministry is the NCP coordinator who is organizing the NCP networks in Costa Rica and support all entities interested to be part of consortium in proposal for H2020.

The Ministry has a representative in the Research Infrastructure UE-LAC working group and it is through it that Costa Rica was elected as one of the fourth site to visit the RI of Latin America, the visit will be to the National Center for Biotechnology Research (CENIBIOT), center created by EU project in the past.

Curriculum vitae of the participants

Mrs. Eliana Ulate (female), holds a degree in Politics Sciences from the University of Costa Rica and she is studying her Master in National University, Costa Rica, in International Cooperation. She was appointed Coordinator of International Cooperation Department in the Ministry of Science, technology and telecommunications since 2014.

Mrs. Ulate is the Coordinator and Marie Curie National Contact Point for Costa Rica, and she was the administrative coordinator for Costa Rica in the FP7 Project called ALCUE NET. She supports all international cooperation actions in the Ministry, and she is part of OCDE adhesion team in Costa Rica.

Dr. Federico Torres (male), holds a degree in Economy from the University of Costa Rica and holds a Master in Information technologies in Universidad de Salamanca, and a PhD in Business Administration from Universidad de Valencia. He was appointed Director on Research and Development in the Ministry of Science, Technology and telecommunications since 2016.

Dr Torres is the representative of RI working group and he works closely with the research authorities in Costa Rica and he is professor in the Instituto Tecnológico de Costa Rica. He is the contact point in the Committee of Science and Technology Policies of OCDE.

Previous projects or activities

ALCUENET, (Latin America, Caribbean and European Union Network on Research and Innovation) outlined a Research and Innovation policy support project aimed at supporting the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative (December 2012-November 2017)

ERANET-LAC, Network of the European Union, Latin America and the Caribbean Countries on Joint Innovation and Research Activities (October 2013-December 2018).

Participant: COLCIENCIAS

Short name: COLCIENCIAS

Description of the legal entity

Colciencias, promotes public policies for the development of science, technology and innovation in Colombia. It is the main entity of public administration to formulate, guide, direct, coordinate, execute, and implement the State policy, in the fields of scientific research, technology and innovation of the National System of Science, Technology and Innovation – for its acronym in Spanish – SNCTeI, transformed into administrative department through the law 1286 of 2009.

Colciencias is constituted by three technical departments: Direction of Research Promotion, Direction of Technical Development and Innovation and Direction of Mentality and Culture:

Direction of Research Promotion

Mission area that has the responsibility of coordinating the formulation of policies, plans, programs and strategies to promote research in order to stimulate the generation of knowledge, strengthen the research capabilities of the country and thus improve quality, visibility, transfer and impact of its results.

Formulate and promote policies for short, medium and long term state R&I, for the formation of human capabilities and infrastructure, integration and international cooperation and social appropriation of Science, Technology and Innovation to consolidate a society whose competitiveness is based on knowledge, technological development and innovation.

Direction of Mentality and Culture

Mission area that creates a culture based on the generation, appropriation, use and dissemination of knowledge, scientific research, technology, innovation and lifelong learning.

Mentality and Culture Direction shortens the distance between science and Colombians. It aims to build and strengthen a culture that values and manage knowledge and innovation, it designs and implements strategies that highlight the transformative power of science.

Direction of Technical Development and Innovation

Missional area who promote scientific development, technology and innovation through capacity building for managing innovation, transfer of knowledge and technology, and management of intellectual property to increase productivity and competitiveness of organizations and country.

Adviser on the formulation of policies and strategies for the consideration of the national government in innovation, competitiveness and development as well as in decision-making for implementation, development and execution. This department promote research, scientific, technological development and innovation in coordination with the private sector, especially with the productive sector.

Colciencias also works with the cross-cutting area and initiatives throughout the institution as Colombia BIO, International Office, Scientific Ecosystem, and research infrastructures. The last one is an initiative of total importance from General Direction that will bring development of the country and improve the capabilities of the research institutions and development for Colombia.

Curriculum vitae of the participants

Eduardo Rojas (male) - Director of Research Promotion at Colciencias, electronic Engineer, Master in University Management from the University of the Andes and in communications network systems of the Polytechnic University of Madrid. He is currently Director of Research Promotion at Colciencias, whose responsibility is to coordinate the formulation of policies, plans, programs and strategies to promote research in order to promote the generation of knowledge, strengthen the country's research capabilities and improve, in this way, the quality, visibility, transfer and impact of its results. He has experience in organizational direction, research and education. As well as knowledge and experience in management of scientific, technological and innovation processes. Also, he has extensive knowledge in organizational management and administration in both the public and private sectors.

Previous projects or activities

- **AMERICAS** - LatinAmerica-EuRope Ict Cooperation Advanced Strategies – project aims at supporting sustainable ICT policy dialogues and fostering ICT R&D cooperation between the EU and strategic partner countries in Latin America, by enabling new synergies and effective collaboration through policy makers, researchers and key stakeholders networks in ICT and international cooperation. Duration: November 2011- October 2013.
- **ALCUENET**, Latin America, Caribbean and European Union Network on Research and Innovation”, FP7 EU-INCO-NET (2013 – 2017).
- **ENSOCIO-LA**: Strategic, Sustainable R&I Cooperation with Latin America (Climate Action, Resource Efficiency and Raw Materials (May 2013 until April 2015).
- **AMBER**: AMerican Bridge for the Excellence in Research with Europe (January 2013 until December 2015).

