



EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA)

EACEA.A – Erasmus+, EU Solidarity Corps
A.4 – **International Capacity Building**

GRANT AGREEMENT

Project 101179471 — NANOMER

PREAMBLE

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

on the one part,

the **European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and

on the other part,

1. 'the coordinator':

ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON), PIC 985804405, established in PARVIS RENE DESCARTES 15, LYON 69342, France,

and the following other beneficiaries, if they sign their 'accession form' (see Annex 3 and Article 40):

2. **SORBONNE UNIVERSITE (SORBONNE UNIV)**, PIC 909875521, established in 21 RUE DE L'ECOLE DE MEDECINE, PARIS 75006, France,

3. **UNIVERSITE GRENOBLE ALPES (UGA)**, PIC 897379108, established in 621 AVENUE CENTRALE, GRENOBLE 38058, France,

4. **UNIVERSIDAD COMPLUTENSE DE MADRID (UCM)**, PIC 999874546, established in AVENIDA DE SENECA 2, MADRID 28040, Spain,

5. **UNIVERSITAT POLITECNICA DE VALENCIA (UPV)**, PIC 999864846, established in CAMINO DE VERA SN EDIFICIO 3A, VALENCIA 46022, Spain,

6. **UNIVERSITAT JAUME I DE CASTELLON (UJI)**, PIC 999882985, established in AVENIDA VICENT SOS BAYNAT S/N, CASTELLON DE LA PLANA 12006, Spain,

7. **UNIVERSIDAD MAYOR DE SAN ANDRES (UMSA)**, PIC 999848162, established in AV VILLAZON 1995 MONOBLOCK CENTRAL, LA PAZ N/A, Bolivia,

8. **UNIVERSIDAD NACIONAL DE CUYO (UNCU)**, PIC 973810355, established in PARQUE GENERAL SAN MARTIN S/N, MENDOZA 5500, Argentina,

9. **UNIVERSIDAD DE TALCA (UTALCA)**, PIC 999442314, established in 2 NORTE 685, CASILLA 721, TALCA 3465548, Chile,

10. **UNIVERSIDAD TECNICA PARTICULAR DE LOJA (UTPL)**, PIC 999573361, established in SAN CAYETANO ALTO SN, LOJA 1101608, Ecuador,

11. **UNIVERSIDAD DE BUENOS AIRES (BUENOSAIRES UNIVERSITY)**, PIC 999881336, established in CALLE VIAMONTE 430, BUENOS AIRES 1053, Argentina,

12. **UNIVERSIDAD NACIONAL DE GENERAL SAN MARTIN (UNSAM)**, PIC 966956335, established in MARTIN DE IRIGOYEN 3100, SAN MARTIN BUENOS AIRES 1650, Argentina,

13. **UNIVERSIDAD SAN SEBASTIAN (USS)**, PIC 919073740, established in BELLAVISTA 7, SANTIAGO, Chile,

14. **UNIVERSIDAD DE CHILE (UCH)**, PIC 999447067, established in Av. Libertador Bernardo O'Higgins 1058, SANTIAGO 10, Chile,

15. **ESCUELA POLITECNICA NACIONAL (EPN ECUADOR)**, PIC 996377890, established in LADRON DE GUEVARA, QUITO 17012759, Ecuador,

16. **ESCUELA MILITAR DE INGENIERIA 'MCAL. ANTONIO JOSE DE SUCRE' (EMI)**, PIC 876143189, established in AVENIDA ARCE NRO 2642, ZONA SAN JORGE, LA PAZ 0000, Bolivia,

Unless otherwise specified, references to 'beneficiary' or 'beneficiaries' include the coordinator and affiliated entities (if any).

If only one beneficiary signs the grant agreement ('mono-beneficiary grant'), all provisions referring to the 'coordinator' or the 'beneficiaries' will be considered — mutatis mutandis — as referring to the beneficiary.

The parties referred to above have agreed to enter into the Agreement.

By signing the Agreement and the accession forms, the beneficiaries accept the grant and agree to implement the action under their own responsibility and in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

The Agreement is composed of:

Preamble

Terms and Conditions (including Data Sheet)

- Annex 1 Description of the action¹
- Annex 2 Estimated budget for the action
- Annex 3 Accession forms (if applicable)²
- Annex 3a Declaration on joint and several liability of affiliated entities (if applicable)³
- Annex 4 Model for the financial statements
- Annex 5 Specific rules (if applicable)

¹ Template published on [Portal Reference Documents](#).

² Template published on [Portal Reference Documents](#).

³ Template published on [Portal Reference Documents](#).

TERMS AND CONDITIONS

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DATA SHEET

1. General data

Project summary:

Project summary
<p>The main objective of the NANOMER project is to share knowledge between Latin America, Spain and France in the domains of science and educational innovation. The field chosen is the world of nanoscience, a field in which students and teachers still have much to discover. Our objective is to empower students to solve societal problems. Three levels of exchanges will be conducted: 1) between students and teachers, 2) between the pedagogical teams of the different universities, and 3) between the international relations resources in each institution. Special attention will be paid to supporting both students and teachers in their acquisition of transversal skills. Indeed, access to information is nowadays easy for students, making it necessary to use new teaching techniques to train students to think critically about the information available, to argue, to work in groups and to solve problems. The idea is to enable them to become good researchers and future teachers as well as to develop their awareness of their skills. These exchanges will take place through distance workshops, face-to-face workshops (summer schools) and also through a digital platform. The latter will allow all the actors to preserve the tools and documents generated and to disseminate them broadly and inclusively to students, especially to those who have fewer resources and who are in more remote locations. This project will create a community of teachers, sociologists and learning specialists to guide both students and teachers in training future scientists. Indeed, the latter will have a key role to play in dealing with many current problems such as water and air decontamination, energy and waste recycling. Finally, one of the strengths of the project is that it will promote cooperative networking between Latin America and Europe.</p>

Keywords:

- Innovation in learning, teaching and assessment practices supported by digital technologies
- Nanosciences

Project number: 101179471

Project name: Nanosciences with Latin America: sharing knowledge through pedagogical innovation

Project acronym: NANOMER

Call: ERASMUS-EDU-2024-CBHE

Topic: ERASMUS-EDU-2024-CBHE-STRAND-1

Type of action: ERASMUS Lump Sum Grants

Granting authority: European Education and Culture Executive Agency

Grant managed through EU Funding & Tenders Portal: Yes (eGrants)

Project starting date: fixed date: 1 January 2025

Project end date: 31 December 2027

Project duration: 36 months

Consortium agreement: Yes

2. Participants

List of participants:

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
1	COO	ENS DE LYON	ECOLE NORMALE SUPERIEURE DE LYON	FR	985804405	65 676.60
2	BEN	SORBONNE UNIV	SORBONNE UNIVERSITE	FR	909875521	60 052.70
3	BEN	UGA	UNIVERSITE GRENOBLE ALPES	FR	897379108	43 137.60
4	BEN	UCM	UNIVERSIDAD COMPLUTENSE DE MADRID	ES	999874546	39 820.10
5	BEN	UPV	UNIVERSITAT POLITECNICA DE VALENCIA	ES	999864846	38 346.70

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
6	BEN	UJI	UNIVERSITAT JAUME I DE CASTELLON	ES	999882985	30 175.70
7	BEN	UMSA	UNIVERSIDAD MAYOR DE SAN ANDRES	BO	999848162	0.00
8	BEN	UNCU	UNIVERSIDAD NACIONAL DE CUYO	AR	973810355	22 360.90
9	BEN	UTALCA	UNIVERSIDAD DE TALCA	CL	999442314	26 116.60
10	BEN	UTPL	UNIVERSIDAD TECNICA PARTICULAR DE LOJA	EC	999573361	28 639.70
11	BEN	BUENOSAIRES UNIVERSITY	UNIVERSIDAD DE BUENOS AIRES	AR	999881336	0.00
12	BEN	UNSAM	UNIVERSIDAD NACIONAL DE GENERAL SAN MARTIN	AR	966956335	0.00
13	BEN	USS	UNIVERSIDAD SAN SEBASTIAN	CL	919073740	0.00
14	BEN	UCH	UNIVERSIDAD DE CHILE	CL	999447067	5 585.40
15	BEN	EPN ECUADOR	ESCUELA POLITECNICA NACIONAL	EC	996377890	0.00
16	BEN	EMI	ESCUELA MILITAR DE INGENIERIA 'MCAL. ANTONIO JOSE DE SUCRE'	BO	876143189	0.00
Total						359 912.00

Coordinator:

- ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON)

3. Grant**Maximum grant amount, total estimated eligible costs and contributions and funding rate:**

Maximum grant amount (Annex 2)	Maximum grant amount (award decision)
359 912.00	359 912.00

Grant form: Lump Sum**Grant mode:** Action grant**Budget categories/activity types:** Lump sum contributions**Cost eligibility options:** n/a**Budget flexibility:** No**4. Reporting, payments and recoveries****4.1 Continuous reporting** (art 21)**Deliverables:** see Funding & Tenders Portal Continuous Reporting tool**4.2 Periodic reporting and payments**

Reporting and payment schedule (art 21, 22):

Reporting					Payments	
Reporting periods			Type	Deadline	Type	Deadline (time to pay)
RP No	Month from	Month to				
					Initial prefinancing	30 days from entry into force/ financial guarantee (if required) – whichever is the latest
1	1	36	Periodic report	60 days after end of reporting period	Final payment	90 days from receiving periodic report

Prefinancing payments and guarantees:

Prefinancing payment		Prefinancing guarantee		
Type	Amount	Guarantee amount	Division per participant	
Prefinancing 1 (initial)	251 938.40	n/a	1 - ENS DE LYON	n/a
			2 - SORBONNE UNIV	n/a
			3 - UGA	n/a
			4 - UCM	n/a
			5 - UPV	n/a
			6 - UJI	n/a
			7 - UMSA	n/a
			8 - UNCU	n/a
			9 - UTALCA	n/a
			10 - UTPL	n/a
			11 - BUENOSAIRES UNIVERSITY	n/a
			12 - UNSAM	n/a
			13 - USS	n/a
			14 - UCH	n/a
			15 - EPN ECUADOR	n/a
			16 - EMI	n/a

Reporting and payment modalities (art 21, 22):

Mutual Insurance Mechanism (MIM): No

Restrictions on distribution of initial prefinancing: The prefinancing may be distributed only if the minimum number of beneficiaries set out in the call conditions (if any) have acceded to the Agreement and only to beneficiaries that have acceded.

Interim payment ceiling (if any): 100% of the maximum grant amount

No-profit rule: n/a

Late payment interest: ECB + 3.5%

Bank account for payments:

FR7610071690000000100447913

Conversion into euros: n/a

Reporting language: Language of the Agreement

4.3 Certificates (art 24): n/a

4.4 Recoveries (art 22)

First-line liability for recoveries:

Beneficiary termination: Beneficiary concerned

Final payment: Coordinator

After final payment: Beneficiary concerned

Joint and several liability for enforced recoveries (in case of non-payment):

Limited joint and several liability of other beneficiaries — up to the maximum grant amount of the beneficiary

Joint and several liability of affiliated entities — n/a

5. Consequences of non-compliance, applicable law & dispute settlement forum

Applicable law (art 43):

Standard applicable law regime: EU law + law of Belgium

Dispute settlement forum (art 43):

Standard dispute settlement forum:

EU beneficiaries: EU General Court + EU Court of Justice (on appeal)

Non-EU beneficiaries: Courts of Brussels, Belgium (unless an international agreement provides for the enforceability of EU court judgements)

6. Other

Specific rules (Annex 5): Yes

Standard time-limits after project end:

Confidentiality (for X years after final payment): 5

Record-keeping (for X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Reviews (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Audits (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Extension of findings from other grants to this grant (no later than X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Impact evaluation (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

CHAPTER 1 GENERAL

ARTICLE 1 — SUBJECT OF THE AGREEMENT

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

ARTICLE 2 — DEFINITIONS

For the purpose of this Agreement, the following definitions apply:

Actions — The project which is being funded in the context of this Agreement.

Grant — The grant awarded in the context of this Agreement.

EU grants — Grants awarded by EU institutions, bodies, offices or agencies (including EU executive agencies, EU regulatory agencies, EDA, joint undertakings, etc.).

Participants — Entities participating in the action as beneficiaries, affiliated entities, associated partners, third parties giving in-kind contributions, subcontractors or recipients of financial support to third parties.

Beneficiaries (BEN) — The signatories of this Agreement (either directly or through an accession form).

Affiliated entities (AE) — Entities affiliated to a beneficiary within the meaning of Article 187 of EU Financial Regulation 2018/1046⁴ which participate in the action with similar rights and obligations as the beneficiaries (obligation to implement action tasks and right to charge costs and claim contributions).

Associated partners (AP) — Entities which participate in the action, but without the right to charge costs or claim contributions.

Purchases — Contracts for goods, works or services needed to carry out the action (e.g. equipment, consumables and supplies) but which are not part of the action tasks (see Annex 1).

Subcontracting — Contracts for goods, works or services that are part of the action tasks (see Annex 1).

In-kind contributions — In-kind contributions within the meaning of Article 2(36) of EU Financial

⁴ For the definition, see Article 187 Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 ('EU Financial Regulation') (OJ L 193, 30.7.2018, p. 1): "**affiliated entities** [are]:

- (a) entities that form a sole beneficiary [(i.e. where an entity is formed of several entities that satisfy the criteria for being awarded a grant, including where the entity is specifically established for the purpose of implementing an action to be financed by a grant)];
- (b) entities that satisfy the eligibility criteria and that do not fall within one of the situations referred to in Article 136(1) and 141(1) and that have a link with the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation".

Regulation 2018/1046, i.e. non-financial resources made available free of charge by third parties.

Fraud — Fraud within the meaning of Article 3 of EU Directive 2017/1371⁵ and Article 1 of the Convention on the protection of the European Communities' financial interests, drawn up by the Council Act of 26 July 1995⁶, as well as any other wrongful or criminal deception intended to result in financial or personal gain.

Irregularities — Any type of breach (regulatory or contractual) which could impact the EU financial interests, including irregularities within the meaning of Article 1(2) of EU Regulation 2988/95⁷.

Grave professional misconduct — Any type of unacceptable or improper behaviour in exercising one's profession, especially by employees, including grave professional misconduct within the meaning of Article 136(1)(c) of EU Financial Regulation 2018/1046.

Applicable EU, international and national law — Any legal acts or other (binding or non-binding) rules and guidance in the area concerned.

Portal — EU Funding & Tenders Portal; electronic portal and exchange system managed by the European Commission and used by itself and other EU institutions, bodies, offices or agencies for the management of their funding programmes (grants, procurements, prizes, etc.).

CHAPTER 2 ACTION

ARTICLE 3 — ACTION

The grant is awarded for the action **101179471 — NANOMER** ('action'), as described in Annex 1.

ARTICLE 4 — DURATION AND STARTING DATE

The duration and the starting date of the action are set out in the Data Sheet (see Point 1).

CHAPTER 3 GRANT

ARTICLE 5 — GRANT

5.1 Form of grant

⁵ Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law (OJ L 198, 28.7.2017, p. 29).

⁶ OJ C 316, 27.11.1995, p. 48.

⁷ Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).

The grant is an action grant⁸ which takes the form of a lump sum grant for the completion of work packages.

5.2 Maximum grant amount

The maximum grant amount is set out in the Data Sheet (see Point 3) and in the estimated budget (Annex 2).

5.3 Funding rate

Not applicable

5.4 Estimated budget, budget categories and forms of funding

The estimated budget for the action (lump sum breakdown) is set out in Annex 2.

It contains the estimated eligible contributions for the action (lump sum contributions), broken down by participant and work package.

Annex 2 also shows the types of contributions (forms of funding)⁹ to be used for each work package.

5.5 Budget flexibility

Budget flexibility does not apply; changes to the estimated budget (lump sum breakdown) always require an amendment (see Article 39).

Amendments for transfers between *work packages* are moreover possible only if:

- the work packages concerned are not already completed (and declared in a financial statement) and
- the transfers are justified by the technical implementation of the action.

ARTICLE 6 — ELIGIBLE AND INELIGIBLE CONTRIBUTIONS

6.1 and 6.2 General and specific eligibility conditions

Lump sum contributions are eligible ('eligible contributions'), if:

- (a) they are set out in Annex 2 and
- (b) the work packages are completed and the work is properly implemented by the beneficiaries and/or the results are achieved, in accordance with Annex 1 and during in the period set out in Article 4 (with the exception of work/results relating to the submission of the final periodic report, which may be achieved afterwards; see Article 21)

They will be calculated on the basis of the amounts set out in Annex 2.

⁸ For the definition, see Article 180(2)(a) EU Financial Regulation 2018/1046: '**action grant**' means an EU grant to finance "an action intended to help achieve a Union policy objective".

⁹ See Article 125 EU Financial Regulation 2018/1046.

6.3 Ineligible contributions

‘Ineligible contributions’ are:

- (a) lump sum contributions that do not comply with the conditions set out above (see Article 6.1 and 6.2)
- (b) lump sum contributions for activities already funded under other EU grants (or grants awarded by an EU Member State, non-EU country or other body implementing the EU budget), except for the following case:
 - (i) Synergy actions: not applicable
- (c) other:
 - (i) country restrictions for eligible costs: not applicable.

6.4 Consequences of non-compliance

If a beneficiary declares lump sum contributions that are ineligible, they will be rejected (see Article 27).

This may also lead to other measures described in Chapter 5.

CHAPTER 4 GRANT IMPLEMENTATION

SECTION 1 CONSORTIUM: BENEFICIARIES, AFFILIATED ENTITIES AND OTHER PARTICIPANTS

ARTICLE 7 — BENEFICIARIES

The beneficiaries, as signatories of the Agreement, are fully responsible towards the granting authority for implementing it and for complying with all its obligations.

They must implement the Agreement to their best abilities, in good faith and in accordance with all the obligations and terms and conditions it sets out.

They must have the appropriate resources to implement the action and implement the action under their own responsibility and in accordance with Article 11. If they rely on affiliated entities or other participants (see Articles 8 and 9), they retain sole responsibility towards the granting authority and the other beneficiaries.

They are jointly responsible for the *technical* implementation of the action. If one of the beneficiaries fails to implement their part of the action, the other beneficiaries must ensure that this part is implemented by someone else (without being entitled to an increase of the maximum grant amount and subject to an amendment; see Article 39). The *financial* responsibility of each beneficiary in case of recoveries is governed by Article 22.

The beneficiaries (and their action) must remain eligible under the EU programme funding the grant

for the entire duration of the action. Lump sum contributions will be eligible only as long as the beneficiary and the action are eligible.

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

(a) Each beneficiary must:

- (i) keep information stored in the Portal Participant Register up to date (see Article 19)
- (ii) inform the granting authority (and the other beneficiaries) immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 19)
- (iii) submit to the coordinator in good time:
 - the prefinancing guarantees (if required; see Article 23)
 - the financial statements and certificates on the financial statements (CFS): not applicable
 - the contribution to the deliverables and technical reports (see Article 21)
 - any other documents or information required by the granting authority under the Agreement
- (iv) submit via the Portal data and information related to the participation of their affiliated entities.

(b) The coordinator must:

- (i) monitor that the action is implemented properly (see Article 11)
- (ii) act as the intermediary for all communications between the consortium and the granting authority, unless the Agreement or granting authority specifies otherwise, and in particular:
 - submit the prefinancing guarantees to the granting authority (if any)
 - request and review any documents or information required and verify their quality and completeness before passing them on to the granting authority
 - submit the deliverables and reports to the granting authority
 - inform the granting authority about the payments made to the other beneficiaries (report on the distribution of payments; if required, see Articles 22 and 32)
- (iii) distribute the payments received from the granting authority to the other beneficiaries without unjustified delay (see Article 22).

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

However, coordinators which are public bodies may delegate the tasks set out in Point (b)(ii) last

indent and (iii) above to entities with ‘authorisation to administer’ which they have created or which are controlled by or affiliated to them. In this case, the coordinator retains sole responsibility for the payments and for compliance with the obligations under the Agreement.

Moreover, coordinators which are ‘sole beneficiaries’¹⁰ (or similar, such as European research infrastructure consortia (ERICs)) may delegate the tasks set out in Point (b)(i) to (iii) above to one of their members. The coordinator retains sole responsibility for compliance with the obligations under the Agreement.

