

EUROPEAN COMMISSION

Directorate-General for Research and Innovation

Research & Innovation Outreach
Research & Industrial Infrastructures



GRANT AGREEMENT

NUMBER 871140 — EU-CELAC ResInfra

This **Agreement** ('the Agreement') is **between** the following parties:

on the one part,

the **European Union** ('the EU'), represented by the European Commission ('the Commission'), represented for the purposes of signature of this Agreement by Head of Unit, Directorate-General for Research and Innovation, Innovative Administration, Financial Management & Program Support I, Pascale CID,

and

on the other part,

1. 'the coordinator':

MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES (MICINN), established in TORRELAGUNA 58, MADRID 28027, Spain, VAT number: ESS2801395A, represented for the purposes of signing the Agreement by Science Policy Coordinaton Secretary General, RAFAEL RODRIGO MONTERO

and the following other beneficiaries, if they sign their 'Accession Form' (see Annex 3 and Article 56):

- 2. **MINISTERIO DE EDUCACION Y CULTURA (MEC)**, established in Reconquista 535, MONTEVIDEO 11100, Uruguay,
- 3. **DEUTSCHES ZENTRUM FUER LUFT UND RAUMFAHRT EV (DLR)**, established in Linder Hoehe, KOELN 51147, Germany,
- 4. **AGENCIA ESTATAL DE INVESTIGACION (AEI)**, established in TORRELAGUNA 58 BIS, MADRID 28071, Spain, VAT number: ESQ2802338J,
- 5. **FUNDACAO PARA A CIENCIA E A TECNOLOGIA (FCT)**, established in AVENIDA D CARLOS I 126, LISBOA 1249 074, Portugal, VAT number: PT503904040,
- 6. **SECRETARIA DE GOBIERNO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN PRODUCTIVA (SGCTEIP)**, established in GODOY CRUZ 2320, BUENOS AIRES 1425, Argentina, VAT number: AR30571910078,
- 7. **CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)**, established in PIAZZALE ALDO MORO 7, ROMA 00185, Italy, VAT number: IT02118311006,

- 8. CONSEJO NACIONAL DE CIENCIA Y TECNOLOGIA (CONACYT), established in INSURGENTES SUR 1582 COLONIA CREDITO CONSTRUCTOR BENITO JUAREZ, MEXICO 03940, Mexico, VAT number: MXCNC701230PDO,
- 9. **Teknologian tutkimuskeskus VTT Oy (VTT)**, established in VUORIMIEHENTIE 3, Espoo 02150, Finland, VAT number: FI26473754,
- 10. COMISION NACIONAL DE INVESTIGACION CIENTIFICA Y TECNOLOGICA (CONICYT), established in CALLE MONEDA 1375, SANTIAGO 8340486, Chile,
- 11. SOCIEDADE PORTUGUESA DE INOVACAO CONSULTADORIA EMPRESARIAL E FOMENTO DA INOVACAO SA (SPI), established in AV MARECHAL GOMES DA COSTA 1376 PORTO CONCELHO FOZ DO DOURO, PORTO 4150 356, Portugal, VAT number: PT503821012,
- 12. CONSELHO NACIONAL DE DESENVOLVIMENTO CIENTIFICO E TECNOLOGICO (CNPQ), established in SHIS QI 1 CONJUNTO B LAGO SUL, BRASILIA 71605 001, Brazil,
- 13. Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), established in Mendeleev Street 21-25, Bucharest 010362, Romania,
- 14. **Ministerio de Ciencia y Tecnologia de Costa Rica (MICITT)**, established in AVENIDA SEGUNDA 17 y 19, SAN JOSE 5589-1000, Costa Rica, VAT number: NOT APPLICABLE,
- 15. **DEPARTAMENTO ADMINISTRATIVO DE CIENCIA, TECNOLOGIA E INNOVACION COLCIENCIAS** (**COLCIENCIAS**), established in AV CALLE 26 NO 57 83 TORRE 8 P 2, BOGOTA 111321, Colombia,
- 16. **INSTRUCT-ERIC** (**INSTRUCT-ERIC**), established in OXFORD HOUSE, PARKWAY COURT, JOHN SMITH DRIVE, OXFORD OX4 2JY, United Kingdom,
- 17. **E-SCIENCE EUROPEAN INFRASTRUCTURE FOR BIODIVERSITY AND ECOSYSTEM RESEARCH (LIFEWATCH)**, established in PLAZA DE ESPANA S/N, SECTOR II-III, SEVILLA 41071, Spain, VAT number: ESN9101001G,
- 18. CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT (CIEMAT), established in Avenida Complutense 40, MADRID 28040, Spain, VAT number: ESQ2820002J,

Unless otherwise specified, references to 'beneficiary' or 'beneficiaries' include the coordinator.

The parties referred to above have agreed to enter into the Agreement under the terms and conditions below.

By signing the Agreement or the Accession Form, the beneficiaries accept the grant and agree to implement it under their own responsibility and in accordance with the Agreement, with all the obligations and conditions it sets out.

The Agreement is composed of:

Terms and Conditions

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| | 2a Additional information on the estimated budget |
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CHAPTER 1 GENERAL

ARTICLE 1 — SUBJECT OF THE AGREEMENT

This Agreement sets out the rights and obligations and the terms and conditions applicable to the grant awarded to the beneficiaries for implementing the action set out in Chapter 2.

CHAPTER 2 ACTION

ARTICLE 2 — ACTION TO BE IMPLEMENTED

The grant is awarded for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures' — 'EU-CELAC ResInfra' ('action'), as described in Annex 1.

ARTICLE 3 — DURATION AND STARTING DATE OF THE ACTION

The duration of the action will be **30 months** as of the first day of the month following the date the Agreement enters into force (see Article 58) ('starting date of the action').

ARTICLE 4 — ESTIMATED BUDGET AND BUDGET TRANSFERS

4.1 Estimated budget

The 'estimated budget' for the action is set out in Annex 2.

It contains the estimated eligible costs and the forms of costs, broken down by beneficiary and budget category (see Articles 5, 6).

4.2 Budget transfers

The estimated budget breakdown indicated in Annex 2 may be adjusted — without an amendment (see Article 55) — by transfers of amounts between beneficiaries, budget categories and/or forms of costs set out in Annex 2, if the action is implemented as described in Annex 1.

However, the beneficiaries may not add costs relating to subcontracts not provided for in Annex 1, unless such additional subcontracts are approved by an amendment or in accordance with Article 13.

CHAPTER 3 GRANT

ARTICLE 5 — GRANT AMOUNT, FORM OF GRANT, REIMBURSEMENT RATES AND FORMS OF COSTS

5.1 Maximum grant amount

The 'maximum grant amount' is EUR 1 499 718.75 (one million four hundred and ninety nine thousand seven hundred and eighteen EURO and seventy five eurocents).

5.2 Form of grant, reimbursement rates and forms of costs

The grant reimburses 100% of the action's eligible costs (see Article 6) ('reimbursement of eligible costs grant') (see Annex 2).

The estimated eligible costs of the action are EUR 1 500 968.75 (one million five hundred thousand nine hundred and sixty eight EURO and seventy five eurocents).

Eligible costs (see Article 6) must be declared under the following forms ('forms of costs'):

(a) for direct personnel costs:

- as actually incurred costs ('actual costs') or
- on the basis of an amount per unit calculated by the beneficiary in accordance with its usual cost accounting practices ('unit costs').

Personnel **costs for SME owners** or **beneficiaries that are natural persons** not receiving a salary (see Article 6.2, Points A.4 and A.5) must be declared on the basis of the amount per unit set out in Annex 2a (**unit costs**);

- (b) for direct costs for subcontracting: as actually incurred costs (actual costs);
- (c) for direct costs of providing financial support to third parties: not applicable;
- (d) for other direct costs:
 - for costs of internally invoiced goods and services: on the basis of an amount per unit calculated by the beneficiary in accordance with its usual cost accounting practices ('unit costs');
 - for all other costs: as actually incurred costs (actual costs);
- (e) for **indirect costs**: on the basis of a flat-rate applied as set out in Article 6.2, Point E (**'flat-rate costs'**);
- (f) specific cost category(ies): not applicable.

5.3 Final grant amount — Calculation

The 'final grant amount' depends on the actual extent to which the action is implemented in accordance with the Agreement's terms and conditions.

This amount is calculated by the Commission — when the payment of the balance is made (see Article 21.4) — in the following steps:

- Step 1 Application of the reimbursement rates to the eligible costs
- Step 2 Limit to the maximum grant amount
- Step 3 Reduction due to the no-profit rule
- Step 4 Reduction due to substantial errors, irregularities or fraud or serious breach of obligations

5.3.1 Step 1 — Application of the reimbursement rates to the eligible costs

The reimbursement rate(s) (see Article 5.2) are applied to the eligible costs (actual costs, unit costs and flat-rate costs; see Article 6) declared by the beneficiaries (see Article 20) and approved by the Commission (see Article 21).

5.3.2 Step 2 — Limit to the maximum grant amount

If the amount obtained following Step 1 is higher than the maximum grant amount set out in Article 5.1, it will be limited to the latter.

5.3.3 Step 3 — Reduction due to the no-profit rule

The grant must not produce a profit.

'**Profit**' means the surplus of the amount obtained following Steps 1 and 2 plus the action's total receipts, over the action's total eligible costs.

The 'action's total eligible costs' are the consolidated total eligible costs approved by the Commission.

The 'action's total receipts' are the consolidated total receipts generated during its duration (see Article 3).

The following are considered **receipts**:

- (a) income generated by the action; if the income is generated from selling equipment or other assets purchased under the Agreement, the receipt is up to the amount declared as eligible under the Agreement;
- (b) financial contributions given by third parties to the beneficiary specifically to be used for the action, and
- (c) in-kind contributions provided by third parties free of charge and specifically to be used for the action, if they have been declared as eligible costs.

The following are however not considered receipts:

- (a) income generated by exploiting the action's results (see Article 28);
- (b) financial contributions by third parties, if they may be used to cover costs other than the eligible costs (see Article 6);
- (c) financial contributions by third parties with no obligation to repay any amount unused at the end of the period set out in Article 3.

If there is a profit, it will be deducted from the amount obtained following Steps 1 and 2.

5.3.4 Step 4 — Reduction due to substantial errors, irregularities or fraud or serious breach of obligations — Reduced grant amount — Calculation

If the grant is reduced (see Article 43), the Commission will calculate the reduced grant amount by deducting the amount of the reduction (calculated in proportion to the seriousness of the errors,

irregularities or fraud or breach of obligations, in accordance with Article 43.2) from the maximum grant amount set out in Article 5.1.

The final grant amount will be the lower of the following two:

- the amount obtained following Steps 1 to 3 or
- the reduced grant amount following Step 4.

5.4 Revised final grant amount — Calculation

If — after the payment of the balance (in particular, after checks, reviews, audits or investigations; see Article 22) — the Commission rejects costs (see Article 42) or reduces the grant (see Article 43), it will calculate the 'revised final grant amount' for the beneficiary concerned by the findings.

This amount is calculated by the Commission on the basis of the findings, as follows:

- in case of **rejection of costs**: by applying the reimbursement rate to the revised eligible costs approved by the Commission for the beneficiary concerned;
- in case of **reduction of the grant**: by calculating the concerned beneficiary's share in the grant amount reduced in proportion to the seriousness of the errors, irregularities or fraud or breach of obligations (see Article 43.2).

In case of **rejection of costs and reduction of the grant**, the revised final grant amount for the beneficiary concerned will be the lower of the two amounts above.

ARTICLE 6 — ELIGIBLE AND INELIGIBLE COSTS

6.1 General conditions for costs to be eligible

'Eligible costs' are costs that meet the following criteria:

(a) for actual costs:

- (i) they must be actually incurred by the beneficiary;
- (ii) they must be incurred in the period set out in Article 3, with the exception of costs relating to the submission of the periodic report for the last reporting period and the final report (see Article 20);
- (iii) they must be indicated in the estimated budget set out in Annex 2;
- (iv) they must be incurred in connection with the action as described in Annex 1 and necessary for its implementation;
- (v) they must be identifiable and verifiable, in particular recorded in the beneficiary's accounts in accordance with the accounting standards applicable in the country where the beneficiary is established and with the beneficiary's usual cost accounting practices;
- (vi) they must comply with the applicable national law on taxes, labour and social security, and

(vii) they must be reasonable, justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency;

(b) for unit costs:

(i) they must be calculated as follows:

{amounts per unit set out in Annex 2a or calculated by the beneficiary in accordance with its usual cost accounting practices (see Article 6.2, Point A and Article 6.2.D.5)

multiplied by

the number of actual units};

- (ii) the number of actual units must comply with the following conditions:
 - the units must be actually used or produced in the period set out in Article 3;
 - the units must be necessary for implementing the action or produced by it, and
 - the number of units must be identifiable and verifiable, in particular supported by records and documentation (see Article 18);

(c) for flat-rate costs:

- (i) they must be calculated by applying the flat-rate set out in Annex 2, and
- (ii) the costs (actual costs or unit costs) to which the flat-rate is applied must comply with the conditions for eligibility set out in this Article.

6.2 Specific conditions for costs to be eligible

Costs are eligible if they comply with the general conditions (see above) and the specific conditions set out below for each of the following budget categories:

- A. direct personnel costs;
- B. direct costs of subcontracting;
- C. not applicable;
- D. other direct costs;
- E. indirect costs:
- F. not applicable.

'Direct costs' are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs (see Point E below).

'Indirect costs' are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

A. Direct personnel costs

Types of eligible personnel costs

A.1 Personnel costs are eligible, if they are related to personnel working for the beneficiary under an employment contract (or equivalent appointing act) and assigned to the action ('costs for employees (or equivalent)'). They must be limited to salaries (including during parental leave), social security contributions, taxes and other costs included in the remuneration, if they arise from national law or the employment contract (or equivalent appointing act).

Beneficiaries that are non-profit legal entities¹ may also declare as personnel costs **additional remuneration** for personnel assigned to the action (including payments on the basis of supplementary contracts regardless of their nature), if:

- (a) it is part of the beneficiary's usual remuneration practices and is paid in a consistent manner whenever the same kind of work or expertise is required;
- (b) the criteria used to calculate the supplementary payments are objective and generally applied by the beneficiary, regardless of the source of funding used.
- 'Additional remuneration' means any part of the remuneration which exceeds what the person would be paid for time worked in projects funded by national schemes.

Additional remuneration for personnel assigned to the action is eligible up to the following amount:

- (a) if the person works full time and exclusively on the action during the full year: up to EUR 8 000;
- (b) if the person works exclusively on the action but not full-time or not for the full year: up to the corresponding pro-rata amount of EUR 8 000, or
- (c) if the person does not work exclusively on the action: up to a pro-rata amount calculated as follows:

```
{{EUR 8 000 divided by the number of annual productive hours (see below)}, multiplied by the number of hours that the person has worked on the action during the year}.
```

- A.2 The **costs for natural persons working under a direct contract** with the beneficiary other than an employment contract are eligible personnel costs, if:
 - (a) the person works under conditions similar to those of an employee (in particular regarding the way the work is organised, the tasks that are performed and the premises where they are performed);
 - (b) the result of the work carried out belongs to the beneficiary (unless exceptionally agreed otherwise), and

¹ For the definition, see Article 2.1(14) of the Rules for Participation Regulation No 1290/2013: 'non-profit legal entity' means a legal entity which by its legal form is non-profit-making or which has a legal or statutory obligation not to distribute profits to its shareholders or individual members.

- (c) the costs are not significantly different from those for personnel performing similar tasks under an employment contract with the beneficiary.
- A.3 The **costs of personnel seconded by a third party against payment** are eligible personnel costs, if the conditions in Article 11.1 are met.
- A.4 Costs of owners of beneficiaries that are small and medium-sized enterprises ('SME owners') who are working on the action and who do not receive a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2a multiplied by the number of actual hours worked on the action.
- A.5 Costs of 'beneficiaries that are natural persons' not receiving a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2a multiplied by the number of actual hours worked on the action.

Calculation

Personnel costs must be calculated by the beneficiaries as follows:

```
{{hourly rate multiplied by the number of actual hours worked on the action}, plus for non-profit legal entities: additional remuneration to personnel assigned to the action under the conditions set out above (Point A.1)}.
```

The number of actual hours declared for a person must be identifiable and verifiable (see Article 18).

The total number of hours declared in EU or Euratom grants, for a person for a year, cannot be higher than the annual productive hours used for the calculations of the hourly rate. Therefore, the maximum number of hours that can be declared for the grant are:

```
{number of annual productive hours for the year (see below)
minus
total number of hours declared by the beneficiary, for that person in that year, for other EU or Euratom
grants}.
```

The 'hourly rate' is one of the following:

(a) for personnel costs declared as **actual costs** (i.e. budget categories A.1, A.2, A.3): the hourly rate is calculated *per full financial year*, as follows:

```
{actual annual personnel costs (excluding additional remuneration) for the person divided by number of annual productive hours}.
```

using the personnel costs and the number of productive hours for each full financial year covered by the reporting period concerned. If a financial year is not closed at the end of the

reporting period, the beneficiaries must use the hourly rate of the last closed financial year available.

For the 'number of annual productive hours', the beneficiaries may choose one of the following:

- (i) 'fixed number of hours': 1 720 hours for persons working full time (or corresponding pro-rata for persons not working full time);
- (ii) 'individual annual productive hours': the total number of hours worked by the person in the year for the beneficiary, calculated as follows:

{annual workable hours of the person (according to the employment contract, applicable collective labour agreement or national law)

plus

overtime worked

minus

absences (such as sick leave and special leave)}.

'Annual workable hours' means the period during which the personnel must be working, at the employer's disposal and carrying out his/her activity or duties under the employment contract, applicable collective labour agreement or national working time legislation.

If the contract (or applicable collective labour agreement or national working time legislation) does not allow to determine the annual workable hours, this option cannot be used;

(iii) 'standard annual productive hours': the 'standard number of annual hours' generally applied by the beneficiary for its personnel in accordance with its usual cost accounting practices. This number must be at least 90% of the 'standard annual workable hours'.

If there is no applicable reference for the standard annual workable hours, this option cannot be used.

For all options, the actual time spent on **parental leave** by a person assigned to the action may be deducted from the number of annual productive hours.

As an alternative, beneficiaries may calculate the hourly rate *per month*, as follows:

{actual monthly personnel cost (excluding additional remuneration) for the person

divided by

{number of annual productive hours / 12}}

using the personnel costs for each month and (one twelfth of) the annual productive hours calculated according to either option (i) or (iii) above, i.e.:

- fixed number of hours or
- standard annual productive hours.

Time spent on **parental leave** may not be deducted when calculating the hourly rate per month. However, beneficiaries may declare personnel costs incurred in periods of parental leave in proportion to the time the person worked on the action in that financial year.

If parts of a basic remuneration are generated over a period longer than a month, the beneficiaries may include only the share which is generated in the month (irrespective of the amount actually paid for that month).

Each beneficiary must use only one option (per full financial year or per month) for each full financial year;

- (b) for personnel costs declared on the basis of **unit costs** (i.e. budget categories A.1, A.2, A.4, A.5): the hourly rate is one of the following:
 - (i) for SME owners or beneficiaries that are natural persons: the hourly rate set out in Annex 2a (see Points A.4 and A.5 above), or
 - (ii) for personnel costs declared on the basis of the beneficiary's usual cost accounting practices: the hourly rate calculated by the beneficiary in accordance with its usual cost accounting practices, if:
 - the cost accounting practices used are applied in a consistent manner, based on objective criteria, regardless of the source of funding;
 - the hourly rate is calculated using the actual personnel costs recorded in the beneficiary's accounts, excluding any ineligible cost or costs included in other budget categories.

The actual personnel costs may be adjusted by the beneficiary on the basis of budgeted or estimated elements. Those elements must be relevant for calculating the personnel costs, reasonable and correspond to objective and verifiable information;

and

- the hourly rate is calculated using the number of annual productive hours (see above).
- **B.** Direct costs of subcontracting (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if the conditions in Article 13.1.1 are met.
- C. Direct costs of providing financial support to third parties

Not applicable

D. Other direct costs

- D.1 **Travel costs and related subsistence allowances** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if they are in line with the beneficiary's usual practices on travel.
- D.2 The depreciation costs of equipment, infrastructure or other assets (new or second-hand) as recorded in the beneficiary's accounts are eligible, if they were purchased in accordance with

Article 10.1.1 and written off in accordance with international accounting standards and the beneficiary's usual accounting practices.

The **costs of renting or leasing** equipment, infrastructure or other assets (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are also eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets and do not include any financing fees.

The costs of equipment, infrastructure or other assets **contributed in-kind against payment** are eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets, do not include any financing fees and if the conditions in Article 11.1 are met.

The only portion of the costs that will be taken into account is that which corresponds to the duration of the action and rate of actual use for the purposes of the action.

- D.3 Costs of other goods and services (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible, if they are:
 - (a) purchased specifically for the action and in accordance with Article 10.1.1 or
 - (b) contributed in kind against payment and in accordance with Article 11.1.

Such goods and services include, for instance, consumables and supplies, dissemination (including open access), protection of results, certificates on the financial statements (if they are required by the Agreement), certificates on the methodology, translations and publications.

- D.4 Capitalised and operating costs of 'large research infrastructure'. Not applicable
- D.5 Costs of internally invoiced goods and services directly used for the action are eligible, if:
 - (a) they are declared on the basis of a unit cost calculated in accordance with the beneficiary's usual cost accounting practices;
 - (b) the cost accounting practices used are applied in a consistent manner, based on objective criteria, regardless of the source of funding;
 - (c) the unit cost is calculated using the actual costs for the good or service recorded in the beneficiary's accounts, excluding any ineligible cost or costs included in other budget categories.
 - The actual costs may be adjusted by the beneficiary on the basis of budgeted or estimated elements. Those elements must be relevant for calculating the costs, reasonable and correspond to objective and verifiable information;
 - (d) the unit cost excludes any costs of items which are not directly linked to the production of the invoiced goods or service.

'Internally invoiced goods and services' means goods or services which are provided by the

² 'Large research infrastructure' means research infrastructure of a total value of at least EUR 20 million, for a beneficiary, calculated as the sum of historical asset values of each individual research infrastructure of that beneficiary, as they appear in its last closed balance sheet before the date of the signature of the Agreement or as determined on the basis of the rental and leasing costs of the research infrastructure.

beneficiary directly for the action and which the beneficiary values on the basis of its usual cost accounting practices.

E. Indirect costs

Indirect costs are eligible if they are declared on the basis of the flat-rate of 25% of the eligible direct costs (see Article 5.2 and Points A to D above), from which are excluded:

- (a) costs of subcontracting and
- (b) costs of in-kind contributions provided by third parties which are not used on the beneficiary's premises;
- (c) not applicable;
- (d) not applicable.

Beneficiaries receiving an operating grant⁴ financed by the EU or Euratom budget cannot declare indirect costs for the period covered by the operating grant, unless they can demonstrate that the operating grant does not cover any costs of the action.

F. Specific cost category(ies)

Not applicable

6.3 Conditions for costs of linked third parties to be eligible

Not applicable

6.4 Conditions for in-kind contributions provided by third parties free of charge to be eligible

In-kind contributions provided free of charge are eligible direct costs (for the beneficiary), if the costs incurred by the third party fulfil — *mutatis mutandis* — the general and specific conditions for eligibility set out in this Article (Article 6.1 and 6.2) and Article 12.1.

6.5 Ineligible costs

'Ineligible costs' are:

- (a) costs that do not comply with the conditions set out above (Article 6.1 to 6.4), in particular:
 - (i) costs related to return on capital;
 - (ii) debt and debt service charges;

⁴ For the definition, see Article 121(1)(b) of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 ('Financial Regulation No 966/2012')(OJ L 218, 26.10.2012, p.1): 'operating grant' means direct financial contribution, by way of donation, from the budget in order to finance the functioning of a body which pursues an aim of general EU interest or has an objective forming part of and supporting an EU policy.

- (iii) provisions for future losses or debts;
- (iv) interest owed;
- (v) doubtful debts;
- (vi) currency exchange losses;
- (vii) bank costs charged by the beneficiary's bank for transfers from the Commission;
- (viii) excessive or reckless expenditure;
 - (ix) deductible VAT;
 - (x) costs incurred during suspension of the implementation of the action (see Article 49);
- (b) costs declared under another EU or Euratom grant (including grants awarded by a Member State and financed by the EU or Euratom budget and grants awarded by bodies other than the Commission for the purpose of implementing the EU or Euratom budget); in particular, indirect costs if the beneficiary is already receiving an operating grant financed by the EU or Euratom budget in the same period, unless it can demonstrate that the operating grant does not cover any costs of the action.

6.6 Consequences of declaration of ineligible costs

Declared costs that are ineligible will be rejected (see Article 42).

This may also lead to any of the other measures described in Chapter 6.

CHAPTER 4 RIGHTS AND OBLIGATIONS OF THE PARTIES

SECTION 1 RIGHTS AND OBLIGATIONS RELATED TO IMPLEMENTING THE ACTION

ARTICLE 7 — GENERAL OBLIGATION TO PROPERLY IMPLEMENT THE ACTION

7.1 General obligation to properly implement the action

The beneficiaries must implement the action as described in Annex 1 and in compliance with the provisions of the Agreement and all legal obligations under applicable EU, international and national law.

7.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 8 — RESOURCES TO IMPLEMENT THE ACTION — THIRD PARTIES INVOLVED IN THE ACTION

The beneficiaries must have the appropriate resources to implement the action.

If it is necessary to implement the action, the beneficiaries may:

- purchase goods, works and services (see Article 10);
- use in-kind contributions provided by third parties against payment (see Article 11);
- use in-kind contributions provided by third parties free of charge (see Article 12);
- call upon subcontractors to implement action tasks described in Annex 1 (see Article 13);
- call upon linked third parties to implement action tasks described in Annex 1 (see Article 14);
- call upon international partners to implement action tasks described in Annex 1 (see Article 14a).

In these cases, the beneficiaries retain sole responsibility towards the Commission and the other beneficiaries for implementing the action.

ARTICLE 9 — IMPLEMENTATION OF ACTION TASKS BY BENEFICIARIES NOT RECEIVING EU FUNDING

Not applicable

ARTICLE 10 — PURCHASE OF GOODS, WORKS OR SERVICES

10.1 Rules for purchasing goods, works or services

10.1.1 If necessary to implement the action, the beneficiaries may purchase goods, works or services.

The beneficiaries must make such purchases ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their contractors.

10.1.2 Beneficiaries that are 'contracting authorities' within the meaning of Directive 2004/18/EC⁵ (or 2014/24/EU⁶) or 'contracting entities' within the meaning of Directive 2004/17/EC⁷ (or 2014/25/EU⁸) must comply with the applicable national law on public procurement.

⁵ Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts (OJ L 134, 30.04.2004, p. 114).

⁶ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. (OJ L 94, 28.03.2014, p. 65).

⁷ Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors (OJ L 134, 30.04.2004, p. 1)

10.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under Article 10.1.1, the costs related to the contract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 10.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 11 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES AGAINST PAYMENT

11.1 Rules for the use of in-kind contributions against payment

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties against payment.

The beneficiaries may declare costs related to the payment of in-kind contributions as eligible (see Article 6.1 and 6.2), up to the third parties' costs for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services.

The third parties and their contributions must be set out in Annex 1. The Commission may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- their use does not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards the third parties.

11.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the costs related to the payment of the in-kind contribution will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 12 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES FREE OF CHARGE

12.1 Rules for the use of in-kind contributions free of charge

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties free of charge.

⁸ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (OJ L 94, 28.03.2014, p. 243).

The beneficiaries may declare costs incurred by the third parties for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services as eligible in accordance with Article 6.4.

The third parties and their contributions must be set out in Annex 1. The Commission may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- their use does not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards the third parties.

12.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the costs incurred by the third parties related to the in-kind contribution will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 13 — IMPLEMENTATION OF ACTION TASKS BY SUBCONTRACTORS

13.1 Rules for subcontracting action tasks

13.1.1 If necessary to implement the action, the beneficiaries may award subcontracts covering the implementation of certain action tasks described in Annex 1.

Subcontracting may cover only a limited part of the action.

The beneficiaries must award the subcontracts ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The tasks to be implemented and the estimated cost for each subcontract must be set out in Annex 1 and the total estimated costs of subcontracting per beneficiary must be set out in Annex 2. The Commission may however approve subcontracts not set out in Annex 1 and 2 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- they do not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their subcontractors.

13.1.2 The beneficiaries must ensure that their obligations under Articles 35, 36, 38 and 46 also apply to the subcontractors.