Participant: INSTRUCT-ERIC

Short name: INSTRUCT-ERIC

Description of the legal entity

Instruct-ERIC is a distributed pan-European Research Infrastructure Consortium, with the following objectives: a) to facilitate the advancement of integrative structural cell biology; b) to make available a managed access to state-of-the-art European structural biology facilities and specialist expertise; c) to further the development of the Instruct technology; and d) to provide training in integrative techniques in the field of structural biology.

2. To this end Instruct-ERIC shall undertake and coordinate a variety of activities, including but not limited to: a) those offered by Instruct Centres such as the provision of infrastructure to the structural biology user community and other Instruct training, networking and dissemination activities; b) the creation and operation of the Instruct Hub that provides the central coordinating role for all Instruct Activities offered through Instruct Centres; c) the provision of access to structural biology infrastructure at Instruct Centres using an Instruct web-portal incorporating peer review and scheduling for access reserved for Instruct users by an Instruct Centre; d) the coordination by the Instruct Hub of training courses and workshops on techniques and methods relevant to structural cell biology, enabling the dissemination of expertise, the stimulation for exchange and co-development with industry; e) the coordination by the Instruct Hub of joint programmes between Instruct Centres that support new technical and technological approaches that enable better integration across structural biology technologies; f) the coordination of programmes with companies that develop innovative structural biology technologies enabling their effective uptake by In-

struct Centres, making these available for access to academic and industrial researchers in Europe; g) the bridging of structural, cell and systems biology communities by coordinating joint actions including meetings, conferences and workshops; h) any other related action that helps strengthen research in the European Research Area.

Curriculum vitae of the participants

Dr Susan Daenke (female): PhD major in Immunology and Virology;

Post-doc University of Oxford Nuffield Department of Clinical Medicine 1988 - 1996;

Wellcome Trust Fellow 1996-2003

EU Project Manager 2003 - 2011

Instruct Hub Coordinator 2011 – present

Other experts participating in the action, without charging personnel costs are the following responsible person of the INSTRUCT National Nodes of Spain, Portugal & France:

Jose Maria Carazo (male), h = 48, 8000 citations –Scopus, 13/03/2019-). Head of the Biocomputing Unit (BCU) of the National Center for Biotechnology / Instruct Image Processing Center (I2PC). Professor Carazo has a sustained experience in the field of Three-dimensional Electron Microscopy under cryogenic conditions (cryo-EM), especially in the methods development area. His laboratory has opened whole new areas in the field, naming just as example the recent successful family of Maximum Likelihood algorithms (developed in Madrid from 2007 to 2011) or the very much used EMDataBank (started from the European Union Bioimage project that he Coordinated from 1996 to 1999). Their software has been downloaded from close to 3500 different IP addresses, and their web software is the last two years has been accessed by more than 2000 different users. Note that the specific version of Scipion developed for cryo-EM facilities is currently being at the heart of some key resources, such as Diamond/eBIC, in Oxford, the ESRF, in Grenoble or SciLab, in Stockholm.

Margarida Archer (female) obtained her PhD in Biochemistry from Universidade Nova de Lisboa in 1999, in association with R. Huber, Max Planck Institute of Biochemistry, Martinsried, Germany. M. Archer is the head of the Membrane Protein Crystallography group at ITQB NOVA. Her focus is on the structural biology of membrane proteins and complexes related with health problems and drug discovery. She teaches at Master and Doctoral programmes, has been awarded funding from national and European projects, co-organized 6 international meetings and was in the scientific committee of 2. Member of Review Editorial Board of Acta Crystallographica and Frontiers in Molecular BioSciences, panel member for ESRF (2013-16) and MAX-IV Synchrotron (2017-), National delegate of the European Crystallographic Association, ECA (since 2009) and Scientific Committee member of Portuguese Centre for Integrated Structural Biology (PCISBIO), an

Affiliate Centre of Instruct-ERIC.

Alberto Daniel Podjarny (male). His scientific interest is the development of crystallographic methodology and its application to biological problems, mainly neutron diffraction and ultra high resolution crystallography. Lately, I am particularly interested in subatomic resolution X-Ray and neutron protein crystallography for the structural study of enzymatic reactions, pharmaceutical targets and its application to rational drug design. I have a large experience in the crystallographic determination of protein-ligand complexes. The first 23 years of his career (1973-1996) were dedicated to the development of crystallographic methodology and its application to the solution of difficult structures. The second 20 years, in turn (1996-current), were dedicated to the use of subatomic resolution X-Ray and neutron protein crystallography for the structural solution of different biological problems. Currently he holds an emeritus position as CNRS research director in order to be the director of the INSTRUMENT Centre France 1 and to continue the structural studies of the HPV complexes with possible ligands that have a pharmaceutical effect.