The beneficiaries must have **internal arrangements** regarding their operation and co-ordination, to ensure that the action is implemented properly.

If required by the granting authority (see Data Sheet, Point 1), these arrangements must be set out in a written **consortium agreement** between the beneficiaries, covering for instance:

- the internal organisation of the consortium
- the management of access to the Portal
- different distribution keys for the payments and financial responsibilities in case of recoveries (if any)
- additional rules on rights and obligations related to background and results (see Article 16)
- settlement of internal disputes
- liability, indemnification and confidentiality arrangements between the beneficiaries.

The internal arrangements must not contain any provision contrary to this Agreement.

ARTICLE 8 — AFFILIATED ENTITIES

Not applicable

ARTICLE 9 — OTHER PARTICIPANTS INVOLVED IN THE ACTION

9.1 Associated partners

Not applicable

9.2 Third parties giving in-kind contributions to the action

Other third parties may give in-kind contributions to the action (i.e. personnel, equipment, other goods, works and services, etc. which are free-of-charge), if necessary for the implementation.

Third parties giving in-kind contributions do not implement any action tasks. They may not charge contributions to the action (no lump sum contributions) and the costs for the in-kind contributions are not eligible (may not be included in the estimated budget in Annex 2).

¹⁰ For the definition, see Article 187(2) EU Financial Regulation 2018/1046: “Where several entities satisfy the criteria for being awarded a grant and together form one entity, that entity may be treated as the **sole beneficiary**, including where it is specifically established for the purpose of implementing the action financed by the grant.”

The third parties and their in-kind contributions should be set out in Annex 1.

9.3 Subcontractors

Subcontractors may participate in the action, if necessary for the implementation.

Subcontractors must implement their action tasks in accordance with Article 11. The beneficiaries' costs for subcontracting are considered entirely covered by the lump sum contributions for implementing the work packages (irrespective of the actual subcontracting costs incurred, if any).

The beneficiaries must ensure that their contractual obligations under Articles 11 (proper implementation), 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the subcontractors.

The beneficiaries must ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the subcontractors.

9.4 Recipients of financial support to third parties

If the action includes providing financial support to third parties (e.g. grants, prizes or similar forms of support), the beneficiaries must ensure that their contractual obligations under Articles 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the third parties receiving the support (recipients).

The beneficiaries must also ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the recipients.

ARTICLE 10 — PARTICIPANTS WITH SPECIAL STATUS

10.1 Non-EU participants

Participants which are established in a non-EU country (if any) undertake to comply with their obligations under the Agreement and:

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: use qualified external auditors which are independent and comply with comparable standards as those set out in EU Directive 2006/43/EC¹¹
- for the controls under Article 25: allow for checks, reviews, audits and investigations (including on-the-spot checks, visits and inspections) by the bodies mentioned in that Article (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.).

¹¹ 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 or similar national regulations (OJ L 157, 9.6.2006, p. 87).

Special rules on dispute settlement apply (see Data Sheet, Point 5).

10.2 Participants which are international organisations

Participants which are international organisations (IOs; if any) undertake to comply with their obligations under the Agreement and:

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: to use either independent public officers or external auditors which comply with comparable standards as those set out in EU Directive 2006/43/EC
- for the controls under Article 25: to allow for the checks, reviews, audits and investigations by the bodies mentioned in that Article, taking into account the specific agreements concluded by them and the EU (if any).

For such participants, nothing in the Agreement will be interpreted as a waiver of their privileges or immunities, as accorded by their constituent documents or international law.

Special rules on applicable law and dispute settlement apply (see Article 43 and Data Sheet, Point 5).

10.3 Pillar-assessed participants

Pillar-assessed participants (if any) may rely on their own systems, rules and procedures, in so far as they have been positively assessed and do not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries.

‘Pillar-assessment’ means a review by the European Commission on the systems, rules and procedures which participants use for managing EU grants (in particular internal control system, accounting system, external audits, financing of third parties, rules on recovery and exclusion, information on recipients and protection of personal data; see Article 154 EU Financial Regulation 2018/1046).

Participants with a positive pillar assessment may rely on their own systems, rules and procedures, in particular for:

- record-keeping (Article 20): may be done in accordance with internal standards, rules and procedures
- currency conversion for financial statements (Article 21): may be done in accordance with usual accounting practices
- guarantees (Article 23): for public law bodies, prefinancing guarantees are not needed
- certificates (Article 24):
 - certificates on the financial statements (CFS): may be provided by their regular internal or external auditors and in accordance with their internal financial regulations and procedures

- certificates on usual accounting practices (CoMUC): are not needed if those practices are covered by an ex-ante assessment

and use the following specific rules, for:

- recoveries (Article 22): in case of financial support to third parties, there will be no recovery if the participant has done everything possible to retrieve the undue amounts from the third party receiving the support (including legal proceedings) and non-recovery is not due to an error or negligence on its part
- checks, reviews, audits and investigations by the EU (Article 25): will be conducted taking into account the rules and procedures specifically agreed between them and the framework agreement (if any)
- impact evaluation (Article 26): will be conducted in accordance with the participant's internal rules and procedures and the framework agreement (if any)
- grant agreement suspension (Article 31): certain costs incurred during grant suspension are eligible (notably, minimum costs necessary for a possible resumption of the action and costs relating to contracts which were entered into before the pre-information letter was received and which could not reasonably be suspended, reallocated or terminated on legal grounds)
- grant agreement termination (Article 32): the final grant amount and final payment will be calculated taking into account also costs relating to contracts due for execution only after termination takes effect, if the contract was entered into before the pre-information letter was received and could not reasonably be terminated on legal grounds
- liability for damages (Article 33.2): the granting authority must be compensated for 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 only if the damage is due to an infringement of the participant's internal rules and procedures or due to a violation of third parties' rights by the participant or one of its employees or individual for whom the employees are responsible.

Participants whose pillar assessment covers procurement and granting procedures may also do purchases, subcontracting and financial support to third parties (Article 6.2) in accordance with their internal rules and procedures for purchases, subcontracting and financial support.

Participants whose pillar assessment covers data protection rules may rely on their internal standards, rules and procedures for data protection (Article 15).

The participants may however not rely on provisions which would breach the principle of equal treatment of applicants or beneficiaries or call into question the decision awarding the grant, such as in particular:

- eligibility (Article 6)
- consortium roles and set-up (Articles 7-9)
- security and ethics (Articles 13, 14)

- IPR (including background and results, access rights and rights of use), communication, dissemination and visibility (Articles 16 and 17)
- information obligation (Article 19)
- payment, reporting and amendments (Articles 21, 22 and 39)
- rejections, reductions, suspensions and terminations (Articles 27, 28, 29-32)

If the pillar assessment was subject to remedial measures, reliance on the internal systems, rules and procedures is subject to compliance with those remedial measures.

Participants whose assessment has not yet been updated to cover (the new rules on) data protection may rely on their internal systems, rules and procedures, provided that they ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subject
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the personal data.

Participants must inform the coordinator without delay of any changes to the systems, rules and procedures that were part of the pillar assessment. The coordinator must immediately inform the granting authority.

Pillar-assessed participants that have also concluded a framework agreement with the EU, may moreover — under the same conditions as those above (i.e. not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries) — rely on provisions set out in that framework agreement.

SECTION 2 RULES FOR CARRYING OUT THE ACTION

ARTICLE 11 — PROPER IMPLEMENTATION OF THE ACTION

11.1 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, the call conditions and all legal obligations under applicable EU, international and national law.

11.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 12 — CONFLICT OF INTERESTS

12.1 Conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the Agreement could be compromised for reasons involving family, emotional life, political or national affinity, economic interest or any other direct or indirect interest ('conflict of interests').

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

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

12.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the beneficiary may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 13 — CONFIDENTIALITY AND SECURITY

13.1 Sensitive information

The parties must keep confidential any data, documents or other material (in any form) that is identified as sensitive in writing ('sensitive information') — during the implementation of the action and for at least until the time-limit set out in the Data Sheet (see Point 6).

If a beneficiary requests, the granting authority may agree to keep such information confidential for a longer period.

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

The beneficiaries may disclose sensitive information to their personnel or other participants involved in the action only if they:

- (a) need to know it in order to implement the Agreement and
- (b) are bound by an obligation of confidentiality.

The granting authority may disclose sensitive information to its staff and to other EU institutions and bodies.

It may moreover disclose sensitive information to third parties, if:

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

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party
- (b) the information becomes publicly available, without breaching any confidentiality obligation
- (c) the disclosure of the sensitive information is required by EU, international or national law.

Specific confidentiality rules (if any) are set out in Annex 5.

13.2 Classified information

The parties must handle classified information in accordance with the applicable EU, international or national law on classified information (in particular, Decision 2015/444¹² and its implementing rules).

Deliverables which contain classified information must be submitted according to special procedures agreed with the granting authority.

Action tasks involving classified information may be subcontracted only after explicit approval (in writing) from the granting authority.

Classified information may not be disclosed to any third party (including participants involved in the action implementation) without prior explicit written approval from the granting authority.

Specific security rules (if any) are set out in Annex 5.

13.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 14 — ETHICS AND VALUES

14.1 Ethics

The action must be carried out in line with the highest ethical standards and the applicable EU, international and national law on ethical principles.

Specific ethics rules (if any) are set out in Annex 5.

14.2 Values

The beneficiaries must commit to and ensure the respect of basic EU values (such as respect for

¹² Commission Decision 2015/444/EC, Euratom of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).

human dignity, freedom, democracy, equality, the rule of law and human rights, including the rights of minorities).

Specific rules on values (if any) are set out in Annex 5.

14.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 15 — DATA PROTECTION

15.1 Data processing by the granting authority

Any personal data under the Agreement will be processed under the responsibility of the data controller of the granting authority in accordance with and for the purposes set out in the Portal Privacy Statement.

For grants where the granting authority is the European Commission, an EU regulatory or executive agency, joint undertaking or other EU body, the processing will be subject to Regulation 2018/1725¹³.

15.2 Data processing by the beneficiaries

The beneficiaries must process personal data under the Agreement in compliance with the applicable EU, international and national law on data protection (in particular, Regulation 2016/679¹⁴).

They must ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subjects
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the data.

¹³ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

¹⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC ('GDPR') (OJ L 119, 4.5.2016, p. 1).

The beneficiaries may grant their personnel access to personal data only if it is strictly necessary for implementing, managing and monitoring the Agreement. The beneficiaries must ensure that the personnel is under a confidentiality obligation.

The beneficiaries must inform the persons whose data are transferred to the granting authority and provide them with the Portal Privacy Statement.

15.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 16 — INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE

16.1 Background and access rights to background

The beneficiaries must give each other and the other participants access to the background identified as needed for implementing the action, subject to any specific rules in Annex 5.

‘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 is:

- (a) held by the beneficiaries before they acceded to the Agreement and
- (b) needed to implement the action or exploit the results.

If background is subject to rights of a third party, the beneficiary concerned must ensure that it is able to comply with its obligations under the Agreement.

16.2 Ownership of results

The granting authority does not obtain ownership of the results produced under the action.

‘Results’ means any tangible or intangible effect of the action, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights.

16.3 Rights of use of the granting authority on materials, documents and information received for policy, information, communication, dissemination and publicity purposes

The granting authority has the right to use non-sensitive information relating to the action and materials and documents received from the beneficiaries (notably summaries for publication, deliverables, as well as any other material, such as pictures or audio-visual material, in paper or electronic form) for policy information, communication, dissemination and publicity purposes — during the action or afterwards.

The right to use the beneficiaries’ materials, documents and information is granted in the form of a royalty-free, non-exclusive and irrevocable licence, which includes the following rights:

- (a) **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- (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** (including shortening, summarising, inserting other elements (e.g. 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) **storage** in paper, electronic or other form
- (f) **archiving**, in line with applicable document-management rules
- (g) the right to authorise **third parties** to act on its behalf or sub-license to third parties the modes of use set out in Points (b), (c), (d) and (f), if needed for the information, communication and publicity activity of the granting authority and
- (h) **processing**, analysing, aggregating the materials, documents and information received and **producing derivative works**.

The rights of use are granted for the whole duration of the industrial or intellectual property rights concerned.

If materials or documents are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

Where applicable, the granting authority will insert the following information:

“© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the [name of granting authority] under conditions.”

16.4 Specific rules on IPR, results and background

Specific rules regarding intellectual property rights, results and background (if any) are set out in Annex 5.

16.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

ARTICLE 17 — COMMUNICATION, DISSEMINATION AND VISIBILITY

17.1 Communication — Dissemination — Promoting the action

Unless otherwise agreed with the granting authority, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner.

Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority.

17.2 Visibility — European flag and funding statement

Unless otherwise agreed with the granting authority, communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge the EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):



Funded by the
European Union



Co-funded by the
European Union



Funded by the
European Union



Co-funded by the
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support.

When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to

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

17.3 Quality of information — Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information.

Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.”

17.4 Specific communication, dissemination and visibility rules

Specific communication, dissemination and visibility rules (if any) are set out in Annex 5.

17.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 18 — SPECIFIC RULES FOR CARRYING OUT THE ACTION

18.1 Specific rules for carrying out the action

Specific rules for implementing the action (if any) are set out in Annex 5.

18.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

SECTION 3 GRANT ADMINISTRATION

ARTICLE 19 — GENERAL INFORMATION OBLIGATIONS

19.1 Information requests

The beneficiaries must provide — during the action or afterwards and in accordance with Article 7 — any information requested in order to verify eligibility of the lump sum contributions declared, proper implementation of the action and compliance with the other obligations under the Agreement.

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

19.2 Participant Register data updates

The beneficiaries must keep — at all times, during the action or afterwards — their information stored in the Portal Participant Register up to date, in particular, their name, address, legal representatives, legal form and organisation type.

19.3 Information about events and circumstances which impact the action

The beneficiaries must immediately inform the granting authority (and the other beneficiaries) of any of the following:

- (a) **events** which are likely to affect or delay the implementation of the action or affect the EU's financial interests, in particular:
 - (i) changes in their legal, financial, technical, organisational or ownership situation (including changes linked to one of the exclusion grounds listed in the declaration of honour signed before grant signature)
 - (ii) linked action information: not applicable
- (b) **circumstances** affecting:
 - (i) the decision to award the grant or
 - (ii) compliance with requirements under the Agreement.

19.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 20 — RECORD-KEEPING

20.1 Keeping records and supporting documents

The beneficiaries must — at least until the time-limit set out in the Data Sheet (see Point 6) — keep records and other supporting documents to prove the proper implementation of the action (proper implementation of the work and/or achievement of the results as described in Annex 1) in line with the accepted standards in the respective field (if any); beneficiaries do not need to keep specific records on the actual costs incurred.

The records and supporting documents must be made available upon request (see Article 19) or in the context of checks, reviews, audits or investigations (see Article 25).

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 25), the beneficiaries must keep these 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 granting authority may accept non-original documents if they offer a comparable level of assurance.

20.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 21 — REPORTING

21.1 Continuous reporting

The beneficiaries must continuously report on the progress of the action (e.g. **deliverables, milestones, outputs/outcomes, critical risks, indicators**, etc; if any), in the Portal Continuous Reporting tool and in accordance with the timing and conditions it sets out (as agreed with the granting authority).

Standardised deliverables (e.g. progress reports not linked to payments, reports on cumulative expenditure, special reports, etc; if any) must be submitted using the templates published on the Portal.

21.2 Periodic reporting: Technical reports and financial statements

In addition, the beneficiaries must provide reports to request payments, in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2):

- for additional prefinancings (if any): **an additional prefinancing report**
- for interim payments (if any) and the final payment: a **periodic report**

The prefinancing and periodic reports include a technical and financial part.

The technical part includes an overview of the action implementation. It must be prepared using the template available in the Portal Periodic Reporting tool.

The financial part of the additional prefinancing report includes a statement on the use of the previous prefinancing payment.

The financial part of the periodic report includes:

- the financial statement (consolidated statement for the consortium)
- the explanation on the use of resources (or detailed cost reporting table): not applicable
- the certificates on the financial statements (CFS): not applicable.

The **financial statement** must contain the lump sum contributions indicated in Annex 2, for the work packages that were completed during the reporting period.

For the last reporting period, the beneficiaries may exceptionally also declare partial lump sum

contributions for work packages that were not completed (e.g. due to force majeure or technical impossibility).

Lump sum contributions which are not declared in a financial statement will not be taken into account by the granting authority.

By signing the financial statement (directly in the Portal Periodic Reporting tool), the coordinator confirms (on behalf of the consortium) that:

- the information provided is complete, reliable and true
- the lump sum contributions declared are eligible (in particular, the work packages have been completed, that the work has been properly implemented and/or the results were achieved in accordance with Annex 1; see Article 6)
- the proper implementation and/or achievement can be substantiated by adequate records and supporting documents (see Article 20) that will be produced upon request (see Article 19) or in the context of checks, reviews, audits and investigations (see Article 25).

In case of recoveries (see Article 22), beneficiaries will be held responsible also for the lump sum contributions declared for their affiliated entities (if any).

21.3 Currency for financial statements and conversion into euros

The financial statements must be drafted in euro.

21.4 Reporting language

The reporting must be in the language of the Agreement, unless otherwise agreed with the granting authority (see Data Sheet, Point 4.2).

21.5 Consequences of non-compliance

If a report submitted does not comply with this Article, the granting authority may suspend the payment deadline (see Article 29) and apply other measures described in Chapter 5.

If the coordinator breaches its reporting obligations, the granting authority may terminate the grant or the coordinator's participation (see Article 32) or apply other measures described in Chapter 5.

ARTICLE 22 — PAYMENTS AND RECOVERIES — CALCULATION OF AMOUNTS DUE

22.1 Payments and payment arrangements

Payments will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

They will be made in euro to the bank account indicated by the coordinator (see Data Sheet, Point 4.2) and must be distributed without unjustified delay (restrictions may apply to distribution of the initial prefinancing payment; see Data Sheet, Point 4.2).

Payments to this bank account will discharge the granting authority from its payment obligation.

The cost of payment transfers will be borne as follows:

- the granting authority 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.

Payments by the granting authority will be considered to have been carried out on the date when they are debited to its account.

22.2 Recoveries

Recoveries will be made, if — at beneficiary termination, final payment or afterwards — it turns out that the granting authority has paid too much and needs to recover the amounts undue.

The general liability regime for recoveries (first-line liability) is as follows: At final payment, the coordinator will be fully liable for recoveries, even if it has not been the final recipient of the undue amounts. At beneficiary termination or after final payment, recoveries will be made directly against the beneficiaries concerned.

Beneficiaries will be fully liable for repaying the debts of their affiliated entities.

In case of enforced recoveries (see Article 22.4):

- the beneficiaries will be jointly and severally liable for repaying debts of another beneficiary under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4)
- affiliated entities will be held liable for repaying debts of their beneficiaries under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4).

22.3 Amounts due

22.3.1 Prefinancing payments

The aim of the prefinancing is to provide the beneficiaries with a float.

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

For **initial prefinancings** (if any), the amount due, schedule and modalities are set out in the Data Sheet (see Point 4.2).

For **additional prefinancings** (if any), the amount due, schedule and modalities are also set out in the Data Sheet (see Point 4.2). However, if the statement on the use of the previous prefinancing payment shows that less than 70% was used, the amount set out in the Data Sheet will be reduced by the difference between the 70% threshold and the amount used.

Prefinancing payments (or parts of them) may be offset (without the beneficiaries' consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency,

offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

22.3.2 Amount due at beneficiary termination — Recovery

In case of beneficiary termination, the granting authority will determine the provisional amount due for the beneficiary concerned.

This will be done on the basis of work packages already completed in previous interim payments. Payments for ongoing/not yet completed work packages which the beneficiary was working on before termination (if any) will therefore be made only later on, with the next interim or final payments when those work packages have been completed.

The **amount due** will be calculated in the following step:

Step 1 — Calculation of the total accepted EU contribution

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the beneficiary, on the basis of the beneficiary’s lump sum contributions for the work packages which were approved in previous interim payments.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’ for the beneficiary.

The **balance** is then calculated by deducting the payments received (if any; see report on the distribution of payments in Article 32), from the total accepted EU contribution:

$$\left\{ \begin{array}{l} \text{total accepted EU contribution for the beneficiary} \\ \text{minus} \\ \text{prefinancing and interim payments received (if any)} \end{array} \right\}.$$

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount due, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered and ask this amount to be paid to the coordinator (**confirmation letter**).