Beneficiaries that are 'contracting authorities' within the meaning of Directive 2004/18/EC (or 2014/24/EU) or 'contracting entities' within the meaning of Directive 2004/17/EC (or 2014/25/EU) must comply with the applicable national law on public procurement.

13.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under Article 13.1.1, the costs related to the subcontract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 13.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 14 — IMPLEMENTATION OF ACTION TASKS BY LINKED THIRD PARTIES

Not applicable

ARTICLE 14a — IMPLEMENTATION OF ACTION TASKS BY INTERNATIONAL PARTNERS

Not applicable

ARTICLE 15 — FINANCIAL SUPPORT TO THIRD PARTIES

15.1 Rules for providing financial support to third parties

Not applicable

15.2 Financial support in the form of prizes

Not applicable

15.3 Consequences of non-compliance

Not applicable

ARTICLE 16 — PROVISION OF TRANS-NATIONAL OR VIRTUAL ACCESS TO RESEARCH INFRASTRUCTURE

16.1 Rules for providing trans-national access to research infrastructure

Not applicable

16.2 Rules for providing virtual access to research infrastructure

Not applicable

16.3 Consequences of non-compliance

Not applicable

SECTION 2 RIGHTS AND OBLIGATIONS RELATED TO THE GRANT ADMINISTRATION

ARTICLE 17 — GENERAL OBLIGATION TO INFORM

17.1 General obligation to provide information upon request

The beneficiaries must provide — during implementation of the action or afterwards and in accordance with Article 41.2 — any information requested in order to verify eligibility of the costs, proper implementation of the action and compliance with any other obligation under the Agreement.

17.2 Obligation to keep information up to date and to inform about events and circumstances likely to affect the Agreement

Each beneficiary must keep information stored in the Participant Portal Beneficiary Register (via the electronic exchange system; see Article 52) up to date, in particular, its name, address, legal representatives, legal form and organisation type.

Each beneficiary must immediately inform the coordinator — which must immediately inform the Commission and the other beneficiaries — of any of the following:

- (a) **events** which are likely to affect significantly or delay the implementation of the action or the EU's financial interests, in particular:
 - (i) changes in its legal, financial, technical, organisational or ownership situation
- (b) circumstances affecting:
 - (i) the decision to award the grant or
 - (ii) compliance with requirements under the Agreement.

17.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 18 — KEEPING RECORDS — SUPPORTING DOCUMENTATION

18.1 Obligation to keep records and other supporting documentation

The beneficiaries must — for a period of five years after the payment of the balance — keep records and other supporting documentation in order to prove the proper implementation of the action and the costs they declare as eligible.

They must make them available upon request (see Article 17) or in the context of checks, reviews, audits or investigations (see Article 22).

If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under

the Agreement (including the extension of findings; see Article 22), the beneficiaries must keep the records and other supporting documentation until the end of these procedures.

The beneficiaries must keep the original documents. Digital and digitalised documents are considered originals if they are authorised by the applicable national law. The Commission may accept non-original documents if it considers that they offer a comparable level of assurance.

18.1.1 Records and other supporting documentation on the scientific and technical implementation

The beneficiaries must keep records and other supporting documentation on scientific and technical implementation of the action in line with the accepted standards in the respective field.

18.1.2 Records and other documentation to support the costs declared

The beneficiaries must keep the records and documentation supporting the costs declared, in particular the following:

- (a) for **actual costs**: adequate records and other supporting documentation to prove the costs declared, such as contracts, subcontracts, invoices and accounting records. In addition, the beneficiaries' usual cost accounting practices and internal control procedures must enable direct reconciliation between the amounts declared, the amounts recorded in their accounts and the amounts stated in the supporting documentation;
- (b) for **unit costs**: adequate records and other supporting documentation to prove the number of units declared. Beneficiaries do not need to identify the actual eligible costs covered or to keep or provide supporting documentation (such as accounting statements) to prove the amount per unit

In addition, for unit costs calculated in accordance with the beneficiary's usual cost accounting practices, the beneficiaries must keep adequate records and documentation to prove that the cost accounting practices used comply with the conditions set out in Article 6.2.

The beneficiaries may submit to the Commission, for approval, a certificate (drawn up in accordance with Annex 6) stating that their usual cost accounting practices comply with these conditions ('certificate on the methodology'). If the certificate is approved, costs declared in line with this methodology will not be challenged subsequently, unless the beneficiaries have concealed information for the purpose of the approval.

(c) for **flat-rate costs**: adequate records and other supporting documentation to prove the eligibility of the costs to which the flat-rate is applied. The beneficiaries do not need to identify the costs covered or provide supporting documentation (such as accounting statements) to prove the amount declared at a flat-rate.

In addition, for **personnel costs** (declared as actual costs or on the basis of unit costs), the beneficiaries must keep **time records** for the number of hours declared. The time records must be in writing and approved by the persons working on the action and their supervisors, at least monthly. In the absence of reliable time records of the hours worked on the action, the Commission may accept alternative evidence supporting the number of hours declared, if it considers that it offers an adequate level of assurance.

As an exception, for **persons working exclusively on the action**, there is no need to keep time records,

if the beneficiary signs a **declaration** confirming that the persons concerned have worked exclusively on the action.

18.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, costs insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 42), and the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 19 — SUBMISSION OF DELIVERABLES

19.1 Obligation to submit deliverables

The coordinator must submit the 'deliverables' identified in Annex 1, in accordance with the timing and conditions set out in it.

19.2 Consequences of non-compliance

If the coordinator breaches any of its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

ARTICLE 20 — REPORTING — PAYMENT REQUESTS

20.1 Obligation to submit reports

The coordinator must submit to the Commission (see Article 52) the technical and financial reports set out in this Article. These reports include requests for payment and must be drawn up using the forms and templates provided in the electronic exchange system (see Article 52).

20.2 Reporting periods

The action is divided into the following '**reporting periods**':

- RP1: from month 1 to month 14
- RP2: from month 15 to month 30

20.3 Periodic reports — Requests for interim payments

The coordinator must submit a periodic report within 60 days following the end of each reporting period.

The **periodic report** must include the following:

- (a) a 'periodic technical report' containing:
 - (i) an **explanation of the work carried out** by the beneficiaries;
 - (ii) an **overview of the progress** towards the objectives of the action, including milestones and deliverables identified in Annex 1.

This report must include explanations justifying the differences between work expected to be carried out in accordance with Annex 1 and that actually carried out.

The report must detail the exploitation and dissemination of the results and — if required in Annex 1 — an updated 'plan for the exploitation and dissemination of the results'.

The report must indicate the communication activities;

- (iii) a **summary** for publication by the Commission;
- (iv) the answers to the 'questionnaire', covering issues related to the action implementation and the economic and societal impact, notably in the context of the Horizon 2020 key performance indicators and the Horizon 2020 monitoring requirements;
- (b) a 'periodic financial report' containing:
 - (i) an 'individual financial statement' (see Annex 4) from each beneficiary, for the reporting period concerned.

The individual financial statement must detail the eligible costs (actual costs, unit costs and flat-rate costs; see Article 6) for each budget category (see Annex 2).

The beneficiaries must declare all eligible costs, even if — for actual costs, unit costs and flat-rate costs — they exceed the amounts indicated in the estimated budget (see Annex 2). Amounts which are not declared in the individual financial statement will not be taken into account by the Commission.

If an individual financial statement is not submitted for a reporting period, it may be included in the periodic financial report for the next reporting period.

The individual financial statements of the last reporting period must also detail the **receipts of the action** (see Article 5.3.3).

Each beneficiary must **certify** that:

- the information provided is full, reliable and true;
- the costs declared are eligible (see Article 6);
- the costs can be substantiated by adequate records and supporting documentation (see Article 18) that will be produced upon request (see Article 17) or in the context of checks, reviews, audits and investigations (see Article 22), and
- for the last reporting period: that all the receipts have been declared (see Article 5.3.3);
- (ii) an **explanation of the use of resources** and the information on subcontracting (see Article 13) and in-kind contributions provided by third parties (see Articles 11 and 12) from each beneficiary, for the reporting period concerned;
- (iii) not applicable;

(iv) a 'periodic summary financial statement', created automatically by the electronic exchange system, consolidating the individual financial statements for the reporting period concerned and including — except for the last reporting period — the request for interim payment.

20.4 Final report — Request for payment of the balance

In addition to the periodic report for the last reporting period, the coordinator must submit the final report within 60 days following the end of the last reporting period.

The **final report** must include the following:

- (a) a 'final technical report' with a summary for publication containing:
 - (i) an overview of the results and their exploitation and dissemination;
 - (ii) the conclusions on the action, and
 - (iii) the socio-economic impact of the action;
- (b) a 'final financial report' containing:
 - (i) a 'final summary financial statement', created automatically by the electronic exchange system, consolidating the individual financial statements for all reporting periods and including the request for payment of the balance and
 - (ii) a 'certificate on the financial statements' (drawn up in accordance with Annex 5) for each beneficiary, if it requests a total contribution of EUR 325 000 or more, as reimbursement of actual costs and unit costs calculated on the basis of its usual cost accounting practices (see Article 5.2 and Article 6.2).

20.5 Information on cumulative expenditure incurred

Not applicable

20.6 Currency for financial statements and conversion into euro

Financial statements must be drafted in euro.

Beneficiaries with accounting established in a currency other than the euro must convert the costs recorded in their accounts into euro, at the average of the daily exchange rates published in the C series of the *Official Journal of the European Union*, calculated over the corresponding reporting period.

If no daily euro exchange rate is published in the *Official Journal of the European Union* for the currency in question, they must be converted at the average of the monthly accounting rates published on the Commission's website, calculated over the corresponding reporting period.

Beneficiaries with accounting established in euro must convert costs incurred in another currency into euro according to their usual accounting practices.

20.7 Language of reports

All reports (technical and financial reports, including financial statements) must be submitted in the language of the Agreement.

20.8 Consequences of non-compliance

If the reports submitted do not comply with this Article, the Commission may suspend the payment deadline (see Article 47) and apply any of the other measures described in Chapter 6.

If the coordinator breaches its obligation to submit the reports and if it fails to comply with this obligation within 30 days following a written reminder, the Commission may terminate the Agreement (see Article 50) or apply any of the other measures described in Chapter 6.

ARTICLE 21 — PAYMENTS AND PAYMENT ARRANGEMENTS

21.1 Payments to be made

The following payments will be made to the coordinator:

- one **pre-financing payment**;
- one or more **interim payments**, on the basis of the request(s) for interim payment (see Article 20), and
- one **payment of the balance**, on the basis of the request for payment of the balance (see Article 20).

21.2 Pre-financing payment — Amount — Amount retained for the Guarantee Fund

The aim of the pre-financing is to provide the beneficiaries with a float.

It remains the property of the EU until the payment of the balance.

The amount of the pre-financing payment will be EUR 1 199 775.00 (one million one hundred and ninety nine thousand seven hundred and seventy five EURO).

The Commission will — except if Article 48 applies — make the pre-financing payment to the coordinator within 30 days, either from the entry into force of the Agreement (see Article 58) or from 10 days before the starting date of the action (see Article 3), whichever is the latest.

An amount of EUR **74 985.94** (seventy four thousand nine hundred and eighty five EURO and ninety four eurocents), corresponding to 5% of the maximum grant amount (see Article 5.1), is retained by the Commission from the pre-financing payment and transferred into the 'Guarantee Fund'.

21.3 Interim payments — Amount — Calculation

Interim payments reimburse the eligible costs incurred for the implementation of the action during the corresponding reporting periods.

The Commission will pay to the coordinator the amount due as interim payment within 90 days from receiving the periodic report (see Article 20.3), except if Articles 47 or 48 apply.

Payment is subject to the approval of the periodic report. Its approval does not imply recognition of the compliance, authenticity, completeness or correctness of its content.

The **amount due as interim payment** is calculated by the Commission in the following steps:

```
Step 1 — Application of the reimbursement rates

Step 2 — Limit to 90% of the maximum grant amount
```

21.3.1 Step 1 — Application of the reimbursement rates

The reimbursement rate(s) (see Article 5.2) are applied to the eligible costs (actual costs, unit costs and flat-rate costs; see Article 6) declared by the beneficiaries (see Article 20) and approved by the Commission (see above) for the concerned reporting period.

21.3.2 Step 2 — Limit to 90% of the maximum grant amount

The total amount of pre-financing and interim payments must not exceed 90% of the maximum grant amount set out in Article 5.1. The maximum amount for the interim payment will be calculated as follows:

```
{90% of the maximum grant amount (see Article 5.1) minus
{pre-financing and previous interim payments}}.
```

21.4 Payment of the balance — Amount — Calculation — Release of the amount retained for the Guarantee Fund

The payment of the balance reimburses the remaining part of the eligible costs incurred by the beneficiaries for the implementation of the action.

If the total amount of earlier payments is greater than the final grant amount (see Article 5.3), the payment of the balance takes the form of a recovery (see Article 44).

If the total amount of earlier payments is lower than the final grant amount, the Commission will pay the balance within 90 days from receiving the final report (see Article 20.4), except if Articles 47 or 48 apply.

Payment is subject to the approval of the final report. Its approval does not imply recognition of the compliance, authenticity, completeness or correctness of its content.

The **amount due as the balance** is calculated by the Commission by deducting the total amount of pre-financing and interim payments (if any) already made, from the final grant amount determined in accordance with Article 5.3:

```
{final grant amount (see Article 5.3)
minus
{pre-financing and interim payments (if any) made}}.
```

At the payment of the balance, the amount retained for the Guarantee Fund (see above) will be released and:

- if the balance is positive: the amount released will be paid in full to the coordinator together with the amount due as the balance;
- if the balance is negative (payment of the balance taking the form of recovery): it will be deducted from the amount released (see Article 44.1.2). If the resulting amount:
 - is positive, it will be paid to the coordinator
 - is negative, it will be recovered.

The amount to be paid may however be offset — without the beneficiaries' consent — against any other amount owed by a beneficiary to the Commission or an executive agency (under the EU or Euratom budget), up to the maximum EU contribution indicated, for that beneficiary, in the estimated budget (see Annex 2).

21.5 Notification of amounts due

When making payments, the Commission will formally notify to the coordinator the amount due, specifying whether it concerns an interim payment or the payment of the balance.

For the payment of the balance, the notification will also specify the final grant amount.

In the case of reduction of the grant or recovery of undue amounts, the notification will be preceded by the contradictory procedure set out in Articles 43 and 44.

21.6 Currency for payments

The Commission will make all payments in euro.

21.7 Payments to the coordinator — Distribution to the beneficiaries

Payments will be made to the coordinator.

Payments to the coordinator will discharge the Commission from its payment obligation.

The coordinator must distribute the payments between the beneficiaries without unjustified delay.

Pre-financing may however be distributed only:

- (a) if the minimum number of beneficiaries set out in the call for proposals has acceded to the Agreement (see Article 56) and
- (b) to beneficiaries that have acceded to the Agreement (see Article 56).

21.8 Bank account for payments

All payments will be made to the following bank account:

Name of bank: BANCO BILBAO VIZCAYA ARGENTARIA, S.A.

Full name of the account holder: FUNDACION ESPANOLA PARA LA CIENCIAY LA

TECNOLOGIA (FECYT)

IBAN code: ES8701822370450201567199

21.9 Costs of payment transfers

The cost of the payment transfers is borne as follows:

- the Commission bears the cost of transfers charged by its bank;
- the beneficiary bears the cost of transfers charged by its bank;
- the party causing a repetition of a transfer bears all costs of the repeated transfer.

21.10 Date of payment

Payments by the Commission are considered to have been carried out on the date when they are debited to its account.

21.11 Consequences of non-compliance

21.11.1 If the Commission does not pay within the payment deadlines (see above), the beneficiaries are entitled to **late-payment interest** at the rate applied by the European Central Bank (ECB) for its main refinancing operations in euros ('reference rate'), plus three and a half points. The reference rate is the rate in force on the first day of the month in which the payment deadline expires, as published in the C series of the *Official Journal of the European Union*.

If the late-payment interest is lower than or equal to EUR 200, it will be paid to the coordinator only upon request submitted within two months of receiving the late payment.

Late-payment interest is not due if all beneficiaries are EU Member States (including regional and local government authorities or other public bodies acting on behalf of a Member State for the purpose of this Agreement).

Suspension of the payment deadline or payments (see Articles 47 and 48) will not be considered as late payment.

Late-payment interest covers the period running from the day following the due date for payment (see above), up to and including the date of payment.

Late-payment interest is not considered for the purposes of calculating the final grant amount.

21.11.2 If the coordinator breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or the participation of the coordinator may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 22 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

22.1 Checks, reviews and audits by the Commission

22.1.1 Right to carry out checks

The Commission will — during the implementation of the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing deliverables and reports.

For this purpose the Commission may be assisted by external persons or bodies.

The Commission may also request additional information in accordance with Article 17. The Commission may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

22.1.2 Right to carry out reviews

The Commission may — during the implementation of the action or afterwards — carry out reviews on the proper implementation of the action (including assessment of deliverables and reports), compliance with the obligations under the Agreement and continued scientific or technological relevance of the action.

Reviews may be started up to two years after the payment of the balance. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the review is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted (including information on the use of resources). The Commission may request beneficiaries to provide such information to it directly.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with external experts.

For **on-the-spot** reviews, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a 'review report' will be drawn up.

The Commission will formally notify the review report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('contradictory review procedure').

Reviews (including review reports) are in the language of the Agreement.

22.1.3 Right to carry out audits

The Commission may — during the implementation of the action or afterwards — carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Audits may be started up to two years after the payment of the balance. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the audit is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out audits directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. The Commission may request beneficiaries to provide such information to it directly.

For **on-the-spot** audits, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format

On the basis of the audit findings, a 'draft audit report' will be drawn up.

The Commission will formally notify the draft audit report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('contradictory audit procedure'). This period may be extended by the Commission in justified cases.

The 'final audit report' will take into account observations by the coordinator or beneficiary concerned. The report will be formally notified to it.

Audits (including audit reports) are in the language of the Agreement.

The Commission may also access the beneficiaries' statutory records for the periodical assessment of unit costs or flat-rate amounts.

22.2 Investigations by the European Anti-Fraud Office (OLAF)

Under Regulations No 883/2013¹⁶ and No 2185/96¹⁷ (and in accordance with their provisions and

¹⁶ Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18.09.2013, p. 1).

¹⁷ Council Regulation (Euratom, EC) No 2185/1996 of 11 November 1996 concerning on-the-spot checks and inspections

procedures), the European Anti-Fraud Office (OLAF) may — at any moment during implementation of the action or afterwards — carry out investigations, including on-the-spot checks and inspections, to establish whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the EU.

22.3 Checks and audits by the European Court of Auditors (ECA)

Under Article 287 of the Treaty on the Functioning of the European Union (TFEU) and Article 161 of the Financial Regulation No 966/2012¹⁸, the European Court of Auditors (ECA) may — at any moment during implementation of the action or afterwards — carry out audits.

The ECA has the right of access for the purpose of checks and audits.

22.4 Checks, reviews, audits and investigations for international organisations

Not applicable

22.5 Consequences of findings in checks, reviews, audits and investigations — Extension of findings

22.5.1 Findings in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to the rejection of ineligible costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44) or to any of the other measures described in Chapter 6.

Rejection of costs or reduction of the grant after the payment of the balance will lead to a revised final grant amount (see Article 5.4).

Findings in checks, reviews, audits or investigations may lead to a request for amendment for the modification of Annex 1 (see Article 55).

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations may also lead to consequences in other EU or Euratom grants awarded under similar conditions ('extension of findings from this grant to other grants').

Moreover, findings arising from an OLAF investigation may lead to criminal prosecution under national law.

22.5.2 Findings in other grants

The Commission may extend findings from other grants to this grant ('extension of findings from other grants to this grant'), if:

(a) the beneficiary concerned is found, in other EU or Euratom grants awarded under similar

carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15.11.1996, p. 2).

¹⁸ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1).

conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and

(b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — no later than two years after the payment of the balance of this grant.

The extension of findings may lead to the rejection of costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44), suspension of payments (see Article 48), suspension of the action implementation (see Article 49) or termination (see Article 50).

22.5.3 Procedure

The Commission will formally notify the beneficiary concerned the systemic or recurrent errors and its intention to extend these audit findings, together with the list of grants affected.

- 22.5.3.1 If the findings concern **eligibility of costs**: the formal notification will include:
 - (a) an invitation to submit observations on the list of grants affected by the findings;
 - (b) the request to submit **revised financial statements** for all grants affected;
 - (c) the **correction rate for extrapolation** established by the Commission on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected if the beneficiary concerned:
 - (i) considers that the submission of revised financial statements is not possible or practicable or
 - (ii) does not submit revised financial statements.

The beneficiary concerned has 90 days from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method**. This period may be extended by the Commission in justified cases.

The Commission may then start a rejection procedure in accordance with Article 42, on the basis of:

- the revised financial statements, if approved;
- the proposed alternative correction method, if accepted

or

- the initially notified correction rate for extrapolation, if it does not receive any observations or revised financial statements, does not accept the observations or the proposed alternative correction method or does not approve the revised financial statements.
- 22.5.3.2 If the findings concern substantial errors, irregularities or fraud or serious breach of obligations: the formal notification will include:
 - (a) an invitation to submit observations on the list of grants affected by the findings and
 - (b) the flat-rate the Commission intends to apply according to the principle of proportionality.

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The beneficiary concerned has 90 days from receiving notification to submit observations or to propose a duly substantiated alternative flat-rate.

The Commission may then start a reduction procedure in accordance with Article 43, on the basis of:

- the proposed alternative flat-rate, if accepted

or

- the initially notified flat-rate, if it does not receive any observations or does not accept the observations or the proposed alternative flat-rate.

22.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, any insufficiently substantiated costs will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 23 — EVALUATION OF THE IMPACT OF THE ACTION

23.1 Right to evaluate the impact of the action

The Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the EU programme.

Evaluations may be started during implementation of the action and up to five years after the payment of the balance. The evaluation is considered to start on the date of the formal notification to the coordinator or beneficiaries.

The Commission may make these evaluations directly (using its own staff) or indirectly (using external bodies or persons it has authorised to do so).

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

23.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the Commission may apply the measures described in Chapter 6.

SECTION 3 RIGHTS AND OBLIGATIONS RELATED TO BACKGROUND AND RESULTS

SUBSECTION 1 GENERAL

ARTICLE 23a — MANAGEMENT OF INTELLECTUAL PROPERTY

23a.1 Obligation to take measures to implement the Commission Recommendation on the management of intellectual property in knowledge transfer activities

Beneficiaries that are universities or other public research organisations must take measures to implement the principles set out in Points 1 and 2 of the Code of Practice annexed to the Commission Recommendation on the management of intellectual property in knowledge transfer activities¹⁹.

This does not change the obligations set out in Subsections 2 and 3 of this Section.

The beneficiaries must ensure that researchers and third parties involved in the action are aware of them.

23a.2 Consequences of non-compliance

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

SUBSECTION 2 RIGHTS AND OBLIGATIONS RELATED TO BACKGROUND

ARTICLE 24 — AGREEMENT ON BACKGROUND

24.1 Agreement on background

The beneficiaries must identify and agree (in writing) on the background for the action ('agreement on background').

- **'Background'** means any data, know-how or information whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights that:
 - (a) is held by the beneficiaries before they acceded to the Agreement, and
 - (b) is needed to implement the action or exploit the results.

24.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 25 — ACCESS RIGHTS TO BACKGROUND

25.1 Exercise of access rights — Waiving of access rights — No sub-licensing

To exercise access rights, this must first be requested in writing ('request for access').

'Access rights' means rights to use results or background under the terms and conditions laid down in this Agreement.

Waivers of access rights are not valid unless in writing.

¹⁹ Commission Recommendation C(2008) 1329 of 10.4.2008 on the management of intellectual property in knowledge transfer activities and the Code of Practice for universities and other public research institutions attached to this recommendation.

Unless agreed otherwise, access rights do not include the right to sub-license.

25.2 Access rights for other beneficiaries, for implementing their own tasks under the action

The beneficiaries must give each other access — on a royalty-free basis — to background needed to implement their own tasks under the action, unless the beneficiary that holds the background has — before acceding to the Agreement —:

- (a) informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel), or
- (b) agreed with the other beneficiaries that access would not be on a royalty-free basis.

25.3 Access rights for other beneficiaries, for exploiting their own results

The beneficiaries must give each other access — under fair and reasonable conditions — to background needed for exploiting their own results, unless the beneficiary that holds the background has — before acceding to the Agreement — informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel).

'Fair and reasonable conditions' means appropriate conditions, including possible financial terms or royalty-free conditions, taking into account the specific circumstances of the request for access, for example the actual or potential value of the results or background to which access is requested and/or the scope, duration or other characteristics of the exploitation envisaged.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

25.4 Access rights for affiliated entities

Unless otherwise agreed in the consortium agreement, access to background must also be given — under fair and reasonable conditions (see above; Article 25.3) and unless it is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel) — to affiliated entities²⁰ established in an EU Member State or 'associated country'²¹, if this is needed to exploit the results generated by the beneficiaries to which they are affiliated.

²⁰ For the definition see Article 2.1(2) Rules for Participation Regulation No 1290/2013: 'affiliated entity' means any legal entity that is:

⁻ under the direct or indirect control of a participant, or

⁻ under the same direct or indirect control as the participant, or

⁻ directly or indirectly controlling a participant.

^{&#}x27;Control' may take any of the following forms:

⁽a) the direct or indirect holding of more than 50% of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity;

⁽b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned. However the following relationships between legal entities shall not in themselves be deemed to constitute controlling relationships:

⁽a) the same public investment corporation, institutional investor or venture-capital company has a direct or indirect holding of more than 50% of the nominal value of the issued share capital or a majority of voting rights of the shareholders or associates;

⁽b) the legal entities concerned are owned or supervised by the same public body.

²¹ For the definition, see Article 2.1(3) of the Rules for Participation Regulation No 1290/2013: 'associated country'

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Unless agreed otherwise (see above; Article 25.1), the affiliated entity concerned must make the request directly to the beneficiary that holds the background.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

25.5 Access rights for third parties

Not applicable

25.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

SUBSECTION 3 RIGHTS AND OBLIGATIONS RELATED TO RESULTS

ARTICLE 26 — OWNERSHIP OF RESULTS

26.1 Ownership by the beneficiary that generates the results

Results are owned by the beneficiary that generates them.

'Results' means any (tangible or intangible) output of the action such as data, knowledge or information — whatever its form or nature, whether it can be protected or not — that is generated in the action, as well as any rights attached to it, including intellectual property rights.

26.2 Joint ownership by several beneficiaries

Two or more beneficiaries own results jointly if:

- (a) they have jointly generated them and
- (b) it is not possible to:
 - (i) establish the respective contribution of each beneficiary, or
 - (ii) separate them for the purpose of applying for, obtaining or maintaining their protection (see Article 27).

The joint owners must agree (in writing) on the allocation and terms of exercise of their joint ownership ('joint ownership agreement'), to ensure compliance with their obligations under this Agreement.

Unless otherwise agreed in the joint ownership agreement, each joint owner may grant non-exclusive licences to third parties to exploit jointly-owned results (without any right to sub-license), if the other joint owners are given:

means a third country which is party to an international agreement with the Union, as identified in Article 7 of Horizon 2020 Framework Programme Regulation No 1291/2013. Article 7 sets out the conditions for association of non-EU countries to Horizon 2020.

- (a) at least 45 days advance notice and
- (b) fair and reasonable compensation.

Once the results have been generated, joint owners may agree (in writing) to apply another regime than joint ownership (such as, for instance, transfer to a single owner (see Article 30) with access rights for the others).

26.3 Rights of third parties (including personnel)

If third parties (including personnel) may claim rights to the results, the beneficiary concerned must ensure that it complies with its obligations under the Agreement.

If a third party generates results, the beneficiary concerned must obtain all necessary rights (transfer, licences or other) from the third party, in order to be able to respect its obligations as if those results were generated by the beneficiary itself.

If obtaining the rights is impossible, the beneficiary must refrain from using the third party to generate the results.

26.4 EU ownership, to protect results

- 26.4.1 The EU may with the consent of the beneficiary concerned assume ownership of results to protect them, if a beneficiary intends up to four years after the period set out in Article 3 to disseminate its results without protecting them, except in any of the following cases:
 - (a) the lack of protection is because protecting the results is not possible, reasonable or justified (given the circumstances);
 - (b) the lack of protection is because there is a lack of potential for commercial or industrial exploitation, or
 - (c) the beneficiary intends to transfer the results to another beneficiary or third party established in an EU Member State or associated country, which will protect them.