Relevant publications, products and services

1. Gómez-Blanco J, de la Rosa-Trevín JM, Marabini R, Del Cano L, Jiménez A, Martínez M, Melero R, Majtner T, Maluenda D, Mota J, Rancel Y, Ramírez-Aportela E, Vilas JL, Carroni M, Fleischmann S, Lindahl E, Ashton AW, Basham M, Clare DK, Savage K, Siebert CA, Sharov GG, Sorzano COS, Conesa P, Carazo JM, Using Scipion for stream image processing at Cryo-EM facilities, *J Struct Biol.* 2018 Dec;204(3):457-463.
2. Alves M, Vieira NSM, Rebelo LPN, Araújo JMM, Pereiro AB, Archer M. (2017) Fluorinated ionic liquids for protein drug delivery systems: investigating their impact on the structure and function of lysozyme, *Int J Pharm* 526, 309-320
3. Nogly P, Gushchin I, Remeeva A, Esteves AM, Borges N, Ma P, Ishchenko A, Grudin S, Round E, et al., Archer M (2014) X-ray structure of a CDP-alcohol phosphatidyltransferase membrane enzyme and insights into its catalytic mechanism. *Nat Commun* 5, 4169
4. Denise Martinez-Zapien, Francesc Xavier Ruiz, Juline Poirson, André Mitschler, Juan Ramirez-Ramos, Anne Forster, Alexandra Cousido-Siah, Murielle Masson, Scott Vande Pol, Alberto Podjarny, Gilles Travé & Katia Zanier, Crystal structure of the HPV E6/E6AP/p53 complex: assembly of a virus-mediated p53 degradation complex, *Nature*, 529, 541–545, 2016
5. E. Howard, A. Cousido-Siah, M. L. Lepage, J.P. Schneider, A. Bodlenner, A. Mitschler, A. Meli, I. Izzo, A. Alvarez, A. Podjarny and P. Compain. Angew, Structural basis of exceptionally strong multivalent inhibitor binding to a GH38 -mannosidase. *Chem. Int. Ed.* 57, 1-6, 2018.

Previous projects or activities

2019 – 2024. HighResCells: A synergistic approach toward understanding receptor signaling in the cell at very high resolution. European Res. Council, UE- 810057, IP.

2019-2022 CYTED Thematic Network "One World – one Health: Integrative approaches in Structural Biology and cryo-Electron Microscopy", Margarida Archer, Coordinator

2017-2020 INSTRUCT-ULTRA “Releasing the full potential of Instruct to expand and consolidate infrastructure services for integrated structural”, Jose Maria Carazo, Margarida Archer, Alberto Podjarny, Participants and Instruc-ERIC Coordinator

2016 - iNEXT workshop “Integrating X-ray crystallography with scattering and electron microscopy – How to deal with complexes and membrane proteins?”, May 2-5, ITQB, Organizer.

Participant: LifeWatch ERIC e-Science European Infrastructure for Biodiversity and Ecosystem Research

Short name: LifeWatch

Description of the legal entity

LifeWatch ERIC is the e-Science European Research Infrastructure for Biodiversity and Ecosystem Research, a distributed Research e-Infrastructure to advance biodiversity research and to provide major contributions to addressing the big environmental challenges, including knowledge-based solutions to environmental managers for its preservation, particularly focusing on to measure the impact of Global Climate Change issues on Earth Biodiversity and Ecosystem Research. This goal is achieved by providing access through a single infrastructure to a multitude of sets of data, e-Services and tools enabling the construction and operation of Virtual Research Environments (VREs), which allow the accelerated capture of data with new innovative technologies and knowledge based decision making-support for the management of biodiversity and ecosystems. Since 2017, LifeWatch is legally constituted as a European Research Infrastructure Consortium –ERIC- composed of Full Member States: Belgium, Greece, Italy, the Netherlands, Portugal, Slovenia and Spain plus other Observer Members. Its Common Facilities are located in Spain (Statutory Seat and the ICT e-Infrastructure Technical Offices), Italy (Service Centre) and the Netherlands (Virtual Laboratories and Innovations Centre). The Statutory Seat and the ICT e-Infrastructure Technical Offices jointly assist to the coordination and management of the day-to-day institutional relationships, administrative, legal, and financial issues. The

Service Centre provides the interface with the Biodiversity Scientific Community, identifies the needs of the multiple users' groups from different domains and areas of interest, and coordinates the development and operation of those Services related. Finally, the Virtual Laboratories and Innovations Centre coordinates and manages the requirements and needs analysis, design and implementation of the scientific case studies and productions of the LifeWatch Virtual Laboratories; as well in tightly collaboration with other Distributed Centers allocated at the rest of above mentioned Member States.

LifeWatch ERIC expected impact is to be a structuring tool for the European Research Area –ERA-in tightly collaboration with other world areas (particularly, Latin America & Caribbean), also supporting policy decision making addressing Societal Challenges which demand scientific knowledge in a Global Climate Change context, including Citizen Science activities. In fact, LifeWatch ERIC is relevant for environmental awareness programs to respond to the social, industrial and scientific challenges posed by the loss of biodiversity, and the deployment of ecosystem sustainable management and eco-innovation activities (e.g., see UNDP publication: “Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean and Economic Valuation of Ecosystems”). Therefore, LifeWatch ERIC fits perfectly with the basis of the call, being based on the consolidated EU-LAC Biodiversity and Ecosystem Research Communities. In fact, as a consequence of the working meetings of the EU-CELAC SOM RI WG, particularly after the 1st meeting of the EU-Latin America and the Caribbean Working Group on Research Infrastructures held at Brussels (Belgium) on March 14th 2018 LifeWatch ERIC was identified as the 1st RI of interest scored by EU-LAC Research Infrastructure Communities.