22.3.3 Interim payments

Interim payments reimburse the eligible lump sum contributions claimed for work packages implemented during the reporting periods (if any).

Interim payments (if any) will be made in accordance with the schedule and modalities set out the Data Sheet (see Point 4.2).

Payment is subject to the approval of the periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Incomplete work packages and work packages that have not been delivered or cannot be approved will be rejected (see Article 27).

The **interim payment** will be calculated by the granting authority in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the interim payment ceiling

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for the reporting period, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions from beneficiary termination (if any). The resulting amount is the ‘total accepted EU contribution’.

Step 2 — Limit to the interim payment ceiling

The resulting amount is then capped to ensure that the total amount of prefinancing and interim payments (if any) does not exceed the interim payment ceiling set out in the Data Sheet (see Point 4.2).

Interim payments (or parts of them) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

22.3.4 Final payment — Final grant amount — Revenues and Profit — Recovery

The final payment (payment of the balance) reimburses the remaining eligible lump sum contributions claimed for the implemented work packages (if any).

The final payment will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

Payment is subject to the approval of the final periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Work packages (or parts of them) that have not been delivered or cannot be approved will be rejected (see Article 27).

The **final grant amount for the action** will be calculated in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the maximum grant amount

Step 3 — Reduction due to the no-profit rule

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for all reporting periods, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’.

Step 2 — Limit to the maximum grant amount

Not applicable

Step 3 — Reduction due to the no-profit rule

Not applicable

The **balance** (final payment) is then calculated by deducting the total amount of prefinancing and interim payments already made (if any), from the final grant amount:

$$\begin{aligned} & \{\text{final grant amount} \\ & \text{minus} \\ & \{\text{prefinancing and interim payments made (if any)}\} \}. \end{aligned}$$

If the balance is **positive**, it will be **paid** to the coordinator.

The final payment (or part of it) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to recover, the final grant amount, the amount to be recovered and the reasons why

- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and date for payment.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

22.3.5 Audit implementation after final payment — Revised final grant amount — Recovery

If — after the final payment (in particular, after checks, reviews, audits or investigations; see Article 25) — the granting authority rejects lump sum contributions (see Article 27) or reduces the grant (see Article 28), it will calculate the **revised final grant amount** for the beneficiary concerned.

The **beneficiary revised final grant amount** will be calculated in the following step:

Step 1 — Calculation of the revised total accepted EU contribution

Step 1 — Calculation of the revised total accepted EU contribution

The granting authority will first calculate the ‘revised accepted EU contribution’ for the beneficiary, by calculating the ‘revised accepted contributions’.

After that, it will take into account grant reductions (if any). The resulting ‘revised total accepted EU contribution’ is the beneficiary revised final grant amount.

If the revised final grant amount is lower than the beneficiary’s final grant amount (i.e. its share in the final grant amount for the action), it will be **recovered** in accordance with the following procedure:

The **beneficiary final grant amount** (i.e. share in the final grant amount for the action) is calculated as follows:

$$\left\{ \begin{array}{l} \text{\{total accepted EU contribution for the beneficiary} \\ \text{divided by} \\ \text{total accepted EU contribution for the action\}} \\ \text{multiplied by} \\ \text{final grant amount for the action\}}. \end{array} \right.$$

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and the date for payment.

Recoveries against affiliated entities (if any) will be handled through their beneficiaries.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

22.4 Enforced recovery

If payment is not made by the date specified in the debit note, the amount due will be recovered:

- (a) by offsetting the amount — without the coordinator or beneficiary's consent — against any amounts owed to the coordinator or beneficiary by the granting authority.

In exceptional circumstances, to safeguard the EU financial interests, the amount may be offset before the payment date specified in the debit note.

For grants where the granting authority is the European Commission or an EU executive agency, debts may also be offset against amounts owed by other Commission services or executive agencies.

- (b) by drawing on the financial guarantee(s) (if any)
- (c) by holding other beneficiaries jointly and severally liable (if any; see Data Sheet, Point 4.4)
- (d) by holding affiliated entities jointly and severally liable (if any, see Data Sheet, Point 4.4)
- (e) by taking legal action (see Article 43) or, provided that the granting authority is the European Commission or an EU executive agency, by adopting an enforceable decision under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 100(2) of EU Financial Regulation 2018/1046.

The amount to be recovered will be increased by **late-payment interest** at the rate set out in Article 23.5, from the day following the payment date in the debit note, up to and including the date the full payment is received.

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 2015/2366¹⁵ applies.

For grants where the granting authority is an EU executive agency, enforced recovery by offsetting or enforceable decision will be done by the services of the European Commission (see also Article 43).

22.5 Consequences of non-compliance

22.5.1 If the granting authority does not pay within the payment deadlines (see above), the beneficiaries are entitled to **late-payment interest** at the reference rate applied by the European Central Bank (ECB) for its main refinancing operations in euros, plus the percentage specified in the Data Sheet (Point 4.2). The ECB reference rate to be used is the rate in force on the first day of the

¹⁵ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (OJ L 337, 23.12.2015, p. 35).

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 on 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).

If payments or the payment deadline are suspended (see Articles 29 and 30), payment will not be considered as late.

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.

22.5.2 If the coordinator breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the coordinator may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 23 — GUARANTEES

23.1 Prefinancing guarantee

If required by the granting authority (see Data Sheet, Point 4.2), the beneficiaries must provide (one or more) prefinancing guarantee(s) in accordance with the timing and the amounts set out in the Data Sheet.

The coordinator must submit them to the granting authority in due time before the prefinancing they are linked to.

The guarantees must be drawn up using the template published on the Portal and fulfil the following conditions:

- (a) be provided by a bank or approved financial institution established in the EU or — if requested by the coordinator and accepted by the granting authority — by a third party or a bank or financial institution established outside the EU offering equivalent security
- (b) the guarantor stands as first-call guarantor and does not require the granting authority to first have recourse against the principal debtor (i.e. the beneficiary concerned) and
- (c) remain explicitly in force until the final payment and, if the final payment takes the form of a recovery, until five months after the debit note is notified to a beneficiary.

They will be released within the following month.

23.2 Consequences of non-compliance

If the beneficiaries breach their obligation to provide the prefinancing guarantee, the prefinancing will not be paid.

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 24 — CERTIFICATES

Not applicable

ARTICLE 25 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

25.1 Granting authority checks, reviews and audits

25.1.1 Internal checks

The granting authority may — during the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing lump sum contributions, deliverables and reports.

25.1.2 Project reviews

The granting authority may carry out reviews on the proper implementation of the action and compliance with the obligations under the Agreement (general project reviews or specific issues reviews).

Such project reviews may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiary concerned and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent, outside experts. If it uses outside experts, the coordinator or beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The coordinator or beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted. The granting authority may request beneficiaries to provide such information to it directly. Sensitive information and documents will be treated in accordance with Article 13.

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

For **on-the-spot visits**, the beneficiary concerned must allow access to sites and premises (including to the outside experts) 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 **project review report** will be drawn up.

The granting authority will formally notify the project review report to the coordinator or beneficiary concerned, which has 30 days from receiving notification to make observations.

Project reviews (including project review reports) will be in the language of the Agreement, unless otherwise agreed with the granting authority (see Data Sheet, Point 4.2).

25.1.3 Audits

The granting authority may carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Such audits may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the beneficiary concerned and will be considered to start on the date of the notification.

The granting authority may use its own audit service, delegate audits to a centralised service or use external audit firms. If it uses an external firm, the beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. Sensitive information and documents will be treated in accordance with Article 13.

For **on-the-spot** visits, the beneficiary concerned must allow access to sites and premises (including for the external audit firm) 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 auditors will formally notify the draft audit report to the beneficiary concerned, which has 30 days from receiving notification to make observations (contradictory audit procedure).

The **final audit report** will take into account observations by the beneficiary concerned and will be formally notified to them.

Audits (including audit reports) will be in the language of the Agreement, unless otherwise agreed with the granting authority (see Data Sheet, Point 4.2).

25.2 European Commission checks, reviews and audits in grants of other granting authorities

Where the granting authority is not the European Commission, the latter has the same rights of checks, reviews and audits as the granting authority.

25.3 Access to records for assessing simplified forms of funding

The beneficiaries must give the European Commission access to their statutory records for the periodic assessment of simplified forms of funding which are used in EU programmes.

25.4 OLAF, EPPO and ECA audits and investigations

The following bodies may also carry out checks, reviews, audits and investigations — during the action or afterwards:

- the European Anti-Fraud Office (OLAF) under Regulations No 883/2013¹⁶ and No 2185/96¹⁷
- the European Public Prosecutor's Office (EPPO) under Regulation 2017/1939
- the European Court of Auditors (ECA) under Article 287 of the Treaty on the Functioning of the EU (TFEU) and Article 257 of EU Financial Regulation 2018/1046.

If requested by these bodies, the beneficiary concerned must provide full, accurate and complete information in the format requested (including complete accounts, individual salary statements or other personal data, including in electronic format) and allow access to sites and premises for on-the-spot visits or inspections — as provided for under these Regulations.

To this end, the beneficiary concerned must keep all relevant information relating to the action, at least until the time-limit set out in the Data Sheet (Point 6) and, in any case, until any ongoing checks, reviews, audits, investigations, litigation or other pursuits of claims have been concluded.

25.5 Consequences of checks, reviews, audits and investigations — Extension of findings

25.5.1 Consequences of checks, reviews, audits and investigations in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to rejections (see Article 27), grant reduction (see Article 28) or other measures described in Chapter 5.

Rejections or grant reductions after the final payment will lead to a revised final grant amount (see Article 22).

Findings in checks, reviews, audits or investigations during the action implementation may lead to a request for amendment (see Article 39), to change the description of the action set out in Annex 1.

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

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

25.5.2 Extension from other grants

Findings of checks, reviews, audits or investigations in other grants may be extended to this grant, if:

- (a) the beneficiary concerned is found, in other EU grants awarded under similar conditions, to

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 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections 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).

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 — within the time-limit for audits set out in the Data Sheet (see Point 6).

The granting authority will formally notify the beneficiary concerned of the intention to extend the findings and the list of grants affected.

If the extension concerns **rejections of lump sum contributions**: the 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 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.

If the extension concerns **grant reductions**: the notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings and
- (b) the **correction rate for extrapolation**, established on the basis of the systemic or recurrent errors and the principle of proportionality.

The beneficiary concerned has **60 days** from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method/rate**.

On the basis of this, the granting authority will analyse the impact and decide on the implementation (i.e. start rejection or grant reduction procedures, either on the basis of the revised financial statements or the announced/alternative method/rate or a mix of those; see Articles 27 and 28).

25.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 26 — IMPACT EVALUATIONS

26.1 Impact evaluation

The granting authority may carry out impact evaluations of the action, measured against the objectives and indicators of the EU programme funding the grant.

Such evaluations may be started during implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiaries and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent outside experts.

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

26.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the granting authority may apply the measures described in Chapter 5.

CHAPTER 5 CONSEQUENCES OF NON-COMPLIANCE

SECTION 1 REJECTIONS AND GRANT REDUCTION

ARTICLE 27 — REJECTION OF CONTRIBUTIONS

27.1 Conditions

The granting authority will — at interim payment, final payment or afterwards — reject any lump sum contributions which are ineligible (see Article 6), in particular following checks, reviews, audits or investigations (see Article 25).

The rejection may also be based on the extension of findings from other grants to this grant (see Article 25).

Ineligible lump sum contributions will be rejected.

27.2 Procedure

If the rejection does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the rejection, the amounts and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the rejection (payment review procedure).

If the rejection leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

27.3 Effects

If the granting authority rejects lump sum contributions, it will deduct them from the lump sum contributions declared and then calculate the amount due (and, if needed, make a recovery; see Article 22).

ARTICLE 28 — GRANT REDUCTION

28.1 Conditions

The granting authority may — at beneficiary termination, final payment or afterwards — reduce the grant for a beneficiary, if:

- (a) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU 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; see Article 25.5).

The amount of the reduction will be calculated for each beneficiary concerned and proportionate to the seriousness and the duration of the errors, irregularities or fraud or breach of obligations, by applying an individual reduction rate to their accepted EU contribution.

28.2 Procedure

If the grant reduction does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the reduction, the amount to be reduced and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the reduction (payment review procedure).

If the grant reduction leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

28.3 Effects

If the granting authority reduces the grant, it will deduct the reduction and then calculate the amount due (and, if needed, make a recovery; see Article 22).

SECTION 2 SUSPENSION AND TERMINATION

ARTICLE 29 — PAYMENT DEADLINE SUSPENSION

29.1 Conditions

The granting authority may — at any moment — suspend the payment deadline if a payment cannot be processed because:

- (a) the required report (see Article 21) has not been submitted or is not complete or additional information is needed

- (b) there are doubts about the amount to be paid (e.g. ongoing extension procedure, queries about eligibility, need for a grant reduction, etc.) and additional checks, reviews, audits or investigations are necessary, or
- (c) there are other issues affecting the EU financial interests.

29.2 Procedure

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

The suspension will **take effect** the day the notification is sent.

If the conditions for suspending the payment deadline are no longer met, the suspension will be **lifted** — and the remaining time to pay (see Data Sheet, Point 4.2) will resume.

If the suspension exceeds two months, the coordinator may request the granting authority to confirm if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the report and the revised report is not submitted (or was submitted but is also rejected), the granting authority may also terminate the grant or the participation of the coordinator (see Article 32).

ARTICLE 30 — PAYMENT SUSPENSION

30.1 Conditions

The granting authority may — at any moment — suspend payments, in whole or in part for one or more beneficiaries, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU 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; see Article 25.5).

If payments are suspended for one or more beneficiaries, the granting authority will make partial payment(s) for the part(s) not suspended. If suspension concerns the final payment, the payment (or recovery) of the remaining amount after suspension is lifted will be considered to be the payment that closes the action.

30.2 Procedure

Before suspending payments, the granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to suspend payments and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

At the end of the suspension procedure, the granting authority will also inform the coordinator.

The suspension will **take effect** the day after the confirmation notification is sent.

If the conditions for resuming payments are met, the suspension will be **lifted**. The granting authority will formally notify the beneficiary concerned (and the coordinator) and set the suspension end date.

During the suspension, no prefinancing will be paid to the beneficiaries concerned. For interim payments, the periodic reports for all reporting periods except the last one (see Article 21) must not contain any financial statements from the beneficiary concerned (or its affiliated entities). 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.

ARTICLE 31 — GRANT AGREEMENT SUSPENSION

31.1 Consortium-requested GA suspension

31.1.1 Conditions and procedure

The beneficiaries may request the suspension of the grant or any part of it, if exceptional circumstances — in particular *force majeure* (see Article 35) — make implementation impossible or excessively difficult.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the suspension takes effect; this date may be before the date of the submission of the amendment request and
- the expected date of resumption.

The suspension will **take effect** on the day specified in the amendment.

Once circumstances allow for implementation to resume, the coordinator must immediately request another **amendment** of the Agreement to set the suspension end date, the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the amendment. This date may be before the date of the submission of the amendment request.

During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.

31.2 EU-initiated GA suspension

31.2.1 Conditions

The granting authority may suspend the grant or any part of it, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU 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; see Article 25.5)
- (c) other:
 - (i) linked action issues: not applicable
 - (ii) additional GA suspension grounds: not applicable.

31.2.2 Procedure

Before suspending the grant, the granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to suspend the grant and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

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

Once the conditions for resuming implementation of the action are met, the granting authority will formally notify the coordinator a **lifting of suspension letter**, in which it will set the suspension end date and invite the coordinator to request an amendment of the Agreement to set the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see

Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the lifting of suspension letter. This date may be before the date on which the letter is sent.

During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.

The beneficiaries may not claim damages due to suspension by the granting authority (see Article 33).

Grant suspension does not affect the granting authority's right to terminate the grant or a beneficiary (see Article 32) or reduce the grant (see Article 28).

ARTICLE 32 — GRANT AGREEMENT OR BENEFICIARY TERMINATION

32.1 Consortium-requested GA termination

32.1.1 Conditions and procedure

The beneficiaries may request the termination of the grant.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the consortium ends work on the action ('end of work date') and
- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

The termination will **take effect** on the termination date specified in the amendment.

If no reasons are given or if the granting authority considers the reasons do not justify termination, it may consider the grant terminated improperly.

32.1.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before the end of work date (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the granting authority does not receive the report within the deadline, only lump sum contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Improper termination may lead to a grant reduction (see Article 28).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

32.2 Consortium-requested beneficiary termination

32.2.1 Conditions and procedure

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

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the opinion of the beneficiary concerned (or proof that this opinion has been requested in writing)
- the date the beneficiary ends work on the action ('end of work date')
- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

If the termination concerns the coordinator and is done without its agreement, the amendment request must be submitted by another beneficiary (acting on behalf of the consortium).

The termination will **take effect** on the termination date specified in the amendment.

If no information is given or if the granting authority considers that the reasons do not justify termination, it may consider the beneficiary to have been terminated improperly.

32.2.2 Effects

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 **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a second **request for amendment** (see Article 39) with other amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, 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.

If the second request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the second request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

Improper termination may lead to a reduction of the grant (see Article 31) or grant termination (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

32.3 EU-initiated GA or beneficiary termination

32.3.1 Conditions

The granting authority may terminate the grant or the participation of one or more beneficiaries, if:

- (a) one or more beneficiaries do not accede to the Agreement (see Article 40)
- (b) a change to the action or the legal, financial, technical, organisational or ownership situation of a beneficiary is likely to substantially affect the implementation of the action or calls into question the decision to award the grant (including changes linked to one of the exclusion grounds listed in the declaration of honour)
- (c) following termination of one or more beneficiaries, the necessary changes to the Agreement (and their impact on the action) would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (d) implementation of the action has become impossible or the changes necessary for its continuation would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (e) a beneficiary (or person with unlimited liability for its debts) is subject to bankruptcy proceedings or similar (including insolvency, winding-up, administration by a liquidator or court, arrangement with creditors, suspension of business activities, etc.)
- (f) a beneficiary (or person with unlimited liability for its debts) is in breach of social security or tax obligations
- (g) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has been found guilty of grave professional misconduct
- (h) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed fraud, corruption, or is involved in a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking

- (i) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) was created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin (or created another entity with this purpose)
- (j) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.)
- (k) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU 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; see Article 25.5)
- (l) despite a specific request by the granting authority, a beneficiary does not request — through the coordinator — an amendment to the Agreement to end the participation of one of its affiliated entities or associated partners that is in one of the situations under points (d), (f), (e), (g), (h), (i) or (j) and to reallocate its tasks, or
- (m) other:
 - (i) linked action issues: not applicable
 - (ii) additional GA termination grounds: not applicable.

32.3.2 Procedure

Before terminating the grant or participation of one or more beneficiaries, the granting authority will send a **pre-information letter** to the coordinator or beneficiary concerned:

- formally notifying the intention to terminate and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the termination and the date it will take effect (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

For beneficiary terminations, the granting authority will — at the end of the procedure — also inform the coordinator.

The termination will **take effect** the day after the confirmation notification is sent (or on a later date specified in the notification; ‘termination date’).

32.3.3 Effects

(a) for **GA termination**:

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the last open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before termination takes effect (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the grant is terminated for breach of the obligation to submit reports, the coordinator may not submit any report after termination.

If the granting authority does not receive the report within the deadline, only lump sum contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Termination does not affect the granting authority's right to reduce the grant (see Article 28) or to impose administrative sanctions (see Article 34).

The beneficiaries may not claim damages due to termination by the granting authority (see Article 33).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

(b) for **beneficiary termination**:

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 **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a **request for amendment** (see Article 39) with any amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, 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.

If the request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

SECTION 3 OTHER CONSEQUENCES: DAMAGES AND ADMINISTRATIVE SANCTIONS

ARTICLE 33 — DAMAGES

33.1 Liability of the granting authority

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

The granting authority cannot be held liable for any damage caused by any of the beneficiaries or other participants involved in the action, as a consequence of the implementation of the Agreement.

33.2 Liability of the beneficiaries

The beneficiaries must compensate the granting authority 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, provided that it was caused by gross negligence or wilful act.