Before the results are disseminated and unless any of the cases above under Points (a), (b) or (c) applies, the beneficiary must formally notify the Commission and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.

If the Commission decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

No dissemination relating to these results may take place before the end of this period or, if the Commission takes a positive decision, until it has taken the necessary steps to protect the results.

- 26.4.2 The EU may with the consent of the beneficiary concerned assume ownership of results to protect them, if a beneficiary intends up to four years after the period set out in Article 3 to stop protecting them or not to seek an extension of protection, except in any of the following cases:
 - (a) the protection is stopped because of a lack of potential for commercial or industrial exploitation;

(b) an extension would not be justified given the circumstances.

A beneficiary that intends to stop protecting results or not seek an extension must — unless any of the cases above under Points (a) or (b) applies — formally notify the Commission at least 60 days before the protection lapses or its extension is no longer possible and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.

If the Commission decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

26.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to the any of the other measures described in Chapter 6.

ARTICLE 27 — PROTECTION OF RESULTS — VISIBILITY OF EU FUNDING

27.1 Obligation to protect the results

Each beneficiary must examine the possibility of protecting its results and must adequately protect them — for an appropriate period and with appropriate territorial coverage — if:

- (a) the results can reasonably be expected to be commercially or industrially exploited and
- (b) protecting them is possible, reasonable and justified (given the circumstances).

When deciding on protection, the beneficiary must consider its own legitimate interests and the legitimate interests (especially commercial) of the other beneficiaries.

27.2 EU ownership, to protect the results

If a beneficiary intends not to protect its results, to stop protecting them or not seek an extension of protection, the EU may — under certain conditions (see Article 26.4) — assume ownership to ensure their (continued) protection.

27.3 Information on EU funding

Applications for protection of results (including patent applications) filed by or on behalf of a beneficiary must — unless the Commission requests or agrees otherwise or unless it is impossible — include the following:

"The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871140".

27.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

ARTICLE 28 — EXPLOITATION OF RESULTS

28.1 Obligation to exploit the results

Each beneficiary must — up to four years after the period set out in Article 3 — take measures aiming to ensure '**exploitation**' of its results (either directly or indirectly, in particular through transfer or licensing; see Article 30) by:

- (a) using them in further research activities (outside the action);
- (b) developing, creating or marketing a product or process;
- (c) creating and providing a service, or
- (d) using them in standardisation activities.

This does not change the security obligations in Article 37, which still apply.

28.2 Results that could contribute to European or international standards — Information on EU funding

If results are incorporated in a standard, the beneficiary concerned must — unless the Commission requests or agrees otherwise or unless it is impossible — ask the standardisation body to include the following statement in (information related to) the standard:

"Results incorporated in this standard received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871140".

28.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced in accordance with Article 43.

Such a breach may also lead to any of the other measures described in Chapter 6.

ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING

29.1 Obligation to disseminate results

Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — 'disseminate' its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).

This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37 or the obligations to protect personal data in Article 39, all of which still apply.

A beneficiary that intends to disseminate its results must give advance notice to the other beneficiaries

of — unless agreed otherwise — at least 45 days, together with sufficient information on the results it will disseminate.

Any other beneficiary may object within — unless agreed otherwise — 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

If a beneficiary intends not to protect its results, it may — under certain conditions (see Article 26.4.1) — need to formally notify the Commission before dissemination takes place.

29.2 Open access to scientific publications

Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

- (a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications;
 - Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.
- (b) ensure open access to the deposited publication via the repository at the latest:
 - (i) on publication, if an electronic version is available for free via the publisher, or
 - (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.
- (c) ensure open access via the repository to the bibliographic metadata that identify the deposited publication.

The bibliographic metadata must be in a standard format and must include all of the following:

- the terms "European Union (EU)" and "Horizon 2020";
- the name of the action, acronym and grant number;
- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

29.3 Open access to research data

Not applicable;

29.4 Information on EU funding — Obligation and right to use the EU emblem

Unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

- (a) display the EU emblem and
- (b) include the following text:

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871140".

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not however give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

29.5 Disclaimer excluding Commission responsibility

Any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

29.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

ARTICLE 30 — TRANSFER AND LICENSING OF RESULTS

30.1 Transfer of ownership

Each beneficiary may transfer ownership of its results.

It must however ensure that its obligations under Articles 26.2, 26.4, 27, 28, 29, 30 and 31 also apply to the new owner and that this owner has the obligation to pass them on in any subsequent transfer.

This does not change the security obligations in Article 37, which still apply.

Unless agreed otherwise (in writing) for specifically-identified third parties or unless impossible under applicable EU and national laws on mergers and acquisitions, a beneficiary that intends to transfer ownership of results must give at least 45 days advance notice (or less if agreed in writing) to the other beneficiaries that still have (or still may request) access rights to the results. This notification must include sufficient information on the new owner to enable any beneficiary concerned to assess the effects on its access rights.

Unless agreed otherwise (in writing) for specifically-identified third parties, any other beneficiary may object within 30 days of receiving notification (or less if agreed in writing), if it can show that the transfer would adversely affect its access rights. In this case, the transfer may not take place until agreement has been reached between the beneficiaries concerned.

30.2 Granting licenses

Each beneficiary may grant licences to its results (or otherwise give the right to exploit them), if:

- (a) this does not impede the access rights under Article 31 and
- (b) not applicable.

In addition to Points (a) and (b), exclusive licences for results may be granted only if all the other beneficiaries concerned have waived their access rights (see Article 31.1).

This does not change the dissemination obligations in Article 29 or security obligations in Article 37, which still apply.

30.3 Commission right to object to transfers or licensing

Not applicable

30.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

ARTICLE 31 — ACCESS RIGHTS TO RESULTS

31.1 Exercise of access rights — Waiving of access rights — No sub-licensing

The conditions set out in Article 25.1 apply.

The obligations set out in this Article do not change the security obligations in Article 37, which still apply.

31.2 Access rights for other beneficiaries, for implementing their own tasks under the action

The beneficiaries must give each other access — on a royalty-free basis — to results needed for implementing their own tasks under the action.

31.3 Access rights for other beneficiaries, for exploiting their own results

The beneficiaries must give each other — under fair and reasonable conditions (see Article 25.3) — access to results needed for exploiting their own results.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

31.4 Access rights of affiliated entities

Unless agreed otherwise in the consortium agreement, access to results must also be given — under fair and reasonable conditions (Article 25.3) — to affiliated entities established in an EU Member

State or associated country, if this is needed for those entities to exploit the results generated by the beneficiaries to which they are affiliated.

Unless agreed otherwise (see above; Article 31.1), the affiliated entity concerned must make any such request directly to the beneficiary that owns the results.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

31.5 Access rights for the EU institutions, bodies, offices or agencies and EU Member States

The beneficiaries must give access to their results — on a royalty-free basis — to EU institutions, bodies, offices or agencies, for developing, implementing or monitoring EU policies or programmes.

Such access rights are limited to non-commercial and non-competitive use.

This does not change the right to use any material, document or information received from the beneficiaries for communication and publicising activities (see Article 38.2).

31.6 Access rights for third parties

Not applicable

31.7 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

SECTION 4 OTHER RIGHTS AND OBLIGATIONS

ARTICLE 32 — RECRUITMENT AND WORKING CONDITIONS FOR RESEARCHERS

32.1 Obligation to take measures to implement the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers

The beneficiaries must take all measures to implement the principles set out in the Commission Recommendation on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers²³, in particular regarding:

- working conditions;
- transparent recruitment processes based on merit, and
- career development.

²³ Commission Recommendation 2005/251/EC of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers (OJ L 75, 22.3.2005, p. 67).

The beneficiaries must ensure that researchers and third parties involved in the action are aware of them.

32.2 Consequences of non-compliance

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

ARTICLE 33 — GENDER EQUALITY

33.1 Obligation to aim for gender equality

The beneficiaries must take all measures to promote equal opportunities between men and women in the implementation of the action. They must aim, to the extent possible, for a gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level.

33.2 Consequences of non-compliance

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

ARTICLE 34 — ETHICS AND RESEARCH INTEGRITY

34.1 Obligation to comply with ethical and research integrity principles

The beneficiaries must carry out the action in compliance with:

- (a) ethical principles (including the highest standards of research integrity)
- and
- (b) applicable international, EU and national law.

Funding will not be granted for activities carried out outside the EU if they are prohibited in all Member States or for activities which destroy human embryos (for example, for obtaining stem cells).

The beneficiaries must ensure that the activities under the action have an exclusive focus on civil applications.

The beneficiaries must ensure that the activities under the action do not:

- (a) aim at human cloning for reproductive purposes;
- (b) intend to modify the genetic heritage of human beings which could make such changes heritable (with the exception of research relating to cancer treatment of the gonads, which may be financed), or
- (c) intend to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer.

In addition, the beneficiaries must respect the fundamental principle of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity²⁴.

This implies compliance with the following fundamental principles:

- **reliability** in ensuring the quality of research reflected in the design, the methodology, the analysis and the use of resources;
- honesty in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair and unbiased way;
- respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment;
- **accountability** for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts

and means that beneficiaries must ensure that persons carrying out research tasks follow the good research practices and refrain from the research integrity violations described in this Code.

This does not change the other obligations under this Agreement or obligations under applicable international, EU or national law, all of which still apply.

34.2 Activities raising ethical issues

Activities raising ethical issues must comply with the 'ethics requirements' set out as deliverables in Annex 1.

Before the beginning of an activity raising an ethical issue, each beneficiary must have obtained:

- (a) any ethics committee opinion required under national law and
- (b) any notification or authorisation for activities raising ethical issues required under national and/or European law

needed for implementing the action tasks in question.

The documents must be kept on file and be submitted upon request by the coordinator to the Commission (see Article 52). If they are not in English, they must be submitted together with an English summary, which shows that the action tasks in question are covered and includes the conclusions of the committee or authority concerned (if available).

34.3 Activities involving human embryos or human embryonic stem cells

Activities involving research on human embryos or human embryonic stem cells may be carried out, in addition to Article 34.1, only if:

- they are set out in Annex 1 or

²⁴ European Code of Conduct for Research Integrity of ALLEA (All European Academies) http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf

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- the coordinator has obtained explicit approval (in writing) from the Commission (see Article 52).

34.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 35 — CONFLICT OF INTERESTS

35.1 Obligation to avoid a conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify to the Commission without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The Commission may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

35.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 36 — CONFIDENTIALITY

36.1 General obligation to maintain confidentiality

During implementation of the action and for four years after the period set out in Article 3, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at the time it is disclosed ('confidential information').

If a beneficiary requests, the Commission may agree to keep such information confidential for an additional period beyond the initial four years.

If information has been identified as confidential only orally, it will be considered to be confidential only if this is confirmed in writing within 15 days of the oral disclosure.

Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

The beneficiaries may disclose confidential information to their personnel or third parties involved in the action only if they:

(a) need to know to implement the Agreement and

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(b) are bound by an obligation of confidentiality.

This does not change the security obligations in Article 37, which still apply.

The Commission may disclose confidential information to its staff, other EU institutions and bodies. It may disclose confidential information to third parties, if:

- (a) this is necessary to implement the Agreement or safeguard the EU's financial interests and
- (b) the recipients of the information are bound by an obligation of confidentiality.

Under the conditions set out in Article 4 of the Rules for Participation Regulation No 1290/2013²⁵, the Commission must moreover make available information on the results to other EU institutions, bodies, offices or agencies as well as Member States or associated countries.

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party;
- (b) the information was already known by the recipient or is given to him without obligation of confidentiality by a third party that was not bound by any obligation of confidentiality;
- (c) the recipient proves that the information was developed without the use of confidential information;
- (d) the information becomes generally and publicly available, without breaching any confidentiality obligation, or
- (e) the disclosure of the information is required by EU or national law.

36.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 37 — SECURITY-RELATED OBLIGATIONS

37.1 Results with a security recommendation

Not applicable

37.2 Classified information

Not applicable

37.3 Activities involving dual-use goods or dangerous materials and substances

²⁵ Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" (OJ L 347, 20.12.2013 p.81).

Not applicable

37.4 Consequences of non-compliance

Not applicable

ARTICLE 38 — PROMOTING THE ACTION — VISIBILITY OF EU FUNDING

38.1 Communication activities by beneficiaries

38.1.1 Obligation to promote the action and its results

The beneficiaries must promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner.

This does not change the dissemination obligations in Article 29, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply.

Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the Commission (see Article 52).

38.1.2 Information on EU funding — Obligation and right to use the EU emblem

Unless the Commission requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

- (a) display the EU emblem and
- (b) include the following text:

For communication activities:

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871140".

For infrastructure, equipment and major results:

"This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871140".

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

38.1.3 Disclaimer excluding Commission responsibility

Any communication activity related to the action must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

38.2 Communication activities by the Commission

38.2.1 Right to use beneficiaries' materials, documents or information

The Commission may use, for its communication and publicising activities, information relating to the action, documents notably summaries for publication and public deliverables as well as any other material, such as pictures or audio-visual material received from any beneficiary (including in electronic form).

This does not change the confidentiality obligations in Article 36 and the security obligations in Article 37, all of which still apply.

If the Commission's use of these materials, documents or information would risk compromising legitimate interests, the beneficiary concerned may request the Commission not to use it (see Article 52).

The right to use a beneficiary's materials, documents and information includes:

- (a) **use for its own purposes** (in particular, making them available to persons working for the Commission or any other EU institution, body, office or agency or body or institutions in EU Member States; and copying or reproducing them in whole or in part, in unlimited numbers);
- (b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes);
- (c) **editing or redrafting** for communication and publicising activities (including shortening, summarising, inserting other elements (such as meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation);
- (d) translation;
- (e) giving **access in response to individual requests** under Regulation No 1049/2001²⁷, without the right to reproduce or exploit;
- (f) **storage** in paper, electronic or other form;
- (g) archiving, in line with applicable document-management rules, and
- (h) the right to authorise **third parties** to act on its behalf or sub-license the modes of use set out in Points (b), (c), (d) and (f) to third parties if needed for the communication and publicising activities of the Commission.

If the right of use is subject to rights of a third party (including personnel of the beneficiary), the

²⁷ Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents, OJ L 145, 31.5.2001, p. 43.

beneficiary must ensure that it complies with its obligations under this Agreement (in particular, by obtaining the necessary approval from the third parties concerned).

Where applicable (and if provided by the beneficiaries), the Commission will insert the following information:

"© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the European Union (EU) under conditions."

38.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 39 — PROCESSING OF PERSONAL DATA

39.1 Processing of personal data by the Commission

Any personal data under the Agreement will be processed by the Commission under Regulation No 45/2001²⁸ and according to the 'notifications of the processing operations' to the Data Protection Officer (DPO) of the Commission (publicly accessible in the DPO register).

Such data will be processed by the 'data controller' of the Commission for the purposes of implementing, managing and monitoring the Agreement or protecting the financial interests of the EU or Euratom (including checks, reviews, audits and investigations; see Article 22).

The persons whose personal data are processed have the right to access and correct their own personal data. For this purpose, they must send any queries about the processing of their personal data to the data controller, via the contact point indicated in the privacy statement(s) that are published on the Commission websites.

They also have the right to have recourse at any time to the European Data Protection Supervisor (EDPS).

39.2 Processing of personal data by the beneficiaries

The beneficiaries must process personal data under the Agreement in compliance with applicable EU and national law on data protection (including authorisations or notification requirements).

The beneficiaries may grant their personnel access only to data that is strictly necessary for implementing, managing and monitoring the Agreement.

The beneficiaries must inform the personnel whose personal data are collected and processed by the Commission. For this purpose, they must provide them with the privacy statement(s) (see above), before transmitting their data to the Commission.

²⁸ Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (OJ L 8, 12.01.2001, p. 1).

39.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under Article 39.2, the Commission may apply any of the measures described in Chapter 6.

ARTICLE 40 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE COMMISSION

The beneficiaries may not assign any of their claims for payment against the Commission to any third party, except if approved by the Commission on the basis of a reasoned, written request by the coordinator (on behalf of the beneficiary concerned).

If the Commission has not accepted the assignment or the terms of it are not observed, the assignment will have no effect on it.

In no circumstances will an assignment release the beneficiaries from their obligations towards the Commission.

CHAPTER 5 DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES — RELATIONSHIP WITH COMPLEMENTARY BENEFICIARIES — RELATIONSHIP WITH PARTNERS OF A JOINT ACTION

ARTICLE 41 — DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES — RELATIONSHIP WITH COMPLEMENTARY BENEFICIARIES — RELATIONSHIP WITH PARTNERS OF A JOINT ACTION

41.1 Roles and responsibility towards the Commission

The beneficiaries have full responsibility for implementing the action and complying with the Agreement.

The beneficiaries are jointly and severally liable for the **technical implementation** of the action as described in Annex 1. If a beneficiary fails to implement its part of the action, the other beneficiaries become responsible for implementing this part (without being entitled to any additional EU funding for doing so), unless the Commission expressly relieves them of this obligation.

The **financial responsibility** of each beneficiary is governed by Article 44.

41.2 Internal division of roles and responsibilities

The internal roles and responsibilities of the beneficiaries are divided as follows:

(a) Each beneficiary must:

- (i) keep information stored in the Participant Portal Beneficiary Register (via the electronic exchange system) up to date (see Article 17);
- (ii) inform the coordinator immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 17);

- (iii) submit to the coordinator in good time:
 - individual financial statements for itself and, if required, certificates on the financial statements (see Article 20);
 - the data needed to draw up the technical reports (see Article 20);
 - ethics committee opinions and notifications or authorisations for activities raising ethical issues (see Article 34);
 - any other documents or information required by the Commission under the Agreement, unless the Agreement requires the beneficiary to submit this information directly to the Commission.

(b) The coordinator must:

- (i) monitor that the action is implemented properly (see Article 7);
- (ii) act as the intermediary for all communications between the beneficiaries and the Commission (in particular, providing the Commission with the information described in Article 17), unless the Agreement specifies otherwise;
- (iii) request and review any documents or information required by the Commission and verify their completeness and correctness before passing them on to the Commission;
- (iv) submit the deliverables and reports to the Commission (see Articles 19 and 20);
- (v) ensure that all payments are made to the other beneficiaries without unjustified delay (see Article 21);
- (vi) inform the Commission of the amounts paid to each beneficiary, when required under the Agreement (see Articles 44 and 50) or requested by the Commission.

The coordinator may not delegate or subcontract the above-mentioned tasks to any other beneficiary or third party (including linked third parties).

As an exception, the coordinator delegates the tasks set out in Point 2(b)(v) and (vi) above to *FUNDACION ESPAÑOLA PARA LA CIENCIA Y LA TECNOLOGIA*, *F.S.P.*, *FECYT*. The coordinator retains sole responsibility for the EU contribution and for compliance with the obligations under the Agreement.

41.3 Internal arrangements between beneficiaries — Consortium agreement

The beneficiaries must have internal arrangements regarding their operation and co-ordination to ensure that the action is implemented properly. These internal arrangements must be set out in a written 'consortium agreement' between the beneficiaries, which may cover:

- internal organisation of the consortium;
- management of access to the electronic exchange system;
- distribution of EU funding;

- additional rules on rights and obligations related to background and results (including whether access rights remain or not, if a beneficiary is in breach of its obligations) (see Section 3 of Chapter 4);
- settlement of internal disputes;
- liability, indemnification and confidentiality arrangements between the beneficiaries.

The consortium agreement must not contain any provision contrary to the Agreement.

41.4 Relationship with complementary beneficiaries — Collaboration agreement

Not applicable

41.5 Relationship with partners of a joint action — Coordination agreement

Not applicable

<u>CHAPTER 6 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY — SANCTIONS — DAMAGES — SUSPENSION — TERMINATION — FORCE MAJEURE</u>

SECTION 1 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY — SANCTIONS

ARTICLE 42 — REJECTION OF INELIGIBLE COSTS

42.1 Conditions

The Commission will — after termination of the participation of a beneficiary, at the time of an interim payment, at the payment of the balance or afterwards — reject any costs which are ineligible (see Article 6), in particular following checks, reviews, audits or investigations (see Article 22).

The rejection may also be based on the **extension of findings from other grants to this grant** (see Article 22.5.2).

42.2 Ineligible costs to be rejected — Calculation — Procedure

Ineligible costs will be rejected in full.

If the rejection of costs does not lead to a recovery (see Article 44), the Commission will formally notify the coordinator or beneficiary concerned of the rejection of costs, the amounts and the reasons why (if applicable, together with the notification of amounts due; see Article 21.5). The coordinator or beneficiary concerned may — within 30 days of receiving notification — formally notify the Commission of its disagreement and the reasons why.

If the rejection of costs leads to a recovery, the Commission will follow the contradictory procedure with pre-information letter set out in Article 44.

42.3 Effects

If the Commission rejects costs at the time of an **interim payment** or **the payment of the balance**, it will deduct them from the total eligible costs declared, for the action, in the periodic or final summary financial statement (see Articles 20.3 and 20.4). It will then calculate the interim payment or payment of the balance as set out in Articles 21.3 or 21.4.

If the Commission rejects costs **after termination of the participation of a beneficiary**, it will deduct them from the costs declared by the beneficiary in the termination report and include the rejection in the calculation after termination (see Article 50.2 and 50.3).

If the Commission — after an interim payment but before the payment of the balance — rejects costs declared in a periodic summary financial statement, it will deduct them from the total eligible costs declared, for the action, in the next periodic summary financial statement or in the final summary financial statement. It will then calculate the interim payment or payment of the balance as set out in Articles 21.3 or 21.4.

If the Commission rejects costs **after the payment of the balance**, it will deduct the amount rejected from the total eligible costs declared, by the beneficiary, in the final summary financial statement. It will then calculate the revised final grant amount as set out in Article 5.4.

ARTICLE 43 — REDUCTION OF THE GRANT

43.1 Conditions

The Commission may — after termination of the participation of a beneficiary, at the payment of the balance or afterwards — reduce the grant amount (see Article 5.1), if:

- (a) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under the Agreement or during the award procedure (including improper implementation of the action, submission of false information, failure to provide required information, breach of ethical principles) or
- (b) a beneficiary (or a natural person who has the power to represent or take decision on its behalf) has committed in other EU or Euratom grants awarded to it under similar conditions systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings from other grants to this grant; see Article 22.5.2).

43.2 Amount to be reduced — Calculation — Procedure

The amount of the reduction will be proportionate to the seriousness of the errors, irregularities or fraud or breach of obligations.

Before reduction of the grant, the Commission will formally notify a 'pre-information letter' to the coordinator or beneficiary concerned:

- informing it of its intention to reduce the grant, the amount it intends to reduce and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If the Commission does not receive any observations or decides to pursue reduction despite the observations it has received, it will formally notify **confirmation** of the reduction (if applicable, together with the notification of amounts due; see Article 21).

43.3 Effects

If the Commission reduces the grant **after termination of the participation of a beneficiary**, it will calculate the reduced grant amount for that beneficiary and then determine the amount due to that beneficiary (see Article 50.2 and 50.3).

If the Commission reduces the grant at the payment of the balance, it will calculate the reduced grant amount for the action and then determine the amount due as payment of the balance (see Articles 5.3.4 and 21.4).

If the Commission reduces the grant **after the payment of the balance**, it will calculate the revised final grant amount for the beneficiary concerned (see Article 5.4). If the revised final grant amount for the beneficiary concerned is lower than its share of the final grant amount, the Commission will recover the difference (see Article 44).

ARTICLE 44 — RECOVERY OF UNDUE AMOUNTS

44.1 Amount to be recovered — Calculation — Procedure

The Commission will — after termination of the participation of a beneficiary, at the payment of the balance or afterwards — claim back any amount that was paid, but is not due under the Agreement.

Each beneficiary's financial responsibility in case of recovery is limited to its own debt, except for the amount retained for the Guarantee Fund (see Article 21.4).

44.1.1 Recovery after termination of a beneficiary's participation

If recovery takes place after termination of a beneficiary's participation (including the coordinator), the Commission will claim back the undue amount from the beneficiary concerned, by formally notifying it a debit note (see Article 50.2 and 50.3). This note will specify the amount to be recovered, the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission will **recover** the amount:

(a) by 'offsetting' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) not applicable;
- (c) by taking legal action (see Article 57) or by adopting an enforceable decision under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date specified in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC²⁹ applies.

44.1.2 Recovery at payment of the balance

If the payment of the balance takes the form of a recovery (see Article 21.4), the Commission will formally notify a '**pre-information letter**' to the coordinator:

- informing it of its intention to recover, the amount due as the balance and the reasons why;
- specifying that it intends to deduct the amount to be recovered from the amount retained for the Guarantee Fund;
- requesting the coordinator to submit a report on the distribution of payments to the beneficiaries within 30 days of receiving notification, and
- inviting the coordinator to submit observations within 30 days of receiving notification.

If no observations are submitted or the Commission decides to pursue recovery despite the observations it has received, it will **confirm recovery** (together with the notification of amounts due; see Article 21.5) and:

- pay the difference between the amount to be recovered and the amount retained for the Guarantee Fund, **if the difference is positive** or
- formally notify to the coordinator a **debit note** for the difference between the amount to be recovered and the amount retained for the Guarantee Fund, **if the difference is negative**. This note will also specify the terms and the date for payment.

If the coordinator does not repay the Commission by the date in the debit note and has not submitted the report on the distribution of payments: the Commission will **recover** the amount set out in the debit note from the coordinator (see below).

If the coordinator does not repay the Commission by the date in the debit note, but has submitted the report on the distribution of payments: the Commission will:

²⁹ Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC (OJ L 319, 05.12.2007, p. 1).

(a) identify the beneficiaries for which the amount calculated as follows is negative:

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(b) formally notify to each beneficiary identified according to point (a) a **debit note** specifying the terms and date for payment. The amount of the debit note is calculated as follows:

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{{amount calculated according to point (a) for the beneficiary concerned divided by the sum of the amounts calculated according to point (a) for all the beneficiaries identified according to point (a)} multiplied by the amount set out in the debit note formally notified to the coordinator}.
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If payment is not made by the date specified in the debit note, the Commission will **recover** the amount:

(a) by **offsetting** it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) by **drawing on the Guarantee Fund**. The Commission will formally notify the beneficiary concerned the debit note on behalf of the Guarantee Fund and recover the amount:
 - (i) not applicable;
 - (ii) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

44.1.3 Recovery of amounts after payment of the balance

If, for a beneficiary, the revised final grant amount (see Article 5.4) is lower than its share of the final grant amount, it must repay the difference to the Commission.

The beneficiary's share of the final grant amount is calculated as follows:

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{{{beneficiary's costs declared in the final summary financial statement and approved by the Commission multiplied by the reimbursement rate set out in Article 5.2 for the beneficiary concerned} divided by the EU contribution for the action calculated according to Article 5.3.1} multiplied by the final grant amount (see Article 5.3)}.
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If the coordinator has not distributed amounts received (see Article 21.7), the Commission will also recover these amounts.

The Commission will formally notify a **pre-information letter** to the beneficiary concerned:

- informing it of its intention to recover, the due amount and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If no observations are submitted or the Commission decides to pursue recovery despite the observations it has received, it will **confirm** the amount to be recovered and formally notify to the beneficiary concerned a **debit note**. This note will also specify the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission will **recover** the amount:

- (a) by **offsetting** it without the beneficiary's consent against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).
 - In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;
- (b) by **drawing on the Guarantee Fund**. The Commission will formally notify the beneficiary concerned the debit note on behalf of the Guarantee Fund and recover the amount:
 - (i) not applicable;
 - (ii) by taking legal action (see Article 57) or by adopting an enforceable decision under

Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the date for payment in the debit note, up to and including the date the Commission receives full payment of the amount

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

ARTICLE 45 — ADMINISTRATIVE SANCTIONS

In addition to contractual measures, the Commission may also adopt administrative sanctions under Articles 106 and 131(4) of the Financial Regulation No 966/2012 (i.e. exclusion from future procurement contracts, grants, prizes and expert contracts and/or financial penalties).

SECTION 2 LIABILITY FOR DAMAGES

ARTICLE 46 — LIABILITY FOR DAMAGES

46.1 Liability of the Commission

The Commission cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of implementing the Agreement, including for gross negligence.

The Commission cannot be held liable for any damage caused by any of the beneficiaries or third parties involved in the action, as a consequence of implementing the Agreement.

46.2 Liability of the beneficiaries

Except in case of force majeure (see Article 51), the beneficiaries must compensate the Commission for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement.