Curriculum vitae of the participants

Dr. Eng. Juan Miguel González Aranda (male). Telecommunications Engineer and European Doctorate & Master on Industrial Organization & Management. [July 2018-today]: LifeWatch ERIC Chief Technology Officer and Head of ICT Core (Spain Common Facility). Chair of ERIC Forum during 2nd Semester 2018. [2012- June 2018]: Spanish Ministry HoU and Delegate for e-Science & e-Infrastructures in tightly collaboration with European Commission (DG R&I and DG CONNECT): e-IRG www.e-irg.eu, European Open Science Cloud (EOSC), Copernicus, EuroHPC Spanish “Sherpa”, Group European Experts Data (GEDE) at Research Data Alliance Europe. Also supporting other ESFRIs (ACTRIS, DANUBIUS-RI, EMSO, EPOS, ICOS, MIRRI, etc.) establishment, involved at start of KIC EIT, particularly Climate KIC-EIT. [2004-2012]: Research Technologist Spanish Council for Scientific Research (CSIC) collaborating with EURO- & INCONET MED, and Latin American & Caribbean initiatives (INCONET-EULARINET & ERANET-EULANEST), also Deputy Director-Technical of the Doñana Biological Station. [1997-2004]: Biomechanics for High Performance Sport(wo-)men and Disabled People and Advanced Digital (Medical) Images Processing Researcher, at the University of Seville part-time teacher on technology-based companies' creation for entrepreneurs. Keywords: Inno-

vation, e-Science, e-Infrastructures, ICT, Environment, CSIC, Research Technologist, Regional Innovation Strategies for Smart Specialization-RIS3, Entrepreneurship. Find further on: <http://linkedin.com/in/juan-miguel-gonzález-aranda-404741b3>

Dr. Cristina Huertas-Olivares (female) LifeWatch ERIC International Projects & Initiatives Officer, holds a PhD in Environmental Sciences, a Master in Water Engineering and a MBA Executive. She has an international multidisciplinary and multisector experience. She has actively participated in more than 28 R&D projects and 28 Conferences. Co-founder of INORE (International Network of Offshore Renewable Energy) and expert evaluator of Environmental R&D projects for the European Commission. She was the scientific secretariat of the 1st International Conference on Climate Change (SOCC, 2017) and two “High-Level” Energy Transition & Climate Change events from the Focus-Abengoa Foundation. Some positions she has had in the private sector includes: Head of Marine Energy R&D, Business Development Director, and Responsible for Technology Projects in companies like Abengoa and Ayesa. In the public sector: Head of Environmental Research & Strategy in the Wave Energy Centre and Responsible for International projects in the University of Huelva (Spain). She has been part of scientific committees/ chair of international conferences such as METS, ICOE, WREC. In Spain she has been vice chair of the marine energy Standardisation Committee AENOR and Coordinator of Spanish Maritime Technological Platform. She has teaching experience in two Erasmus Mundus programs, apart from other master and undergraduate programs, where she has mentored some international students. Apart from that, as a freelance, she has been the project manager for the development of the “Strategic Plan for Public-Private cooperation”, especially for Latin America and Caribe, for a relevant Spanish public water management entity. Dr. Huertas-Olivares has several publications and two book chapters.

Other experts participating in the action, without charging personnel costs are:

Prof. Dr. Jesús Miguel Santamaría (male) is the interim CEO of the European e-infrastructure LifeWatch ERIC. From 2013 to 2017 he has been the Spanish representative of the “Environment Strategic Working Group” of ESFRI. He is leading the Integrated Laboratory for Environmental Quality (LICA) at the University of Navarra, where he works since 1991, currently teaching the subjects “Environmental Chemistry” and “Air Pollution”, as well as several subjects of the master's degree on “Biodiversity, Landscapes and Sustainable Management”. He has a long and outstanding experience in the research of environmental pollution and its effects on ecosystems. An important part of his investigations is conducted within the framework of the Long-Range Transboundary Air Pollution (LRTAP) Convention. He has participated in 22 research projects (12 as PI) and 31 research contracts, and he has published more than 122 scientific papers.

Dr. Francisco Pando de la Hoz (male) is a researcher of the Spanish's National Science Council (CSIC) where he coordinates CSIC's participation in LifeWatch ERIC. He did his

PhD through University Complutense (Madrid). He has always navigated between Taxonomy and Informatics. His taxonomic studies have been centered on Myxomycetes (Slime Moulds) whereas on informatics he focused on Information systems for collection management, floristic studies and identification systems. He has published over 80 scientific articles, done field work in Altai, Equatorial Guinea, Morocco, Panama and Spain, and co-authored a few global check-lists. He has been keeper of the cryptogamic collections at the Royal Botanical Garden (Madrid) and Secretary of the TDWG (now Biodiversity Information Standards Group, 1995-2000). He set-up and directed the Spanish GBIF node, and then worked as programme officer for Nodes at the GBIF Secretariat (2005/6). He has been at head of the Spanish GBIF node until February 2016, was Chair of the GBIF Participant Node Managers Committee and member of its Executive Committee (2008-2012). He has acted as PI in 13 national and international projects.