The liability does not extend to indirect or consequential losses or similar damage (such as loss of profit, loss of revenue or loss of contracts), provided such damage was not caused by wilful act or by a breach of confidentiality.

ARTICLE 34 — ADMINISTRATIVE SANCTIONS AND OTHER MEASURES

Nothing in this Agreement may be construed as preventing the adoption of administrative sanctions (i.e. exclusion from EU award procedures and/or financial penalties) or other public law measures, in addition or as an alternative to the contractual measures provided under this Agreement (see,

for instance, Articles 135 to 145 EU Financial Regulation 2018/1046 and Articles 4 and 7 of Regulation 2988/95¹⁸).

SECTION 4 FORCE MAJEURE

ARTICLE 35 — FORCE MAJEURE

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

‘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 other participants involved in the action), and
- proves to be inevitable in spite of exercising all due diligence.

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.

CHAPTER 6 FINAL PROVISIONS

ARTICLE 36 — COMMUNICATION BETWEEN THE PARTIES

36.1 Forms and means of communication — Electronic management

EU grants are managed fully electronically through the EU Funding & Tenders Portal (‘Portal’).

All communications must be made electronically through the Portal in accordance with the Portal Terms and Conditions and using the forms and templates provided there (except if explicitly instructed otherwise by the granting authority).

Communications must be made in writing and clearly identify the grant agreement (project number and acronym).

Communications must be made by persons authorised according to the Portal Terms and 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 their appointment letter (see Portal Terms and Conditions).

¹⁸ Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).

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

36.2 Date of communication

The sending date for communications made through the Portal will be the date and time of sending, as indicated by the time logs.

The receiving date for communications made through the Portal will be the date and time the communication is accessed, as indicated by the time logs. Formal notifications that have not been accessed within 10 days after sending, will be considered to have been accessed (see Portal Terms and Conditions).

If a communication is exceptionally made on paper (by e-mail or postal service), general principles apply (i.e. date of sending/receipt). Formal notifications by registered post with proof of delivery will be considered to have been received either on the delivery date registered by the postal service or the deadline for collection at the post office.

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.

36.3 Addresses for communication

The Portal can be accessed via the Europa website.

The address for paper communications to the granting authority (if exceptionally allowed) is the official mailing address indicated on its website.

For beneficiaries, it is the legal address specified in the Portal Participant Register.

ARTICLE 37 — INTERPRETATION OF THE AGREEMENT

The provisions in the Data Sheet take precedence over the rest of the Terms and Conditions of the Agreement.

Annex 5 takes precedence over the Terms and Conditions.

The Terms and Conditions take precedence over the Annexes other than Annex 5.

Annex 2 takes precedence over Annex 1.

ARTICLE 38 — CALCULATION OF PERIODS AND DEADLINES

In accordance with Regulation No 1182/71¹⁹, 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.

‘Days’ means calendar days, not working days.

¹⁹ 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).

ARTICLE 39 — AMENDMENTS

39.1 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.

39.2 Procedure

The party requesting an amendment must submit a request for amendment signed directly in the Portal Amendment tool.

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 granting authority may request additional information.

If the party receiving the request agrees, it must sign the amendment in the tool within 45 days of receiving notification (or any additional information the granting authority 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 of entry into force or other date specified in the amendment.

ARTICLE 40 — ACCESSION AND ADDITION OF NEW BENEFICIARIES

40.1 Accession of the beneficiaries mentioned in the Preamble

The beneficiaries which are not coordinator must accede to the grant by signing the accession form (see Annex 3) directly in the Portal Grant Preparation tool, within 30 days after the entry into force of the Agreement (see Article 44).

They will assume the rights and obligations under the Agreement with effect from the date of its entry into force (see Article 44).

If a beneficiary does not accede to the grant within the above deadline, the coordinator must — within

30 days — request an amendment (see Article 39) to terminate the beneficiary and make any changes necessary to ensure proper implementation of the action. This does not affect the granting authority's right to terminate the grant (see Article 32).

40.2 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 39. It must include an accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool.

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

Additions are also possible in mono-beneficiary grants.

ARTICLE 41 — TRANSFER OF THE AGREEMENT

In justified cases, the beneficiary of a mono-beneficiary grant may request the transfer of the grant to a new beneficiary, provided that this would not call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiary must submit a request for **amendment** (see Article 39), with

- the reasons why
- the accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool and
- additional supporting documents (if required by the granting authority).

The new beneficiary will assume the rights and obligations under the Agreement with effect from the date of accession specified in the accession form (see Annex 3).

ARTICLE 42 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE GRANTING AUTHORITY

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

If the granting authority has not accepted the assignment or if 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 granting authority.

ARTICLE 43 — APPLICABLE LAW AND SETTLEMENT OF DISPUTES

43.1 Applicable law

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

Special rules may apply for beneficiaries which are international organisations (if any; see Data Sheet, Point 5).

43.2 Dispute settlement

If a dispute concerns the interpretation, application or validity of the Agreement, the parties must bring action before the EU General Court — or, on appeal, the EU Court of Justice — under Article 272 of the Treaty on the Functioning of the EU (TFEU).

For non-EU beneficiaries (if any), such disputes must be brought before the courts of Brussels, Belgium — unless an international agreement provides for the enforceability of EU court judgements.

For beneficiaries with arbitration as special dispute settlement forum (if any; see Data Sheet, Point 5), the dispute will — in the absence of an amicable settlement — be settled in accordance with the Rules for Arbitration published on the Portal.

If a dispute concerns administrative sanctions, offsetting or an enforceable decision under Article 299 TFEU (see Articles 22 and 34), the beneficiaries must bring action before the General Court — or, on appeal, the Court of Justice — under Article 263 TFEU.

For grants where the granting authority is an EU executive agency (see Preamble), actions against offsetting and enforceable decisions must be brought against the European Commission (not against the granting authority; see also Article 22).

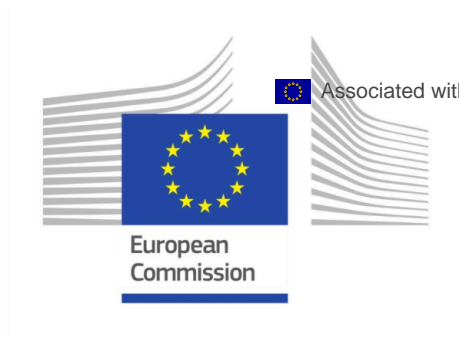
ARTICLE 44 — ENTRY INTO FORCE

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

SIGNATURES

For the coordinator

For the granting authority



ANNEX 1



Erasmus+ (ERASMUS+)

Description of the action (DoA)

Part A

Part B

DESCRIPTION OF THE ACTION (PART A)

COVER PAGE

Part A of the Description of the Action (DoA) must be completed directly on the Portal Grant Preparation screens.

PROJECT	
<i>Grant Preparation (General Information screen) — Enter the info.</i>	
Project number:	101179471
Project name:	Nanosciences with Latin America: sharing knowledge through pedagogical innovation
Project acronym:	NANOMER
Call:	ERASMUS-EDU-2024-CBHE
Topic:	ERASMUS-EDU-2024-CBHE-STRAND-1
Type of action:	ERASMUS-LS
Service:	EACEA/A/04
Project starting date:	fixed date: 1 January 2025
Project duration:	36 months

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List of work packages	5
Staff effort	12
List of deliverables	13
List of milestones (outputs/outcomes)	21
List of critical risks	21

PROJECT SUMMARY

Project summary

Grant Preparation (General Information screen) — Provide an overall description of your project (including context and overall objectives, planned activities and main achievements, and expected results and impacts (on target groups, change procedures, capacities, innovation etc)). This summary should give readers a clear idea of what your project is about.

Use the project summary from your proposal.

The main objective of the NANOMER project is to share knowledge between Latin America, Spain and France in the domains of science and educational innovation. The field chosen is the world of nanoscience, a field in which students and teachers still have much to discover. Our objective is to empower students to solve societal problems. Three levels of exchanges will be conducted: 1) between students and teachers, 2) between the pedagogical teams of the different universities, and 3) between the international relations resources in each institution. Special attention will be paid to supporting both students and teachers in their acquisition of transversal skills. Indeed, access to information is nowadays easy for students, making it necessary to use new teaching techniques to train students to think critically about the information available, to argue, to work in groups and to solve problems. The idea is to enable them to become good researchers and future teachers as well as to develop their awareness of their skills.

These exchanges will take place through distance workshops, face-to-face workshops (summer schools) and also through a digital platform. The latter will allow all the actors to preserve the tools and documents generated and to disseminate them broadly and inclusively to students, especially to those who have fewer resources and who are in more remote locations. This project will create a community of teachers, sociologists and learning specialists to guide both students and teachers in training future scientists. Indeed, the latter will have a key role to play in dealing with many current problems such as water and air decontamination, energy and waste recycling. Finally, one of the strengths of the project is that it will promote cooperative networking between Latin America and Europe.

LIST OF PARTICIPANTS

PARTICIPANTS

Grant Preparation (Beneficiaries screen) — Enter the info.

Number	Role	Short name	Legal name	Country	PIC
1	COO	ENS DE LYON	ECOLE NORMALE SUPERIEURE DE LYON	FR	985804405
2	BEN	SORBONNE UNIV	SORBONNE UNIVERSITE	FR	909875521
3	BEN	UGA	UNIVERSITE GRENOBLE ALPES	FR	897379108
4	BEN	UCM	UNIVERSIDAD COMPLUTENSE DE MADRID	ES	999874546
5	BEN	UPV	UNIVERSITAT POLITECNICA DE VALENCIA	ES	999864846
6	BEN	UJI	UNIVERSITAT JAUME I DE CASTELLON	ES	999882985
7	BEN	UMSA	UNIVERSIDAD MAYOR DE SAN ANDRES	BO	999848162
8	BEN	UNCU	UNIVERSIDAD NACIONAL DE CUYO	AR	973810355
9	BEN	UTALCA	UNIVERSIDAD DE TALCA	CL	999442314
10	BEN	UTPL	UNIVERSIDAD TECNICA PARTICULAR DE LOJA	EC	999573361
11	BEN	BUENOSAIRES UNIVERSITY	UNIVERSIDAD DE BUENOS AIRES	AR	999881336

PARTICIPANTS*Grant Preparation (Beneficiaries screen) — Enter the info.*

Number	Role	Short name	Legal name	Country	PIC
12	BEN	UNSAM	UNIVERSIDAD NACIONAL DE GENERAL SAN MARTIN	AR	966956335
13	BEN	USS	UNIVERSIDAD SAN SEBASTIAN	CL	919073740
14	BEN	UCH	UNIVERSIDAD DE CHILE	CL	999447067
15	BEN	EPN ECUADOR	ESCUELA POLITECNICA NACIONAL	EC	996377890
16	BEN	EMI	ESCUELA MILITAR DE INGENIERIA 'MCAL. ANTONIO JOSE DE SUCRE'	BO	876143189

LIST OF WORK PACKAGES

Work packages						
<i>Grant Preparation (Work Packages screen) — Enter the info.</i>						
Work Package No	Work Package name	Lead Beneficiary	Effort (Person-Months)	Start Month	End Month	Deliverables
WP1	Project management and coordination	1 - ENS DE LYON	3.00	1	36	D1.1 – Kick Off Meeting Minutes D1.2 – Quality Assurance Plan D1.3 – Project Management Handbook D1.4 – Mid-term report
WP2	Pedagogical support of students and teachers	14 - UCH	0.20	1	36	D2.1 – Presentation for the workshops on pedagogy - summer school 1 D2.2 – Presentation for the workshops on pedagogy - summer school 2 D2.3 – Presentation for the workshops on pedagogy - summer school 3 D2.4 – Final white book on case studies
WP3	Design and implementation of a collaborative pedagogical digital platform	1 - ENS DE LYON	0.20	1	36	D3.1 – Set up of the platform D3.2 – Final version of the platform
WP4	Pedagogy Summer School 1	9 - UTALCA	1.50	1	12	D4.1 – Summer school 1 program D4.2 – Summer school 1 report
WP5	Pedagogy Summer School 2	8 - UNCU	1.50	13	24	D5.1 – Summer school 2 program D5.2 – Summer school 2 report
WP6	Pedagogy Summer School 3	10 - UTPL	1.50	25	36	D6.1 – Summer school 3 program D6.2 – Summer school 3 report
WP7	Staff training in international cooperation	2 - SORBONNE UNIV	0.50	1	36	D7.1 – Staff Training report 1 D7.2 – Staff training report 2
WP8	Students' exchange program	12 - UNSAM	3.00	1	36	D8.1 – Student exchange program - Report Year 1

Work packages*Grant Preparation (Work Packages screen) — Enter the info.*

Work Package No	Work Package name	Lead Beneficiary	Effort (Person-Months)	Start Month	End Month	Deliverables
						D8.2 – Student exchange program - Report Year 2 D8.3 – Student exchange program - Report Year 3
WP9	Knowledge dissemination and replication plan	10 - UTPL	0.20	4	36	D9.1 – Dissemination and sustainability Plan D9.2 – Nanomer website D9.3 – White book digital publication

Work package WP1 – Project management and coordination

Work Package Number	WP1	Lead Beneficiary	1 - ENS DE LYON
Work Package Name	Project management and coordination		
Start Month	1	End Month	36

Objectives

This WP will plan, organise and control processes to achieve the objectives of the project. It will take care of its smooth overall coordination, its scientific, administrative, financial and legal management, the effective co-operation and communication among partners, as well as the making of decisions and the identification of potential risks and the set-up of an implementation plan for problem and conflict resolution.

Description

The specific objectives are:

- Reformulation of the specific objectives in a collaborative manner: project charter and partnership agreement
- Identification of the main actors for each WP in each HEI and determine stakeholders
- Elaborating a project management plan in a collaborative way
- Building the different committees: NANOMER steering committee, WP steering committees, the committee for the exchange student program and attribution of the international service staff stays in Europe, gender equity and inclusion referent, ...
- Defining project control: how to monitor progression, establish performance indicators, revisit project management if necessary
- Recording project processes and findings, handover deliverables
- Elaborating of a financial and administrative guideline
- Ensuring flow of information between the Commission and the Researcher/Host Institution.
- Identifying potential risks for the project and set up an implementation plan for problems and conflicts resolution.

Work package WP2 – Pedagogical support of students and teachers

Work Package Number	WP2	Lead Beneficiary	14 - UCH
Work Package Name	Pedagogical support of students and teachers		
Start Month	1	End Month	36

Objectives

- Draw up a detailed inventory / cartography of the pedagogical activities carried out by the institutions in the consortium
 - Create a learning organisation around pedagogical issues: set up working groups and workshops to prepare for the summer school.
 - Create and moderate interactions with teacher into identify the problematic situations they wish to work on as a priority.
 - Mobilize pedagogical research to share tools those involved to question and develop their practices. Train and support teacher on analysis activity methodology.
- Monitor teaching experiments in schools and analysing the effects on practices
- Create teaching and student workshops in order to help teacher to transform their pedagogical practices
 - Analysis of experimental pedagogical activities.
 - Capitalise on the resources produced

Description

Teachers: This WP aims to enable NANOMER project members to develop professionally through training and support in teaching methods. Pedagogical LAB: we are therefore proposing incubation workshops approach to enable us to start from problematic situations in the field and offer training/coaching that responds to concrete concerns. Summer School: the results of this experimentation will be share during summer schools and be analysed by pedagogical experts.

Students: On the student side, the idea would be to get them to express the skills developed during international exchanges and to be able to share/value them during the summer school.

Work package WP3 – Design and implementation of a collaborative pedagogical digital platform

Work Package Number	WP3	Lead Beneficiary	1 - ENS DE LYON
Work Package Name	Design and implementation of a collaborative pedagogical digital platform		
Start Month	1	End Month	36

Objectives

The platform will allow the community:

1. Gathering all the pedagogical resources generated during the previous NanoAndes summer schools and also the new summer schools that will be organised during this project.
2. Preparation of both the NANOMER and the NanoAndes summer schools.
3. Sharing other pedagogical tools and a space to communicate between students, teachers and pedagogues.

Description

1. Set-up of the platform:

- Analysis of the previous pedagogical data
- definition of the architecture of the platform
- Pedagogical innovations
- technical innovations
- identification of the software to use and the language for each item
- roles and permissions for the users (students, educators, staff, external users)
- definition of the content and its organisation
- incorporation of the pedagogical items (lectures, practical's, manuals, videos,)
- technical evaluation: definition of the indicators to follow its use
- pedagogic evaluation: definition of the indicators

2. Implementation of the platform

- Technical evaluation: analysis and implementation
- Pedagogical evaluation: analysis of the use of the platform
- Creation of a space to allow feedback of the users of the platform
- Creation of a space to communicate, propose offers of internships, ...

Work package WP4 – Pedagogy Summer School 1

Work Package Number	WP4	Lead Beneficiary	9 - UTALCA
Work Package Name	Pedagogy Summer School 1		
Start Month	1	End Month	12

Objectives

- Preparation of the program of the school: choice of the lectures and the workshops
- Selection of the students that will participate and organisation of the school
- Evaluation of the outcomes and definition of the perspectives for the next school

Description

Three pedagogy summer schools will be proposed in the NANOMER project, and these summer schools will be 2-days

workshops that will take place after the scientific NanoAndes school. NANOMER will enrich this existing school both at the level of the teachers and the students. It will also enrich researchers in pedagogy involved in the project.

Work package WP5 – Pedagogy Summer School 2

Work Package Number	WP5	Lead Beneficiary	8 - UNCU
Work Package Name	Pedagogy Summer School 2		
Start Month	13	End Month	24

Objectives

Preparation of the program of the school: choice of the lectures and the workshops

- Selection of the students that will participate and organisation of the school
- Evaluation of NANOMER project by an international expert in pedagogy. Feedback on the workshops of the summer school definition of the perspectives

Description

Three pedagogy summer schools will be proposed in the NANOMER project, and these summer schools will be 2-days workshops that will take place after the scientific NanoAndes school. NANOMER will enrich this existing school both at the level of the teachers and the students. It will also enrich researchers in pedagogy involved in the project.

Work package WP6 – Pedagogy Summer School 3

Work Package Number	WP6	Lead Beneficiary	10 - UTPL
Work Package Name	Pedagogy Summer School 3		
Start Month	25	End Month	36

Objectives

- Preparation of the program of the school: choice of the lectures and the workshops
- Selection of the students that will participate and organisation of the school
- Evaluation of the students and teachers' training over the 3 years. Evaluation of the skills portfolio.

Description

Three pedagogy summer schools will be proposed in the NANOMER project, and these summer schools will be 2-days workshops that will take place after the scientific NanoAndes school. NANOMER will enrich this existing school both at the level of the teachers and the students. It will also enrich researchers in pedagogy involved in the project.

Work package WP7 – Staff training in international cooperation

Work Package Number	WP7	Lead Beneficiary	2 - SORBONNE UNIV
Work Package Name	Staff training in international cooperation		
Start Month	1	End Month	36

Objectives

Train the staff of the international relations department from Latin America. Exchange good practices about HEIs internationalization

Description
Implementation of the cooperation between the Universities in Latin America and in Europe is an important objective of this project. Meetings and workshops between the responsible leaders of the international cooperation from each HEI will be organised in order to facilitate the student and staff mobilities and to exchange on best practices. This aspect is very important, since this program could foster the internationalisation of some of the HEIs in the third countries not associated to the European Union, for example the two HEIs from Bolivia.

Work package WP8 – Students' exchange program

Work Package Number	WP8	Lead Beneficiary	12 - UNSAM
Work Package Name	Students' exchange program		
Start Month	1	End Month	36

Objectives
<p>Selection of the LA students for the internships (1 or 3 months) in the 6 HEIs in Spain and France (2 internships per HEIs, one-month and three-months). The administrative organisation of the exchange will be performed by the European institutions (travel tickets, scholarship, etc).</p> <ul style="list-style-type: none"> A committee will be established with representatives of the 16 partners, as well as the gender equity and inclusion referent. The students with fewer opportunities will be a priority, and for the 1-month internship the candidates that have children. The committee will be coordinated by UNSAM. A call will be published in the website. After the internships, an on-line workshop will be organized to present the results and the feedback of the internships in Europe.