SECTION 3 SUSPENSION AND TERMINATION

ARTICLE 47 — SUSPENSION OF PAYMENT DEADLINE

47.1 Conditions

The Commission may — at any moment — suspend the payment deadline (see Article 21.2 to 21.4) if a request for payment (see Article 20) cannot be approved because:

(a) it does not comply with the provisions of the Agreement (see Article 20);

- (b) the technical or financial reports have not been submitted or are not complete or additional information is needed, or
- (c) there is doubt about the eligibility of the costs declared in the financial statements and additional checks, reviews, audits or investigations are necessary.

47.2 Procedure

The Commission will formally notify the coordinator of the suspension and the reasons why.

The suspension will take effect the day notification is sent by the Commission (see Article 52).

If the conditions for suspending the payment deadline are no longer met, the suspension will be **lifted** — and the remaining period will resume.

If the suspension exceeds two months, the coordinator may request the Commission if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the technical or financial reports (see Article 20) and the revised report or statement is not submitted or was submitted but is also rejected, the Commission may also terminate the Agreement or the participation of the beneficiary (see Article 50.3.1(1)).

ARTICLE 48 — SUSPENSION OF PAYMENTS

48.1 Conditions

The Commission may — at any moment — suspend payments, in whole or in part and interim payments or the payment of the balance for one or more beneficiaries, if:

- (a) a beneficiary (or a natural person who has the power to represent or take decision on its behalf) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under the Agreement or during the award procedure (including improper implementation of the action, submission of false information, failure to provide required information, breach of ethical principles) or
- (b) a beneficiary (or a natural person who has the power to represent or take decision on its behalf) has committed in other EU or Euratom grants awarded to it under similar conditions systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings from other grants to this grant; see Article 22.5.2).

If payments are suspended for one or more beneficiaries, the Commission will make partial payment(s) for the part(s) not suspended. If suspension concerns the payment of the balance, — once suspension is lifted — the payment or the recovery of the amount(s) concerned will be considered the payment of the balance that closes the action.

48.2 Procedure

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Before suspending payments, the Commission will formally notify the coordinator or beneficiary concerned:

- informing it of its intention to suspend payments and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify **confirmation** of the suspension. Otherwise, it will formally notify that the suspension procedure is not continued.

The suspension will take effect the day the confirmation notification is sent by the Commission.

If the conditions for resuming payments are met, the suspension will be **lifted**. The Commission will formally notify the coordinator or beneficiary concerned.

During the suspension, the periodic report(s) for all reporting periods except the last one (see Article 20.3), must not contain any individual financial statements from the beneficiary concerned. The coordinator must include them in the next periodic report after the suspension is lifted or — if suspension is not lifted before the end of the action — in the last periodic report.

The beneficiaries may suspend implementation of the action (see Article 49.1) or terminate the Agreement or the participation of the beneficiary concerned (see Article 50.1 and 50.2).

ARTICLE 49 — SUSPENSION OF THE ACTION IMPLEMENTATION

49.1 Suspension of the action implementation, by the beneficiaries

49.1.1 Conditions

The beneficiaries may suspend implementation of the action or any part of it, if exceptional circumstances — in particular *force majeure* (see Article 51) — make implementation impossible or excessively difficult.

49.1.2 Procedure

The coordinator must immediately formally notify to the Commission the suspension (see Article 52), stating:

- the reasons why and
- the expected date of resumption.

The suspension will **take effect** the day this notification is received by the Commission.

Once circumstances allow for implementation to resume, the coordinator must immediately formally notify the Commission and request an **amendment** of the Agreement to set the date on which the action will be resumed, extend the duration of the action and make other changes necessary to adapt the action to the new situation (see Article 55) — unless the Agreement or the participation of a beneficiary has been terminated (see Article 50).

The suspension will be **lifted** with effect from the resumption date set out in the amendment. This date may be before the date on which the amendment enters into force.

Costs incurred during suspension of the action implementation are not eligible (see Article 6).

49.2 Suspension of the action implementation, by the Commission

49.2.1 Conditions

The Commission may suspend implementation of the action or any part of it, if:

- (a) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under the Agreement or during the award procedure (including improper implementation of the action, submission of false information, failure to provide required information, breach of ethical principles);
- (b) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed in other EU or Euratom grants awarded to it under similar conditions systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings from other grants to this grant; see Article 22.5.2), or
- (c) the action is suspected of having lost its scientific or technological relevance.

49.2.2 Procedure

Before suspending implementation of the action, the Commission will formally notify the coordinator or beneficiary concerned:

- informing it of its intention to suspend the implementation and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify **confirmation** of the suspension. Otherwise, it will formally notify that the procedure is not continued.

The suspension will **take effect** five days after confirmation notification is received (or on a later date specified in the notification).

It will be **lifted** if the conditions for resuming implementation of the action are met.

The coordinator or beneficiary concerned will be formally notified of the lifting and the Agreement will be **amended** to set the date on which the action will be resumed, extend the duration of the action and make other changes necessary to adapt the action to the new situation (see Article 55) — unless the Agreement has already been terminated (see Article 50).

The suspension will be lifted with effect from the resumption date set out in the amendment. This date may be before the date on which the amendment enters into force.

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Costs incurred during suspension are not eligible (see Article 6).

The beneficiaries may not claim damages due to suspension by the Commission (see Article 46).

Suspension of the action implementation does not affect the Commission's right to terminate the Agreement or participation of a beneficiary (see Article 50), reduce the grant or recover amounts unduly paid (see Articles 43 and 44).

ARTICLE 50 — TERMINATION OF THE AGREEMENT OR OF THE PARTICIPATION OF ONE OR MORE BENEFICIARIES

50.1 Termination of the Agreement, by the beneficiaries

50.1.1 Conditions and procedure

The beneficiaries may terminate the Agreement.

The coordinator must formally notify termination to the Commission (see Article 52), stating:

- the reasons why and
- the date the termination will take effect. This date must be after the notification.

If no reasons are given or if the Commission considers the reasons do not justify termination, the Agreement will be considered to have been 'terminated improperly'.

The termination will **take effect** on the day specified in the notification.

50.1.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a periodic report (for the open reporting period until termination; see Article 20.3) and
- (ii) the final report (see Article 20.4).

If the Commission does not receive the reports within the deadline (see above), only costs which are included in an approved periodic report will be taken into account.

The Commission will **calculate** the final grant amount (see Article 5.3) and the balance (see Article 21.4) on the basis of the reports submitted. Only costs incurred until termination are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

Improper termination may lead to a reduction of the grant (see Article 43).

After termination, the beneficiaries' obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

50.2 Termination of the participation of one or more beneficiaries, by the beneficiaries

50.2.1 Conditions and procedure

The participation of one or more beneficiaries may be terminated by the coordinator, on request of the beneficiary concerned or on behalf of the other beneficiaries.

The coordinator must formally notify termination to the Commission (see Article 52) and inform the beneficiary concerned.

If the coordinator's participation is terminated without its agreement, the formal notification must be done by another beneficiary (acting on behalf of the other beneficiaries).

The notification must include:

- the reasons why;
- the opinion of the beneficiary concerned (or proof that this opinion has been requested in writing);
- the date the termination takes effect. This date must be after the notification, and
- a request for amendment (see Article 55), with a proposal for reallocation of the tasks and the estimated budget of the beneficiary concerned (see Annexes 1 and 2) and, if necessary, the addition of one or more new beneficiaries (see Article 56). If termination takes effect after the period set out in Article 3, no request for amendment must be included unless the beneficiary concerned is the coordinator. In this case, the request for amendment must propose a new coordinator.

If this information is not given or if the Commission considers that the reasons do not justify termination, the participation will be considered to have been **terminated improperly**.

The termination will **take effect** on the day specified in the notification.

50.2.2 Effects

The coordinator must — within 30 days from when termination takes effect — submit:

- (i) a report on the distribution of payments to the beneficiary concerned and
- (ii) if termination takes effect during the period set out in Article 3, a 'termination report' from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work, an overview of the use of resources, the individual financial statement and, if applicable, the certificate on the financial statement (see Articles 20.3 and 20.4).

The information in the termination report must also be included in the periodic report for the next reporting period (see Article 20.3).

If the request for amendment is rejected by the Commission (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the Agreement may be terminated according to Article 50.3.1(c).

If the request for amendment is accepted by the Commission, the Agreement is **amended** to introduce the necessary changes (see Article 55).

The Commission will — on the basis of the periodic reports, the termination report and the report

on the distribution of payments — **calculate** the amount which is due to the beneficiary and if the (pre-financing and interim) payments received by the beneficiary exceed this amount.

The **amount which is due** is calculated in the following steps:

Step 1 — Application of the reimbursement rate to the eligible costs

The grant amount for the beneficiary is calculated by applying the reimbursement rate(s) to the total eligible costs declared by the beneficiary in the termination report and approved by the Commission.

Only costs incurred by the beneficiary concerned until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

Step 2 — Reduction due to substantial errors, irregularities or fraud or serious breach of obligations

In case of a reduction (see Article 43), the Commission will calculate the reduced grant amount for the beneficiary by deducting the amount of the reduction (calculated in proportion to the seriousness of the errors, irregularities or fraud or breach of obligations, in accordance with Article 43.2) from the grant amount for the beneficiary.

If the payments received exceed the amounts due:

- if termination takes effect during the period set out in Article 3 and the request for amendment is accepted, the beneficiary concerned must repay to the coordinator the amount unduly received. The Commission will formally notify the amount unduly received and request the beneficiary concerned to repay it to the coordinator within 30 days of receiving notification. If it does not repay the coordinator, the Commission will draw upon the Guarantee Fund to pay the coordinator and then notify a **debit note** on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
- in all other cases, in particular if termination takes effect after the period set out in Article 3, the Commission will formally notify a **debit note** to the beneficiary concerned. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Commission the amount due and the Commission will notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
- if the beneficiary concerned is the former coordinator, it must repay the new coordinator according to the procedure above, unless:
 - termination takes effect after an interim payment and
 - the former coordinator has not distributed amounts received as pre-financing or interim payments (see Article 21.7).

In this case, the Commission will formally notify a **debit note** to the former coordinator. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Commission the amount due. The Commission will then pay the new coordinator and notify a debit note on behalf of the Guarantee Fund to the former coordinator (see Article 44).

If the payments received **do not exceed the amounts due**: amounts owed to the beneficiary concerned will be included in the next interim or final payment.

If the Commission does not receive the termination report within the deadline (see above), only costs included in an approved periodic report will be taken into account.

If the Commission does not receive the report on the distribution of payments within the deadline (see above), it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

Improper termination may lead to a reduction of the grant (see Article 43) or termination of the Agreement (see Article 50).

After termination, the concerned beneficiary's obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

50.3 Termination of the Agreement or the participation of one or more beneficiaries, by the Commission

50.3.1 Conditions

The Commission may terminate the Agreement or the participation of one or more beneficiaries, if:

- (a) one or more beneficiaries do not accede to the Agreement (see Article 56);
- (b) a change to their legal, financial, technical, organisational or ownership situation is likely to substantially affect or delay the implementation of the action or calls into question the decision to award the grant;
- (c) following termination of participation for one or more beneficiaries (see above), the necessary changes to the Agreement would call into question the decision awarding the grant or breach the principle of equal treatment of applicants (see Article 55);
- (d) implementation of the action is prevented by force majeure (see Article 51) or suspended by the coordinator (see Article 49.1) and either:
 - (i) resumption is impossible, or
 - (ii) the necessary changes to the Agreement would call into question the decision awarding the grant or breach the principle of equal treatment of applicants;
- (e) a beneficiary is declared bankrupt, being wound up, having its affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, or is subject to any other similar proceedings or procedures under national law;
- (f) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has been found guilty of professional misconduct, proven by any means;
- (g) a beneficiary does not comply with the applicable national law on taxes and social security;

- (h) the action has lost scientific or technological relevance;
- (i) not applicable;
- (j) not applicable;
- (k) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed fraud, corruption, or is involved in a criminal organisation, money laundering or any other illegal activity;
- (l) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under the Agreement or during the award procedure (including improper implementation of the action, submission of false information, failure to provide required information, breach of ethical principles);
- (m) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed in other EU or Euratom grants awarded to it under similar conditions systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings from other grants to this grant; see Article 22.5.2);
- (n) not applicable.

50.3.2 Procedure

Before terminating the Agreement or participation of one or more beneficiaries, the Commission will formally notify the coordinator or beneficiary concerned:

- informing it of its intention to terminate and the reasons why and
- inviting it, within 30 days of receiving notification, to submit observations and in case of Point (l.ii) above to inform the Commission of the measures to ensure compliance with the obligations under the Agreement.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify to the coordinator or beneficiary concerned **confirmation** of the termination and the date it will take effect. Otherwise, it will formally notify that the procedure is not continued.

The termination will take effect:

- for terminations under Points (b), (c), (e), (g), (h), (j), (l.ii) and (n) above: on the day specified in the notification of the confirmation (see above);
- for terminations under Points (a), (d), (f), (i), (k), (l.i) and (m) above: on the day after the notification of the confirmation is received.

50.3.3 Effects

(a) for termination of the Agreement:

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a periodic report (for the last open reporting period until termination; see Article 20.3) and
- (ii) a final report (see Article 20.4).

If the Agreement is terminated for breach of the obligation to submit reports (see Articles 20.8 and 50.3.1(1)), the coordinator may not submit any reports after termination.

If the Commission does not receive the reports within the deadline (see above), only costs which are included in an approved periodic report will be taken into account.

The Commission will **calculate** the final grant amount (see Article 5.3) and the balance (see Article 21.4) on the basis of the reports submitted. Only costs incurred until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

This does not affect the Commission's right to reduce the grant (see Article 43) or to impose administrative sanctions (Article 45).

The beneficiaries may not claim damages due to termination by the Commission (see Article 46).

After termination, the beneficiaries' obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

(b) for termination of the participation of one or more beneficiaries:

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a report on the distribution of payments to the beneficiary concerned;
- (ii) a request for amendment (see Article 55), with a proposal for reallocation of the tasks and estimated budget of the beneficiary concerned (see Annexes 1 and 2) and, if necessary, the addition of one or more new beneficiaries (see Article 56). If termination is notified after the period set out in Article 3, no request for amendment must be submitted unless the beneficiary concerned is the coordinator. In this case the request for amendment must propose a new coordinator, and
- (iii) if termination takes effect during the period set out in Article 3, a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work, an overview of the use of resources, the individual financial statement and, if applicable, the certificate on the financial statement (see Article 20).

The information in the termination report must also be included in the periodic report for the next reporting period (see Article 20.3).

If the request for amendment is rejected by the Commission (because it calls into question the

decision awarding the grant or breaches the principle of equal treatment of applicants), the Agreement may be terminated according to Article 50.3.1(c).

If the request for amendment is accepted by the Commission, the Agreement is **amended** to introduce the necessary changes (see Article 55).

The Commission will — on the basis of the periodic reports, the termination report and the report on the distribution of payments — **calculate** the amount which is due to the beneficiary and if the (pre-financing and interim) payments received by the beneficiary exceed this amount.

The **amount which is due** is calculated in the following steps:

Step 1 — Application of the reimbursement rate to the eligible costs

The grant amount for the beneficiary is calculated by applying the reimbursement rate(s) to the total eligible costs declared by the beneficiary in the termination report and approved by the Commission.

Only costs incurred by the beneficiary concerned until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

Step 2 — Reduction due to substantial errors, irregularities or fraud or serious breach of obligations

In case of a reduction (see Article 43), the Commission will calculate the reduced grant amount for the beneficiary by deducting the amount of the reduction (calculated in proportion to the seriousness of the errors, irregularities or fraud or breach of obligations, in accordance with Article 43.2) from the grant amount for the beneficiary.

If the payments received exceed the amounts due:

- if termination takes effect during the period set out in Article 3 and the request for amendment is accepted, the beneficiary concerned must repay to the coordinator the amount unduly received. The Commission will formally notify the amount unduly received and request the beneficiary concerned to repay it to the coordinator within 30 days of receiving notification. If it does not repay the coordinator, the Commission will draw upon the Guarantee Fund to pay the coordinator and then notify a **debit note** on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
- in all other cases, in particular if termination takes effect after the period set out in Article 3, the Commission will formally notify a **debit note** to the beneficiary concerned. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Commission the amount due and the Commission will notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
- if the beneficiary concerned is the former coordinator, it must repay the new coordinator according to the procedure above, unless:
 - termination takes effect after an interim payment and

the former coordinator has not distributed amounts received as pre-financing or interim payments (see Article 21.7).

In this case, the Commission will formally notify a **debit note** to the former coordinator. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Commission the amount due. The Commission will then pay the new coordinator and notify a debit note on behalf of the Guarantee Fund to the former coordinator (see Article 44).

If the payments received **do not exceed the amounts due**: amounts owed to the beneficiary concerned will be included in the next interim or final payment.

If the Commission does not receive the termination report within the deadline (see above), only costs included in an approved periodic report will be taken into account.

If the Commission does not receive the report on the distribution of payments within the deadline (see above), it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

After termination, the concerned beneficiary's obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

SECTION 4 FORCE MAJEURE

ARTICLE 51 — FORCE MAJEURE

'Force majeure' means any situation or event that:

- prevents either party from fulfilling their obligations under the Agreement,
- was unforeseeable, exceptional situation and beyond the parties' control,
- was not due to error or negligence on their part (or on the part of third parties involved in the action), and
- proves to be inevitable in spite of exercising all due diligence.

The following cannot be invoked as force majeure:

- any default of a service, defect in equipment or material or delays in making them available, unless they stem directly from a relevant case of force majeure,
- labour disputes or strikes, or
- financial difficulties.

Any situation constituting force majeure must be formally notified to the other party without delay, stating the nature, likely duration and foreseeable effects.

The parties must immediately take all the necessary steps to limit any damage due to force majeure and do their best to resume implementation of the action as soon as possible.

The party prevented by force majeure from fulfilling its obligations under the Agreement cannot be considered in breach of them.

CHAPTER 7 FINAL PROVISIONS

ARTICLE 52 — COMMUNICATION BETWEEN THE PARTIES

52.1 Form and means of communication

Communication under the Agreement (information, requests, submissions, 'formal notifications', etc.) must:

- be made in writing and
- bear the number of the Agreement.

All communication must be made through the Participant Portal **electronic** exchange system and using the forms and templates provided there.

If — after the payment of the balance — the Commission finds that a formal notification was not accessed, a second formal notification will be made by registered post with proof of delivery ('formal notification on **paper**'). Deadlines will be calculated from the moment of the second notification.

Communications in the electronic exchange system must be made by persons authorised according to the Participant Portal Terms & Conditions. For naming the authorised persons, each beneficiary must have designated — before the signature of this Agreement — a 'legal entity appointed representative (LEAR)'. The role and tasks of the LEAR are stipulated in his/her appointment letter (see Participant Portal Terms & Conditions).

If the electronic exchange system is temporarily unavailable, instructions will be given on the Commission website.

52.2 Date of communication

Communications are considered to have been made when they are sent by the sending party (i.e. on the date and time they are sent through the electronic exchange system).

Formal notifications through the **electronic** exchange system are considered to have been made when they are received by the receiving party (i.e. on the date and time of acceptance by the receiving party, as indicated by the time stamp). A formal notification that has not been accepted within 10 days after sending is considered to have been accepted.

Formal notifications **on paper** sent by **registered post** with proof of delivery (only after the payment of the balance) are considered to have been made on either:

- the delivery date registered by the postal service or
- the deadline for collection at the post office.

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If the electronic exchange system is temporarily unavailable, the sending party cannot be considered in breach of its obligation to send a communication within a specified deadline.

52.3 Addresses for communication

The **electronic** exchange system must be accessed via the following URL:

https://ec.europa.eu/research/participants/portal/desktop/en/projects/

The Commission will formally notify the coordinator and beneficiaries in advance any changes to this URL.

Formal notifications on paper (only after the payment of the balance) addressed **to the Commission** must be sent to the official mailing address indicated on the Commission's website.

Formal notifications on paper (only after the payment of the balance) addressed **to the beneficiaries** must be sent to their legal address as specified in the Participant Portal Beneficiary Register.

ARTICLE 53 — INTERPRETATION OF THE AGREEMENT

53.1 Precedence of the Terms and Conditions over the Annexes

The provisions in the Terms and Conditions of the Agreement take precedence over its Annexes.

Annex 2 takes precedence over Annex 1.

53.2 Privileges and immunities

Not applicable

ARTICLE 54 — CALCULATION OF PERIODS, DATES AND DEADLINES

In accordance with Regulation No 1182/71³⁰, periods expressed in days, months or years are calculated from the moment the triggering event occurs.

The day during which that event occurs is not considered as falling within the period.

ARTICLE 55 — AMENDMENTS TO THE AGREEMENT

55.1 Conditions

The Agreement may be amended, unless the amendment entails changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

Amendments may be requested by any of the parties.

55.2 Procedure

³⁰ Regulation (EEC, Euratom) No 1182/71 of the Council of 3 June 1971 determining the rules applicable to periods, dates and time-limits (OJ L 124, 8.6.1971, p. 1).

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The party requesting an amendment must submit a request for amendment signed in the electronic exchange system (see Article 52).

The coordinator submits and receives requests for amendment on behalf of the beneficiaries (see Annex 3).

If a change of coordinator is requested without its agreement, the submission must be done by another beneficiary (acting on behalf of the other beneficiaries).

The request for amendment must include:

- the reasons why;
- the appropriate supporting documents, and
- for a change of coordinator without its agreement: the opinion of the coordinator (or proof that this opinion has been requested in writing).

The Commission may request additional information.

If the party receiving the request agrees, it must sign the amendment in the electronic exchange system within 45 days of receiving notification (or any additional information the Commission has requested). If it does not agree, it must formally notify its disagreement within the same deadline. The deadline may be extended, if necessary for the assessment of the request. If no notification is received within the deadline, the request is considered to have been rejected

An amendment **enters into force** on the day of the signature of the receiving party.

An amendment **takes effect** on the date agreed by the parties or, in the absence of such an agreement, on the date on which the amendment enters into force.

ARTICLE 56 — ACCESSION TO THE AGREEMENT

56.1 Accession of the beneficiaries mentioned in the Preamble

The other beneficiaries must accede to the Agreement by signing the Accession Form (see Annex 3) in the electronic exchange system (see Article 52) within 30 days after its entry into force (see Article 58).

They will assume the rights and obligations under the Agreement with effect from the date of its entry into force (see Article 58).

If a beneficiary does not accede to the Agreement within the above deadline, the coordinator must — within 30 days — request an amendment to make any changes necessary to ensure proper implementation of the action. This does not affect the Commission's right to terminate the Agreement (see Article 50).

56.2 Addition of new beneficiaries

In justified cases, the beneficiaries may request the addition of a new beneficiary.

For this purpose, the coordinator must submit a request for amendment in accordance with Article 55.

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It must include an Accession Form (see Annex 3) signed by the new beneficiary in the electronic exchange system (see Article 52).

New beneficiaries must assume the rights and obligations under the Agreement with effect from the date of their accession specified in the Accession Form (see Annex 3).

ARTICLE 57 — APPLICABLE LAW AND SETTLEMENT OF DISPUTES

57.1 Applicable law

The Agreement is governed by the applicable EU law, supplemented if necessary by the law of Belgium.

57.2 Dispute settlement

If a dispute concerning the interpretation, application or validity of the Agreement cannot be settled amicably, the General Court — or, on appeal, the Court of Justice of the European Union — has sole jurisdiction. Such actions must be brought under Article 272 of the Treaty on the Functioning of the EU (TFEU).

As an exception, if such a dispute is between the Commission and MINISTERIO DE EDUCACION Y CULTURA, SECRETARIA DE GOBIERNO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN PRODUCTIVA, CONSEJO NACIONAL DE CIENCIA Y TECNOLOGIA, COMISION NACIONAL DE INVESTIGACION CIENTIFICA Y TECNOLOGICA, CONSELHO NACIONAL DE DESENVOLVIMENTO CIENTIFICO E TECNOLOGICO, Ministerio de Ciencia y Tecnologia de Costa Rica, DEPARTAMENTO ADMINISTRATIVO DE CIENCIA, TECNOLOGIA E INNOVACION - COLCIENCIAS, the competent Belgian courts have sole jurisdiction.

If a dispute concerns administrative sanctions, offsetting or an enforceable decision under Article 299 TFEU (see Articles 44, 45 and 46), the beneficiaries must bring action before the General Court — or, on appeal, the Court of Justice of the European Union — under Article 263 TFEU.

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ARTICLE 58 — ENTRY INTO FORCE OF THE AGREEMENT

The Agreement will enter into force on the day of signature by the Commission or the coordinator, depending on which is later.

SIGNATURES

For the coordinator

For the Commission



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 |
|-----------------------------|--------|------------------------------|-------------------|
| | | | |

| 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-INFRASUPP-2019-1 | | | | | | |
| Торіс | INFRASUPP-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 |
|-----------------------------|--------|------------------------------|-------------------|
| 3 | | | |

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 CONSULTADORIA 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 (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 | Perdiodical 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 Number ¹⁴ | Deliverable Title | WP number ⁹ | Lead beneficiary | Type ¹⁵ | Dissemination level ¹⁶ | 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 Number ¹⁴ | Deliverable Title | WP number ⁹ | Lead beneficiary | Type ¹⁵ | Dissemination level ¹⁶ | 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 require | 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 |
|-----------------------------------|-----------------|------------------|----------------------------|-----------------------|
|-----------------------------------|-----------------|------------------|----------------------------|-----------------------|

| Work package number 9 | WP2 | Lead beneficiary 10 | 12 - CNPQ |
|-----------------------|-------------|---------------------|-----------|
| Work package title | CELAC RI La | andscape | |
| 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 al-ready 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 RISCAPE (European Research Infrastructures in the International Landscape).

This task aims to update in-formation 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 perti-nent 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, manage-ment, 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 collabora-tions 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 number ¹⁸ | 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 CELA | C strategies on RI prioritisation | on 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 promis-ing 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 priori-tization 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 collabo-ration. (M6-M12)

Leader: CNR Contributors: UEFISCDI, FCT, VTT

The analysis of European RI models of funding and participation has been already accom-plished, 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, govern-ance, 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 prac-tices (M13-M20)

Leader: AEI Contributors: SGCTEIP, CNPq, VTT, DLR

There are ongoing EU-CELAC RI collaborations that justify an in-depth analysis and bench-marking 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 ac-tivities 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 deliv-ered in M20.

| 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 |
| To | otal 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 rele-vant 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 number ¹⁸ | 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 sruveys results | 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 | 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 re-gion.

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 Pro-jects 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 fo-cus 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 syner-gies 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 iden-tify and propose additional specific actions to be developed through the pilots, or recommen-dations 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 in-vestments. 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, final-ly 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 infrastruc-tures in an exploratory, yet sustainable manner, (3) To stablish 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 bilogogia 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 Memoran-da 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), Univer-sidad de la Republica (Uruguay), Institute Pasteur Montevideo, Instituto de Investigaciones Bioquímicas de La Plata "Prof. Dr. R.R.Brenner", Instituto de química y fisicoquímica bioló-gicas (Argentina). It is, therefore, very clear, that both Institutional and Research Infrastruc-tures 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 repre-sentatives from the different countries, Intruct-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. In-struct-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 stablish common "best practices" and access procedures (M6-M18)

This action will be stablished 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 elabo-rate a Report where an analysis of the situation with respect to Structural Biology Infrastruc-ture 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, methodol-ogies, 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 or-ganizations and research infrastructures, concerning scientific, data management and govern-ance 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 sci-ence 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 herit-age 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 Envi-ronments –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 estab-lishing 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 contribu-tions and benefits of ecosystems to economic and other human activity. UNDP publication: "Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin Amer-ica 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 estab-lishment of processes aimed at obtaining findings and recommendations for the broader pic-ture 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.observatoriolarabida.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 infrastruc-ture 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 compet-itive 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 scien-tific and technological activities on Physics, Chemistry, Computational Science, Health, Envi-ronment, 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 con-tinuously 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 ap-proach 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 | Perdiodical 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 : Perdiodical 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, coordinationa actions carried out, additional 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 bodies | SOM RI Working Group and | links with research infrastructures related | |
| 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 Offi-cials 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 in-cluding 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 be-tween 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 pro-ject 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 lead-ers 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 pro-gress 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 coleader 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 biregional collaboration.

In the specific case of ESFRI, as a follow-up of the International Cooperation seminar that took place in Viena 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 analy-sis 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 ac-tivities 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 communica-tion 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 Infrastructres 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 Infrastructurs 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 number ¹⁸ | 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 | on and Dissemination | |
| Start month | 1 | End month | 30 |

Objectives

This WP aims to develop an effective strategy to communicate, disseminate the project ac-tivities, results and outcomes in order to optimize them, generating thus impact and sustaina-bility 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 sup-port 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 learn 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 in-formation 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 par-ticipating 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 Confer-ence 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 coun-tries' 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 reg-istration. 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 announce-ments 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 en-sured, 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, sug-gestion 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 coop-eration with other key initiatives taken place at regional and global levels, with regards to research infrastructure cooperation, especially those involving either EU or CELAC cou-tries.