Relevant publications, products and services

1. Borrell Fontelles, J., Huertas Olivares, C.. After COP21, *EU climate ambition and social justice in the fight against climate change*. Papeles de Europa. Vol. 29 (1). 2017
2. González-Aranda Juan Miguel, Rodríguez-Clemente Rafael, Lozano Sebastián (2009) *E-Research In International Cooperation Networks In Science & Technology Research*". Book chapter on "*E-Research Collaboration: Frameworks, Tools and Techniques*. Berlin/Heidelberg: Springer-Verlag. ISBN 978-3-642-12256-9 e-ISBN 978-3-64212257-6, pp. 167-199.
3. González-Aranda, J.M., Sánchez Gimeno B., Ballester F., Migueis R., Basset A., Escacena-Ortega D. (2014). *Making a joint use of the EU-FUNDS: Opportunities and challenges associated to European Research Infrastructures*. Published by the 20th APDR Congress "Renaissance of the Regions of the Southern Europe". Évora (Portugal), 10-11 July 2014.
4. Morera-Gómez, Y., Elustondo, D., Lasheras, E., Alonso-Hernández, C.M., Santamaría, J.M. (2018). *Chemical characterization of PM₁₀ samples collected simultaneously at a rural and an urban site in the Caribbean coast: Local and long-range source apportionment*. *Atmospheric Environment* 192, 182-192.
5. Aedo, C., Pando, F. (2017). "*A distribution and taxonomic reference dataset of Geranium in the New World*". *Nature-Scientific Data* <https://doi.org/10.1038/sdata.2017.49>

Previous projects or activities

- Red iberoamericana para la conservación e informatización de colecciones biológicas – sistemas de información **RECIBIO** (2005 – 2008) <http://www.recibio.net/redes-antiores/cyted/>. Sponsored by CYTED (Ciencia y Tecnología para el Desarrollo), a joint cooperation program among the science ministries of Latin-American countries, Portugal and Spain Principal investigator: Ed-

gardo Romero.

- Plataforma Iberoamericana de Información sobre Biodiversidad **RECIBIO** (2008-2011) www.recibio.net/piib Sponsored by the Spanish Ministry of Science and Innovation Principal investigator: Francisco Pando.
- Infraestructura Iberoamericana de Información en Biodiversidad (**I3B**) (2012-2015). Sponsored by CYTED (Ciencia y Tecnología para el Desarrollo, a joint cooperation program among the science ministries of Latin-American countries, Portugal and Spain Principal investigator: Francisco Pando <http://www.recibio.net/home-i3b/>
- A cooperative framework for building a common platform to serve biodiversity information at national level- **CoopBioPlat** (2015-2016). Sponsored as a Pilot Coordination Action supported by the ERANet-LaC Project (funded by the European Commission Principal investigator: Francisco Pando: www.gbif.es/?s=CoopBioPlat
- Increasing capacities to develop National Species Checklists in the Latin America and the Caribbean Region (2018-2019). Funded by **GBIF** (<http://www.gbif.org>) Principal investigator: Anabela Plos (Argentina)
- **ERANET EULANEST** “European - Latin American Network for Science and Technology”.
- **INCONET EULARINET** “Coordinating Latin American Research and Innovation NETWORKS”.

Description of any significant infrastructure

See LifeWatch ERIC proposal presentation: <https://bit.ly/2MOipxE> and also **open capabilities and e-Services** provision through <https://www.lifewatch.eu>

Participant: Centro de Investigaciones Energéticas Medioambientales y Tecnológicas

Short name: CIEMAT

Description of the legal entity

CIEMAT is a Spanish Public Research Institution (www.ciemat.es). Since its formation in 1951, it has developed and led R&D projects in the fields of Energy, Environment and Technology, placing the institution at the forefront of science and technology. As a technological research centre, CIEMAT fosters links between academia and industry. Its main activities include: to promote the introduction and improve the competitiveness of renewable energies on the energy market; to improve the efficiency and environmental quality of fossil fuels; to optimise waste management and safety of nuclear fission energy; to demon-

strate the role of nuclear fusion as a future energy alternative; to assess the environmental impact of energy; to promote the development of environmentally-friendly technologies that respect the environment; to transfer horizontal technologies to industry; to improve scientific returns derived from CIEMAT activities; to strengthen industrial participation in international projects with high technological content; and, to foster technology transfer, training and scientific outreach.

CIEMAT is the Spanish largest R&D centre on energy and will participate in EU-CELAC ResInfra with the ICT Division representing the Ibero American HPC Network (RICAP). In addition to coordinate RICAP, CIEMAT owns two European ESFRI (Solar Platform at Almería devoted to Concentrating Solar power and IFMIF-DONES devoted to materials in fusion), holds the Spanish representation in several fora such as EERA, ECRA, IEA-SHC, etc., and has participated in 77 projects co-funded by H2020 (as those of Feb 2019).

Curriculum vitae of the participants

Rafael Mayo-García (M) is Senior Researcher at CIEMAT and Harvard University Fellow. He earned his PhD in Physics from Universidad Complutense de Madrid (2004). From 2006 he has also been Adjunct Faculty and Honorary Fellow at the same University. He has been involved in many experiments in the US, Bulgaria, Sweden and Ireland (funded, among others, by the European Commission with a Marie Curie Action). He has also obtained a postdoctoral fellowship in the Spanish Juan de la Cierva Programme. He is author of more than 130 scientific articles. He has been project coordinator of 4 Spanish and 1 international R&D IT initiatives and has been involved in several European and National projects working on HPC+BD scientific developments and even on managerial activities as Work Package Manager and/or member of Executive Boards. He sums up to participation in 50 projects. He also has served to several institutions as evaluator for their competitive Calls, European Commission included, and has supervised 5 theses.

Dr. Mayo-García is the RICAP PI.

Sylvia Núñez Crespi (female), PhD in Physics (UCM, 2001) is currently the Director of the European Projects Office at CIEMAT. She started her career as a researcher and experimentalist at the Environmental Division where she gained a wide experience in atmospheric pollutants, mixed layer height and meteorological models. She is author of several scientific articles, scientific and technical documents and books. She has also participated in many national and international projects and conferences. Her activities are presently concentrated on the Seventh Framework Programme (FP7) and the new European Research Framework Programme HORIZON 2020. Her special interest focuses on increase the participation in FP7, the percentage of success of the CIEMAT proposals, and the consequent return. She is also interested in the European Science Policy.