Description
<p>NANOMER project will propose two types of internships for the students from LA of the HEIs participating in this project:</p> <ol style="list-style-type: none"> Three-month internship coupled with courses in a European master nanosciences program: <ul style="list-style-type: none"> participation to these courses is optional but highly recommended open badges will be given to the students for both the internship and the attendance to the courses the internship will be between September and January a workshop (on-line or face-to-face) will be organised at the end of January to exchange experiences, since all the students from LA participating to this exchange program will be at the same time in Europe (France and Spain). The students will present their work and feedback. One-month internship <ul style="list-style-type: none"> these grants for shorter stays will be prioritized for students with children. In LA there are many Masters and PhD students with children, who will not apply for 3-month internships and the one-month internship is thus a solution to cater for this target group.

Work package WP9 – Knowledge dissemination and replication plan

Work Package Number	WP9	Lead Beneficiary	10 - UTPL
Work Package Name	Knowledge dissemination and replication plan		
Start Month	4	End Month	36

Objectives
increase the visibility of achievements and enable the promotion and dissemination of the project

Description

- creation and maintenance of the NANOMER webpage
- edition of a white book on pedagogy case studies at the end of the project
- dissemination to the whole Spanish-speaking community interested in sciences teaching

STAFF EFFORT

Staff effort per participant										
<i>Grant Preparation (Work packages - Effort screen) — Enter the info.</i>										
Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	Total Person-Months
1 - ENS DE LYON	3.00		0.20					0.50		3.70
2 - SORBONNE UNIV							0.50	0.50		1.00
3 - UGA								0.50		0.50
4 - UCM								0.50		0.50
5 - UPV								0.50		0.50
6 - UJI								0.50		0.50
8 - UNCU					1.50					1.50
9 - UTALCA				1.50						1.50
10 - UTPL						1.50			0.20	1.70
14 - UCH		0.20								0.20
Total Person-Months	3.00	0.20	0.20	1.50	1.50	1.50	0.50	3.00	0.20	11.60

LIST OF DELIVERABLES

Deliverables						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
<i>The labels used mean:</i>						
<i>Public — fully open (🚩 automatically posted online)</i>						
<i>Sensitive — limited under the conditions of the Grant Agreement</i>						
<i>EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444</i>						
Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D1.1	Kick Off Meeting Minutes	WP1	1 - ENS DE LYON	R — Document, report	SEN - Sensitive	1
D1.2	Quality Assurance Plan	WP1	1 - ENS DE LYON	R — Document, report	SEN - Sensitive	6
D1.3	Project Management Handbook	WP1	1 - ENS DE LYON	R — Document, report	SEN - Sensitive	6
D1.4	Mid-term report	WP1	1 - ENS DE LYON	R — Document, report	SEN - Sensitive	18
D2.1	Presentation for the workshops on pedagogy - summer school 1	WP2	14 - UCH	R — Document, report	SEN - Sensitive	11
D2.2	Presentation for the workshops on pedagogy - summer school 2	WP2	14 - UCH	R — Document, report	SEN - Sensitive	23
D2.3	Presentation for the workshops on pedagogy - summer school 3	WP2	14 - UCH	R — Document, report	SEN - Sensitive	35
D2.4	Final white book on case studies	WP2	14 - UCH	R — Document, report	SEN - Sensitive	36
D3.1	Set up of the platform	WP3	1 - ENS DE LYON	DEC — Websites, patent filings, videos, etc	SEN - Sensitive	8
D3.2	Final version of the platform	WP3	1 - ENS DE LYON	DEC — Websites, patent filings, videos, etc	SEN - Sensitive	36
D4.1	Summer school 1 program	WP4	9 - UTALCA	DEC — Websites, patent filings, videos, etc	SEN - Sensitive	7

Deliverables

Grant Preparation (Deliverables screen) — Enter the info.

The labels used mean:

Public — fully open (⚠ automatically posted online)

Sensitive — limited under the conditions of the Grant Agreement

EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision [2015/444](#)

Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D4.2	Summer school 1 report	WP4	9 - UTALCA	R — Document, report	SEN - Sensitive	12
D5.1	Summer school 2 program	WP5	8 - UNCU	DEC — Websites, patent filings, videos, etc	SEN - Sensitive	19
D5.2	Summer school 2 report	WP5	8 - UNCU	R — Document, report	SEN - Sensitive	24
D6.1	Summer school 3 program	WP6	10 - UTPL	DEC — Websites, patent filings, videos, etc	SEN - Sensitive	31
D6.2	Summer school 3 report	WP6	10 - UTPL	R — Document, report	SEN - Sensitive	36
D7.1	Staff Training report 1	WP7	2 - SORBONNE UNIV	R — Document, report	SEN - Sensitive	18
D7.2	Staff training report 2	WP7	2 - SORBONNE UNIV	R — Document, report	SEN - Sensitive	36
D8.1	Student exchange program - Report Year 1	WP8	12 - UNSAM	R — Document, report	SEN - Sensitive	15
D8.2	Student exchange program - Report Year 2	WP8	12 - UNSAM	R — Document, report	SEN - Sensitive	27
D8.3	Student exchange program - Report Year 3	WP8	12 - UNSAM	R — Document, report	SEN - Sensitive	36
D9.1	Dissemination and sustainability Plan	WP9	10 - UTPL	R — Document, report	SEN - Sensitive	6
D9.2	Nanomer website	WP9	10 - UTPL	DEC — Websites, patent filings, videos, etc	PU - Public	6
D9.3	White book digital publication	WP9	10 - UTPL	R — Document, report	SEN - Sensitive	36

Deliverable D1.1 – Kick Off Meeting Minutes

Deliverable Number	D1.1	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Kick Off Meeting Minutes		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	1	Work Package No	WP1

Description
Minutes of the meeting to officially launch the project

Deliverable D1.2 – Quality Assurance Plan

Deliverable Number	D1.2	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Quality Assurance Plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	6	Work Package No	WP1

Description
Plan to ensure the high quality of project implementation and completion in time

Deliverable D1.3 – Project Management Handbook

Deliverable Number	D1.3	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Project Management Handbook		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	6	Work Package No	WP1

Description
Handbook to support partners in the effective and efficient administration and financial management of the project

Deliverable D1.4 – Mid-term report

Deliverable Number	D1.4	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Mid-term report		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	18	Work Package No	WP1

Description
Report to share the progress of the implementation of the project

Deliverable D2.1 – Presentation for the workshops on pedagogy - summer school 1

Deliverable Number	D2.1	Lead Beneficiary	14 - UCH
Deliverable Name	Presentation for the workshops on pedagogy - summer school 1		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	11	Work Package No	WP2

Description
Presentation / slides of selected case studies to be presented during the workshops on pedagogy during the Nanomer summer school 1 in Chile

Deliverable D2.2 – Presentation for the workshops on pedagogy - summer school 2

Deliverable Number	D2.2	Lead Beneficiary	14 - UCH
Deliverable Name	Presentation for the workshops on pedagogy - summer school 2		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	23	Work Package No	WP2

Description
Presentation / slides of selected case studies to be presented during the workshops on pedagogy during the Nanomer summer school 1 in Chile

Deliverable D2.3 – Presentation for the workshops on pedagogy - summer school 3

Deliverable Number	D2.3	Lead Beneficiary	14 - UCH
Deliverable Name	Presentation for the workshops on pedagogy - summer school 3		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	35	Work Package No	WP2

Description
Presentation / slides of selected case studies to be presented during the workshops on pedagogy during the Nanomer summer school 3 in Ecuador

Deliverable D2.4 – Final white book on case studies

Deliverable Number	D2.4	Lead Beneficiary	14 - UCH
Deliverable Name	Final white book on case studies		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP2

Description
Consolidation of all the analysis of the case studies from the 3 summer schools

Deliverable D3.1 – Set up of the platform

Deliverable Number	D3.1	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Set up of the platform		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	SEN - Sensitive
Due Date (month)	8	Work Package No	WP3

Description
Analysis of previous data from all NanoAndes Summer school and set up of the platform with pedagogical content - Version 1

Deliverable D3.2 – Final version of the platform

Deliverable Number	D3.2	Lead Beneficiary	1 - ENS DE LYON
Deliverable Name	Final version of the platform		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP3

Description
Final version of the platform gathering data from NanoAndes and Nanomer summer schools

Deliverable D4.1 – Summer school 1 program

Deliverable Number	D4.1	Lead Beneficiary	9 - UTALCA
Deliverable Name	Summer school 1 program		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	SEN - Sensitive
Due Date (month)	7	Work Package No	WP4

Description
Program published on the Nanomer website with the program for the summer school 1 in Chile

Deliverable D4.2 – Summer school 1 report

Deliverable Number	D4.2	Lead Beneficiary	9 - UTALCA
Deliverable Name	Summer school 1 report		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	12	Work Package No	WP4

Description
A summary report of the organization of the summer schools including the main outcomes

Deliverable D5.1 – Summer school 2 program

Deliverable Number	D5.1	Lead Beneficiary	8 - UNCU
Deliverable Name	Summer school 2 program		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	SEN - Sensitive
Due Date (month)	19	Work Package No	WP5

Description
Program published on the Nanomer website with the program for the summer school 2 in Argentina

Deliverable D5.2 – Summer school 2 report

Deliverable Number	D5.2	Lead Beneficiary	8 - UNCU
Deliverable Name	Summer school 2 report		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	24	Work Package No	WP5

Description
A summary report of the organization of the summer schools including the main outcomes

Deliverable D6.1 – Summer school 3 program

Deliverable Number	D6.1	Lead Beneficiary	10 - UTPL
Deliverable Name	Summer school 3 program		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	SEN - Sensitive
Due Date (month)	31	Work Package No	WP6

Description
Program published on the Nanomer website with the program for the summer school 3 in Ecuador

Deliverable D6.2 – Summer school 3 report

Deliverable Number	D6.2	Lead Beneficiary	10 - UTPL
Deliverable Name	Summer school 3 report		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP6

Description
A summary report of the organization of the summer schools including the main outcomes

Deliverable D7.1 – Staff Training report 1

Deliverable Number	D7.1	Lead Beneficiary	2 - SORBONNE UNIV
Deliverable Name	Staff Training report 1		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	18	Work Package No	WP7

Description
Report on the organization and outcomes of the staff training exchange 1

Deliverable D7.2 – Staff training report 2

Deliverable Number	D7.2	Lead Beneficiary	2 - SORBONNE UNIV
Deliverable Name	Staff training report 2		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP7

Description
Report on the organization and outcomes of the staff training exchange 2

Deliverable D8.1 – Student exchange program - Report Year 1

Deliverable Number	D8.1	Lead Beneficiary	12 - UNSAM
Deliverable Name	Student exchange program - Report Year 1		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	15	Work Package No	WP8

Description
Report about the student exchange program organization and outcomes - Year 1

Deliverable D8.2 – Student exchange program - Report Year 2

Deliverable Number	D8.2	Lead Beneficiary	12 - UNSAM
Deliverable Name	Student exchange program - Report Year 2		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	27	Work Package No	WP8

Description
Report about the student exchange program organization and outcomes - Year 2

Deliverable D8.3 – Student exchange program - Report Year 3

Deliverable Number	D8.3	Lead Beneficiary	12 - UNSAM
Deliverable Name	Student exchange program - Report Year 3		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP8

Description
Report about the student exchange program organization and outcomes - Year 3

Deliverable D9.1 – Dissemination and sustainability Plan

Deliverable Number	D9.1	Lead Beneficiary	10 - UTPL
Deliverable Name	Dissemination and sustainability Plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	6	Work Package No	WP9

Description
Plan to raise awareness, promote outcomes across Europe and Latin America, facilitate the exploitation of the project outcomes

Deliverable D9.2 – Nanomer website

Deliverable Number	D9.2	Lead Beneficiary	10 - UTPL
Deliverable Name	Nanomer website		
Type	DEC — Websites, patent filings, videos, etc	Dissemination Level	PU - Public
Due Date (month)	6	Work Package No	WP9

Description
Creation and maintenance of the NANOMER webpage, Spanish

Deliverable D9.3 – White book digital publication

Deliverable Number	D9.3	Lead Beneficiary	10 - UTPL
Deliverable Name	White book digital publication		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP9

Description
Formatting of the white book to proceed to digital publication

LIST OF MILESTONES

Milestones					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
1	Summer school 1	WP4	9 - UTALCA	Associated deliverables (program and report)	11
2	Summer school 2	WP5	8 - UNCU	Associated deliverables (program and report)	23
3	Summer school 3	WP6	10 - UTPL	Associated deliverables (program and report)	35
4	Start of student exchange 1	WP8	12 - UNSAM	Associated deliverable (student exchange report)	9
5	Start of student exchange 2	WP8	12 - UNSAM	Associated deliverables (student exchange report)	21
6	Start of student exchange 3	WP8	12 - UNSAM	Associated deliverable (student exchange report)	30

LIST OF CRITICAL RISKS

Critical risks & risk management strategy			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
1	Pandemic crisis		Summer school on line
2	Political instability		Summer school on line or in another country
3	High number of partners		Establish a partnership agreement and an administrative and financial guide, do frequent online meetings to follow the project

Critical risks & risk management strategy*Grant Preparation (Critical Risks screen) — Enter the info.*

Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
4	NanoAndes summer school does not take place face-to-face		NANOMER summer school will be added to another scientific meeting occurring in the country. The aim is to optimize travel costs for the participants to reduce carbon footprint.

TECHNICAL DESCRIPTION (PART B)

COVER PAGE

PROJECT	
Project name:	[Nanosciences with Latin America: sharing knowledge through pedagogical innovation]
Project acronym:	[NANOMER]
Coordinator contact:	[Belén Albela], [Ecole Normale Supérieure de Lyon]

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#@APP-FORM-ERASMUSBLSII@#

#@PRJ-SUM-PS@# [This document is tagged. Do not delete the tags; they are needed for the processing.]

PROJECT SUMMARY

Project summary (in English)

See Abstract (Application Form Part A).

The main objective of the NANOMER project is to share knowledge between Latin America, Spain and France in the domains of science and educational innovation. The field chosen is the world of nanoscience, a field in which students and teachers still have much to discover. Our objective is to empower students to solve societal problems. Three levels of exchanges will be conducted: 1) between students and teachers, 2) between the pedagogical teams of the different universities, and 3) between the international relations resources in each institution. Special attention will be paid to supporting both students and teachers in their acquisition of transversal skills. Indeed, access to information is nowadays easy for students, making it necessary to use new teaching techniques to train students to think critically about the information available, to argue, to work in groups and to solve problems. The idea is to enable them to become good researchers and future teachers as well as to develop their awareness of their skills. These exchanges will take place through distance workshops, face-to-face workshops (summer schools) and also through a digital platform. The latter will allow all the actors to preserve the tools and documents generated and to disseminate them broadly and inclusively to students, especially to those who have fewer resources and who are in more remote locations. This project will create a community of teachers, sociologists and learning specialists to guide both students and teachers in training future scientists. Indeed, the latter will have a key role to play in dealing with many current problems such as water and air decontamination, energy and waste recycling. Finally, one of the strengths of the project is that it will promote cooperative networking between Latin America and Europe.

#\$PRJ-SUM-PSS# #@REL-EVA-RE@# #@PRJ-OBJ-PO@#

1. RELEVANCE

1.1 Background and general objectives

Background and general objectives

Introduction

The main motivation of this project is to **improve both scientific and soft skills as well as the employability of students from High Education Institutions (HEIs) in Latin America in the field of nanosciences**. This field of science is a multi-disciplinary domain that brings together physicists, chemists, engineers and biologists and offers young scientists the space to be creative and solve important environmental problems such as air and water purification, waste recycling, alternative energies, and development of smart materials. These are current challenges in the economic and social ecosystems of all countries and for which the young generations will have a key role to play. **Strengthening connections between Latin America (LA) and Europe (EU) will stimulate capacity building and ensure equity and inclusion as well as student empowerment and employability, mainly in remote HEIs in Latin America.**

Beyond scientific skills, in order to be more active in their professional projects, it is necessary to develop other **transversal skills** among students such as teamworking, problem solving and reflexive thinking. Moreover, training of teachers in innovative pedagogies is a key issue in providing them the proper tools and methodologies to train students who will become future professors and researchers. Teacher training is not equally promoted depending on the countries' educational system. This is also the case for the different institutions involved in our consortium. Indeed, **the challenge is to empower students to lead their own learning**. Within the NANOMER project, the aim is thus to tackle this using a holistic approach. We believe this development should be done at three levels –students, teachers and staff- using a systemic approach, while also taking into account the institutional level and the surrounding ecosystem.

The NANOMER project aims to contribute to the regional priority of fostering sustainable growth and jobs, in line with the Sustainable Development Goals (SDGs), with a specific focus on SDG 4 'quality education', SDG 5 'gender equality' and SDG 17 'partnerships for goals'. The project will leverage interlinkages between SDGs and CBHE objectives to progress towards NANOMER goals and increase benefits to the Latin American HEIs.

In order to disseminate the knowledge, we will **co-construct a digital innovative environment with all the actors** to capitalize on the resources produced, with the aim of generating projects for all the actors and opening access to the entire university educational community. The digital platform will make it possible to develop **communities of interest** in the countries involved in the project and to reach out more widely to remote students with fewer opportunities. The contents of the platform should be accessible and inclusive. We will make them available to other HEIs in Latin America.

The consortium in the present project is composed of **two EU members** (Spain and France) and **four countries from Region 10** (Argentina, Bolivia, Chile, and Ecuador). Some of the HEIs in this project are less experienced or in remote regions and need modernisation, whereas others have program exchanges that are good (satisfactory/ well-constructed...), but are only accessible to a very small number of students.

Background

The NanoAndes network is a spontaneous assembly of nanoscience researchers motivated by the training of new generations of scientists. This network is coordinated by Prof Cesar Costa Vera (EPN Quito, Ecuador, who is also a member of the NANOMER project). Historically, **France was at the origin** of its consolidation, through initial funding by the Regional Cooperation Agency for Andean nations of the French Ministry of Foreign Affairs from 2010 until 2015, and, since 2016, partial support by the French National Center for Scientific Research (CNRS). The CNRS network formally gathers an important number of institutions from five countries in South and Central America (Mexico, Costa Rica, Peru, Chile and Argentina), and is open to all scientists from that region, in particular from Colombia, Bolivia, Brazil and Ecuador. It contributes to the organisation of **one nanoscience-centered summer school per year in Latin America devoted to nanoscience**, with the aim of improving the teaching of the different disciplines involved in the nanoscience domain. In addition, it helps to **strengthen cooperation between nanomaterials research laboratories** by fostering collaborations through internships in France for both students and professors (albeit without any financing for these actions). The CNRS IRN network is coordinated by the University Grenoble-Alpes (UGA), together with Sorbonne University (SorbonneU) and École Normale Supérieure de Lyon (ENS Lyon).

While NanoAndes focuses on scientific workshops and collaborations, at this stage, **it is essential to expand the exchange between teachers and students as well as to develop in greater depth the pedagogical aspects and acquire greater international visibility**. The NANOMER project aims to fill in this gap and bridge the needs of the different target groups.

Spain is the second European country involved in this project, since it shares the language, the interest in nanomaterials and many **multicultural links with all Latin American countries** selected for this project. In addition, some of the participants already cooperate with some institutions in Latin America. Two important universities, Universidad Politécnica de Valencia (UPV) and Universidad Complutense de Madrid (UCM) have extensive experience in the management of European projects and internationalisation of HEIs, and they possess well equipped laboratories in the field of nanotechnology. This will allow the students from LA to be trained in recent technologies that later they could incorporate in their own LA laboratories. This project will also offer them the possibility of establishing a new network to facilitate scientific cooperation. Also, Universitat Jaume I in Castellón is a young university, created in 1991 in a small city. The growing experience of this young university in terms of internationalisation will be helpful for other small universities in Latin America.

Ten HEIs from four countries from **Latin America** will participate in this Project:

- **Argentina:** Universidad de Buenos Aires (UBA), Universidad Nacional de San Martín (UNSAM), Instituto Balseiro-Universidad Nacional de Cuyo (IB-UCuyo)
- **Bolivia:** Universidad Mayor de San Andrés (UMSA), Escuela Militar de Ingeniería (EMI)
- **Chile:** Universidad de Chile (UCH), Universidad de San Sebastián (USS), Universidad Talca (UTALCA)
- **Ecuador:** Universidad Técnica Particular de Loja (UTPL), Escuela Politécnica Nacional de Quito (EPN)

Some of these universities are old and highly recognized internationally, such as Universidad de Buenos Aires (Argentina) or Universidad de Chile, while others are younger, like Universidad de Talca (Chile) or less experienced, such as Universidad Mayor de San Andrés and Escuela Militar de Ingeniería, in Bolivia (see description of the Universities in the Annex). It is important for the development of nanoscience throughout LA to **create strong links between small universities with those having high quality equipment and a critical mass of researchers and engineers**.