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 pre-sented 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 Number ¹⁴ | Deliverable Title | Lead beneficiary | Type ¹⁵ | Dissemination level ¹⁶ | 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, chan-nels, 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 activitie.

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 number ¹⁸ | Milestone title | Lead beneficiary | Due Date (in months) | Means of verification |
|-----------------------------------|--|------------------|----------------------------|---|
| MS12 | Webiste 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 communcation and disemmination activities. The 1st one should be published by month 6 |
| MS14 | Update of the Communication and Dissemination Plan | 10 - CONICYT | 18 | In M18 the communciation 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 realease must be published by month 24 |

Schedule of relevant Milestones

| Milestone number ¹⁸ | 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 Manag | gement 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 activi-ties 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, amend-ments), 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 Coor-dinator 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 consorti-um 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 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 mem-bers, 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 com-munications, 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 Hand-book 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 ex-penses 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 pro-ject 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 distri-bution among partners, as well as the financial reporting to the European Commission re-specting the timetable indicated in the Grant Agreement. In those cases needed, the Coordi-nator will assist partners on financial issues.

The Coordinator and WP leaders will be in charge of monitoring and checking that the deliv-erables are available ontime 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 re-port;
- 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 Assur-ance 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 colead-ers 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 coun-try. 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 with-in 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 Infrastuctures 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 sruveys results | WP3 | 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 | 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 uture 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 Infrastructurs 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 projet, will be presented to the SOM RI WG by the end of the project |
| MS12 | Webiste 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 communcation and disemmination 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 communciation 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 realease 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 crucial for starting the project organising tasks, solving possible doubts concerning the management of the project, etc. |
| MS18 | Selection of the Research Infrastuctures 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 number ¹⁸ | | WP number ⁹ | 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 fillings, 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 An- drés 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 | Resources to be committed: Inclusion of a reference to the travel costs of INSTRUCT-ERIC and Lifewatch. |
| | Participants: clarification of the role of participating experts of INSTRUCT-ERIC and Lifewatch |
| | Update of CONACYT team members |

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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 (JI-RI)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

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¹Towards 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 on 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)."

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 EUCELAC 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 roadmapping 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- |

moting the collaboration of European researchers with CELAC RIs and reciprocally, for CELAC researchers to collaborate with European RIs. WP3 Pilots will also serve to develop specific roadmaps for cooperation for selected thematic areas, including the initial implementation of identified actions. Support the identification of a limited Under WP3 four Pilots are proposed to develop the number of Research Infrastructures of bi-regional cooperation covering different aspects of bi-regional interest on which the project interest, such as access, training, transnational acwill have to conduct pilot cooperation cess, data management, etc. demonstrators Strengthen the development of a con-EU-CELAC ResInfra will contribute to strengthensistent cooperation agenda with CELAC. ing 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. 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. Develop the international outreach of the EU-CELAC ResInfra will support the international-European research infrastructures' ecoization of the European RI. The collaboration will system 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

| | 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. |
|---|--|
| Foster a global research area vision and the development of global research infrastructures | 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. |
| | 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. |
| Contribute to capacity building and research infrastructures human capital development in targeted/relevant regions | WP4 will contribute to capacity building and research infrastructures human capital development in both regions. It will foster multi-lateral cooperation of both European and CELAC RIs, promoting and facilitating the mutual openness. |
| Enhance the role of the Union in multi- lateral fora | 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. |

1.3 Concept and methodology; quality of the measures

The main objective of the EU-CELAC ResInfra project is to contribute to fostering the biregional 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 cofunding 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 RISCAPE, 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 |
|--|---|--|
| RIs Users | - Easy identification of CELAC RIs available for the implementation of the collaboration. | - Number of CELAC RIs ready to participate in the EU-CELAC 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. | 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. |
| RIs Managers | 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 | 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 agen- cies | 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. | 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. |

| | 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 stake-holders 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;

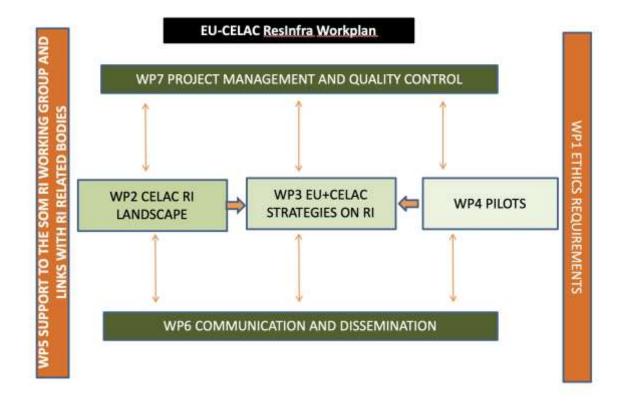
WP5. Support to the EU-CELAC RI Working Group and links with Research Infrastructures Related Bodies will be based on the information and support the policy activities of the EU-CELAC RI Working Group, as well as establishing links with RI related groups such as the Group of Senior Officials on Global 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

| | | | | | | | | | | • | | • | | | _ | | МО | NTHS | _ | _ | | | | | | | | | | |
|---------|---|------|----------------|--------------|----------|----|--------------|---|------|------|-----------|-----|----------|--------------|----|------|----------|----------|------|----|------|------|------|------|-----------|------|------|------|-------|-----------|
| WP/Task | WORK PLAN | PM | Start Month | End Month | Duration | 1 | 2 3 | 4 | 5 | 6 | 7 8 | 9 1 | 0 1: | 1 12 | 13 | 14 1 | 5 16 | 17 | 18 | 19 | 20 : | 21 | 22 2 | 23 2 | 24 | 25 2 | 6 27 | 7 28 | 29 | 30 |
| WP | WP1 Ethics Requirements | 0 | 1 | 30 | 30 | | | | | D1.1 | | | | | | | | | | | | | | | | | | | | |
| WP | WP2 Mapping Research Infrastructures and supporting policies in CELAC | 14 | 1 | 12 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| т | T2.1 Analising existing CELAC RI mapping | 5,5 | 1 | 6 | 6 | | | | D2.1 | | | | | | | | | | | | | | | | | | | | | |
| Т | T2.2: Deepening the CELAC RI mapping and elaborating the CELAC RI landscape | 9 | 6 | 12 | 7 | ľ | | | | | D2.2 | | | D2.3 | | | | Ī | | | | | | | | | | | | |
| WP | WP3 EU and CELAC STRATEGIES ON RI PRIORITISATION AND FUNDING MODELS | 24,5 | 6 | 20 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Т | T3.1 CELAC Policies and funding models | 6,5 | 6 | 12 | 7 | | | | | | | | | D3.1 | | | | | | | | | | | | | | | | |
| Т | T3.2 European RI funding and participation models applicable to international cooperation | 7 | 6 | 12 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Т | T3.3 EU-CELAC Research Infrastructure promising cooperation models and practices | 10 | 13 | 20 | 8 | | | | | | | | | <u></u> | | | | | | | D3.2 | | | | | | | | | |
| WP | WP4 PROMOTING THE EU-CELAC RI AREA THROUGH THE COLLABORATION BETWEEN RIS FROM EUROPE AND CELAC: PILOTS. | 44 | 1 | 28 | 28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Т | T4.1 EU-CELAC RI WG Follow-up and Pilots coordination | 15 | 1 | 28 | 28 | | | | D4.1 | | | | | | | | | | | | | | | | | | | D4.3 | | |
| Т | T4.2 Pilot on Health. INSTRUCT-ERIC | 8 | 6 | 24 | 19 | | | | | | D4.2 | | | | | | D4.2 | | | | | | | | D4.2 | | | | | |
| Т | T4.3 Pilot on Cultural Heritage. E-RIHS | 0 | 8 | 20 | 13 | | | | | 2 | D4.2 D4.2 | | | | | | D4.2 | ļ | | | | | | | D4.2 D4.2 | | | | | |
| Т | T4.4 Pilot on Ecosystem & supporting e- Biodiversity Services "LifEuLac" | 8 | 12 | 24 | 13 | | | | | | D4.2 | | | | | | D4.2 | | | | | | | | | | | | | |
| Т | T4.5 Pilot RICAP | 8 | 12 | 24 | 13 | | | | | | D4.2 | | | | | | D4.2 | | | | | | | | D4.2 | | | | | |
| WP | WP5 Support to the EU-CELAC RI Working Group and links with Research Infrastructures Related Bodies | 19,5 | 1 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Т | T5.1 Sustainability plan to support and strengthen EU-CELAC collaboration. | 14 | 12 | 30 | 19 | | | | | | | | Ī | | | | | | | | | | | | | | | | | D5.1 D5.3 |
| Т | T5.2 Reporting Board to the EU-CELAC RI WG | 5 | 1 | 30 | 30 | | | | | | | | | D5.1 | | | | | | | | D5.1 | | | | | | | | D5.1 |
| Т | T5.3 Liaison with the Group of Senior Officials on Global Research Infrastructures, OECD-GSF and ESFRI | 4 | 2 | 30 | 29 | | | | | | | | | | | | | | D5.2 | | | | | | | | | | | D5.2 |
| WP | WP6 Communication and Dissemination | 35,5 | 1 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Т | T6.1 Elaboration and update of the project communication and dissemination plan | 4 | 1 | 3 | 3 | | D6.1 | | | | ı. | | <u>.</u> | | | | <u>.</u> | <u> </u> | | | | | | | | | 1 | | | |
| Т | T6.2 Deployment of the project digital strategy for dissemination and communication | 12 | 1 | 30 | 30 | | | | | Ш | | | | | | | | | | | | | | | | | | | | |
| Т | T6.3 Implementation of complementary dissemination and comunication activities and materials | | 1 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | 2.90 |
| | T6.4 Planning, organization and implementation of the Final Conference | | 26 | 30 | 5 | ľ | | | | | | | T | | | | - | 1 | | | | | | | | | | | | D6.3 D6.2 |
| Т | T6.5 Liaisons with other related projects and initiatives | 6 | 6 | 30 | 25 | †" | 1 | ļ | | H | | | | 1 | | | | 1 | | | • | | | | | | | | | |
| WP | WP7 Project Management | 25,5 | 1 | 30 | 30 | | | | | | | | | 'n | | | | | | | m | | | | m | | | | أوالة | |
| Т | T7.1 Project coordination | 15 | 1 | 30 | 30 | | D7.2 D7.1 | | | | | | | | | | | | | | | | | | | | | | | |
| т | T7.2 Financial and technical reporting | 5 | 12 | 30 | 19 | ľ | | | | П | | | | | | | D7.4 | | | | | | | | | | | | | D7.5 |
| Т | T7.3 Quality plan | 4 | 1 | 30 | 30 | | | | D7.3 | | | | | | | | | | | | | | | | | | | | | |

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 | WP5: travels to SOM RI WG meetings (EU+LAC) |
| | 3.000 | WP6: travels to workshops |
| | 15.000 | WP7: travels of RIIB members to meetings + 1 meeting LAC+ |
| | | 1 meeting EU |
| Other goods and | 9.000 | WP7: Kick-off meeting (catering, conference room) |
| services | 20.000 | WP6: Final conference (5 travels for speakers, conference |
| | | room, catering) |
| | 2.000 | 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) LAC |
| Other goods and services | 10.000 | WP5: Intra-CELAC meeting costs |
| Total | 22.000 | |

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

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

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

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

| 7. CNR | Cost (€) | Justification |
|-----------------|----------|--|
| Travel | 6.000 | WP6: Workshop attendance |
| | 10.000 | WP7: 2 travel EU, 1 travel LAC for project meetings 2 travel |
| | 7.500 | WP4: travels of E-RISH pilot participant personnel. |
| Other goods and | 9.000 | WP4: Meetings organised by E-RISH pilot |
| services | | • |
| 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 | WP6: Workshop attendance |
| | 7.000 | WP7: 2 travel EU, 1 travel LAC for project meetings |
| Total | 11.000 | |

| 10. CONICYT | Cost (€) | Justification |
|-----------------|----------|---|
| | | |
| Travel | 4.000 | WP6: Workshop attendance |
| | 8.000 | WP7: 2 travel EU, 1 travel LAC for project meetings |
| Other goods and | 5.000 | WP6: Project videos for communication |
| services | 11.500 | 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 | WP6: Workshop attendance |
| | 7.000 | WP7: 2 travel EU, 1 travel LAC for project meetings |
| Total | 11.000 | |

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

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

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

| 16. INSTRUCT- | Cost (€) | Justification |
|----------------------|----------|---|
| ERIC | | |
| Travel | 37.500 | WP5:Travels to LAC and EU for participants in Pilot activi- |
| | | ties. 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 ser- | 12.000 | WP5:Pilot Meetings, trainings and workshops costs |
| vices | | |
| 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 ser- | 12.000 | WP5:Pilot Meeting and workshop costs |
| vices | | |
| 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

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.

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.

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.

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.

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.

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.

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

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 Spalation 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) were 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, INSTRUCT 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 land-scape 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 implement 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 highenergy 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 highimpact 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.

OPENSCREEN-ERIC: The European Infrastructure of Open Screening Platforms for Chemical Biology (EU-OPENSCREEN) 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.

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, were 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 it's 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 NetworkIntegrating 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

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.

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.

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.

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 were 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: EU-LARINET 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.

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 Wolwerhapmton), 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.

<u>Joana Pinheiro</u> (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 Innovationis 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 programes 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. EULAR-INET 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 biregional and bilateral partnerships for jointly societal challenges, working to develop the attractiveness of Europe in the world, and by promoting the establishment of a levelplaying 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, AL-CUE 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 cofunded 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 cofunded 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 mm < λ < 4 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.

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), coleading 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 upscaling 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 theplanning 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 Comission 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. EULAR-INET 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 inhouse 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 INCO-BRA (www.incobra.eu) and the European Network of Research Centres and Hubs (EN-RICH) 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-

nomic 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 innovat ion/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 roadmaping, 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 nstitute 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 <u>PASTEUR4OA</u> 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 "Politechnica" 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 **RIs**.

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 Coteţ (female) is project coordinator within the International Programmes Department of UEFISCDI. She graduated Faculty of Electronics and Telecommunication, (University "Politechnica" of Bucharest) and Faculty of Industrial Management, Ecological University of Bucharest. She has a Master degree in project management.

Mrs. Cotet 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 partener 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 Mecanisms 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 tramsitted 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

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 Infraestructure 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 tree 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, coorganized 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 INSTRUCT 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

- 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) Fluor nated 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 phosphatidyltran ferase 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 m croscopy – How to deal with complexes and membrane proteins?", May 2-5, ITQB, Organi er.

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 –ERICcomposed 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 parttime teacher on technology-based companies' creation for entrepreneurs. Keywords: Innovation, e-Science, e-Infraestructures, ICT, Environment, CSIC, Research Tecnologist, 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. Cofounder 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 coauthored 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
- 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., Ballestero 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 PM*₁₀ 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-anteriores/cyted/. Sponsored by CYTED (Ciencia y Técnología para el Desarrollo), a join 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 Técnología para el Desarrollo, a join 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 Crespí (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 & Enginnering 20, 39-48 (2018)
- A.J. Rubio-Montero el at. 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 Platinium 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 Ecuatorian supercomputer 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 Rmax = 232 TFLOPS and Rpeak=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 (Rmax 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 og 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 | | | | | | | |
|---|-----------------|--|--|--|--|--|--|--|
| If yes, please describe and justify the tasks to be subcontracted | | | | | | | | |
| Does the participant envisage that part of its work is performed by linked third parties ⁴ | N | | | | | | | |
| If yes, please describe the third party, the link of the participant to the third party, and a scribe and justify the foreseen tasks to be performed by the third party | | | | | | | | |
| 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 | | | | | | | |
| 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. | | | | | | | | |
| 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. | | | | | | | | |
| 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. | | | | | | | | |
| The Ministry remains responsible for all tasks and deliverables as they are s Annex I (Description of Action). | pecified in the | | | | | | | |
| Does the participant envisage that part of the work is performed by Interna- | N | | | | | | | |

tional Partners⁵ (Article 14a of the General Model Grant Agreement)?

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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 <u>Model Grant Agreement</u>).

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 <u>Model Grant Agreement</u>. 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 eligible costs (per budget category) EU contribution | | | | | | | | | | | Additional information | | | | |
|----------------------------|---|-------------------|-------------------------------|------------------|-----------------------------------|--|------------|--------------------------------|--|---|--------------------------------------|---------------------------------------|--------------------------------|-----------------------------------|------------------------|-----------------|
| | | | | | [C. Direct costs of fin. support] | | | 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 | | | | | | Estimated | Declaration of | Estimated costs |
| | A.2 Natural persons under direct A.5 Beneficiaries that are natural | | | | D.2 Equipment | of internally invoiced goods | | | | | | costs of in-kind contributions not | costs under Point D.4 | of beneficiaries/ linked third | | |
| | contract persons without salary | | | | D.3 Other goods | and services | | | | | | used on premises | | parties not receiving | | |
| | A.3 Seconded persons | | | | and services | | | | | | | | | funding/ | | |
| | [A.6 Personnel for part to research infrastru | | | | | [D.4 Costs of large research infrastructure] | | | | | | | | | international partners | |
| | | 7 | | 0 | | | | 0 | Flat-rate ¹⁰ | | | | | | | |
| Form of costs ⁶ | Actual | Unit ⁷ | Un | nit ^o | Actual | Actual | Actual | Unit ⁹ | 25% | | | | | | | |
| | a | Total b | No hours | Total c | d | [e] | f | Total g | 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 | 1 | 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 | 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 | 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 | 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 | 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.

ANNEX 2a

ADDITIONAL INFORMATION ON THE ESTIMATED BUDGET

- Instructions and footnotes in blue will not appear in the text generated by the IT system (since they are internal instructions only).
- For options [in square brackets]: the applicable option will be chosen by the IT system. Options not chosen will automatically not appear.
- For fields in [grey in square brackets] (even if they are part of an option as specified in the previous item): IT system will enter the appropriate data.

Transitory period: Until SyGMa fully supports Annex 2a, you must prepare it manually (using this template by choosing and deleting the options/entering the appropriate data). For the 'unit cost tables': either fill them out manually or use currently existing tables from Annex 1 or the proposal.

The document can then be uploaded in SyGMa and attached to the grant agreement.

Unit cost for SME owners/natural beneficiaries without salary

1. Costs for a /SME owner/beneficiary that is a natural person/ not receiving a salary

Units: hours worked on the action

Amount per unit ('hourly rate'): calculated according to the following formula:

{the monthly living allowance for researchers in MSCA-IF actions / 143 hours} multiplied by

{country-specific correction coefficient of the country where the beneficiary is established}

The monthly living allowance and the country-specific correction coefficients are set out in the Work Programme (section 3 MSCA) in force at the time of the call:

- for calls before Work Programme 2018-2020:
 - for the monthly living allowance: EUR 4 650
 - for the country-specific correction coefficients: see Work Programme 2014-2015 and Work Programme 2016-2017 (available on the <u>Participant Portal Reference Documents</u> page)
- for calls *under* Work Programme 2018-2020:
 - for the monthly living allowance: **EUR 4 880**
 - for the country-specific correction coefficients: see Work Programme 2018-2020 (available on the Participant Portal Reference Documents page)

[additional OPTION for beneficiaries/linked third parties that have opted to use the unit cost (in the proposal/with an amendment): For the following beneficiaries/linked third parties, the amounts per unit (hourly rate) are fixed as follows:

- beneficiary/linked third party [short name]: EUR [insert amount]
- beneficiary/linked third party [short name]: EUR [insert amount]

[same for other beneficiaries/linked third parties, if necessary]]

Estimated number of units: see Annex 2

Energy efficiency measures unit cost

2. Costs for energy efficiency measures in buildings

Unit: m² of eligible 'conditioned' (i.e. built or refurbished) floor area

Amount per unit*: see (for each beneficiary/linked third party and BEST table) the 'unit cost table' attached

* Amount calculated as follows:

{EUR 0.1 x estimated total kWh saved per m^2 per year x 10}

Estimated number of units: see (for each beneficiary/linked third party and BEST table) the 'unit cost table' attached

Unit cost table (energy efficiency measures unit cost)¹

| Short name beneficiary/linked third party | BEST No | Amount per unit | Estimated No of units | Total unit cost (cost per unit x estimated no of units) |
|---|---------|-----------------|-----------------------|---|
| | | | | |
| | | | | |
| | | | | |

Data from the 'building energy specification table (BEST)' that is part of the proposal and Annex 1.

Research infrastructure unit cost

3. Access costs for providing trans-national access to research infrastructure

Units²: see (for each access provider and installation) the 'unit cost table' attached

Amount per unit*: see (for each access provider and installation) the 'unit cost table' attached

* Amount calculated as follows:

average annual total access cost to the installation (over past two years³)

average annual total quantity of access to the installation (over past two years⁴)

Estimated number of units: see (for each access provider and installation) the 'unit cost table' attached

Unit cost table (access to research infrastructure unit cost)⁵

| Short name access provider | Short name infrastru cture | Installation No Short name | | Unit of access | Amount per unit | Estimated No of units | Total unit cost (cost per unit x estimated no of units) |
|----------------------------------|-------------------------------------|-----------------------------|--|----------------|--------------------|-----------------------|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Clinical studies unit cost

4. Costs for clinical studies

Units: patients/subjects that participate in the clinical study

Amount per unit*: see (for each sequence (if any), clinical study and beneficiary/linked third party) the 'unit cost table' attached

* Amount calculated, for the cost components of each task, as follows:

For personnel costs:

For personnel costs of doctors: 'average hourly cost for doctors', i.e.:

{certified or auditable total personnel costs for doctors for year N-1

 $\{1720 * number of full-time-equivalent for doctors for year N-1\}$ multiplied by

estimated number of hours to be worked by doctors for the task (per participant)}

For personnel costs of other medical personnel: 'average hourly cost for other medical personnel', i.e.:

{certified or auditable total personnel costs for other medical personnel for year N-1

{1720 * number of full-time-equivalent for other medical personnel for year N-1}

² Unit of access (e.g. beam hours, weeks of access, sample analysis) fixed by the access provider in proposal.

In exceptional and duly justified cases, the Commission/Agency may agree to a different reference period.

In exceptional and duly justified cases, the Commission/Agency may agree to a different reference period.

Data from the 'table on estimated costs/quantity of access to be provided' that is part of the proposal and Annex 1.

multiplied by

estimated number of hours to be worked by other medical personnel for the task (per participant)}

For personnel costs of technical personnel: 'average hourly cost for technical personnel', i.e.:

{certified or auditable total personnel costs for technical personnel for year N-1

{1720 * number of full-time-equivalent for technical personnel for year N-1} multiplied by

estimated number of hours to be worked by technical personnel for the task (per participant)}

'total personnel costs' means actual salaries + actual social security contributions + actual taxes and other costs included in the remuneration, provided they arise from national law or the employment contract/equivalent appointing act

For consumables:

For each cost item: 'average price of the consumable', i.e.:

 $\{\{\text{certified or auditable total costs of purchase of the consumable in year N-1}$

total number of items purchased in year N-1} multiplied by

estimated number of items to be used for the task (per participant)}

'total costs of purchase of the consumable' means total value of the supply contracts (including related duties, taxes and charges such as non-deductible VAT) concluded by the beneficiary for the consumable delivered in year N-1, provided the contracts were awarded according to the principle of best value- for-money and without any conflict of interests

For medical equipment:

For each cost item: 'average cost of depreciation and directly related services per unit of use', i.e.:

{{ certified or auditable total depreciation costs in year N-1 + certified or auditable total costs of purchase of services in year N-1 for the category of equipment concerned}

total capacity in year N-1

multiplied by

estimated number of units of use of the equipment for the task (per participant)}

'total depreciation costs' means total depreciation allowances as recorded in the beneficiary's accounts of year N-1 for the category of equipment concerned, provided the equipment was purchased according to the principle of best value for money and without any conflict of interests + total costs of renting or leasing contracts (including related duties, taxes and charges such as non-deductible VAT) in year N-1 for the category of equipment concerned, provided they do not exceed the depreciation costs of similar equipment and do not include finance fees

For **services**:

For each cost item: 'average cost of the service per study participant', i.e.:

{certified or auditable total costs of purchase of the service in year N-1

total number of patients or subjects included in the clinical studies for which the service was delivered in year N-1}

'total costs of purchase of the service' means total value of the contracts concluded by the beneficiary (including related duties, taxes and charges such as non-deductible VAT) for the specific service delivered in year N-1 for the conduct of clinical studies, provided the contracts were awarded according to the principle of best value for money and without any conflict of interests

For indirect costs:

{{cost component 'personnel costs' + cost component 'consumables' + cost component 'medical equipment'}

minus

{costs of in-kind contributions provided by third parties which are not used on the beneficiary's premises + costs of providing financial support to third parties (if any)}}

multiplied by

25%

The estimation of the resources to be used must be done on the basis of the study protocol and must be the same for all beneficiaries/linked third parties/third parties involved.

The year N-1 to be used is the last closed financial year at the time of submission of the grant application.

Estimated number of units: see (for each clinical study and beneficiary/linked third party) the 'unit cost table' attached

Unit cost table: clinical studies unit cost⁶

| Task, Direct cost categories | Resource per patient | Costs year N-1 Beneficiary 1 [short name] | Costs year N-1 Linked third party 1a [short | Costs year N-1 Beneficiary 2 [short name] | Costs year N-1 Linked third party 2a [short | Costs year N-1 Third party giving in- kind contributi |
|---------------------------------------|---|--|--|--|--|---|
| | | | name] | | name] | ons 1 [short name] |
| Sequence No. 1 | | | | | | |
| Task No. 1 Blood sample | | | | | | |
| (a) Personnel costs: - Doctors | n/a | | | | | |
| - Other Medical Personnel | Phlebotomy (nurse), 10 minutes | 8,33 EUR | 11,59 EUR | 10,30 EUR | 11,00 EUR | 9,49 EUR |
| - Technical Personnel | Sample Processing (lab technician), 15 minutes | 9,51 EUR | 15,68 EUR | 14,60 EUR | 15,23 EUR | 10,78 EUR |
| (b) Costs of consumables: | Syringe | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| | Cannula | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| | Blood container | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| (c) Costs of medical equipment: | Use of -80° deep freezer, 60 days | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| | Use of centrifuge, 15 minutes | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| (d) Costs of services | Cleaning of XXX | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| (e) Indirect costs (25% | flat-rate) | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| Task No. 2 | | | | | | |
| | | | | | | |
| Amount per unit (unit | cost sequence 1): | XX EUR | XX EUR | XX EUR | XX EUR | XX EUR |
| Sequence No. 2 | | • | | | • | |
| Task No. 1 | | | | | | |

⁶ Same table as in proposal and Annex 1.