Previous projects or activities

- CYTED Thematic Network.Red Iberoamericana de Computación de Altas Prestaciones (RICAP, 30,000 €/year). RICAP extends the PRACE concept to the CELAC region, providing free access to supercomputing facilities under competitive Calls and drafting several documents for consolidating a multidisciplinary collaboration in the region.
- H2020-INFRAEOSC-2018-3: European Open Science Cloud - Expanding Capacities by building Capabilities (EOSC-SYNERGY, 5,584,006.25 €, 2019-2021). EOSC-synergy extends the EOSC coordination to nine participating countries by harmonizing policies and federating relevant national research e-Infrastructures, scientific data and thematic services, bridging the gap between national initiatives and EOSC .
- H2020-INFRAEDI-2018-2020: European oriented Centre of Excellence-II (EoCoE-II, 9,214,327.50 €, 2019-2020). This project applies cutting-edge HPC and BD computational methods in its mission to accelerate the transition to the production, storage and management of clean, decarbonized energy. EoCoE enables energy-relevant numerical models to be run on exascale supercomputers, demonstrating their benefits for low carbonenergy technology.
- H2020-EUB-2015: Supercomputing and Energy in Mexico (EnerxicoHPC4E, 2,000,000 €, 2019-2021). This project is going to apply exascale HPC-BD techniques to develop beyond the state-of-the-art high performance and artificial intelligence simulation tools that can help the modernization of the energy industry.

Relevant publications, products and services

- E. Mocskos et al. Boosting the use and development of advanced computational applications and resources in Latin America through collaboration and sharing. *Computing Science & Engineering* 20, 39-48 (2018)
- A.J. Rubio-Montero et al. La infraestructura de RICAP en la nube para realizar e-Ciencia en Latinoamérica. *Actas TICAL 2018 y 2º Encuentro Latinoamericano de e-Ciencia*, pp-pp (2018)
- A. de la Ossa Osegueda et al. La Red Iberoamericana de Computación de Altas Prestaciones: una plataforma tecnológica al servicio de la comunidad académica. *Actas TICAL 2017*, 525-534 (2017)
- R. Mayo-García et al. Enhancing Energy Production with Exascale HPC Methods. In: Barrios Hernández C., Gitler I., Klapp J. (eds) *High Performance Computing. CARLA 2016. Communications in Computer and Information Science*, vol 697. 233-246 (2017). Springer
- J.M Cela; A.L.G.A. Coutinho; P.O.A. Navaux; R. Mayo-García. Fostering Collaboration in Energy Research and Technological Developments applying new exascale HPC techniques. *16th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing*,.701 - 706 (2016).

Description of any significant infrastructure

The RICAP HPC infrastructure is composed of the following supercomputers:

- BSC: A general purpose cluster composed of 165,488 Intel Platinum cores in 3,456 nodes, with more than 394TB of main memory and 25PB of storage.
- CIEMAT: 1 cluster with 680 Intel Gold cores and 456 Xeon Phi cores, 1 cluster of ~100,000 Nvidia cores, two cloud nodes with ~ 950 CPU cores and more than 1 PB of storage.
- CEDIA: 12 computing nodes with 322 Intel Xeon cores, 1TB RAM & 6TB of storage. Also, 5760 CUDA cores. CEDIA will also promote the use of the Ecuadorian super-computer Quinde I (Cluster with 1.760 CPU Cores and Nvidia K80 Tesla under MIMD NUMA architecture; RAM of 11 TB; and, parallel storage of 350TB). Quinde I provides $R_{max} = 232$ TFLOPS and $R_{peak} = 488,9$ TFLOPS.
- CeNAT-UCR: Several clusters with 72 Xeon cores, ~25,000 Nvidia cores and ~1450 Xeon Phi cores.
- CINVESTAV: SGI ICE-XA (CPU) and SGI ICE-X (GPU) with 8,900 cores (R_{max} of 429 Tflops). Lustre Seagate ClusterStor 9000 storage of 1 PB.
- CSC-CONICET: One cluster of 4,096 AMD Opteron cores and 16,384 Nvidia cores with 8,192 GB of RAM and 72TB of storage.
- HPC-Cuba: One HPC cluster with 50 nodes composed of 800 CPU cores and ~20.000 GPU cores and one Big Data cluster composed of 30 nodes with CPU 480 cores.
- NLHPC: One cluster with 132 nodes composed of 2,640 CPU cores (E5-2660v2), 57 nodes with 2,508 CPU cores (Gold 6152), 4 GPUs Nvidia Tesla V100, and 12 Intel Xeon Phi 5110p
- UDELAR: Cluster of 29 nodes with 576 cores and 1.28 TB of RAM, and 128 Xeon Phi cores with 16 GB of RAM
- UIS: One cluster of 24 nodes (2,4GHz and 16GB RAM) and once cluster with 128 NVIDIA FERMI Tesla (104 GB of RAM and 4 Intel Haskwell processors).
- UFRGS: One cluster with 256 nodes and 19,968 Nvidia cores.
- UNIANDES: One cluster with 1,808 cores with HT (8 TB RAM) jointly with 160 TB of storage

CIEMAT will also count with the expertise from the Solar Platform at Almería (ESFRI on CSP), which is composed of:

- CESA-1 and SSPS-CRS central receiver systems, 7 and 2.7 MWth respectively
- SSPS-DCS 1.2-MWth parabolic-trough collector system, with associated thermal storage system and water desalination plant
- DISS 1.8-MWth test loop, an excellent experimental system for two-phase flow and direct steam generation for electricity production research
- HTF test loop, a complete oil circuit for evaluation of new parabolic-trough collector components
- The FRESDEMO “linear Fresnel” technology loop.