Main objectives

With the improved training of Latin American young scientists, in part thanks to the NanoAndes summer schools, the quality of teaching in the nanosciences domain has already improved over the past years at least in the largest universities in Latin America. However, much work remains to be done to give access to high-level teaching in nanosciences for students from smaller universities that do not have access to expensive, state-of-the-art laboratory equipment. Specific attention will also be given to the involvement of women in science. The aim of this project is therefore to not only increase the scientific knowledge of Latin American students, in particular for those from small universities, but also to provide them with all the necessary tools to increase their employability by developing their soft skills and by enhancing the transnational networks between scientists. Particular emphasis will be devoted to scientific communication and training to develop their own **portfolio of skills**. Moreover, we want to foster the acquisition of **transversal skills** thanks to lectures on ethics in research, sustainable development in chemistry, the environmental impact of nanomaterials as well as legal and regulatory aspects. The students need to feel

that they are the true agents of the change and support and promote the Green Deal. The **exchange between students from different origins** will be promoted, as this program involves people from different cultures.

The NANOMER project is built on **the existing scientific NanoAndes network in order to develop a pedagogy network bringing together the actors** already involved in this community (teachers, researchers, students). Additionally, we will include:

- **Learning specialists and sociologists** to co-coordinate and co-support the different pedagogical actions for both students and teachers
- **An international cooperation staff** to foster the exchange programs and promote inclusion of students with fewer opportunities or coming from remote areas

We would like to **promote cooperation at three levels** between the different higher education institutions (HEIs) involved in the project:

1) Students' level - Workshops will be organized in LA (Bolivia, Argentina and Chile) to develop these transversal skills and prepare them to find employment, either in the private sector or in academia. These workshops on pedagogical issues will be associated to the NanoAndes summer schools. The **main language** of these schools will be **Spanish**, in order to promote students that do not have a sufficient level of English, which is often the case in some HEIs in LA. The second language used will be English for the participants that do not master Spanish. This double language concept has already been implemented in NanoAndes, and is an important factor in their success. The students that will attend these workshops will be selected along the following criteria: pertinence of academic level, inclusion of students with fewer opportunities or coming from isolated cities in LA, gender equality, and geographical balance. The schools will be organised in an environment to promote communication between students from different countries thereby fostering the creation of **a network, civic-competencies and sharing of different cultures**.

2) Teachers' level – Most university lecturers have neither access to, nor the motivation to incorporate modern pedagogies in their courses and practicals. We would like to increase the pedagogical level and motivation of the teachers from both Europe and Latin America by organizing **meetings to share the teaching methodologies** used in each university and also train them to new methodologies. Specialists on innovative teaching, fully relevant in nanoscience, will coordinate this training. The advent of internet has made readily available to educators and students a wealth of information that was difficult to obtain until then. Consequently, descriptive courses have become less attractive for students. Therefore, new teaching techniques such as **reverse learning or project-based approaches** can be used to improve science teaching. In addition, these techniques will improve the student-teacher relationship and increase the motivation of the students. We will also **improve the practical teaching**, which is fundamental in nanosciences. One of the obstacles of transforming teaching practices is ignoring the specific contexts and environment. The challenge of transformations is to articulate **innovation and ecosystem** to see what possible "steps forward" are acceptable and feasible. If the pedagogical problems are similar, the ways of actions are different and must be adapted to specific contexts. Collaboration in NANOMER offers a question of giving space and time to work about educational experiments. We will use the results of a project developed at ENS Lyon in collaboration with the Institut Français de l'Éducation (IFE, French Institute of Education) on the **improvement of practical teaching in sciences (COMESUP)** as a starting point in this new project. Moreover, the experience of the University of Talca, which is a pioneering reference of **competency-based education** in Chile, will be fundamental for this part of the project. Different experts in the field will lead this part of the project. Finally, involving **cultural diversity** in the methodologies and trainings will be a key aspect in the project.

3) Institutional level – Implementation of the cooperation between the Universities in Latin America and in Europe is an important objective of this project. **Meetings and workshops between the responsible leaders of the international cooperation from each HEI will be organised** in order to facilitate the student and staff mobilities and to exchange on best practices. This aspect is very important, since this program could foster the internationalisation of some of the HEIs in the third countries not associated to the European Union, for example the two HEIs from Bolivia.

The NANOMER ambition, built on the existing NanoAndes network, is to **create a learning community**, (Figure 1, Senge model, 1990) around *"organizations where people continuously develop their capacity to produce the results they desire, where new and expansive ways of thinking are fostered, where collective aspiration is unleashed, and where people continually learn to learn together"*. As well as sharing experience and knowledge, the aim is building a community that shares a common culture, a common vision of the project, shared values (mental models), and that thinks in terms of its own progressive development within the ecosystem of its community. The idea is for this community to be able to share and build on pedagogical and didactic issues in an **integrated and continuous training system**, built around key moments, events and common sharing spaces (cf WP2).

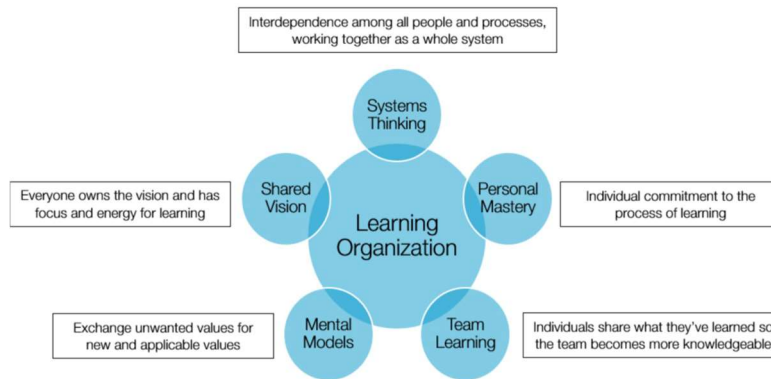


Figure 1. *The Fifth Discipline, Peter Senge, 1990.*

This learning community will value each individual's experience and skills, encourage collaboration and collective spirit, find collective solutions and reconfigure work spaces. From the point of view of horizontal interactions between players, the idea will be to produce deliverables together - training and research objects - by documenting the activity carried out within the system.

This agile, collaborative work will take place in the **NANOMER LAB**, designed as a virtual space. Composed of project stakeholders (students, learning specialists, staff, etc.) and coordinated by WP coordinators, this LAB will enable incubation sessions to be organized to design highlights and actions carried out, provide feedback on actions carried out and possibly develop future actions. This space will encourage agile and experimental management of the project, with possible areas for regulation.

1.2 Needs analysis and specific objectives

Needs analysis and specific objectives

International Cooperation in Latin America

Both Europe (EU) and Latin America (LA) produce good quality knowledge, the main **difference** between these regions being the **critical mass of researchers and equipment**. Regarding equipment, Argentina and Chile possess modern and heavy scientific equipment, while in Ecuador and Bolivia less expensive scientific equipment is available and the access to specific tools to characterize nanomaterials such as electronic microscopy or synchrotron measurements is done thanks to collaborations with other countries. Politically LA is betting on scientific and technological development, investing in scientific equipment and in the development of international scientific cooperation networks. These types of scientific cooperative structures allow the sharing of knowledge.

Most universities in Latin America have a Department of International Cooperation. The main objective of this type of structure is to direct the process of internationalisation of the university through relationships and strategic alliances with academic, scientific, development cooperation and higher education entities worldwide, aimed at strengthening the institutional management, academic, research and social interaction capacities of the institution through international cooperation.

In this sense, there are important **differences** among the different HEIs with respect to the **system of exchange, mobilities and international relations** that contribute to the purpose of establishing academic-scientific cooperation links, oriented towards the international mobility of students, graduates, teachers, researchers and administrative staff. In some cases, there is an important gap compared to European HEIs. This gap depends on different factors: the national politic strategy, the political stability of the country, the location of the HEI inside the country, the history and priorities of each HEI, the number and socio-economic situation of students, and also the teachers' and researchers' results and international impact of each institution. Some universities such as the universities from Chile and Argentina participating in this project have been much more active in recent years, while the **universities of Ecuador and Bolivia have not been able to establish many important collaborations with Europe**. As a representative example, Escuela Militar de Ingeniería (EMI, Military School of Engineering) in Bolivia has not been involved in any important collaboration with Europe since 2015, with only an initial contact with the University of Granada in Spain.

These types of international networks allow scientific collaboration, especially between professors and scientists with high international recognition. However, this collaboration does not favour the vast majority of students in the country, especially those who do not have many opportunities because they live in remote

cities or whose families do not have many resources. **Only a few students are able to spend a few months in European universities.**

Student exchange

In Bolivia and Ecuador, the rate of student exchange with Europe is very low. Although there is some help from the institution, in this aspect, it is more a personal approach—with the help of a professor- to look for a financial support to go abroad. This occurs at various levels, mainly master or PhD. **It is necessary to have an easy way to access exchange programs, and in many cases the students are not able to access to them.**

Another key aspect is that **an important percentage of master and PhD students in LA have children,** which is a drawback to go abroad. Indeed, going to Europe implies going with the whole family or having the possibility to have some help to organise the family duties while going abroad. This is a very different situation compared to Europe, where master or PhD students with children are rare in physical sciences.

For example, the Universidad Técnica Particular de Loja (UTPL), in Ecuador, has 6000 students on site, and 33000 online. Only a very small percentage of their students have done an internship abroad, and even less students have carried out an internship at UTPL (Table 1).

Year	in	out	Total
2018	5 (on site)	14 (on site)	19
2019	19 (9 on line; 10 on site)	15 (7 on line ; 8 on site)	34
2020	32 (31 on line ; 1 on site)	13 (12 on line ; 1 on site)	45
2021	45 (on line)	24 (on line)	69
2022	33 (31 on line ; 2 on site)	18 (10 on line ; 8 on site)	51
TOTAL 5 Years	134	84	218

Table 1. Number of students in exchange programs with international HEIs at UTPL, Loja, Ecuador, between 2018 and 2022: in (foreign students welcomed at UTPL) and out (students from UTPL that went abroad). Total number of students at UTPL: 6000 on site and 33000 on line.

UTPL in Ecuador offers a high-level education in different fields, it is pioneering in on-line teaching since 1977 and new pedagogical tools have been recently invested. However, **higher internationalisation and better exchange networks are needed to favour students' exchange.** Table 2 gathers the international projects where UTPL has participated.

Number	Organisation	Location
1	FIEDS	ITALY
1	EUROPEAN COMISION	BELGIUM
1	ARES	FRANCE
9	GIZ	GERMANY
1	RUFORD FOUNDATION	UK
1	OUI	CANADA
4	ECUACORRIENTE	CHINA
1	PNUD	New York, USA
1	FUNDACIÓN FUTURO LATINOAMERICANO INTERNACIONAL	PANAMA
1	BID	Washington D.C., USA
2	LUNDIRG FOUNDATION	CANADA
5	NATURALEZA Y CULTURA INTERNACIONAL	USA
1	UNESCO	FRANCE
Total:	29	

Table 2. International projects of UTPL between 2019 and 2022, Loja, Ecuador.

There are some instances that are linked to certain universities in Latin America in order to promote and disseminate professional training scholarships with European countries, such as:

- **Campus France:** The French Embassies in LA annually open a call for scholarships. The selected students benefit from a scholarship to study a master at a French university or at one of the “Grandes Écoles”, like ENS de Lyon, or to perform up to 12 months of their PhD in a French laboratory. In 2022, a student from UChile has been awarded such a grant to perform research at UGA in the field of nanomedicine.
- **Chevening:** This is the United Kingdom international scholarship program. Funded by the Foreign and Commonwealth Office and partner organizations, it offers scholarships to study in the United Kingdom for one year on a fully funded master degree course.
- **Carolina Foundation:** Institution that promotes intercultural relations and educational and scientific cooperation between Spain and Ibero-American Nations. It proposes a training program for young Ibero-American professionals.

- **DAAD:** is the German Academic Exchange Service, one of the world's largest funding organisation for the international exchange of students and researchers. DAAD supports over 100,000 German and international students and researchers around the world.

These types of platforms help the students in many countries such as Mexico, Brazil or Argentina to find internships in Europe. However, for some students, especially in countries such as Ecuador and Bolivia, **language is one of the obstacles** to accessing these types of applications that promote exchanges with Europe. Sometimes students do not have the good English, German or French level to apply, nor the requested **language certificate, which has an additional cost**. This is sometimes one of the reasons not to apply to these calls for students with fewer resources.

Moreover, many HEIs in Latin America do not encourage the development of soft skills among students. In fact, in terms of communication, many universities face the **language barrier** as the main difficulty. Motivating the learning of communication skills in a foreign language is an important challenge. This is due to the fact that in the national educational system, for example in Bolivia, learning of other languages is not privileged. Although it is included in the curricular content, unfortunately **students do not develop communication skills in another language than Spanish**, not even at B1 level. That is why envisioning the exchange of students at the international level would motivate the learning of other languages within the university system and this in turn would open the motivation and visualisation for the exchange of knowledge in other languages, strengthening the professional and personal development.

In turn, also through student exchange internships in a different country, students would not only develop communication or professional skills but also personal skills such as resilience and problem solving, through coping with common situations that arise when living alone abroad. Moreover, exchanges abroad would allow students to **open their scientific, cultural, historical and social vision in life**.

Science education in Latin America

Science teaching in Latin America is mostly based on lectures, exercises on known problems (mainly calculus training), and evaluations with exams that are very much geared to a single answer. This type of teaching trains very good technicians, but it inhibits the creative capacity of students. Individualism is valued and the "brilliant" students are highlighted. **Today it is important to encourage creativity and critical reasoning to make an inclusive education where each individual can reason, expose and discuss their ideas in order to become true agents of the global change**.

To this aim, it is necessary to train teachers, which is not easy. In most universities, the training of pedagogical teams is precarious or non-existent. University professors have to find financial support in order to support their research projects thus pedagogical training is often neglected and not taken into account in the development and promotion of their careers.

Pedagogical training in Higher Education Institutions

As far as pedagogical training is concerned, most educational projects are focused on improving early childhood, primary and secondary education. **There are not many experiences at the university level**. In higher education, pedagogical innovation is often a **personal initiative** of a given teacher, and without help, **motivation is easily lost**.

The institutional support offered to the teachers varies from one national context to another, with institutional dynamics ranging from informal exchanges to compulsory teacher training. However, student success is at the heart of the concerns of HEIs, and in the face of diversity, **the pedagogical dimension seems to be a relevant way of transforming teaching practices**.

However, it is important to form and train pedagogical teams with the vision of developing the following objectives:

- Establishing common goals and expectations, involving all components in the consensus and clarity of objectives and goals.
- Planning and coordinating educational processes, also considering personal and social aspects in relation to the educational process.
- Promoting an organised and collaborative environment among students, pedagogical teams, administrators and those responsible for the project.

One of the possible approaches to develop this capability environment is the **competency-based education**. Competences are explicit and the student uses them as a map to learn. Assessment of the competencies is an on-going process rather than a single event, and extra support is needed for this type of « program approach ». Using the competency-based approach students and teachers work together to address problems and the students have the choice of how they learn (empowerment approach).

However, in most of the universities **educational innovation and reflexivity is an elective process for courses**. Besides the mandatory update of programs and courses to a competency-based model, the contents and learning strategies are the responsibility of each course coordinator. The institution fosters educational innovation, having a diverse range of initiatives, according to each program and unit's projects, funds, and challenges. And this is quite diverse depending on the institution and the teachers responsible of the courses (see document in Annex with the description of the pedagogical support for teachers for each HEIs participating in this project).

Conclusions

Many students from LA often **do not have the opportunity to go to a European HEI for an internship**, either as undergraduate, master or PhD student. The most motivated students manage to go to Europe because there is an existing scientific partnership between a given professor in LA and a specific laboratory in Europe. Therefore, it is not easy for a student to apply for an internship, and the choice of the subject is often reduced to some specific research projects.

In order to propose a larger panel of internships, **an organised network is required**, both at the level of the professors and scientists but also at the level of the international cooperation departments of each HEIs in both Europe and Latin America.

Motivating teachers to use the competency-based approach is a challenge. In addition, **increasing the soft skills of students from LA and proposing innovative pedagogical tools —and pedagogical support— to their educators will increase the motivation of the students** to apply to such international exchange programs.

Networking and sharing science with people with different cultures since young ages will help the students of LA to be more open and motivated to become **active actors (autonomous and responsible) and empower them to cope with the environmental problems in their own countries. The scheme will help them to develop capabilities, be more conscious of them and be more proactive on actual global societal topics.**

Specific objectives

The **key objectives** (KO) of the NANOMER project address the challenges raised above and primarily focuses on the inclusion of students from Latin America —in particular those have fewer opportunities— in order to develop their soft skills and foster an environment of empowerment. NANOMER provides a systemic framework to support communities of stakeholders in achieving this objective, while creating social and economic value. NANOMER actions are ready to be implemented, and are described in the following:

KO1. Improvement the soft skills of the students

Soft skills are personal attributes that enable someone to **interact effectively with others** and can have a positive influence on furthering the students' career. These skills can include communication abilities, interaction with others, emotional empathy, teamworking and conflict resolution (Table 3). The importance of soft skills lies in the fact that they are not restricted to a specific field and can be used in every aspect of people's lives, without any need to readapt them based on the situation. Soft skills make students flexible and adaptable to different environments in a world which keeps changing.

In the 21st century, **soft skills are a major differentiator for employability and success in life**. James Heckman, Nobel Prize Laureate in Economics, claims that soft skills predict success in life and that programs that enhance soft skills have an important place in an effective portfolio of public policies. He worked with a consortium of economists, developmental psychologists, sociologists, statisticians and neuroscientists and showed that quality student development is essential for better education, health and economic outcomes. Heckman shows that the "soft" social skills are neither soft nor unimportant. These skills are essential ingredients for success in life. Life cycle skill formation is dynamic in nature. Early development of effective social skills greatly influences the successful development of the intelligence quotient (IQ) and ultimately, personal and social productivity (<https://heckmanequation.org/>).

Teaching soft skills (competencies) is challenging, because they are **difficult to assess and measure**. Moreover, they are cumulative and depend on personal characteristics of students. Hard skills, on the other hand, relate to specific information and can be easily demonstrated and evaluated. Hard skills, for example in the field of nanosciences, tend to change over time and require updating, whereas soft skills are harder to acquire, but last longer. Therefore, the **help of sociologists and learning specialists** is required to support teachers to foster students' success.

HARD SKILLS	SOFT SKILLS
fundamentals in sciences (chemistry, physics, biology), spectroscopy, data analysis, problem-solving, python, experimental sciences, etc.	communication, negotiation, adaptability, empathy, creativity, teamworking, time management, etc.

Table 3. Hard and soft skills for students in nanosciences

NANOMER aims at **improving the soft skills of the students** by:

- organising **pedagogy workshops** between teachers from different institutions (on support for development of competencies),
- motivating students to participate to **summer schools** and
- **fostering students exchange** between HEIs.

This objective is addressed not only to students from LA but also from Europe. Different actors are involved: students, teachers, learning specialists, sociologists and international cooperation staff (Table 4).

KO2. Development of a community on pedagogical innovation in sciences

There are a lot of scientific communities gathering researchers from different countries in different fields of sciences (chemistry, physics, biology). This is the case of the NanoAndes network in the field of nanosciences. However, **scarce examples exist about communities of teachers at the university level focused on pedagogical problems.**

NANOMER aims at **creating an active community interested in educational problems** in science teaching at the university level. We propose to develop:

- a **digital platform** to capitalise pedagogical resources (and experimentations);
- **case study workshops and thematic workshops;**
- **summer schools** to present the results of these workshops.

KO3. Inclusion of students with less opportunities from Latin America

NANOMER project would like to be able to **motivate Latin American students** who are outstanding, but due to their environment and personal situation, do not have the opportunity **to participate in international projects**. Sometimes it is because they do not have enough money to pass a language certification in order to apply for a scholarship, sometimes it is because they are afraid to move to Europe, sometimes because they do not have the right contacts to apply for scholarships, training courses or summer schools.