5

Grant Agreement number: [insert number] [insert acronym] [insert call identifier] Associated with document Ref. Ares(2019)7166327 - 20/11/2019

H2020 Templates: Annex 2a (Additional information on the estimated budget)

| XXX | | | | | | |
|---------------------------------|-----------------------|--------|--------|--------|--------|--------|
| (a) Personnel costs: | | | | | | |
| - Doctors | XXX | XX EUR |
| - Other Medical Personnel | XXX | XX EUR |
| - Technical Personnel | XXX | XX EUR |
| (b) Costs of consumables: | XXX | XX EUR |
| | XXX | XX EUR |
| | XXX | XX EUR |
| (c) Costs of medical equipment: | XXX | XX EUR |
| | XXX | XX EUR |
| (d) Costs of services | XXX | XX EUR |
| (e) Indirect costs (25% | flat-rate) | XX EUR |
| Task No. 2 | | | | | | |
| | | | | | | |
| Amount per unit (uni | t cost sequence 2): | XX EUR |
| | | | | | | |
| Amount per unit (uni | t cost entire study): | XX EUR |

ACCESSION FORM FOR BENEFICIARIES

MINISTERIO DE EDUCACION Y CULTURA (MEC), established in Reconquista 535, MONTEVIDEO 11100, Uruguay, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('2')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV (DLR), established in Linder Hoehe, KOELN 51147, Germany, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('3')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

AGENCIA ESTATAL DE INVESTIGACION (AEI), established in TORRELAGUNA 58 BIS, MADRID 28071, Spain, VAT number: ESQ2802338J, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('4')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

FUNDACAO PARA A CIENCIA E A TECNOLOGIA (FCT), established in AVENIDA D CARLOS I 126, LISBOA 1249 074, Portugal, VAT number: PT503904040, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('5')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

SECRETARIA DE GOBIERNO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN PRODUCTIVA (SGCTEIP), established in GODOY CRUZ 2320, BUENOS AIRES 1425, Argentina, VAT number: AR30571910078, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('6')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

CONSIGLIO NAZIONALE DELLE RICERCHE (CNR), established in PIAZZALE ALDO MORO 7, ROMA 00185, Italy, VAT number: IT02118311006, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('7')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

CONSEJO NACIONAL DE CIENCIA Y TECNOLOGIA (CONACYT), established in INSURGENTES SUR 1582 COLONIA CREDITO CONSTRUCTOR BENITO JUAREZ, MEXICO 03940, Mexico, VAT number: MXCNC701230PDO, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('8')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

Teknologian tutkimuskeskus VTT Oy (VTT), established in VUORIMIEHENTIE 3, Espoo 02150, Finland, VAT number: FI26473754, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('9')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

COMISION NACIONAL DE INVESTIGACION CIENTIFICA Y TECNOLOGICA (CONICYT), established in CALLE MONEDA 1375, SANTIAGO 8340486, Chile, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('10')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

SOCIEDADE PORTUGUESA DE INOVACAO CONSULTADORIA EMPRESARIAL E FOMENTO DA INOVACAO SA (SPI), established in AV MARECHAL GOMES DA COSTA 1376 PORTO CONCELHO FOZ DO DOURO, PORTO 4150 356, Portugal, VAT number: PT503821012, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('11')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

CONSELHO NACIONAL DE DESENVOLVIMENTO CIENTIFICO E TECNOLOGICO (CNPQ), established in SHIS QI 1 CONJUNTO B LAGO SUL, BRASILIA 71605 001, Brazil, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('12')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), established in Mendeleev Street 21-25, Bucharest 010362, Romania, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('13')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

Ministerio de Ciencia y Tecnologia de Costa Rica (MICITT), established in AVENIDA SEGUNDA 17 y 19, SAN JOSE 5589-1000, Costa Rica, VAT number: NOT APPLICABLE, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('14')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

DEPARTAMENTO ADMINISTRATIVO DE CIENCIA, TECNOLOGIA E INNOVACION - **COLCIENCIAS** (**COLCIENCIAS**), established in AV CALLE 26 NO 57 83 TORRE 8 P 2, BOGOTA 111321, Colombia, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('15')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

INSTRUCT-ERIC (**INSTRUCT-ERIC**), established in OXFORD HOUSE, PARKWAY COURT, JOHN SMITH DRIVE, OXFORD OX4 2JY, United Kingdom, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('16')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

E-SCIENCE EUROPEAN INFRASTRUCTURE FOR BIODIVERSITY AND ECOSYSTEM RESEARCH (LIFEWATCH), established in PLAZA DE ESPANA S/N, SECTOR II-III, SEVILLA 41071, Spain, VAT number: ESN9101001G, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('17')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

ACCESSION FORM FOR BENEFICIARIES

CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT (CIEMAT), established in Avenida Complutense 40, MADRID 28040, Spain, VAT number: ESQ2820002J, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

hereby agrees

to become beneficiary No ('18')

in Grant Agreement No 871140 ('the Agreement')

between MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES **and** the European Union ('the EU'), represented by the European Commission ('the Commission'),

for the action entitled 'Towards a new EU-CELAC partnership in Research Infrastructures (EU-CELAC ResInfra)'.

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

FINANCIAL STATEMENT FOR [BENEFICIARY [name]/ LINKED THIRD PARTY [name]] FOR REPORTING PERIOD [reporting period]

| | | Eligible costs (per budget category) | | | | | | | | Receipts | | EU contributio | n | Additional information | | | | | |
|---|---|---|---|-------------------------------|-----------------------------------|--------------------------|--------|-----------------|---|---|------------|----------------|-------------------|--|---|---|---------------------------|---------------------------|---|
| | A. Direct personnel costs | | | | B. Direct costs of subcontracting | costs of fin. | D. | Other direct co | osts | E. Indirect costs ² | | [F. Cost | es of] | Total costs | Receipts | | Maximum EU contribution 3 | Requested EU contribution | Information for indirect costs : |
| | A.1 Employees equivalent) A.2 Natural pedirect contract A.3 Seconded [A.6 Personnel access to resectinfrastructure] | rsons under persons for providing urch | A.4 SME o without sal A.5 Benefic are natural without sal | ary iaries that persons | | support] [C.2 Prizes] | | infrastructure] | D.5 Costs of internally invoiced goods and services | | [F.1 Costs | of] | [F.2 Costs of] | | Receipts of the action, to be reported in the last reporting period, according to Article 5.3.3 | | | | Costs of in-kind contributions not used on premises |
| Form of costs 4 | Actual | Unit | U | nit | Actual | Actual | Actual | Actual | Unit | Flat-rate 5 | . U | nit | [Unit][Lump sum] | | | | | | |
| | a | Total b | No hours | Total c | d | [e] | f | [g] | Total h | i=0,25 x (a+b+ c+f+[g] + h+ [j 1] 6 [j 2] 6-p) | No units | Total [j1] | Total <i>[j2]</i> | k = a+b+c+d+[e] +f + [g] +h+ i + [j1] +[j2] | I | m | n | o | р |
| [short name beneficiary/linked third party] | | | | | | | | | | | | | | | | | | | |

The beneficiary/linked third party hereby confirms that:

The information provided is complete, reliable and true.

The costs declared are eligible (see Article 6).

The costs can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 17, 18 and 22).

For the last reporting period: that all the receipts have been declared (see Article 5.3.3).

Thease declare all eligible costs, even if they exceed the amounts indicated in the estimated budget (see Annex 2). Only amounts that were declared in your individual financial statements can be taken into account lateron, in order to replace other costs that are found to be ineligible.

¹ See Article 6 for the eligibility conditions

The indirect costs claimed must be free of any amounts covered by an operating grant (received under any EU or Euratom funding programme; see Article 6.2.E). If you have received an operating grant during this reporting period, you cannot claim indirect costs unless you can demonstrate that the operating grant does not cover any costs of the action.

This is the theoretical amount of EU contribution that the system calculates automatically (by multiplying the reimbursement rate by the total costs declared). The amount you request (in the column 'requested EU contribution') may be less,

⁴ See Article 5 for the forms of costs

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)

⁶ Only specific unit costs that do not include indirect costs

ANNEX 5

MODEL FOR THE CERTIFICATE ON THE FINANCIAL STATEMENTS

- > For options [in italics in square brackets]: choose the applicable option. Options not chosen should be deleted.
- For fields in [grey in square brackets]: enter the appropriate data

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TERMS OF REFERENCE FOR AN INDEPENDENT REPORT OF FACTUAL FINDINGS ON COSTS DECLARED UNDER A GRANT AGREEMENT FINANCED UNDER THE HORIZON 2020 RESEARCH FRAMEWORK PROGRAMME

INDEPENDENT REPORT OF FACTUAL FINDINGS ON COSTS DECLARED UNDER A GRANT AGREEMENT FINANCED UNDER THE HORIZON 2020 RESEARCH FRAMEWORK PROGRAMME

Terms of Reference for an Independent Report of Factual Findings on costs declared under a Grant Agreement financed under the Horizon 2020 Research and Innovation Framework Programme

This document sets out the 'Terms of Reference (ToR)' under which

[OPTION 1: [insert name of the beneficiary] ('the Beneficiary')] [OPTION 2: [insert name of the linked third party] ('the Linked Third Party'), third party linked to the Beneficiary [insert name of the beneficiary] ('the Beneficiary')]

agrees to engage

[insert legal name of the auditor] ('the Auditor')

to produce an independent report of factual findings ('the Report') concerning the Financial Statement(s)¹ drawn up by the [Beneficiary] [Linked Third Party] for the Horizon 2020 grant agreement [insert number of the grant agreement, title of the action, acronym and duration from/to] ('the Agreement'), and

to issue a Certificate on the Financial Statements' ('CFS') referred to in Article 20.4 of the Agreement based on the compulsory reporting template stipulated by the Commission.

The Agreement has been concluded under the Horizon 2020 Research and Innovation Framework Programme (H2020) between the Beneficiary and [OPTION 1: the European Union, represented by the European Commission ('the Commission')][OPTION 2: the European Atomic Energy Community (Euratom,) represented by the European Commission ('the Commission')][OPTION 3: the [Research Executive Agency (REA)] [European Research Council Executive Agency (ERCEA)] [Innovation and Networks Executive Agency (INEA)] [Executive Agency for Small and Medium-sized Enterprises (EASME)] ('the Agency'), under the powers delegated by the European Commission ('the Commission').]

The [Commission] [Agency] is mentioned as a signatory of the Agreement with the Beneficiary only. The [European Union][Euratom][Agency] is not a party to this engagement.

1.1 Subject of the engagement

The coordinator must submit to the [Commission][Agency] the final report within 60 days following the end of the last reporting period which should include, amongst other documents, a CFS for each beneficiary and for each linked third party that requests a total contribution of EUR 325 000 or more, as reimbursement of actual costs and unit costs calculated on the basis of its usual cost accounting practices (see Article 20.4 of the Agreement). The CFS must cover all reporting periods of the beneficiary or linked third party indicated above.

The Beneficiary must submit to the coordinator the CFS for itself and for its linked third party(ies), if the CFS must be included in the final report according to Article 20.4 of the Agreement.

The CFS is composed of two separate documents:

- The Terms of Reference ('the ToR') to be signed by the [Beneficiary] [Linked Third Party] and the Auditor;

By which costs under the Agreement are declared (see template 'Model Financial Statements' in Annex 4 to the Grant Agreement).

- The Auditor's Independent Report of Factual Findings ('the Report') to be issued on the Auditor's letterhead, dated, stamped and signed by the Auditor (or the competent public officer) which includes the agreed-upon procedures ('the Procedures') to be performed by the Auditor, and the standard factual findings ('the Findings') to be confirmed by the Auditor.

If the CFS must be included in the final report according to Article 20.4 of the Agreement, the request for payment of the balance relating to the Agreement cannot be made without the CFS. However, the payment for reimbursement of costs covered by the CFS does not preclude the Commission [Agency,] the European Anti-Fraud Office and the European Court of Auditors from carrying out checks, reviews, audits and investigations in accordance with Article 22 of the Agreement.

1.2 Responsibilities

The [Beneficiary] [Linked Third Party]:

- must draw up the Financial Statement(s) for the action financed by the Agreement in compliance with the obligations under the Agreement. The Financial Statement(s) must be drawn up according to the [Beneficiary's] [Linked Third Party's] accounting and bookkeeping system and the underlying accounts and records;
- must send the Financial Statement(s) to the Auditor;
- is responsible and liable for the accuracy of the Financial Statement(s);
- is responsible for the completeness and accuracy of the information provided to enable the Auditor to carry out the Procedures. It must provide the Auditor with a written representation letter supporting these statements. The written representation letter must state the period covered by the statements and must be dated;
- accepts that the Auditor cannot carry out the Procedures unless it is given full access to the [Beneficiary's] [Linked Third Party's] staff and accounting as well as any other relevant records and documentation.

The Auditor:

- [Option 1 by default: is qualified to carry out statutory audits of accounting documents in accordance with Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC or similar national regulations].
- [Option 2 if the Beneficiary or Linked Third Party has an independent Public Officer: is a competent and independent Public Officer for which the relevant national authorities have established the legal capacity to audit the Beneficiary].
- [Option 3 if the Beneficiary or Linked Third Party is an international organisation: is an [internal] [external] auditor in accordance with the internal financial regulations and procedures of the international organisation].

The Auditor:

- must be independent from the Beneficiary [and the Linked Third Party], in particular, it must not have been involved in preparing the [Beneficiary's] [Linked Third Party's] Financial Statement(s);
- must plan work so that the Procedures may be carried out and the Findings may be assessed;
- must adhere to the Procedures laid down and the compulsory report format;
- must carry out the engagement in accordance with this ToR;
- must document matters which are important to support the Report;
- must base its Report on the evidence gathered;
- must submit the Report to the [Beneficiary] [Linked Third Party].

The Commission sets out the Procedures to be carried out by the Auditor. The Auditor is not responsible for their suitability or pertinence. As this engagement is not an assurance engagement, the Auditor does not provide an audit opinion or a statement of assurance.

1.3 Applicable Standards

The Auditor must comply with these Terms of Reference and with²:

- the International Standard on Related Services ('ISRS') 4400 Engagements to perform Agreed-upon Procedures regarding Financial Information as issued by the International Auditing and Assurance Standards Board (IAASB);
- the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA). Although ISRS 4400 states that independence is not a requirement for engagements to carry out agreed-upon procedures, the [Commission][Agency] requires that the Auditor also complies with the Code's independence requirements.

The Auditor's Report must state that there is no conflict of interests in establishing this Report between the Auditor and the Beneficiary [and the Linked Third Party], and must specify - if the service is invoiced - the total fee paid to the Auditor for providing the Report.

1.4 Reporting

The Report must be written in the language of the Agreement (see Article 20.7).

Under Article 22 of the Agreement, the Commission, the Agency, the European Anti-Fraud Office and the Court of Auditors have the right to audit any work that is carried out under the action and for which costs are declared from [the European Union] [Euratom] budget. This includes work related to this engagement. The Auditor must provide access to all working papers (e.g. recalculation of hourly rates, verification of the time declared for the action) related to this assignment if the Commission [, the Agencyl, the European Anti-Fraud Office or the European Court of Auditors requests them.

1.5 Timing

The Report must be provided by [dd Month yyyy].

1.6 Other terms

[The [Beneficiary] [Linked Third Party] and the Auditor can use this section to agree other specific terms, such as the Auditor's fees, liability, applicable law, etc. Those specific terms must not *contradict the terms specified above.*]

[legal name of the Auditor] [dd Month yyyy] Signature of the Auditor

[legal name of the [Beneficiary][Linked Third Party]] [name & function of authorised representative] [name & function of authorised representative] [dd Month yyyy] Signature of the [Beneficiary][Linked Third Party]

Supreme Audit Institutions applying INTOSAI-standards may carry out the Procedures according to the corresponding International Standards of Supreme Audit Institutions and code of ethics issued by INTOSAI instead of the International Standard on Related Services ('ISRS') 4400 and the Code of Ethics for Professional Accountants issued by the IAASB and the IESBA.

Independent Report of Factual Findings on costs declared under Horizon 2020 Research and Innovation Framework Programme

(To be printed on the Auditor's letterhead)

To
[name of contact person(s)], [Position]
[[Beneficiary's] [Linked Third Party's] name]
[Address]
[dd Month yyyy]

Dear [Name of contact person(s)],

As agreed under the terms of reference dated [dd Month yyyy]

with [OPTION 1: [insert name of the beneficiary] ('the Beneficiary')] [OPTION 2: [insert name of the linked third party] ('the Linked Third Party'), third party linked to the Beneficiary [insert name of the beneficiary] ('the Beneficiary')],

we

[name of the auditor] ('the Auditor'),

established at

[full address/city/state/province/country],

represented by

[name and function of an authorised representative],

have carried out the procedures agreed with you regarding the costs declared in the Financial Statement(s)³ of the [Beneficiary] [Linked Third Party] concerning the grant agreement [insert grant agreement reference: number, title of the action and acronym] ('the Agreement'),

with a total cost declared of [total amount] EUR,

and a total of actual costs and unit costs calculated in accordance with the [Beneficiary's] [Linked Third Party's] usual cost accounting practices' declared of

[sum of total actual costs and total direct personnel costs declared as unit costs calculated in accordance with the [Beneficiary's] [Linked Third Party's] usual cost accounting practices] EUR

and hereby provide our Independent Report of Factual Findings ('the Report') using the compulsory report format agreed with you.

The Report

Our engagement was carried out in accordance with the terms of reference ('the ToR') appended to this Report. The Report includes the agreed-upon procedures ('the Procedures') carried out and the standard factual findings ('the Findings') examined.

By which the Beneficiary declares costs under the Agreement (see template 'Model Financial Statement' in Annex 4 to the Agreement).

The Procedures were carried out solely to assist the [Commission] [Agency] in evaluating whether the [Beneficiary's] [Linked Third Party's] costs in the accompanying Financial Statement(s) were declared in accordance with the Agreement. The [Commission] [Agency] draws its own conclusions from the Report and any additional information it may require.

The scope of the Procedures was defined by the Commission. Therefore, the Auditor is not responsible for their suitability or pertinence. Since the Procedures carried out constitute neither an audit nor a review made in accordance with International Standards on Auditing or International Standards on Review Engagements, the Auditor does not give a statement of assurance on the Financial Statements.

Had the Auditor carried out additional procedures or an audit of the [Beneficiary's] [Linked Third Party's] Financial Statements in accordance with International Standards on Auditing or International Standards on Review Engagements, other matters might have come to its attention and would have been included in the Report.

Not applicable Findings

We examined the Financial Statement(s) stated above and considered the following Findings not applicable:

Explanation (to be removed from the Report):

If a Finding was not applicable, it must be marked as 'N.A.' ('Not applicable') in the corresponding row on the right-hand column of the table and means that the Finding did not have to be corroborated by the Auditor and the related Procedure(s) did not have to be carried out.

The reasons of the non-application of a certain Finding must be obvious i.e.

- i) if no cost was declared under a certain category then the related Finding(s) and Procedure(s) are not applicable;
- ii) if the condition set to apply certain Procedure(s) are not met the related Finding(s) and those Procedure(s) are not applicable. For instance, for 'beneficiaries with accounts established in a currency other than euro' the Procedure and Finding related to 'beneficiaries with accounts established in euro' are not applicable. Similarly, if no additional remuneration is paid, the related Finding(s) and Procedure(s) for additional remuneration are not applicable.

List here all Findings considered not applicable for the present engagement and explain the reasons of the non-applicability.

Exceptions

Apart from the exceptions listed below, the [Beneficiary] [Linked Third Party] provided the Auditor all the documentation and accounting information needed by the Auditor to carry out the requested Procedures and evaluate the Findings.

Explanation (to be removed from the Report):

- If the Auditor was not able to successfully complete a procedure requested, it must be marked as 'E' ('Exception') in the corresponding row on the right-hand column of the table. The reason such as the inability to reconcile key information or the unavailability of data that prevents the Auditor from carrying out the Procedure must be indicated below.
- If the Auditor cannot corroborate a standard finding after having carried out the corresponding procedure, it must also be marked as 'E' ('Exception') and, where possible, the reasons why the Finding was not fulfilled and its possible impact must be explained here below.

List here any exceptions and add any information on the cause and possible consequences of each exception, if known. If the exception is quantifiable, include the corresponding amount.

Example (to be removed from the Report):

- 1. The Beneficiary was unable to substantiate the Finding number 1 on ... because
- 2. Finding number 30 was not fulfilled because the methodology used by the Beneficiary to calculate unit costs was different from the one approved by the Commission. The differences were as follows: ...
- 3. After carrying out the agreed procedures to confirm the Finding number 31, the Auditor found a difference of ______EUR. The difference can be explained by ...

Further Remarks

In addition to reporting on the results of the specific procedures carried out, the Auditor would like to make the following general remarks:

Example (to be removed from the Report):

- 1. Regarding Finding number 8 the conditions for additional remuneration were considered as fulfilled because ...
- 2. In order to be able to confirm the Finding number 15 we carried out the following additional procedures:

Use of this Report

This Report may be used only for the purpose described in the above objective. It was prepared solely for the confidential use of the [Beneficiary] [Linked Third Party] and the [Commission] [Agency], and only to be submitted to the [Commission] [Agency] in connection with the requirements set out in Article 20.4 of the Agreement. The Report may not be used by the [Beneficiary] [Linked Third Party] or by the [Commission] [Agency] for any other purpose, nor may it be distributed to any other parties. The [Commission] [Agency] may only disclose the Report to authorised parties, in particular to the European Anti-Fraud Office (OLAF) and the European Court of Auditors.

This Report relates only to the Financial Statement(s) submitted to the [Commission] [Agency] by the [Beneficiary] [Linked Third Party] for the Agreement. Therefore, it does not extend to any other of the [Beneficiary's] [Linked Third Party's] Financial Statement(s).

| There was no conflic | et of interest ⁴ between the Auditor and the Beneficiary [and Linked Third Pan | rty] |
|------------------------|---|------|
| in establishing this R | eport. The total fee paid to the Auditor for providing the Report was EUR | |
| (including EUR | of deductible VAT). | |

We look forward to discussing our Report with you and would be pleased to provide any further information or assistance.

[legal name of the Auditor]
[name and function of an authorised representative]
[dd Month yyyy]
Signature of the Auditor

⁴ A conflict of interest arises when the Auditor's objectivity to establish the certificate is compromised in fact or in appearance when the Auditor for instance:

⁻ was involved in the preparation of the Financial Statements;

⁻ stands to benefit directly should the certificate be accepted;

⁻ has a close relationship with any person representing the beneficiary;

⁻ is a director, trustee or partner of the beneficiary; or

⁻ is in any other situation that compromises his or her independence or ability to establish the certificate impartially.

Agreed-upon procedures to be performed and standard factual findings to be confirmed by the Auditor

The European Commission reserves the right to i) provide the auditor with additional guidance regarding the procedures to be followed or the facts to be ascertained and the way in which to present them (this may include sample coverage and findings) or to ii) change the procedures, by notifying the Beneficiary in writing. The procedures carried out by the auditor to confirm the standard factual finding are listed in the table below.

If this certificate relates to a Linked Third Party, any reference here below to 'the Beneficiary' is to be considered as a reference to 'the Linked Third Party'.

The 'result' column has three different options: 'C', 'E' and 'N.A.':

- > 'C' stands for 'confirmed' and means that the auditor can confirm the 'standard factual finding' and, therefore, there is no exception to be reported.
- E' stands for 'exception' and means that the Auditor carried out the procedures but cannot confirm the 'standard factual finding', or that the Auditor was not able to carry out a specific procedure (e.g. because it was impossible to reconcile key information or data were unavailable),
- N.A.' stands for 'not applicable' and means that the Finding did not have to be examined by the Auditor and the related Procedure(s) did not have to be carried out. The reasons of the non-application of a certain Finding must be obvious i.e. i) if no cost was declared under a certain category then the related Finding(s) and Procedure(s) are not applicable; ii) if the condition set to apply certain Procedure(s) are not met then the related Finding(s) and Procedure(s) are not applicable. For instance, for 'beneficiaries with accounts established in a currency other than the euro' the Procedure related to 'beneficiaries with accounts established in euro' is not applicable. Similarly, if no additional remuneration is paid, the related Finding(s) and Procedure(s) for additional remuneration are not applicable.

| Ref | Procedures | Standard factual finding | Result (C/E/ N.A.) |
|-----|--|----------------------------|--------------------------|
| A | ACTUAL PERSONNEL COSTS AND UNIT COSTS CALCULATED BY THE BENEFICIAL COST ACCOUNTING PRACTICE | ARY IN ACCORDANCE WITH ITS | USUAL |
| | The Auditor draws a sample of persons whose costs were declared in the Financial Statement(s) to carry out the procedures indicated in the consecutive points of this section A. | | |
| | (The sample should be selected randomly so that it is representative. Full coverage is required if there are fewer than 10 people (including employees, natural persons working under a direct contract and personnel seconded by a third party), otherwise the sample should have a minimum of 10 people, or 10% of the total, whichever number is the highest) | | |
| | The Auditor sampled people out of the total of people. | | |

| Ref | Procedures | Standard factual finding | Result (C/E/ N.A.) |
|-----|---|--|--------------------|
| A.1 | For the persons included in the sample and working under an employment contract or equivalent act (general procedures for individual actual personnel costs and personnel costs declared as unit costs) To confirm standard factual findings 1-5 listed in the next column, the Auditor reviewed following information/documents provided by the Beneficiary: o a list of the persons included in the sample indicating the period(s) during which they worked for the action, their position (classification or category) and type of contract; the payslips of the employees included in the sample; reconciliation of the personnel costs declared in the Financial Statement(s) with the accounting system (project accounting and general ledger) and payroll system; information concerning the employment status and employment conditions of personnel included in the sample, in particular their employment contracts or equivalent; the Beneficiary's usual policy regarding payroll matters (e.g. salary policy, overtime policy, variable pay); applicable national law on taxes, labour and social security and any other document that supports the personnel costs declared. The Auditor also verified the eligibility of all components of the retribution (see Article 6 GA) and recalculated the personnel costs for employees included in the sample. | 1) The employees were i) directly hired by the Beneficiary in accordance with its national legislation, ii) under the Beneficiary's sole technical supervision and responsibility and iii) remunerated in accordance with the Beneficiary's usual practices. 2) Personnel costs were recorded in the Beneficiary's accounts/payroll system. 3) Costs were adequately supported and reconciled with the accounts and payroll records. 4) Personnel costs did not contain any ineligible elements. 5) There were no discrepancies between the personnel costs charged to the action and the costs recalculated by the Auditor. | |
| | Further procedures if 'additional remuneration' is paid To confirm standard factual findings 6-9 listed in the next column, the Auditor: o reviewed relevant documents provided by the Beneficiary (legal form, legal/statutory) | 6) The Beneficiary paying "additional remuneration" was a non-profit legal entity. | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|-----|---|--|-----------------------------|
| | obligations, the Beneficiary's usual policy on additional remuneration, criteria used for its calculation, the Beneficiary's usual remuneration practice for projects funded under national funding schemes); o recalculated the amount of additional remuneration eligible for the action based on the supporting documents received (full-time or part-time work, exclusive or non-exclusive dedication to the action, usual remuneration paid for projects funded by national schemes) to arrive at the applicable FTE/year and pro-rata rate (see data collected in the course of carrying out the procedures under A.2 'Productive hours' and A.4 'Time recording system'). 'ADDITIONAL REMUNERATION' MEANS ANY PART OF THE REMUNERATION WHICH EXCEEDS WHAT THE PERSON WOULD BE PAID FOR TIME WORKED IN PROJECTS FUNDED BY NATIONAL SCHEMES. | 7) The amount of additional remuneration paid corresponded to the Beneficiary's usual remuneration practices and was consistently paid whenever the same kind of work or expertise was required. 8) The criteria used to calculate the additional remuneration were objective and generally applied by the Beneficiary recordings of | 1.11.21) |
| | IF ANY PART OF THE REMUNERATION PAID TO THE EMPLOYEE QUALIFIES AS "ADDITIONAL REMUNERATION" AND IS ELIGIBLE UNDER THE PROVISIONS OF ARTICLE 6.2.A.1, THIS CAN BE CHARGED AS ELIGIBLE COST TO THE ACTION UP TO THE FOLLOWING AMOUNT: (A) IF THE PERSON WORKS FULL TIME AND EXCLUSIVELY ON THE ACTION DURING THE FULL YEAR: UP TO EUR 8 000/YEAR; (B) IF THE PERSON WORKS EXCLUSIVELY ON THE ACTION BUT NOT FULL-TIME OR NOT FOR THE FULL YEAR: UP TO THE CORRESPONDING PRO-RATA AMOUNT OF EUR 8 000, OR (C) IF THE PERSON DOES NOT WORK EXCLUSIVELY ON THE ACTION: UP TO A PRO-RATA AMOUNT CALCULATED IN ACCORDANCE TO ARTICLE 6.2.A.1. | by the Beneficiary regardless of the source of funding used. 9) The amount of additional remuneration included in the personnel costs charged to the action was capped at EUR 8,000 per FTE/year (up to the equivalent pro-rata amount if the person did not work on the action full-time during the year or did not work exclusively on the action). | |
| | Additional procedures in case "unit costs calculated by the Beneficiary in accordance with its usual cost accounting practices" is applied: | 10) The personnel costs included in the Financial Statement were calculated in accordance with | |
| | Apart from carrying out the procedures indicated above to confirm standard factual findings 1-5 and, if applicable, also 6-9, the Auditor carried out following procedures to confirm standard | the Beneficiary's usual cost accounting practice. This methodology was consistently | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|-----|---|--|-----------------------|
| | factual findings 10-13 listed in the next column: | used in all H2020 actions. | |
| | obtained a description of the Beneficiary's usual cost accounting practice to calculate unit costs;. | 11) The employees were charged under the correct category. | |
| | o reviewed whether the Beneficiary's usual cost accounting practice was applied for the Financial Statements subject of the present CFS; | 12) Total personnel costs used in calculating the unit costs were | |
| | verified the employees included in the sample were charged under the correct category (in accordance with the criteria used by the Beneficiary to establish personnel categories) by reviewing the contract/HR-record or analytical accounting records; | consistent with the expenses recorded in the statutory accounts. | |
| | verified that there is no difference between the total amount of personnel costs used in calculating the cost per unit and the total amount of personnel costs recorded in the statutory accounts; | element used by the Beneficiary in its unit-cost | |
| | verified whether actual personnel costs were adjusted on the basis of budgeted or estimated elements and, if so, verified whether those elements used are actually relevant for the calculation, objective and supported by documents. | calculation were relevant for calculating personnel costs and corresponded to objective and verifiable information. | |
| | For natural persons included in the sample and working with the Beneficiary under a direct contract other than an employment contract, such as consultants (no subcontractors). | 14) The natural persons worked under conditions similar to those of an employee, in | |
| | To confirm standard factual findings 14-17 listed in the next column the Auditor reviewed following information/documents provided by the Beneficiary: | particular regarding the way the work is organised, the tasks | |
| | the contracts, especially the cost, contract duration, work description, place of work, ownership of the results and reporting obligations to the Beneficiary; | that are performed and the premises where they are performed. | |
| | the employment conditions of staff in the same category to compare costs and; | 15) The results of work carried out | |
| | any other document that supports the costs declared and its registration (e.g. invoices, accounting records, etc.). | belong to the Beneficiary, or, if not, the Beneficiary has obtained all necessary rights to fulfil its obligations as if those | |