- The parabolic-trough collector system called the “Innovative Fluids Test Loop”
- 6-unit DISTAL dish/Stirling facility.
- A 60-kWt solar furnace for thermal materials treatments.
- A solar chemistry facility for solar detoxification applications consisting of a parabolic-trough loop with two-axis tracking and three CPC photoreactors for different types of trials.
- Laboratorio de Ensayo Energético de Componentes de la Edificación (Laboratory for Energy Testing of Building Components) (LECE).
- The ARFRISOL Building, an integral part of the “Unique Project Strategy” of the same name, which is a container-demonstrator for advanced energy savings and efficiency technologies in building.
- Meteorological station forming part of the “Baseline Surface Radiation Network” (BSRN).

4.2. Third parties involved in the project (including use of third party resources)

Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
<i>If yes, please describe and justify the tasks to be subcontracted</i>	
Does the participant envisage that part of its work is performed by linked third parties ⁴	N
<i>If yes, please describe the third party, the link of the participant to the third party, and describe and justify the foreseen tasks to be performed by the third party</i>	
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	Y
<p>The Spanish Ministry of Science, Innovation and Universities will participate in the project with the Spanish Foundation for Science and Technology (full official name: Fundación Española para la Ciencia y la Tecnología – FECYT), acting as its third party under article 11.</p> <p>There is a legal binding between FECYT and the Ministry, since the Foundation depends hierarchically of MICINN. The cooperation of both entities in European projects is based on a legal partnership agreement that regulates the support given to the Ministry by FECYT as its third party.</p> <p>FECYT will manage the budget of the proposal on behalf of the Ministry, following its instructions, being in charge of distributing the budget among the consortium and paying MICINN costs, except personnel. The Foundation will also hire personnel if demanded by the Ministry in order to develop the action tasks under MICINN’s supervision and on its premises.</p> <p>The Ministry remains responsible for all tasks and deliverables as they are specified in the Annex I (Description of Action).</p>	
Does the participant envisage that part of the work is performed by International Partners ⁵ (Article 14a of the General Model Grant Agreement)?	N

⁴ A third party that is an affiliated entity or has a legal link to a participant implying a collaboration not limited to the action. (Article 14 of the [Model Grant Agreement](#)).

If yes, please describe the International Partner(s) and their contributions

Section 5: Ethics and Security

5.1 Ethics

The activities of the project will involve the access to non-sensitive personal data, both in Europe and in non-EU countries. The personal data collected by informed consent forms and derived from the project tasks will not be shared, except as blind data for statistical and justification of activities purposes. Templates of informed consent forms and information sheets will be designed and kept at MICINN.

The Data Protection Officer (DPO) of the Spanish Ministry of Science, Innovation and Universities, whose contact data will be communicated to all partners, will establish the ethics requirements according to GDPR standards to be applied by the project, ensuring that the procedures established for data collection, storage, protection and destruction comply with GDPR and national legislation.

If requested, the DPO will confirm to the EC that all data collection and processing are carried-out according to EU and national legislation.

5.2 Security⁶

Please indicate if your project will involve:

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

⁵ 'International Partner' is any legal entity established in a non-associated third country which is not eligible for funding under Article 10 of the Rules for Participation Regulation No 1290/2013.

⁶ See article 37 of the [Model Grant Agreement](#). For more information on the classification of Information, please refer to the Horizon 2020 guidance: https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/secur/h2020-hi-guide-classif_en.pdf.