We propose to include these students, in particular those with fewer opportunities, through the following actions:

- **improving international relations resources**, especially at universities in more remote areas, so that students have access to all the information they need:
- prioritizing the selection of these students to participate in summer schools
- developing their **soft skills**
- creating a **specific exchange program** for them to do scientific internships in Europe
- using **Spanish** as the main language of the pedagogical platform and summer schools

KO4. Empowering students to solve societal problems

The three latter objectives will provide students with the tools to **solve societal problems on the path to a green transition**, such as recycling waste, de-polluting water and soil, finding greener energy sources, developing new techniques for detecting and treating diseases, etc. A degree in nanosciences can offer all the knowledge to form the future actors to solve these problems. However, other **soft skills are also necessary in order to empower students**, which is the main aim of NANOMER.

NANOMER will help students to develop a **portfolio of skills**. Thus, the students will gain authority to make decisions on their own and implement their changes during their university education. After, they will be active actors to **solve problems in their own countries and regions**. We expect that the European Green Deal initiatives to make the European Union climate neutral in 2050 could be applied in Latin America.

NANOMER will also provide an optimised environment to reach the objectives by

- Creating a support system at organisational level (administrative staff, academics, governance)
- Enhancing institutional capacity and services offered to students

- Improving international cooperation and ensuring the alignment of international development strategies

The **key objectives** (KO) of the NANOMER project are gathered in Table 4, together with the expected achievements and **key performance indicators** (KPI).

Key Objectives	KO1 Improvement of the soft skills of the students		KO2 Development of a community on pedagogy innovation in sciences		KO3 Inclusion of students with less resources from LA		KO4 Development of students' empowerment to solve societal problems	
	Achievement	Indicators	Achievement	Indicators	Achievement	Indicators	Achievement	Indicators
Actors								
Students	<ul style="list-style-type: none"> • Participation to the summer school • Exchange program AL-EU 	<ul style="list-style-type: none"> • Skills portfolio • Report and/or presentation • Professional project 	<ul style="list-style-type: none"> • Participation to an innovative course 	<ul style="list-style-type: none"> • Co-Evaluation of the courses and practicals 	<ul style="list-style-type: none"> • Specific NANOMER exchange program 	<ul style="list-style-type: none"> • number of students participating to the exchange 	<ul style="list-style-type: none"> • Open badge (OB) • Portfolio of skills 	<ul style="list-style-type: none"> • Number of OB
Teachers	<ul style="list-style-type: none"> • Proposal of a practical for the summer school 	<ul style="list-style-type: none"> • Evaluation by the students • Reuse of the practical 	<ul style="list-style-type: none"> • Pedagogical platform • Online pedagogy workshop 	<ul style="list-style-type: none"> • Evaluation of the students • Use of the pedagogy tools in their courses 	<ul style="list-style-type: none"> • Motivate the students of participate to summer schools 	<ul style="list-style-type: none"> • number of students participating to the summer school 	<ul style="list-style-type: none"> • Open badge 	<ul style="list-style-type: none"> • Number of OB
Scientific Community	<ul style="list-style-type: none"> • Organisation of the summer school 	<ul style="list-style-type: none"> • Connection between science and pedagogy 	<ul style="list-style-type: none"> • Feedback of the workshop during the summer school 	<ul style="list-style-type: none"> • Evaluation of the teacher 	<ul style="list-style-type: none"> • Scientific exchanges 	<ul style="list-style-type: none"> • Bilateral co-directed PhD 	<ul style="list-style-type: none"> • Bilateral cooperation programs • Bilateral co-directed PhD 	<ul style="list-style-type: none"> • Feedback from the students
Other actors : pedagogues, sociologists, international service staff...	<ul style="list-style-type: none"> • Co-organisaiton of pedagogy workshops (online and summer school) 	<ul style="list-style-type: none"> • Evaluation of the pedagogy ateliers • students education cursus 	<ul style="list-style-type: none"> • Co-organisaiton of pedagogy teacher training 	<ul style="list-style-type: none"> • Evaluation of the training 	<ul style="list-style-type: none"> • motivate the students through the workshops on soft skills 	<ul style="list-style-type: none"> • Number of students participating 	<ul style="list-style-type: none"> • Evolution of the student's soft skills • Relation with the culture and the local environment 	<ul style="list-style-type: none"> • feedback from the students

Table 4. Key objectives (KO), expected achievements and key performance indicators (KPI).

Remarks

- We plan to have both students, teachers and staff co-create and participate in the platform. This will create strong connexions and will increase the soft skills of the students.
- The summer schools, as short intensive study programs, will be organised in HEIs of LA in order to facilitate the access of a higher number of students from LA and minimise the environmental impact due to travelling. Professors and specialists of different fields from both Europe and America will be invited.
 - The training of the educators will be both remote and face-to-face.
 - It would be very fruitful to exchange innovative teaching experiences carried out in each university, to make them known with their successes, weaknesses and with the resistance that we usually find with peers.
 - The learning specialist could help the educators to understand with a broader framework the strengths and weaknesses of their experiences that are rather intuitive and pragmatic and that have given good results. A reflexivity analysis will be encouraged in order to share experiences during Summer Schools and to disseminate innovative projects.
 - Meetings between of the international staff of the different HEIs should increase the internationalisation of HEIs in LA and favour student exchange.

#@COM-PLE-CP@#

1.3 Complementarity with other actions and innovation — European added value

Complementarity with other actions and innovation

Some of the HEIs participating in this project are fostering competency-based learning approaches and innovative pedagogical strategies. These on-going projects will be used to help us in supporting students and teachers to develop soft skills. Educators involved in these projects will participate in NANOMER project, both in the pedagogy workshops and summer schools, in order to train both students and teachers from the HEIs that do not have this type of support.

Moreover, the different culture of the participants will be an added-value to the project. The pedagogical project of NANOMER will be coordinated by University of Chile, that have a very active department in learning and teaching, in coordination with the French Institute of Education (Institut Français de l'Education, IFé) in France. DUNES service at ENS de Lyon will take care of the pedagogical platform based on a current open Moodle platform that is already devoted to other trainings proposed to external participants.

Universidad de Chile, coordinator of the pedagogical project of NANOMER

The University of Chile is a complex university founded in 1842. It is the country's oldest and most prestigious research institution and one of the largest higher education universities in the region. The university has the most significant number of graduate programs in the country and, **since 2000, has been implementing competency-based programs in all its undergrad programs**, which is equivalent to the one in most of the countries in the EU.

The **implementation of a graduate education competency-based system** has been ongoing **since 2019**, the year in which many master's and Ph.D. degrees started to update their curricular design to fulfill this standard, in alignment with the mandate of the National Accreditation Commission (CNA), an institution that certifies the educational quality of higher education institutions and graduate programs.

The Undergrad Education Office offers training and support in competency-based education each semester, aligned with the Educational Model of the University of Chile (UPERDOC program). These courses include effective teaching techniques, **digital tools for learning, integration of artificial intelligence for higher education, and educational assessment based on competency models**, among others. In addition, different workshops and educational activities are also offered across the year for faculties interested in emerging topics and opportunities.

Institut Français de l'Éducation (IFé) and DUNES service, ENS de Lyon, a French teaching lab

Institut Français de l'Éducation (IFé)

The French Institute of Education (IFé) is at the interface between research, action and decision-making in education. Participating in the dialogue between science and society, its mission is to promote the circulation of knowledge and the articulation of professional practices, with the aim of supporting teachers, researchers, staff and students in the improvement and transformation of the education system.

Teaching activities at IFE are described below:

1) Funded projects: COMESUP « Enhanced Practical Works »

Funding: 15000 €



Start: 01/04/21 End: 01/ 04/ 22

The aim of the “Enhanced Practical Work” to promote in-depth learning project is to significantly increase the quality, viability and value of practical work, which has a strong experimental component. During COVID, the teaching teams embarked on a process of transforming practical work. Indeed, hybrid or distance learning has led them to think differently about this teaching method, and to envisage long-term changes. The COMESUP project, enriched by this experience, was based on a set of measures designed above all to limit the factors that lead to student disengagement and to encourage the acquisition of soft skills that could allow them to improve the collaborative work. Through this project, IFé aimed to document the impact of this type of approach for both students and teachers.

Process quality indicators:

- New skills integrated into the reference framework / degree of readjustment of student tests and mid-term exams
- Increase in the number of practical exercises carried out in groups
- Number of teaching staff involved (accept, value and apply the change)
- Level of ease of the process implementation

Indicators of pedagogical results:

- Average student attendance rate for these practical exercises

- Quality of the student reports
- Success rate in the courses and practicals in which the augmented practical work is offered
- Ability of the students to use the skills developed

2) Teacher trainings (future teachers, neo-lecturers...): co-construct with actors on concrete pedagogic situations, from problematization and identify ways of solutions in order to experiment them.

- Teachers, future teachers, neo-lecturers: workshops and trainings on inclusive pedagogy for student achievement, pedagogical alignment and pedagogical coherence, syllabus, collaboration and regulation during teaching,
- Teacher-trainers competencies approach, assessment as learning, student tutoring

Supporting French higher education institutions in competencies approach and change management at different scales: macro, meso and micro.

3) Pedagogical innovations: support of pedagogic teams on innovative projects: National Chemistry Tournament (TFChim: Tournoi Français des Chimistes, <https://www.tfchim.fr/>), Mediation with high School about the periodic table, support on inclusive questions.

DUNES (Développement des Usages du Numérique pour l'Enseignement et les Savoirs)

One of the DUNES department's main missions is to implement and develop the use of digital technology in all of the school's activities, and to promote the creation of digital resources by the school's teachers, researchers, staff and students (including PhD students), from design to internal and external distribution. In particular, the department is responsible for coordinating the production of resources for continuing teacher training (DGESCO sites) and online digital universities (Unisciel, UOH, UVED), as well as for international digital projects in which the school is involved (opencourseware, for example). It participates in the production of resources for digital pedagogical engineering for teachers.

DUNES specializes in a range of activities, including:

- Expertise in administering the Moodle educational platforms at ENS de Lyon, involving the deployment of plugins tailored to specific needs, adherence to accessibility rules, and access management.
- Providing user support for navigating and utilizing these platforms.
- Offering teacher training for creating online courses, including pedagogical engineering and the optimal utilization of activities available on the Moodle platform.
- Expertise in assisting with the design and execution of online courses, particularly MOOCs.

The ENS de Lyon's "Moodle Ouvert" platform serves as a hub for educational content accessible to both national and international audiences, regardless of enrolment status. The current LMS operates on Moodle version 4 and integrates features such as BigBlueButton (virtual classrooms, video conferencing) and the H5P plug-in.

Universidad de Talca, pioneer on competency-based education in Chile

The Universidad de Talca initiated a shift towards competency-based education in 2004, aiming to align training with labour market needs and enhance student mobility. This transformation started with the adoption of the European Credit Transfer System (ECTS) in 2006 and later transitioned to the SCT-Chile system in 2013. Their educational model, officially implemented in 2012, consists of three lines of formation: Fundamental Formation, Basic Formation, and Disciplinary Formation. The Fundamental Formation Program (PFF) focuses on **communication skills, personal and interpersonal skills, and social responsibility** and is integrated across all programs.

Continuous improvement led to an update of the Educational Model in 2023, reflecting changing global realities, such as technology and climate change. It is built on three core principles: a people-focused university, a university linked to the territory, and a university promoting innovation.

To support this competency-based model, the university introduced a **Diploma program in Competency-Based Education** for academics in 2011, emphasizing methodology, evaluation, and technology changes. Additionally, the Research and Educational Development Institute offers a **Master's program in Competency-Based Education**, the only one of its kind in Chile, aiming to train specialists in developing, designing, and improving competency-based educational solutions.

Overall, Universidad de Talca's commitment to competency-based education and innovation reflects its dedication to adapting to evolving educational needs and fostering student success.

Universidad Técnica Particular de Loja (Ecuador), pioneer on in-distance education

The Universidad Técnica Particular de Loja (UTPL) offers both face-to-face and distance learning academic programs for undergraduate and postgraduate students, boasting 46 years of experience in

distance education. UTPL's flexibility allows students from Ecuador, Spain, Italy, and the USA to access **high-quality higher education**. As of 2023, UTPL had 40,256 students, with nearly **equal gender representation**, and a teaching staff of 784, maintaining gender balance as well.

The university prioritizes **inclusivity and ethnic diversity**, focusing on students with disabilities and those from **social rehabilitation centers**. The scholarship program aims to support students financially throughout their academic journeys. UTPL's academic model is **competency-based**, emphasizing active learning and ethical development. It promotes research, critical thinking, innovation, and community engagement, encouraging students to participate in community projects as part of their education.

UTPL is dedicated to the professional development of its teaching staff through the Teacher Training and Innovation Program, ensuring educational quality and innovation. The university boasts modern laboratories, such as the Teaching Research and Innovation Laboratory (LiID) and extended reality Laboratory (XR Lab), supporting educational innovation, research, and the integration of emerging technologies into learning. Additionally, UTPL offers programs in Chemical Engineering, Biochemistry and Pharmacy, and Chemical-Biological Sciences Education, and in 2023, it gained approval for the first Ph.D. program in Chemistry in Ecuador, commencing in 2024.

Spanish Universities: teaching and learning support and assessment

Universidad Politècnica de València

The Universitat Politècnica de València (UPV) is a dynamic and innovative public institution dedicated to research and teaching. It has celebrated its 50th anniversary and is recognized for its social and economic impact worldwide. UPV's quality policy focuses on training students with knowledge and skills to tackle **modern societal challenges**, aligned with five strategic goals: sustainability, internationalization, relevance, vitality, and excellence. UPV's teaching excellence model emphasizes that teaching staff should have expertise in their subjects, reflect on their teaching practices, strive for improvement and professionalism, motivate and engage students effectively, mentor students, and integrate **innovative methodologies and digital tools**.

The Institute of Educational Sciences supports faculty development through various training strategies, offering modular training activities tailored to teachers' needs and schedules. These include PAU, CAyD, modules for active and in-depth learning, initiation to educational research, and own degrees such as Expert in Online Training and Expert in University Pedagogy. These activities are delivered through different learning environments, including face-to-face, online asynchronous, online synchronous, and semi-presential methods.

Educational innovation is a key aspect, with initiatives promoting educational improvement and innovation within UPV's official degrees, as well as stable teams of lecturers dedicated to educational innovation and research.

The institution also provides comprehensive support to students, offering psycho-pedagogical guidance, advice, and training throughout their academic journey. The "Learning Support Plan for the Student Body: With you and for you" facilitates academic, personal, and social development, with a variety of training actions tailored to individual needs and conditions during their time at UPV.

Universitat Jaume I de Castellón

The Jaume I University of Castellón (UJI), established in 1991, is a community-focused public university known for its **quality education, research, and strong local ties**. Its modern and sustainable single-campus offers extensive facilities, including multimedia-equipped classrooms and state-of-the-art laboratories. UJI offers over 30 bachelor's degrees, more than 40 master's programs, and 20 doctoral programs, catering to around 14,300 students. The university prioritizes small group teaching to ensure personalized attention and maintains a highly qualified faculty with continuous pedagogical training.

UJI's educational model emphasizes competence acquisition, guided by ten principles that encompass comprehensive **student development, ethics, social responsibility**, research promotion, internationalization, multilingualism, ICT integration, **quality improvement, employability**, and lifelong learning. The university's programs adhere to a **quality assurance** system recognized by the National Agency for Quality Assessment and Accreditation (ANECA) in Spain. Additionally, the teaching activities of each professor are evaluated through the DOCENTIA-UJI program, which includes student surveys and other merits.

To support faculty development and ensure teaching quality, UJI offers various training activities organized by the Unit of Training and Educational Innovation (UFIE). These programs include the New Faculty Training Program for newcomers, the Ongoing Training Program to evolve teaching methodologies, and the Teaching Management Training Program for those in or aspiring to management positions.

UJI has received international recognitions and labels such as the HRS4R (HR Excellence in Research quality award) and the ERASMUS CHARTER FOR HIGHER EDUCATION, showcasing its commitment to excellence in university policies.

Universidad Complutense de Madrid

The Complutense University of Madrid (UCM) is **one of the oldest operating universities in the world** and the largest public research university in Spain. It enrolls over 70.000 students, more than 8.000 teachers and researchers, and about 3.400 administrative and support personnel (2023-24). At the present time, Complutense holds 26 faculties, and offers 81 BA degrees, 173 MA and MS degrees, 55 Doctoral programs and 10 international titles, in almost all areas of knowledge.

UCM actively promotes innovative teaching methods and high-quality education. It encourages innovative projects through an annual open call for educational innovation proposals. Teachers participate in **Pedagogical Innovation Projects** (INNOVA-UCM program) and engage in continuous training, including pedagogical courses, software and internet tools, and communication skills.

The university has utilized the "Campus Virtual," a **Moodle-based virtual campus**, for over a decade. This platform enables teachers to share course materials, communicate with students, conduct online evaluations, and provide additional resources, enhancing the teaching and learning experience.

Student evaluation at UCM is based on continuous assessment, including assignments, tutorials, seminars, and tests throughout the semester. Clear evaluation procedures and program guidelines are published on the UCM website, ensuring transparency and adherence by professors.

UCM also implements the DOCENTIA-UCM program, an evaluation protocol established by ANECA (Spanish National Agency for Quality Assessment and Accreditation) adapted for UCM. It involves yearly evaluations by students and mandatory self-assessments by teachers every three years. Teachers must analyze evaluation results, make improvements if needed, and participate in pedagogical training courses if results remain negative for two consecutive years. DOCENTIA focuses on **recognizing good practices** and enhancing teaching methodologies, considering teachers' participation in pedagogical innovation projects and teaching courses in the overall evaluation.

IRN from French CNRS to support the NanoAndes network (01/2021-12/2025)

After the initial support of the NanoAndes schools by the French ministry of foreign affairs finished, French professors obtained a grant from the CNRS to support the fees associated with scientific collaboration with Latin America. From 2016 to 2020, then from 2021 until 2025, the **CNRS provides 25 k€/year** to support mobility of researchers from Paris, Lyon and Grenoble to Latin America to develop research-oriented actions primarily with Argentina, Chile, Peru, Costa-Rica and Mexico, and to a wider extent with other countries in Latin America. This program aims at **fostering scientific collaboration in the fields of chemistry and physics of nanoobjects, for application in health, energy and environment**. Notably, the support from CNRS cannot be used to welcome researchers or students from abroad, and in this sense, it will not compete with the NANOMER program but rather complement it by financing French researchers' mobility with only one year of overlap.

Remarks:

- NANOMER has a trans-national dimension. Indeed, the pedagogical practices and support offered by each institution to teachers is different. We would like to share the experience of some above-mentioned universities with others that have had fewer resources to improve their curricula, and in particular to apply the competency-based approach and the development of soft skills. **All the participants, both from Europe and from Latin America will have a positive impact of this exchange of practices.** We would like to create an **international community** around all these aspects of pedagogy.
- The results of this program could be reuse in other countries, mainly in Spanish speaking countries. We would like to write a « **white book** » on study cases in nanosciences teaching (WP9).
- The existence of NanoAndes will catalyse the creation of this « pedagogy community » since an important part of the teachers participating to NANOMER are already part of the NanoAndes network and know each other very well.

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2. QUALITY

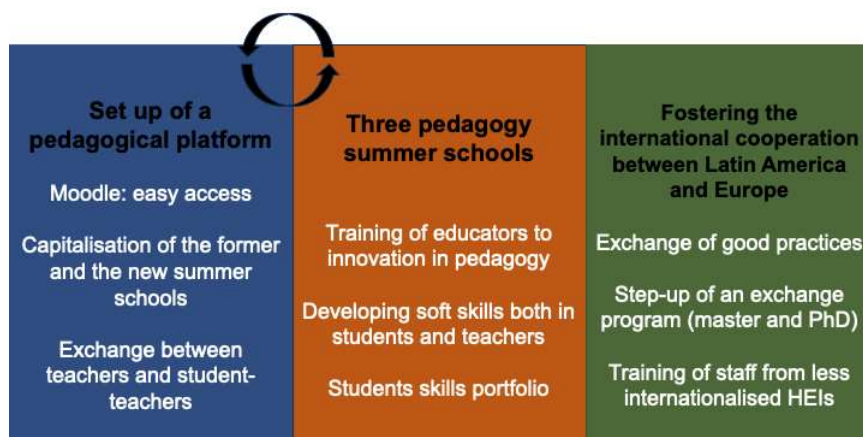
2.1 PROJECT DESIGN AND IMPLEMENTATION

2.1.1 Concept and methodology

Concept and methodology

Main challenges and overall methodology

In order to meet NANOMER's objectives and train nanoscience students to **solve societal problems**, three strategies will be pursued in parallel: setting up a pedagogical platform, organizing three pedagogical summer schools and strengthening international cooperation between LA and Europe.