| Ref | Procedures | Standard factual finding | Result (C/E/ N.A.) |
|-----|---|---|--------------------|
| | | results were generated by itself. 16) Their costs were not | |
| | | significantly different from those for staff who performed similar tasks under an employment contract with the Beneficiary. | |
| | | 17) The costs were supported by audit evidence and registered in the accounts. | |
| | For personnel seconded by a third party and included in the sample (not subcontractors) | 18) Seconded personnel reported to | |
| | To confirm standard factual findings 18-21 listed in the next column, the Auditor review following information/documents provided by the Beneficiary: | the Beneficiary and worked on the Beneficiary's premises (unless otherwise agreed with | |
| | their secondment contract(s) notably regarding costs, duration, work description, place work and ownership of the results; | 3, | |
| | o if there is reimbursement by the Beneficiary to the third party for the resource made available_(in-kind contribution against payment): any documentation that supports the costs declared (e.g. contract, invoice, bank payment, and proof of registration in its accounting/payroll, etc.) and reconciliation of the Financial Statement(s) with the accounting system (project accounting and general ledger) as well as any proof that the amount invoiced by the third party did not include any profit; | the not, the Beneficiary has obtained all necessary rights to fulfil its obligations as if those | |
| | o if there is no reimbursement by the Beneficiary to the third party for the resource may available (in-kind contribution free of charge): a proof of the actual cost borne by Third Party for the resource made available free of charge to the Beneficiary such a statement of costs incurred by the Third Party and proof of the registration in the The Party's accounting/payroll; | the payment: s a 20) The costs declared were | |

| | | | Result |
|-----|---|--|-------------------|
| Ref | Procedures | Standard factual finding | (C / E / N.A.) |
| | o any other document that supports the costs declared (e.g. invoices, etc.). | Beneficiary's accounts. The third party did not include any profit. | |
| | | If personnel is seconded free of charge: | |
| | | 21) The costs declared did not exceed the third party's cost as recorded in the accounts of the third party and were supported with documentation. | |
| A.2 | PRODUCTIVE HOURS | 22) The Beneficiary applied method [choose one option and | |
| | To confirm standard factual findings 22-27 listed in the next column, the Auditor reviewed relevant documents, especially national legislation, labour agreements and contracts and time | delete the others] | |
| | records of the persons included in the sample, to verify that: | [A: 1720 hours] | |
| | the annual productive hours applied were calculated in accordance with one of the methods described below, | [B : the 'total number of hours worked'] | |
| | the full-time equivalent (FTEs) ratios for employees not working full-time were correctly calculated. | [C: 'standard annual productive hours' used correspond to usual accounting | |
| | If the Beneficiary applied method B, the auditor verified that the correctness in which the total number of hours worked was calculated and that the contracts specified the annual workable hours. | practices] 23) Productive hours were calculated annually. | |
| | If the Beneficiary applied method C, the auditor verified that the 'annual productive hours' applied when calculating the hourly rate were equivalent to at least 90 % of the 'standard annual workable hours'. The Auditor can only do this if the calculation of the standard annual workable | 24) For employees not working full-time the full-time equivalent (FTE) ratio was correctly applied. | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|-----|--|---|-----------------------------|
| | hours can be supported by records, such as national legislation, labour agreements, and contracts. Beneficiary's Productive Hours' for Persons Working full time shall be one of the following methods: A. 1720 annual productive hours (pro-rata for persons not working full-time) B. the total number of hours worked by the person for the beneficiary in the year (this method is also referred to as 'total number of hours worked' in the next column). The calculation of the total number of hours worked was done as follows: annual workable hours of the person according to the employment contract, applicable labour agreement or national law plus overtime worked minus absences (such as sick leave or special leave). C. the standard number of annual hours generally applied by the beneficiary for its | If the Beneficiary applied method B. 25) The calculation of the number of 'annual workable hours', overtime and absences was verifiable based on the documents provided by the Beneficiary. 25.1) The Beneficiary calculates the hourly rates per full financial year following procedure A.3 (method B | |
| | PERSONNEL IN ACCORDANCE WITH ITS USUAL COST ACCOUNTING PRACTICES (THIS METHOD IS ALSO REFERRED TO AS 'STANDARD ANNUAL PRODUCTIVE HOURS' IN THE NEXT COLUMN). THIS NUMBER MUST BE AT LEAST 90% OF THE STANDARD ANNUAL WORKABLE HOURS. 'ANNUAL WORKABLE HOURS' MEANS THE PERIOD DURING WHICH THE PERSONNEL MUST BE WORKING, AT THE EMPLOYER'S DISPOSAL AND CARRYING OUT HIS/HER ACTIVITY OR DUTIES UNDER THE EMPLOYMENT CONTRACT, APPLICABLE COLLECTIVE LABOUR AGREEMENT OR NATIONAL WORKING TIME LEGISLATION. | is not allowed for beneficiaries calculating hourly rates per month). If the Beneficiary applied method C. 26) The calculation of the number of 'standard annual workable hours' was verifiable based on the documents provided by the Beneficiary. | |

| | | | Result |
|-----|--|---|-------------------|
| Ref | Procedures | Standard factual finding | (C / E / N.A.) |
| | | 27) The 'annual productive hours' used for calculating the hourly rate were consistent with the usual cost accounting practices of the Beneficiary and were equivalent to at least 90 % of the 'annual workable hours'. | |
| A.3 | HOURLY PERSONNEL RATES I) For unit costs calculated in accordance to the Beneficiary's usual cost accounting practice (unit | 28) The Beneficiary applied [choose one option and delete the other]: | |
| | costs): If the Beneficiary has a "Certificate on Methodology to calculate unit costs" (CoMUC) approved by the Commission, the Beneficiary provides the Auditor with a description of the approved methodology and the Commission's letter of acceptance. The Auditor verified that the Beneficiary has indeed used the methodology approved. If so, no further verification is necessary. | [Option I: "Unit costs (hourly rates) were calculated in accordance with the Beneficiary's usual cost accounting practices"] | |
| | If the Beneficiary does not have a "Certificate on Methodology" (CoMUC) approved by the Commission, or if the methodology approved was not applied, then the Auditor: | [Option II: Individual hourly rates were applied] | |
| | reviewed the documentation provided by the Beneficiary, including manuals and internal guidelines that explain how to calculate hourly rates; recalculated the unit costs (hourly rates) of staff included in the sample following the results of the procedures corried out in A.1 and A.2. | For option I concerning unit costs and if the Beneficiary applies the methodology approved by the Commission (CoMUC): | |
| | results of the procedures carried out in A.1 and A.2. II) For individual hourly rates: The Auditor: oreviewed the documentation provided by the Beneficiary, including manuals and internal guidelines that explain how to calculate hourly rates; | 29) The Beneficiary used the Commission-approved methodology to calculate hourly rates. It corresponded to the organisation's usual cost | |
| | The Auditor: orreviewed the documentation provided by the Beneficiary, including manuals and internal | dology to calculate hourly rates. It corresponded to the | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|-----|--|--|-----------------------------|
| | o recalculated the hourly rates of staff included in the sample (recalculation of all hourly rates if the Beneficiary uses annual rates, recalculation of three months selected randomly for every year and person if the Beneficiary uses monthly rates) following the results of the procedures carried out in A.1 and A.2; | activities irrespective of the source of funding. | |
| | (only in case of monthly rates) confirmed that the time spent on parental leave is not deducted, and that, if parts of the basic remuneration are generated over a period longer than a month, the Beneficiary has included only the share which is generated in the month. | For option I concerning unit costs and if the Beneficiary applies a methodology not approved by the | |
| | "Unit costs calculated by the Beneficiary in accordance with its usual cost accounting practices": It is calculated by dividing the total amount of personnel costs of the category to which the employee belongs verified in line with procedure A.1 by the number of FTE and the annual total productive hours of the same category calculated by the | Commission: 30) The unit costs re-calculated by the Auditor were the same as the rates applied by the Beneficiary. | |
| | BENEFICIARY IN ACCORDANCE WITH PROCEDURE A.2. HOURLY RATE FOR INDIVIDUAL ACTUAL PERSONAL COSTS: IT IS CALCULATED FOLLOWING ONE OF THE TWO OPTIONS BELOW: A) [OPTION BY DEFAULT] BY DIVIDING THE ACTUAL ANNUAL AMOUNT OF PERSONNEL COSTS OF AN EMPLOYEE VERIFIED IN LINE WITH PROCEDURE A.1 BY THE NUMBER OF ANNUAL PRODUCTIVE HOURS | For option II concerning individual hourly rates: 31) The individual rates recalculated by the Auditor were the same as the rates applied by the Beneficiary. | |
| | FIED IN LINE WITH PROCEDURE A.2 (FULL FINANCIAL YEAR HOURLY RATE); DIVIDING THE ACTUAL MONTHLY AMOUNT OF PERSONNEL COSTS OF AN EMPLOYEE VERIFIED IN WITH PROCEDURE A.1 BY 1/12 OF THE NUMBER OF ANNUAL PRODUCTIVE HOURS VERIFIED IN WITH PROCEDURE A.2. (MONTHLY HOURLY RATE). | 31.1) The Beneficiary used only one option (per full financial year or per month) throughout each financial year examined. | |
| | | 31.2) The hourly rates do not include additional remuneration. | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|-----|--|---|-----------------------------|
| A.4 | TIME RECORDING SYSTEM To verify that the time recording system ensures the fulfilment of all minimum requirements and that the hours declared for the action were correct, accurate and properly authorised and supported by documentation, the Auditor made the following checks for the persons included in the sample that declare time as worked for the action on the basis of time records: o description of the time recording system provided by the Beneficiary (registration, authorisation, processing in the HR-system); | 32) All persons recorded their time dedicated to the action on a daily/ weekly/ monthly basis using a paper/computer-based system. (delete the answers that are not applicable) | |
| | its actual implementation; time records were signed at least monthly by the employees (on paper or electronically) and authorised by the project manager or another manager; | 33) Their time-records were authorised at least monthly by the project manager or other superior. | |
| | the hours declared were worked within the project period; there were no hours declared as worked for the action if HR-records showed absence due to holidays or sickness (further cross-checks with travels are carried out in B.1 below); the hours charged to the action matched those in the time recording system. | 34) Hours declared were worked within the project period and were consistent with the presences/absences recorded in HR-records. | |
| | Only the hours worked on the action can be charged. All working time to be charged should be recorded throughout the duration of the project, adequately supported by evidence of their reality and reliability (see specific provisions below for persons working exclusively for the action without time records). | 35) There were no discrepancies between the number of hours charged to the action and the number of hours recorded. | |
| | If the persons are working exclusively for the action and without time records For the persons selected that worked exclusively for the action without time records, the Auditor verified evidence available demonstrating that they were in reality exclusively dedicated to the action and that the Beneficiary signed a declaration confirming that they have worked exclusively for the action. | 36) The exclusive dedication is supported by a declaration signed by the Beneficiary and by any other evidence gathered. | |

| Ref | Procedures | Standard factual finding | Result |
|-----|---|--|-------------------|
| Kei | Troccuires | Standard factual finding | (C / E / N.A.) |
| В | COSTS OF SUBCONTRACTING | | |
| B.1 | The Auditor obtained the detail/breakdown of subcontracting costs and sampled cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest). To confirm standard factual findings 37-41 listed in the next column, the Auditor reviewed the | 37) The use of claimed subcontracting costs was foreseen in Annex 1 and costs were declared in the Financial Statements under the | |
| | following for the items included in the sample: | subcontracting category. 38) There were documents of | |
| | o the use of subcontractors was foreseen in Annex 1; | requests to different providers, | |
| | subcontracting costs were declared in the subcontracting category of the Financial Statement; | different offers and assessment of the offers before selection of | |
| | o supporting documents on the selection and award procedure were followed; | the provider in line with | |
| | o the Beneficiary ensured best value for money (key elements to appreciate the respect of this principle are the award of the subcontract to the bid offering best price-quality ratio, under conditions of transparency and equal treatment. In case an existing framework contract was used the Beneficiary ensured it was established on the basis of the principle of best value for money under conditions of transparency and equal treatment). | internal procedures and procurement rules. Subcontracts were awarded in accordance with the principle of best value for money. | |
| | In particular, | (When different offers were not collected the Auditor explains | |
| | i. if the Beneficiary acted as a contracting authority within the meaning of Directive 2004/18/EC (or 2014/24/EU) or of Directive 2004/17/EC (or 2014/25/EU), the Auditor verified that the applicable national law on public procurement was followed and that the subcontracting complied with the Terms and Conditions of the Agreement. | the reasons provided by the Beneficiary under the caption "Exceptions" of the Report. The Commission will analyse this information to evaluate | |
| | ii. if the Beneficiary did not fall under the above-mentioned category the Auditor verified that the Beneficiary followed their usual procurement rules and respected the Terms and Conditions of the Agreement | whether these costs might be accepted as eligible) | |
| | | 39) The subcontracts were not awarded to other Beneficiaries | |

| Ref | Procedures | Standard factual finding | Result (C / E / N.A.) |
|----------|--|--|-----------------------------|
| | For the items included in the sample the Auditor also verified that: o the subcontracts were not awarded to other Beneficiaries in the consortium; there were signed agreements between the Beneficiary and the subcontractor; there was evidence that the services were provided by subcontractor; | of the consortium. 40) All subcontracts were supported by signed agreements between the Beneficiary and the subcontractor. 41) There was evidence that the services were provided by the | |
| C C.1 | COSTS OF PROVIDING FINANCIAL SUPPORT TO THIRD PARTIES The Auditor obtained the detail/breakdown of the costs of providing financial support to | subcontractors. | |
| | third parties and sampled cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest). The Auditor verified that the following minimum conditions were met: a) the maximum amount of financial support for each third party did not exceed EUR 60 000, unless explicitly mentioned in Annex 1; b) the financial support to third parties was agreed in Annex 1 of the Agreement and the other provisions on financial support to third parties included in Annex 1 were respected. | 42) All minimum conditions were met | |

| D | OTHER ACTUAL DIRECT COSTS | | |
|-----|--|---|--|
| D.1 | COSTS OF TRAVEL AND RELATED SUBSISTENCE ALLOWANCES | 43) Costs were incurred, approved and | |
| | The Auditor sampled cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is the highest). | reimbursed in line with the Beneficiary's usual policy for travels. | |
| | The Auditor inspected the sample and verified that: | 44) There was a link between the trip | |
| | travel and subsistence costs were consistent with the Beneficiary's usual policy for travel. In this context, the Beneficiary provided evidence of its normal policy for travel costs (e.g. use of first class tickets, reimbursement by the Beneficiary on the basis of actual costs, a lump sum or per diem) to enable the Auditor to compare the travel costs charged with this policy; travel costs are correctly identified and allocated to the action (e.g. trips are directly linked to the action) by reviewing relevant supporting documents such as minutes of | and the action. 45) The supporting documents were consistent with each other regarding subject of the trip, dates, duration and reconciled with time records and accounting. | |
| | linked to the action) by reviewing relevant supporting documents such as minutes of meetings, workshops or conferences, their registration in the correct project account, their consistency with time records or with the dates/duration of the workshop/conference; on ineligible costs or excessive or reckless expenditure was declared (see Article 6.5 MGA). | 46) No ineligible costs or excessive or reckless expenditure was declared. | |
| D.2 | DEPRECIATION COSTS FOR EQUIPMENT, INFRASTRUCTURE OR OTHER ASSETS The Auditor sampled cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the | 47) Procurement rules, principles and guides were followed. | |
| | total, whichever number is the highest). For "equipment, infrastructure or other assets" [from now on called "asset(s)"] selected in the sample the Auditor verified that: | 48) There was a link between the grant agreement and the asset charged to the action. | |
| | the assets were acquired in conformity with the Beneficiary's internal guidelines and procedures; | 49) The asset charged to the action was traceable to the accounting records and the underlying documents. | |

50) The depreciation method used to o they were correctly allocated to the action (with supporting documents such as delivery charge the asset to the action was in note invoice or any other proof demonstrating the link to the action) line with the applicable rules of the they were entered in the accounting system; and Beneficiary's country Beneficiary's usual accounting the extent to which the assets were used for the action (as a percentage) was supported by policy. reliable documentation (e.g. usage overview table); 51) The amount charged corresponded The Auditor recalculated the depreciation costs and verified that they were in line with the to the actual usage for the action. applicable rules in the Beneficiary's country and with the Beneficiary's usual accounting policy (e.g. depreciation calculated on the acquisition value). 52) No ineligible costs or excessive or The Auditor verified that no ineligible costs such as deductible VAT, exchange rate losses, reckless expenditure were declared. excessive or reckless expenditure were declared (see Article 6.5 GA). COSTS OF OTHER GOODS AND SERVICES 53) Contracts for works or services did **D.3** not cover tasks described in Annex The Auditor sampled cost items selected randomly (full coverage is required if there 1. are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest). 54) Costs were allocated to the correct action and the goods were not For the purchase of goods, works or services included in the sample the Auditor verified that: placed in the inventory of durable the contracts did not cover tasks described in Annex 1; equipment. they were correctly identified, allocated to the proper action, entered in the accounting system (traceable to underlying documents such as purchase orders, invoices and 55) The costs were charged in line with the Beneficiary's accounting policy accounting); and were adequately supported. the goods were not placed in the inventory of durable equipment; the costs charged to the action were accounted in line with the Beneficiary's usual 56) No ineligible costs or excessive or accounting practices; reckless expenditure were declared. For internal invoices/charges only no ineligible costs or excessive or reckless expenditure were declared (see Article 6 GA). the cost element was charged, In addition, the Auditor verified that these goods and services were acquired in conformity with without any mark-ups.

the Beneficiary's internal guidelines and procedures, in particular:

- o if Beneficiary acted as a contracting authority within the meaning of Directive 2004/18/EC (or 2014/24/EU) or of Directive 2004/17/EC (or 2014/25/EU), the Auditor verified that the applicable national law on public procurement was followed and that the procurement contract complied with the Terms and Conditions of the Agreement.
- o if the Beneficiary did not fall into the category above, the Auditor verified that the Beneficiary followed their usual procurement rules and respected the Terms and Conditions of the Agreement.

For the items included in the sample the Auditor also verified that:

o the Beneficiary ensured best value for money (key elements to appreciate the respect of this principle are the award of the contract to the bid offering best price-quality ratio, under conditions of transparency and equal treatment. In case an existing framework contract was used the Auditor also verified that the Beneficiary ensured it was established on the basis of the principle of best value for money under conditions of transparency and equal treatment);

SUCH GOODS AND SERVICES INCLUDE, FOR INSTANCE, CONSUMABLES AND SUPPLIES, DISSEMINATION (INCLUDING OPEN ACCESS), PROTECTION OF RESULTS, SPECIFIC EVALUATION OF THE ACTION IF IT IS REQUIRED BY THE AGREEMENT, CERTIFICATES ON THE FINANCIAL STATEMENTS IF THEY ARE REQUIRED BY THE AGREEMENT AND CERTIFICATES ON THE METHODOLOGY, TRANSLATIONS, REPRODUCTION.

D.4 AGGREGATED CAPITALISED AND OPERATING COSTS OF RESEARCH INFRASTRUCTURE

The Auditor ensured the existence of a positive ex-ante assessment (issued by the EC Services) of the cost accounting methodology of the Beneficiary allowing it to apply the guidelines on direct costing for large research infrastructures in Horizon 2020.

57) Procurement rules, principles and guides were followed. There were documents of requests to different providers, different offers and assessment of the offers before selection of the provider in line with internal procedures and procurement rules. The purchases were made in accordance with the principle of best value for money.

(When different offers were not collected the Auditor explains the reasons provided by the Beneficiary under the caption "Exceptions" of the Report. The Commission will analyse this information to evaluate whether these costs might be accepted as eligible)

58) The costs declared as direct costs for Large Research Infrastructures (in the appropriate line of the Financial Statement) comply with the methodology described in the positive ex-ante assessment report.

| | In the cases that a positive ex-ante assessment has been issued (see the standard factual findings 58-59 on the next column), The Auditor ensured that the beneficiary has applied consistently the methodology that is explained and approved in the positive ex ante assessment; | 59) Any difference between the methodology applied and the one positively assessed was extensively described and adjusted accordingly. | |
|-----|---|--|--|
| | In the cases that a positive ex-ante assessment has NOT been issued (see the standard factual findings 60 on the next column), The Auditor verified that no costs of Large Research Infrastructure have been charged as direct costs in any costs category; | 60) The direct costs declared were free | |
| | In the cases that a draft ex-ante assessment report has been issued with recommendation for further changes (see the standard factual findings 60 on the next column), The Auditor followed the same procedure as above (when a positive ex-ante assessment has NOT yet been issued) and paid particular attention (testing reinforced) to the cost items for which the draft ex-ante assessment either rejected the inclusion as direct costs for Large Research Infrastructures or issued recommendations. | from any indirect costs items related to the Large Research Infrastructure. | |
| D.5 | Costs of internally invoiced goods and services The Auditor sampled cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest). | 61) The costs of internally invoiced goods and services included in the Financial Statement were calculated in accordance with the Beneficiary's usual cost accounting practice. | |
| | To confirm standard factual findings 61-65 listed in the next column, the Auditor: o obtained a description of the Beneficiary's usual cost accounting practice to calculate costs of internally invoiced goods and services (unit costs); | 62) The cost accounting practices used to calculate the costs of internally invoiced goods and services were applied by the Beneficiary in a | |
| | reviewed whether the Beneficiary's usual cost accounting practice was applied for the Financial Statements subject of the present CFS; | consistent manner based on objective criteria regardless of the source of funding. | |
| | ensured that the methodology to calculate unit costs is being used in a consistent manner, based on objective criteria, regardless of the source of funding; verified that any ineligible items or any costs claimed under other budget categories, in | 63) The unit cost is calculated using the actual costs for the good or service recorded in the Beneficiary's | |
| | particular indirect costs, have not been taken into account when calculating the costs of | accounts, excluding any ineligible cost or costs included in other | |

| | | internally invoiced goods and services (see Article 6 GA); | budget categories. | |
|-----|--|--|---|--|
| | verified whether actual costs of internally invoiced goods and services were adjusted on the basis of budgeted or estimated elements and, if so, verified whether those elements used are actually relevant for the calculation, and correspond to objective and verifiable information. verified that any costs of items which are not directly linked to the production of the invoiced goods or service (e.g. supporting services like cleaning, general accountancy, administrative support, etc. not directly used for production of the good or service) have | 64) The unit cost excludes any costs of items which are not directly linked | | |
| | | to the production of the invoiced goods or service. 65) The costs items used for calculating the actual costs of internally invoiced goods and services were relevant, reasonable and correspond to objective and verifiable information. | | |
| E | USE (| OF EXCHANGE RATES | | |
| E.1 | The Arates rules otherwhighes COSTS EURO JOURN (https://correction.org/library.com/librar | RECORDED IN THE ACCOUNTS IN A CURRENCY OTHER THAN EURO SHALL BE CONVERTED INTO AT THE AVERAGE OF THE DAILY EXCHANGE RATES PUBLISHED IN THE C SERIES OF OFFICIAL INTO ALL OF THE EUROPEAN UNION Www.ecb.int/stats/exchange/eurofxref/html/index.en.html), DETERMINED OVER THE ESPONDING REPORTING PERIOD. DAILY EURO EXCHANGE RATE IS PUBLISHED IN THE OFFICIAL JOURNAL OF THE EUROPEAN IF FOR THE CURRENCY IN QUESTION, CONVERSION SHALL BE MADE AT THE AVERAGE OF THE | 66) The exchange rates used to convert other currencies into Euros were in accordance with the rules established of the Grant Agreement and there was no difference in the final figures. | |
| | | HLY ACCOUNTING RATES ESTABLISHED BY THE COMMISSION AND PUBLISHED ON ITS WEBSITE /ec.europa.eu/budget/contracts_grants/info_contracts/inforeuro/inforeuro_en.cfm), | | |

| DETERMINED OVER THE CORRESPONDING REPORTING PERIOD. | | |
|--|---|--|
| b) For Beneficiaries with accounts established in euros | | |
| The Auditor sampled cost items selected randomly and verified that the exchange rates used for converting other currencies into euros were in accordance with the following rules established in the Agreement (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest): Costs incurred in another currency shall be converted into euro by applying the | 67) The Beneficiary applied its usual accounting practices. | |
| BENEFICIARY'S USUAL ACCOUNTING PRACTICES. | | |

[legal name of the audit firm]
[name and function of an authorised representative]
[dd Month yyyy]

<Signature of the Auditor>

ANNEX 6

MODEL FOR THE CERTIFICATE ON THE METHODOLOGY

- > For options [in italics in square brackets]: choose the applicable option. Options not chosen should be deleted.
- For fields in [grey in square brackets]: enter the appropriate data.

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TERMS OF REFERENCE FOR AN AUDIT ENGAGEMENT FOR A METHODOLOGY CERTIFICATE IN CONNECTION WITH ONE OR MORE GRANT AGREEMENTS FINANCED UNDER THE HORIZON 2020 RESEARCH AND INNOVATION FRAMEWORK PROGRAMME

INDEPENDENT REPORT OF FACTUAL FINDINGS ON THE METHODOLOGY CONCERNING GRANT AGREEMENTS FINANCED UNDER THE HORIZON 2020 RESEARCH AND INNOVATION FRAMEWORK PROGRAMME

Terms of reference for an audit engagement for a methodology certificate in connection with one or more grant agreements financed under the Horizon 2020 Research and Innovation Framework Programme

This document sets out the 'Terms of Reference (ToR)' under which

[OPTION 1: [insert name of the beneficiary] ('the Beneficiary')] [OPTION 2: [insert name of the linked third party] ('the Linked Third Party'), third party linked to the Beneficiary [insert name of the beneficiary] ('the Beneficiary')]

agrees to engage

[insert legal name of the auditor] ('the Auditor')

to produce an independent report of factual findings ('the Report') concerning the [Beneficiary's] [Linked Third Party's] usual accounting practices for calculating and claiming direct personnel costs declared as unit costs ('the Methodology') in connection with grant agreements financed under the Horizon 2020 Research and Innovation Framework Programme.

The procedures to be carried out for the assessment of the methodology will be based on the grant agreement(s) detailed below:

[title and number of the grant agreement(s)] ('the Agreement(s)')

The Agreement(s) has(have) been concluded between the Beneficiary and [OPTION 1: the European Union, represented by the European Commission ('the Commission')][OPTION 2: the European Atomic Energy Community (Euratom,) represented by the European Commission ('the Commission')][OPTION 3: the [Research Executive Agency (REA)] [European Research Council Executive Agency (ERCEA)] [Innovation and Networks Executive Agency (INEA)] [Executive Agency for Small and Medium-sized Enterprises (EASME)] ('the Agency'), under the powers delegated by the European Commission ('the Commission').].

The [Commission] [Agency] is mentioned as a signatory of the Agreement with the Beneficiary only. The [European Union] [Euratom] [Agency] is not a party to this engagement.

1.1 Subject of the engagement

According to Article 18.1.2 of the Agreement, beneficiaries [and linked third parties] that declare direct personnel costs as unit costs calculated in accordance with their usual cost accounting practices may submit to the [Commission] [Agency], for approval, a certificate on the methodology ('CoMUC') stating that there are adequate records and documentation to prove that their cost accounting practices used comply with the conditions set out in Point A of Article 6.2.