ESTIMATED BUDGET FOR THE ACTION

Estimated eligible ¹ costs (per budget category)										EU contribution			Additional information			
A. Direct personnel costs				B. Direct costs of subcontracting	[C. Direct costs of fin. support]	D. Other direct costs		E. Indirect costs ²	Total costs	Reimbursement rate %	Maximum EU contribution ³	Maximum grant amount ⁴	Information for indirect costs	Information for auditors	Other information:	
A.1 Employees (or equivalent)		A.4 SME owners without salary				D.1 Travel	D.5 Costs of internally invoiced goods and services						Estimated costs of in-kind contributions not used on premises	Declaration of costs under Point D.4	Estimated costs of beneficiaries/ linked third parties not receiving funding/ international partners	
A.2 Natural persons under direct contract		A.5 Beneficiaries that are natural persons without salary				D.2 Equipment										
A.3 Seconded persons						D.3 Other goods and services										
[A.6 Personnel for providing access to research infrastructure]						[D.4 Costs of large research infrastructure]										
Form of costs ⁶	Actual	Unit ⁷	Unit ⁸		Actual	Actual	Actual	Unit ⁹	Flat-rate ¹⁰							
	a	Total b	No hours	Total c	d	[e]	f	Total g	25%	h = 0,25 x (a + b + c + f + g + [i1] ¹³ + [i2] ¹³ - n)	j = a + b + c + d + [e] + f + g + h + [i1] + [i2]	k	l	m	n	Yes/No
1. MICINN	115 000.00	0.00	0.00	0.00	0.00	0.00	55 000.00	0.00	42 500.00	212 500.00	100.00	212 500.00	212 500.00	0.00	No	n/a
2. MEC	24 000.00	0.00	0.00	0.00	0.00	0.00	22 000.00	0.00	11 500.00	57 500.00	100.00	57 500.00	57 500.00	0.00	No	n/a
3. DLR	80 750.00	0.00	0.00	0.00	0.00	0.00	42 000.00	0.00	30 687.50	153 437.50	100.00	153 437.50	153 437.50	0.00	No	n/a
4. AEI	25 000.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	9 000.00	45 000.00	100.00	45 000.00	45 000.00	0.00	No	n/a
5. FCT	16 650.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	6 912.50	34 562.50	100.00	34 562.50	34 562.50	0.00	No	n/a
6. SGCTEIP	24 500.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	8 875.00	44 375.00	100.00	44 375.00	44 375.00	0.00	No	n/a
7. CNR	62 000.00	0.00	0.00	0.00	0.00	0.00	32 500.00	0.00	23 625.00	118 125.00	100.00	118 125.00	118 125.00	0.00	No	n/a
8. CONACYT	44 000.00	0.00	0.00	0.00	0.00	0.00	25 000.00	0.00	17 250.00	86 250.00	100.00	86 250.00	86 250.00	0.00	No	n/a
9. VTT	0.00	57 375.00	0.00	0.00	0.00	0.00	11 000.00	0.00	17 093.75	85 468.75	100.00	85 468.75	85 468.75	0.00	No	n/a
10. CONICYT	44 100.00	0.00	0.00	0.00	0.00	0.00	28 500.00	0.00	18 150.00	90 750.00	100.00	90 750.00	89 500.00	0.00	No	n/a
11. SPI	90 000.00	0.00	0.00	0.00	0.00	0.00	12 500.00	0.00	25 625.00	128 125.00	100.00	128 125.00	128 125.00	0.00	No	n/a
12. CNPQ	24 500.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	8 875.00	44 375.00	100.00	44 375.00	44 375.00	0.00	No	n/a
13. UEFISCDI	26 100.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	9 275.00	46 375.00	100.00	46 375.00	46 375.00	0.00	No	n/a
14. MICITT	7 500.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	4 625.00	23 125.00	100.00	23 125.00	23 125.00	0.00	No	n/a
15. COLCIENCIAS	18 000.00	0.00	0.00	0.00	0.00	0.00	11 000.00	0.00	7 250.00	36 250.00	100.00	36 250.00	36 250.00	0.00	No	n/a
16. INSTRUCT-ERIC	36 000.00	0.00	0.00	0.00	0.00	0.00	49 500.00	0.00	21 375.00	106 875.00	100.00	106 875.00	106 875.00	0.00	No	n/a
17. LIFEWATCH	45 000.00	0.00	0.00	0.00	0.00	0.00	34 500.00	0.00	19 875.00	99 375.00	100.00	99 375.00	99 375.00	0.00	No	n/a
18. CIEMAT	36 300.00	0.00	0.00	0.00	0.00	0.00	34 500.00	0.00	17 700.00	88 500.00	100.00	88 500.00	88 500.00	0.00	No	n/a
Total consortium	719 400.00	57 375.00		0.00	0.00	0.00	424 000.00	0.00	300 193.75	1 500 968.75		1 500 968.75	1 499 718.75			0.00

¹ See Article 6 for the eligibility conditions.

² Indirect costs already covered by an operating grant (received under any EU or Euratom funding programme; see Article 6.5.(b)) are ineligible under the GA. Therefore, a beneficiary/linked third party that receives an operating grant during the action's duration cannot declare indirect costs for the year(s)/reporting period(s) covered by the operating grant, unless it can demonstrate that the operating grant does not cover any costs of the action (see Article 6.2.E).

³ This is the theoretical amount of EU contribution that the system calculates automatically (by multiplying all the budgeted costs by the reimbursement rate). This theoretical amount is capped by the 'maximum grant amount' (that the Commission decided to grant for the action) (see Article 5.1).

⁴ The 'maximum grant amount' is the maximum grant amount decided by the Commission. It normally corresponds to the requested grant, but may be lower.

⁵ Depending on its type, this specific cost category will or will not cover indirect costs. Specific unit costs that include indirect costs are: costs for energy efficiency measures in buildings, access costs for providing trans-national access to research infrastructure and costs for clinical studies.

⁶ See Article 5 for the forms of costs.

⁷ Unit : hours worked on the action; costs per unit (hourly rate) : calculated according to the beneficiary's usual accounting practice.

⁸ See Annex 2a 'Additional information on the estimated budget' for the details (costs per hour (hourly rate)).

⁹ Unit and costs per unit : calculated according to the beneficiary's usual accounting practices.

¹⁰ Flat rate : 25% of eligible direct costs, from which are excluded: direct costs of subcontracting, costs of in-kind contributions not used on premises, direct costs of financial support, and unit costs declared under budget category F if they include indirect costs (see Article 6.2.E).

¹¹ See Annex 2a 'Additional information on the estimated budget' for the details (units, costs per unit).

¹² See Annex 2a 'Additional information on the estimated budget' for the details (units, costs per unit, estimated number of units, etc).

¹³ Only specific unit costs that do not include indirect costs.

¹⁴ See Article 9 for beneficiaries not receiving funding.

¹⁵ Only for linked third parties that receive funding.