The subject of this engagement is the CoMUC which is composed of two separate documents:

- the Terms of Reference ('the ToR') to be signed by the [Beneficiary] [Linked Third Party] and the Auditor;
- the Auditor's Independent Report of Factual Findings ('the Report') issued on the Auditor's letterhead, dated, stamped and signed by the Auditor which includes; the standard statements ('the Statements') evaluated and signed by the [Beneficiary] [Linked Third Party], the agreed-upon procedures ('the Procedures') performed by the Auditor and the standard factual findings

('the Findings') assessed by the Auditor. The Statements, Procedures and Findings are summarised in the table that forms part of the Report.

The information provided through the Statements, the Procedures and the Findings will enable the Commission to draw conclusions regarding the existence of the [Beneficiary's] [Linked Third Party's] usual cost accounting practice and its suitability to ensure that direct personnel costs claimed on that basis comply with the provisions of the Agreement. The Commission draws its own conclusions from the Report and any additional information it may require.

1.2 Responsibilities

The parties to this agreement are the [Beneficiary] [Linked Third Party] and the Auditor.

The [Beneficiary] [Linked Third Party]:

- is responsible for preparing financial statements for the Agreement(s) ('the Financial Statements') in compliance with those Agreements;
- is responsible for providing the Financial Statement(s) to the Auditor and enabling the Auditor to reconcile them with the [Beneficiary's] [Linked Third Party's] accounting and bookkeeping system and the underlying accounts and records. The Financial Statement(s) will be used as a basis for the procedures which the Auditor will carry out under this ToR;
- is responsible for its Methodology and liable for the accuracy of the Financial Statement(s);
- is responsible for endorsing or refuting the Statements indicated under the heading 'Statements to be made by the Beneficiary/ Linked Third Party' in the first column of the table that forms part of the Report;
- must provide the Auditor with a signed and dated representation letter;
- accepts that the ability of the Auditor to carry out the Procedures effectively depends upon the [Beneficiary] [Linked Third Party] providing full and free access to the [Beneficiary's] [Linked Third Party's] staff and to its accounting and other relevant records.

The Auditor:

- [Option 1 by default: is qualified to carry out statutory audits of accounting documents in accordance with Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC or similar national regulations].
- [Option 2 if the Beneficiary or Linked Third Party has an independent Public Officer: is a competent and independent Public Officer for which the relevant national authorities have established the legal capacity to audit the Beneficiary].
- [Option 3 if the Beneficiary or Linked Third Party is an international organisation: is an [internal] [external] auditor in accordance with the internal financial regulations and procedures of the international organisation].

The Auditor:

- must be independent from the Beneficiary [and the Linked Third Party], in particular, it must not have been involved in preparing the Beneficiary's [and Linked Third Party's] Financial Statement(s);
- must plan work so that the Procedures may be carried out and the Findings may be assessed;
- must adhere to the Procedures laid down and the compulsory report format;
- must carry out the engagement in accordance with these ToR;
- must document matters which are important to support the Report;
- must base its Report on the evidence gathered;
- must submit the Report to the [Beneficiary] [Linked Third Party].

The Commission sets out the Procedures to be carried out and the Findings to be endorsed by the Auditor. The Auditor is not responsible for their suitability or pertinence. As this engagement is not an assurance engagement the Auditor does not provide an audit opinion or a statement of assurance.

1.3 Applicable Standards

The Auditor must comply with these Terms of Reference and with¹:

- the International Standard on Related Services ('ISRS') 4400 Engagements to perform Agreed-upon Procedures regarding Financial Information as issued by the International Auditing and Assurance Standards Board (IAASB);
- the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA). Although ISRS 4400 states that independence is not a requirement for engagements to carry out agreed-upon procedures, the Commission requires that the Auditor also complies with the Code's independence requirements.

The Auditor's Report must state that there was no conflict of interests in establishing this Report between the Auditor and the Beneficiary [and the Linked Third Party] that could have a bearing on the Report, and must specify – if the service is invoiced - the total fee paid to the Auditor for providing the Report.

1.4 Reporting

The Report must be written in the language of the Agreement (see Article 20.7 of the Agreement).

Under Article 22 of the Agreement, the Commission, [the Agency], the European Anti-Fraud Office and the Court of Auditors have the right to audit any work that is carried out under the action and for which costs are declared from [the European Union] [Euratom] budget. This includes work related to this engagement. The Auditor must provide access to all working papers related to this assignment if the Commission, the Agency, the European Anti-Fraud Office or the European Court of Auditors requests them.

1.5 Timing

The Report must be provided by [dd Month yyyy].

1.6 Other Terms

[The [Beneficiary] [Linked Third Party] and the Auditor can use this section to agree other specific terms, such as the Auditor's fees, liability, applicable law, etc. Those specific terms must not contradict the terms specified above.]

[legal name of the Auditor] [name & title of authorised representative] [dd Month yyyy] Signature of the Auditor

[legal name of the [Beneficiary] [Linked Third Party]] [name & title of authorised representative] [dd Month yyyy] Signature of the [Beneficiary] [Linked Third Party]

Supreme Audit Institutions applying INTOSAI-standards may carry out the Procedures according to the corresponding International Standards of Supreme Audit Institutions and code of ethics issued by INTOSAI instead of the International Standard on Related Services ('ISRS') 4400 and the Code of Ethics for Professional Accountants issued by the IAASB and the IESBA.

Independent report of factual findings on the methodology concerning grant agreements financed under the Horizon 2020 Research and Innovation Framework Programme

(To be printed on letterhead paper of the auditor)

To
[name of contact person(s)], [Position]
[[Beneficiary's] [Linked Third Party's] name]
[Address]
[dd Month yyyy]

Dear [Name of contact person(s)],

As agreed under the terms of reference dated [dd Month yyyy]

with [OPTION 1: [insert name of the beneficiary] ('the Beneficiary')] [OPTION 2: [insert name of the linked third party] ('the Linked Third Party'), third party linked to the Beneficiary [insert name of the beneficiary] ('the Beneficiary')],

we [name of the auditor] ('the Auditor'),
established at
[full address/city/state/province/country],
represented by
[name and function of an authorised representative],

have carried out the agreed-upon procedures ('the Procedures') and provide hereby our Independent Report of Factual Findings ('the Report'), concerning the [Beneficiary's] [Linked Third Party's] usual accounting practices for calculating and declaring direct personnel costs declared as unit costs ('the Methodology').

You requested certain procedures to be carried out in connection with the grant(s)

[title and number of the grant agreement(s)] ('the Agreement(s)').

The Report

Our engagement was carried out in accordance with the terms of reference ('the ToR') appended to this Report. The Report includes: the standard statements ('the Statements') made by the [Beneficiary] [Linked Third Party], the agreed-upon procedures ('the Procedures') carried out and the standard factual findings ('the Findings') confirmed by us.

The engagement involved carrying out the Procedures and assessing the Findings and the documentation requested appended to this Report, the results of which the Commission uses to draw conclusions regarding the acceptability of the Methodology applied by the [Beneficiary] [Linked Third Party].

The Report covers the methodology used from [dd Month yyyy]. In the event that the [Beneficiary] [Linked Third Party] changes this methodology, the Report will not be applicable to any Financial Statement¹ submitted thereafter.

The scope of the Procedures and the definition of the standard statements and findings were determined solely by the Commission. Therefore, the Auditor is not responsible for their suitability or pertinence.

Since the Procedures carried out constitute neither an audit nor a review made in accordance with International Standards on Auditing or International Standards on Review Engagements, we do not give a statement of assurance on the costs declared on the basis of the [Beneficiary's] [Linked Third Party's] Methodology. Had we carried out additional procedures or had we performed an audit or review in accordance with these standards, other matters might have come to its attention and would have been included in the Report.

Exceptions

Apart from the exceptions listed below, the [Beneficiary] [Linked Third Party] agreed with the standard Statements and provided the Auditor all the documentation and accounting information needed by the Auditor to carry out the requested Procedures and corroborate the standard Findings.

List here any exception and add any information on the cause and possible consequences of each exception, if known. If the exception is quantifiable, also indicate the corresponding amount.

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Explanation of possible exceptions in the form of examples (to be removed from the Report):

i. the [Beneficiary] [Linked Third Party] did not agree with the standard Statement number ... because...;

ii. the Auditor could not carry out the procedure ... established because (e.g. due to the inability to reconcile key information or the unavailability or inconsistency of data);

iii. the Auditor could not confirm or corroborate the standard Finding number ... because

Remarks

We would like to add the following remarks relevant for the proper understanding of the Methodology applied by the [Beneficiary] [Linked Third Party] or the results reported:

Example (to be removed from the Report):

Regarding the methodology applied to calculate hourly rates ...

Regarding standard Finding 15 it has to be noted that ...

The [Beneficiary] [Linked Third Party] explained the deviation from the benchmark statement XXIV concerning time recording for personnel with no exclusive dedication to the action in the following manner:

Annexes

Please provide the following documents to the auditor and annex them to the report when submitting this CoMUC to the Commission:

Financial Statement in this context refers solely to Annex 4 of the Agreement by which the Beneficiary declares costs under the Agreement.

- 1. Brief description of the methodology for calculating personnel costs, productive hours and hourly rates;
- 2. Brief description of the time recording system in place;
- 3. An example of the time records used by the [Beneficiary] [Linked Third Party];
- 4. Description of any budgeted or estimated elements applied, together with an explanation as to why they are relevant for calculating the personnel costs and how they are based on objective and verifiable information;
- 5. A summary sheet with the hourly rate for direct personnel declared by the [*Beneficiary*] [*Linked Third Party*] and recalculated by the Auditor for each staff member included in the sample (the names do not need to be reported);
- 6. A comparative table summarising for each person selected in the sample a) the time claimed by the [*Beneficiary*] [*Linked Third Party*] in the Financial Statement(s) and b) the time according to the time record verified by the Auditor;
- 7. A copy of the letter of representation provided to the Auditor.

Use of this Report

This Report has been drawn up solely for the purpose given under Point 1.1 Reasons for the engagement.

The Report:

- is confidential and is intended to be submitted to the Commission by the [Beneficiary] [Linked Third Party] in connection with Article 18.1.2 of the Agreement;
- may not be used by the [Beneficiary] [Linked Third Party] or by the Commission for any other purpose, nor distributed to any other parties;
- may be disclosed by the Commission only to authorised parties, in particular the European Anti-Fraud Office (OLAF) and the European Court of Auditors.
- relates only to the usual cost accounting practices specified above and does not constitute a report on the Financial Statements of the [Beneficiary] [Linked Third Party].

| No conflict of interest ² exists between | en the Auditor and the Beneficiary [and the Linked Third Party] |
|---|---|
| that could have a bearing on the Repo | ort. The total fee paid to the Auditor for producing the Report was |
| EUR (including EUR | of deductible VAT). |
| | |

We look forward to discussing our Report with you and would be pleased to provide any further information or assistance which may be required.

Yours sincerely

[legal name of the Auditor]
[name and title of the authorised representative]
[dd Month yyyy]
Signature of the Auditor

² A conflict of interest arises when the Auditor's objectivity to establish the certificate is compromised in fact or in appearance when the Auditor for instance:

⁻ was involved in the preparation of the Financial Statements;

⁻ stands to benefit directly should the certificate be accepted;

⁻ has a close relationship with any person representing the beneficiary;

⁻ is a director, trustee or partner of the beneficiary; or

⁻ is in any other situation that compromises his or her independence or ability to establish the certificate impartially.

Statements to be made by the Beneficiary/Linked Third Party ('the Statements') and Procedures to be carried out by the Auditor ('the Procedures') and standard factual findings ('the Findings') to be confirmed by the Auditor

The Commission reserves the right to provide the auditor with guidance regarding the Statements to be made, the Procedures to be carried out or the Findings to be ascertained and the way in which to present them. The Commission reserves the right to vary the Statements, Procedures or Findings by written notification to the Beneficiary/Linked Third Party to adapt the procedures to changes in the grant agreement(s) or to any other circumstances.

If this methodology certificate relates to the Linked Third Party's usual accounting practices for calculating and claiming direct personnel costs declared as unit costs any reference here below to 'the Beneficiary' is to be considered as a reference to 'the Linked Third Party'.

| Please ex | Please explain any discrepancies in the body of the Report. | | |
|--------------------------------------|---|--|--|
| Statements to be made by Beneficiary | | Procedures to be carried out and Findings to be confirmed by the Auditor | |
| A. Use of | f the Methodology | Procedure: | |
| | The cost accounting practice described below has been in use since [dd Month yyyy]. | ✓ The Auditor checked these dates against the documentation the Beneficiary has provided. | |
| | The next planned alteration to the methodology used by the Beneficiary | Factual finding: | |
| V | will be from [dd Month yyyy]. | 1. The dates provided by the Beneficiary were consistent with the documentation. | |
| B. Descr | ription of the Methodology | Procedure: | |
| | The methodology to calculate unit costs is being used in a consistent manner and is reflected in the relevant procedures. | ✓ The Auditor reviewed the description, the relevant manuals and/or internal guidance documents describing the methodology. | |
| _ | describe the methodology your entity uses to calculate <u>personnel</u> costs, | Factual finding: | |
| 1 - | ve hours and hourly rates, present your description to the Auditor and to this certificate] | 2. The brief description was consistent with the relevant manuals, internal guidance and/or other documentary evidence the Auditor has reviewed. | |
| endorsed | tatement of section "B. Description of the methodology" cannot be by the Beneficiary or there is no written methodology to calculate unit should be listed here below and reported as exception by the Auditor in the | 3. The methodology was generally applied by the Beneficiary as part of its usual costs accounting practices. | |
| main Repo - | oort of Factual Findings:] | | |

Please explain any discrepancies in the body of the Report.

Statements to be made by Beneficiary

C. Personnel costs

General

- IV. The unit costs (hourly rates) are limited to salaries including during parental leave, social security contributions, taxes and other costs included in the remuneration required under national law and the employment contract or equivalent appointing act;
- V. Employees are hired directly by the Beneficiary in accordance with national law, and work under its sole supervision and responsibility;
- VI. The Beneficiary remunerates its employees in accordance with its usual practices. This means that personnel costs are charged in line with the Beneficiary's usual payroll policy (e.g. salary policy, overtime policy, variable pay) and no special conditions exist for employees assigned to tasks relating to the European Union or Euratom, unless explicitly provided for in the grant agreement(s);
- VII. The Beneficiary allocates its employees to the relevant group/category/cost centre for the purpose of the unit cost calculation in line with the usual cost accounting practice;
- VIII. Personnel costs are based on the payroll system and accounting system.
- IX. Any exceptional adjustments of actual personnel costs resulted from relevant budgeted or estimated elements and were based on objective and verifiable information. [Please describe the 'budgeted or estimated elements' and their relevance to personnel costs, and explain how they were reasonable and based on objective and verifiable information, present your explanation to the Auditor and annex it to this certificate].
- X. Personnel costs claimed do not contain any of the following ineligible costs: costs related to return on capital; debt and debt service charges; provisions for future losses or debts; interest owed; doubtful debts; currency exchange losses; bank costs charged by the Beneficiary's bank for transfers from the Commission/Agency; excessive or reckless expenditure; deductible VAT or costs incurred during suspension of the implementation of the action.
- XI. Personnel costs were not declared under another EU or Euratom grant

Procedures to be carried out and Findings to be confirmed by the Auditor

Procedure:

The Auditor draws a sample of employees to carry out the procedures indicated in this section C and the following sections D to F.

[The Auditor has drawn a random sample of 10 employees assigned to Horizon 2020 action(s). If fewer than 10 employees are assigned to the Horizon 2020 action(s), the Auditor has selected all employees assigned to the Horizon 2020 action(s) complemented by other employees irrespective of their assignments until he has reached 10 employees.]. For this sample:

- ✓ the Auditor reviewed all documents relating to personnel costs such as employment contracts, payslips, payroll policy (e.g. salary policy, overtime policy, variable pay policy), accounting and payroll records, applicable national tax, labour and social security law and any other documents corroborating the personnel costs claimed;
- ✓ in particular, the Auditor reviewed the employment contracts of the employees in the sample to verify that:
 - i. they were employed directly by the Beneficiary in accordance with applicable national legislation;
 - ii. they were working under the sole technical supervision and responsibility of the latter;
 - iii. they were remunerated in accordance with the Beneficiary's usual practices:
 - iv. they were allocated to the correct group/category/cost centre for the purposes of calculating the unit cost in line with the Beneficiary's usual cost accounting practices;
- the Auditor verified that any ineligible items or any costs claimed under other costs categories or costs covered by other types of grant or by other grants financed from the European Union budget have not been taken into account when calculating the personnel costs;
- the Auditor numerically reconciled the total amount of personnel costs used to calculate the unit cost with the total amount of personnel costs recorded in the statutory accounts and the payroll system.

Please explain any discrepancies in the body of the Report.

Statements to be made by Beneficiary

(including grants awarded by a Member State and financed by the EU budget and grants awarded by bodies other than the Commission/Agency for the purpose of implementing the EU or Euratom budget in the same period, unless the Beneficiary can demonstrate that the operating grant does not cover any costs of the action).

If additional remuneration as referred to in the grant agreement(s) is paid

- XII. The Beneficiary is a non-profit legal entity;
- XIII. The additional remuneration is part of the beneficiary's usual remuneration practices and paid consistently whenever the relevant work or expertise is required;
- XIV. The criteria used to calculate the additional remuneration are objective and generally applied regardless of the source of funding;
- XV. The additional remuneration included in the personnel costs used to calculate the hourly rates for the grant agreement(s) is capped at EUR 8 000 per full-time equivalent (reduced proportionately if the employee is not assigned exclusively to the action).

[If certain statement(s) of section "C. Personnel costs" cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor in the main Report of Factual Findings:

...]

Procedures to be carried out and Findings to be confirmed by the Auditor

- ✓ to the extent that actual personnel costs were adjusted on the basis of budgeted or estimated elements, the Auditor carefully examined those elements and checked the information source to confirm that they correspond to objective and verifiable information;
- ✓ if additional remuneration has been claimed, the Auditor verified that the Beneficiary was a non-profit legal entity, that the amount was capped at EUR 8000 per full-time equivalent and that it was reduced proportionately for employees not assigned exclusively to the action(s).
- ✓ the Auditor recalculated the personnel costs for the employees in the sample.

Factual finding:

- 4. All the components of the remuneration that have been claimed as personnel costs are supported by underlying documentation.
- 5. The employees in the sample were employed directly by the Beneficiary in accordance with applicable national law and were working under its sole supervision and responsibility.
- 6. Their employment contracts were in line with the Beneficiary's usual policy;
- 7. Personnel costs were duly documented and consisted solely of salaries, social security contributions (pension contributions, health insurance, unemployment fund contributions, etc.), taxes and other statutory costs included in the remuneration (holiday pay, thirteenth month's pay, etc.);
- 8. The totals used to calculate the personnel unit costs are consistent with those registered in the payroll and accounting records;
- 9. To the extent that actual personnel costs were adjusted on the basis of budgeted or estimated elements, those elements were relevant for calculating the personnel costs and correspond to objective and verifiable information. The budgeted or estimated elements used are: (indicate the elements and their values).
- 10. Personnel costs contained no ineligible elements;
- 11. Specific conditions for eligibility were fulfilled when additional

| Please explain any discrepancies in the body of the Report. | | |
|---|---|--|
| Statements to be made by Beneficiary | Procedures to be carried out and Findings to be confirmed by the Auditor | |
| | remuneration was paid: a) the Beneficiary is registered in the grant agreements as a non-profit legal entity; b) it was paid according to objective criteria generally applied regardless of the source of funding used and c) remuneration was capped at EUR 8000 per full-time equivalent (or up to up to the equivalent pro-rata amount if the person did not work on the action full-time during the year or did not work exclusively on the action). | |
| D. Productive hours | Procedure (same sample basis as for Section C: Personnel costs): | |
| XVI. The number of productive hours per full-time employee applied is [deleas as appropriate]: | The Auditor verified that the number of productive hours applied is in accordance with method A, B or C. | |
| A. 1720 productive hours per year for a person working full-tir (corresponding pro-rata for persons not working full time). | The Auditor checked that the number of productive hours per full-time employee is correct. | |
| B. the total number of hours worked in the year by a person for t BeneficiaryC. the standard number of annual hours generally applied by t beneficiary for its personnel in accordance with its usual companies. | number of hours worked was done and ii) that the contract specified the annual workable hours by inspecting all the relevant documents, national | |
| accounting practices. This number must be at least 90% of t standard annual workable hours. If method B is applied | He ✓ If method C is applied the Auditor reviewed the manner in which the standard number of working hours per year has been calculated by inspecting all the relevant documents, national legislation, labour agreements and contracts and verified that the number of productive hours | |
| XVII. The calculation of the total number of hours worked was done follows: annual workable hours of the person according to t employment contract, applicable labour agreement or national law pl overtime worked minus absences (such as sick leave and special leave | of working hours per year. Factual finding: | |
| XVIII. 'Annual workable hours' are hours during which the personnel must working, at the employer's disposal and carrying out his/her activity duties under the employment contract, applicable collective labor agreement or national working time legislation. | 12. The Beneficiary applied a number of productive hours consistent with method A, B or C detailed in the left-hand column. 13. The number of productive hours per year per full-time employee was | |
| XIX. The contract (applicable collective labour agreement or nation working time legislation) do specify the working time enabling calculate the annual workable hours. | | |

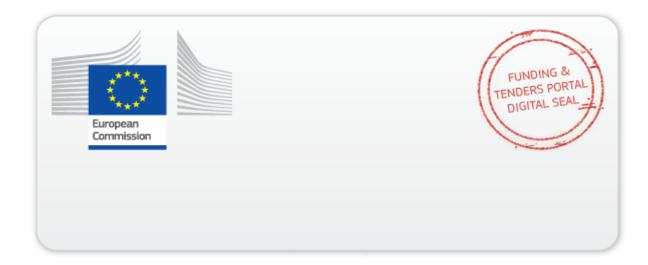
| Please explain any discrepancies in the body of the Report. | | |
|--|--|--|
| Statements to be made by Beneficiary | Procedures to be carried out and Findings to be confirmed by the Auditor | |
| If method C is applied | verifiable based on the documents provided by the Beneficiary and the calculation of the total number of hours worked was accurate. | |
| XX. The standard number of productive hours per year is that of a full-time equivalent. | 15. The contract specified the working time enabling to calculate the annual workable hours. | |
| XXI. The number of productive hours per year on which the hourly rate is based i) corresponds to the Beneficiary's usual accounting practices; ii) is at least | If method C is applied | |
| 90% of the standard number of workable (working) hours per year. XXII. Standard workable (working) hours are hours during which personnel are at | 16. The calculation of the number of productive hours per year corresponded to the usual costs accounting practice of the Beneficiary. | |
| the Beneficiary's disposal preforming the duties described in the relevant employment contract, collective labour agreement or national labour | 17. The calculation of the standard number of workable (working) hours per year was corroborated by the documents presented by the Beneficiary. | |
| legislation. The number of standard annual workable (working) hours that the Beneficiary claims is supported by labour contracts, national legislation and other documentary evidence. | 18. The number of productive hours per year used for the calculation of the hourly rate was at least 90% of the number of workable (working) hours per year. | |
| [If certain statement(s) of section "D. Productive hours" cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor:] | year. | |
| E. Hourly rates | Procedure | |
| The hourly rates are correct because: | ✓ The Auditor has obtained a list of all personnel rates calculated by the Beneficiary in accordance with the methodology used. | |
| XXIII. Hourly rates are correctly calculated since they result from dividing annual personnel costs by the productive hours of a given year and group (e.g. staff category or department or cost centre depending on the methodology | ✓ The Auditor has obtained a list of all the relevant employees, based on which the personnel rate(s) are calculated. | |
| applied) and they are in line with the statements made in section C. and D. above. | For 10 employees selected at random (same sample basis as Section C: Personnel costs): | |
| | ✓ The Auditor recalculated the hourly rates. | |
| [If the statement of section 'E. Hourly rates' cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor: | ✓ The Auditor verified that the methodology applied corresponds to the usual accounting practices of the organisation and is applied consistently for all activities of the organisation on the basis of objective criteria irrespective of the source of funding. | |
| J | Factual finding: | |

| Please explain any discrepancies in the body of the Report. | | | |
|--|---|--|--|
| Statements to be made by Beneficiary | Procedures to be carried out and Findings to be confirmed by the Auditor | | |
| | 19. No differences arose from the recalculation of the hourly rate for the employees included in the sample. | | |
| F. Time recording | Procedure | | |
| XXIV. Time recording is in place for all persons with no exclusive dedication to one Horizon 2020 action. At least all hours worked in connection with the grant agreement(s) are registered on a daily/weekly/monthly basis [delete | ✓ The Auditor reviewed the brief description, all relevant manuals and/or internal guidance describing the methodology used to record time. | | |
| as appropriate] using a paper/computer-based system [delete as appropriate]; | The Auditor reviewed the time records of the random sample of 10 employees referred to under Section C: Personnel costs, and verified in particular: | | |
| XXV. For persons exclusively assigned to one Horizon 2020 activity the Beneficiary has either signed a declaration to that effect or has put arrangements in place to record their working time; | ✓ that time records were available for all persons with not exclusive assignment to the action; | | |
| XXVI.Records of time worked have been signed by the person concerned (on paper or electronically) and approved by the action manager or line manager at least monthly; | that time records were available for persons working exclusively for a Horizon 2020 action, or, alternatively, that a declaration signed by the Beneficiary was available for them certifying that they were working | | |
| XXVII. Measures are in place to prevent staff from: | exclusively for a Horizon 2020 action; | | |
| i. recording the same hours twice, | ✓ that time records were signed and approved in due time and that all minimum requirements were fulfilled; | | |
| ii. recording working hours during absence periods (e.g. holidays, sick leave), | ✓ that the persons worked for the action in the periods claimed; | | |
| iii. recording more than the number of productive hours per year used to calculate the hourly rates, and | ✓ that no more hours were claimed than the productive hours used to calculate the hourly personnel rates; | | |
| iv. recording hours worked outside the action period. | ✓ that internal controls were in place to prevent that time is recorded twice, during absences for holidays or sick leave; that more hours are claimed per | | |
| XXVIII. No working time was recorded outside the action period; | person per year for Horizon 2020 actions than the number of productive | | |
| XXIX. No more hours were claimed than the productive hours used to calculate the hourly personnel rates. | hours per year used to calculate the hourly rates; that working time is recorded outside the action period; | | |
| [Please provide a brief description of the time recording system in place together with the measures applied to ensure its reliability to the Auditor and annex it to the | ✓ the Auditor cross-checked the information with human-resources records to verify consistency and to ensure that the internal controls have been effective. In addition, the Auditor has verified that no more hours were charged to Horizon 2020 actions per person per year than the number of productive hours per year used to calculate the hourly rates, and verified that | | |

| Please explain any discrepancies in the body of the Report. | | |
|--|---|--|
| Statements to be made by Beneficiary | Procedures to be carried out and Findings to be confirmed by the Auditor | |
| present certificate ¹]. | no time worked outside the action period was charged to the action. | |
| | Factual finding: | |
| [If certain statement(s) of section "F. Time recording" cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor:] | 20. The brief description, manuals and/or internal guidance on time recording provided by the Beneficiary were consistent with management reports/records and other documents reviewed and were generally applied by the Beneficiary to produce the financial statements. | |
| | For the random sample time was recorded or, in the case of employees working exclusively for the action, either a signed declaration or time records were available; | |
| | 22. For the random sample the time records were signed by the employee and the action manager/line manager, at least monthly. | |
| | 23. Working time claimed for the action occurred in the periods claimed; | |
| | 24. No more hours were claimed than the number productive hours used to calculate the hourly personnel rates; | |
| | 25. There is proof that the Beneficiary has checked that working time has not been claimed twice, that it is consistent with absence records and the number of productive hours per year, and that no working time has been claimed outside the action period. | |
| | 26. Working time claimed is consistent with that on record at the human-resources department. | |

The description of the time recording system must state among others information on the content of the time records, its coverage (full or action time-recording, for all personnel or only for personnel involved in H2020 actions), its degree of detail (whether there is a reference to the particular tasks accomplished), its form, periodicity of the time registration and authorisation (paper or a computer-based system; on a daily, weekly or monthly basis; signed and countersigned by whom), controls applied to prevent double-charging of time or ensure consistency with HR-records such as absences and travels as well as it information flow up to its use for the preparation of the Financial Statements.

| Please explain any discrepancies in the body of the Report. | |
|---|--|
| Statements to be made by Beneficiary | Procedures to be carried out and Findings to be confirmed by the Auditor |
| [official name of the [Beneficiary] [Linked Third Party]] | [official name of the Auditor] |
| [name and title of authorised representative] | [name and title of authorised representative] |
| [dd Month yyyy] | [dd Month yyyy] |
| Signature of the [Beneficiary] [Linked Third Party]> | <signature auditor="" of="" the=""></signature> |



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