The NANOMER project will be supported by a scientific network, **NanoAndes**. One of the aims of this network is to train young scientists from Latin America through an annual summer school. This school is aimed at students of different levels — mainly master and PhD— in science from different LA countries. Conferences and practical sessions are organized over five days. Another aim of NanoAndes is diffusion of science through different actions such as a webpage and on-line videos using Youtube platform.

Pedagogical Platform

Challenge: 1) reuse the resources deposited in the platform by all the pedagogy community (students, teachers and learning specialists); **2)** give a feedback on the use of the pedagogical tools in another context.

Consortium strength: 1) capitalization and organization of various pedagogical resources from 6 different countries and 16 HEIs; **2)** dissemination of resources within the platform will promote a dynamic and enriched community.

A pedagogical platform will be created using Moodle, which is a free open access tool that is already used by some of the HEIs involved in the project.

The platform will allow the community:

1. Gathering all the pedagogical resources generated during the previous NanoAndes summer schools and also the new summer schools that will be organised during this project.

- An important number of pedagogical resources is generated during the NanoAndes summer school such as videos of the courses, practical tutorials and round-tables given in the summer schools. Indeed, youtube platform was used for the 2021 online edition of the NanoAndes summer school (<https://youtube.com/@nanoandesred1161>). Some of these videos have had a lot of success quantified by a large number of views.
- Collaboratively building the platform's pedagogical architecture to meet the needs of each HIE and the objectives of NANOMER will be decisive.

2. Preparation of both the NANOMER and the NanoAndes summer schools.

- The teaching community will be able to work on different pedagogies (assessment, pedagogical alignment, etc.) that can enrich practical work, interactions with students, etc. This will enable us to prepare the pedagogical workshops that will be covered at the NANOMER summer school.

- The students that will attend the NANOMER summer school will prepare in advance the portfolio of soft and hard skills.
- In parallel, the students can prepare in advance the practical's by interacting with the platform. An example is given in Figure 2 using Moodle.

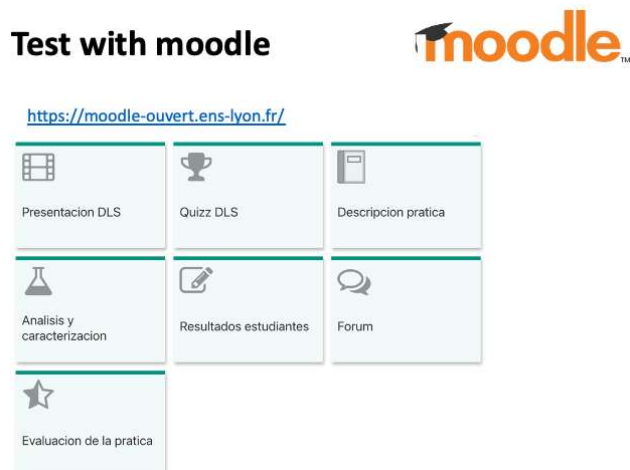


Figure 2. Example of the use of the pedagogical platform to prepare a practical for the scientific summer school. The main language is Spanish, and the learning management system (LMS) proposed is Moodle.

3. Sharing other pedagogical tools and a space to communicate between students, teachers and pedagogues.

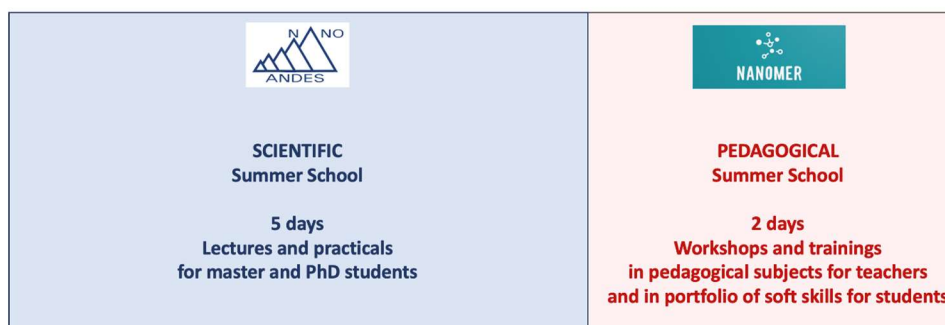
- Teachers, learning specialists and students will be involved in this platform project. The students' implication will confer them additional soft skills. Indexation and architectural works will help accessibility and usability of resources.
- The platform will be freely accessible on the internet, not only for the participants of this project, but also to the whole Spanish speaking community.

Pedagogy summer schools

Challenge: 1) attract as many higher education teachers as possible to participate in the pedagogy summer schools; 2) involve these teachers in the pedagogical preparation of the workshops that will take place during the summer school.

Consortium strength: share the diverse pedagogical practices of the teaching community, and enrich them with the variety of students, educational backgrounds, cultures and social contexts.

Three **pedagogy summer schools** will be proposed in the NANOMER project, and these summer schools will be 2-days workshops that will take place after the scientific NanoAndes school (Scheme 1).



Scheme 1. NanoAndes and Nanomer Summer Schools.

NANOMER will enrich this existing school both at the level of the teachers and the students. It will also enrich researchers in pedagogy involved in the project. The expected achievements for the different actors are:

Teachers:

- Reflection on pedagogical issues
- Analysis and problematization of case studies, and identification of ways of solutions to experiment

- Portfolio of the teacher

Students:

- Skills portfolio for students
- Development of the ability to act in any professional situation and in a team environment

Pedagogy community: Develop a soft skills repository

Educational researchers:

- Analysis of teachers' pedagogical practices
- Study of teacher-student interaction
- Documentation of the collaborative process and the effects on learning community

Overview of the NANOMER methodology concerning the pedagogical project

The overall strategy for the pedagogical project is shown in Figure 3. The work packages are indicated (see below, part 4). The key aspects are:

- working on a pedagogical problem (①) involving various actors (students, teachers, learning specialists, sociologists) on a « pedagogical laboratory » (③) ;
- identifying several possible solutions, and to experiment with at least one of them, in preparation for a practical session that could take place during the NanoAndes summer school (②) ;
- carrying out an a priori analysis of the learning situation, collaboratively identify the blocking points during the running of a NanoAndes lab (③), and then analysing them during the NANOMER workshop.

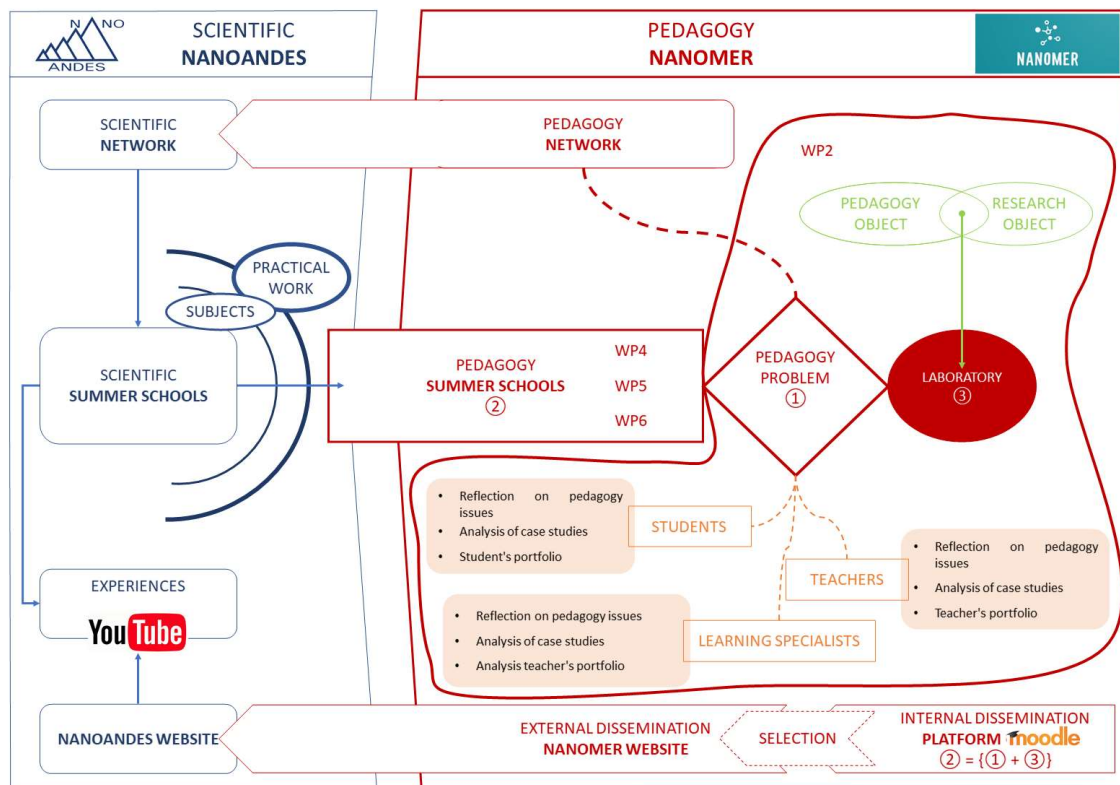


Figure 3. Overall strategy for the pedagogical NANOMER project.

International cooperation between Latin America and Europe

Challenge: foster the international cooperation at three levels : 1) student exchange in both directions ; 2) bilateral cooperation (scientific, pedagogical) ; 3) exchange of good practices between international cooperation staff

Consortium strength: some of the HEIs have strong international experience and this will benefit mainly the HEIs from LA —in particular those from Bolivia and Ecuador

Student exchanges

NANOMER project will propose two types of internships for the students from LA of the HEIs participating in this project:

1. Three-month internship coupled with courses in a European master nanosciences program:

- participation to these courses is optional but highly recommended
- open badges will be given to the students for both the internship and the attendance to the courses
- the internship will be between September and January
- a workshop (on-line or face-to-face) will be organised at the end of January to exchange experiences, since all the students from LA participating to this exchange program will be at the same time in Europe (France and Spain). The students will present their work and feedback.

2. One-month internship

- these grants for shorter stays will be prioritized for **students with children**. In LA there are many Masters and PhD students with children, who will not apply for 3-month internships and the one-month internship is thus a solution to cater for this target group.

In parallel, European HEIs will foster students to go to LA. A **list of laboratories** for experimental internships in both Europe and LA HEIs is available in the Annex.

Digital Open badges

Both during the summer schools and during exchange program, **open badges** will be delivered to the students and teachers. The Open Badge, is a secure and verifiable digital credential in the form of an image containing metadata. It is used by communities of practice and organizations to recognize and value a skill, expertise, a way of being, participation, a role, an achievement, commitment, contribution, project, or interest.

Open Badges has become the standard defining a badge format and infrastructure. This system has the following characteristics: **Free and open, Transferable, Stackable, Evidence-based, Complements certifications and diplomas** (no ECTS), **Useful for valorising and making visible non-formal and informal experiences and learning**. Of course, the use of this tool does not stop there. We also aim to encourage learners to be introspective, to reflect on their own skills, and especially to know how to analyse them to develop their self-confidence, self-assessment, critical thinking, and adaptability. Indeed, having a skill and knowing how to use it at the right time is even more important. In this regard, in addition to awarding badges, we will implement a reflective and analytical process for students as well as teachers who participate in the various exchanges. Lifelong learning is an important reality that also needs to be supported.

Short stay for international cooperation staff from Latin American HEIs in France

Short-term staff mobility will be implemented so as to offer training opportunities in Europe (job shadowing / observation) each year for 1-2 international office staff from Latin America. The aim is to increase their knowledge of good practices, share practical examples and hands-on training, update know-how, and broaden work methodologies/approaches. The skills acquired will be beneficial both at an individual level and an institutional level (home HEI). This will also **foster cross-organisational cooperation** and open new development opportunities regarding collaborations among consortium members.

The NANOMER receiving and sending institutions will draft a learning agreement to provide a framework for the mobility.

- Mobility recognised at home institution
- Part of the staff's training plan and career development
- Certificate issued by host institution after the mobility
- Learning experience to be shared with colleagues at local/national level (feedback for replication)
- Testimonies will be collected and shared on the project's website

Visiting colleagues will give presentations about their home university, so that staff at all levels and in various departments of the host institution get to know them and their institution.

Half of the staff of the host institution also speaks Spanish, which will make it more convenient in case conversation is not thoroughly fluent in English.

Virtual meetings will take place before and after the physical mobility in order to respectively prepare and follow-up on the mobility program.

Exchange of best practice | international cooperation

Regular meetings/workshops will be organised on-line on specific themes selected by the international cooperation staff of NANOMER partners. A list of topics of interest will be drafted, for example: running of an

international office, improvement of student services (guidance/counselling for mobility), quality assurance, crisis management, international strategies and road maps.

Each topic will aim to address a specific use case; namely regarding issues faced by institutions with less experience or located in remote areas. The goal will be to share expertise and provide tangible solutions and on-boarding strategies. The proceedings of these meetings will be collated into a digest and will be made available on the project's website.

Development of Internationalisation

A further aim is to build on the NANOMER project to develop ties at bilateral or multi-lateral level. A mapping of the existing collaborations between consortium members has been carried out. 3 collaboration perspectives have been drawn up, depending on the level of internationalisation of each institution:

- Partners with no previous collaborations but who will use NANOMER as a springboard to implement for example student exchange agreements (e.g., USS, UTPL, EMI)
- Partners with some previous collaboration experience and who will go further by implementing for instance double degree PhDs (e.g., ENS de Lyon, UNSAM)
- Partners with more experience and who will densify existing collaborations including at regional level (e.g., Chili/Argentina/Ecuador)

Interdisciplinary approach between disciplines and actors

NANOMER involves learning specialists, sociologists, international cooperation staff and scientists from three different fields (chemistry, physics and biology), which makes the project very rich. Moreover, the various tasks are coordinated as a team. Even if this project is structured with local referent in each institution to help continuous engagement of actors, it is built as a **collaborative** and « cross-views » project. For example, the pedagogical project is coordinated by both science teachers and learning specialists.

This working environment will foster the **professional development (soft skills)** of all those involved, as well as their **empowerment**.

Conclusions of the working strategy

Pedagogical platform	Summer schools	International cooperation
Moodle works well and is open source. Almost all the professors use it	Experts will be invited to train teachers in innovative pedagogies	Offers of 1 and 3-month stays internships in France and Europe
Test with a practical: it can be used to prepare the summer school, and after to deposit the results	Exchange of experiences between teachers	September-January in order to follow some courses
The knowledge can be used by other students	Training for the students: how to make a portfolio of skills	Open badges will be given to the students for the courses
Parametrisation is required (pedagogical needs, indicators to follow the use)		On-line meetings and staff stays in Europe to foster international cooperation

Expected results

- Active use of the **pedagogical platform** by both students and educators
- Promotion of **active exchange** through the platform between students, teachers and student-teacher from different countries.
- Improvement of the **hard and soft skills** among students and teachers
- Improvement of the skills of the educators in **pedagogy practices**
- Improvement of the **internationalisation** of the HEIs in remote zones in LA
- Establishment of **bilateral cooperation** between some of the HEIs and French and Spanish HEIs

Key performance indicators

In order to verify the output of the project, the following indicators can be considered:

- Number of visits to the pedagogical platform
- Reuse of the pedagogical resources of the platform
- Feedback of students and teachers using the resources of the platform
- Feedback of students and teachers after the participation on the NANOMER summer schools
- Feedback of the internships of LA students in France and Spain

- Number of agreements between LA and European HEIs
- Number of internships of European students in Latin America (with other financial support)
- Number of staff mobilities
- Number of open badges delivered

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2.1.2 Project management, quality assurance and monitoring and evaluation strategy

Project management, quality assurance and monitoring and evaluation strategy

Describe the measures foreseen to ensure that the project implementation is of high quality and completed in time.

Describe the methods to ensure good quality, monitoring, planning and control.

Describe the evaluation methods and indicators (quantitative and qualitative) to monitor and verify the outreach and coverage of the activities and results (including unit of measurement, baseline and target values). The indicators proposed to measure progress should be relevant, realistic and measurable.

The NANOMER project will run for **three years**, with events recurring once a year as the summer school is scheduled and students are selected for the exchange program (Scheme 2).

December of the year before: start of the process
Platform : <ul style="list-style-type: none"> • January: on line meeting to set-up the platform • February-April: training of the users and incorporation of the pedagogical resources • May-June: preparation the summer school program together with the NanoAndes committee • January- July: one line pedagogy workshops (results will be communicated during the the summer school)
October-November: Summer school (in Latin America)
Exchange program: <ul style="list-style-type: none"> • January: Opening of the applications for the exchange program • February: Selection of the students for the exchange program and organisation of the students' arrival; selection of the staff candidates for the stay in Europe • September-October: arrival of the students to Europe • January of the next year: workshop to share students'experiences and present the work, stay in Europe of the international cooperation staff
December: on-line NANOMER review meeting

Scheme 2. Proposed planning for each of the three years of the NANOMER project.

A **partnership agreement** will be established. It will attribute clear responsibilities to each partner and coordinating organisations and contains the corresponding division of the grant.

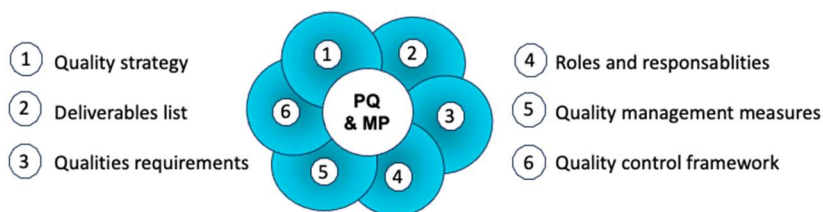
In order to assure quality of the project, a **Quality Plan (QP)** will be elaborated (WP1) in order to ensure that the project is followed in the proposed time and also in order to implement it (Scheme 3). A **Management Plan (MP)** will be established to monitor and control the success of the project. The following actions will be done:

- writing of an **administrative and financial guideline** for all partners (including lump-sum processes) and establishing responsibilities of each partner (WP1)
- **progress reporting** on all on-going actions considering the **Key Performance Indicators (KPI)** detailed in Table 4, part 1.2, and at the end of part 2.1.1.

In this management plan we will consider:

- an **internal monitoring** by the different WP leaders
- a **quality committee** composed of the WP leaders and representing all the 16 HEIs
- an **external evaluator** on skill portfolio and innovative pedagogy at the middle of the project

This process will ensure that feedback, from internal as well as from external advisors, is taken into account. Risk Management forms a central focus of quality control as the proactive notice of deviations allows the consortium to control the consequences or even transform them and profit from positive effects.



Scheme 3. Project Quality (PQ) and Management Plan (MP) of NANOMER.

#§PRJ-MGT-PM§# #@CON-SOR-CS@#

2.1.3 Project teams, staff and experts

Project teams and staff			
Name and function	Organisation	Role/tasks	Professional profile and expertise
Maria Luz Martinez Ricci Project manager/ Researcher/ trainer /teacher	Universidad de Buenos Aires (UBA)- Facultad de Ciencias Exactas y Naturales (FCEN)	NANOMER Coordination at UBA Development of Project and Contents.	Physics PhD, area: electromagnetism and optics. Assistant Professor DF, and specialization in PhD courses. Member of Nanoandes Networks Expertise: photonics and plasmonics at hierarchical systems composed of mesostructured nanoparticles and/or thin films. Electromagnetic modelling of the optical response of nanostructures. Specialist in specific characterization techniques and electromagnetic modelling.
Sara Aldabe Bilmes Senior researcher/ teacher	FCEN-UBA	Development of learning units and support. Science education and advisor, professor Building of innovative learning resources	Chemistry PhD. Consultant Professor DQIAQF. Member Nanoandes network. Expertise: nanomaterials synthesis and properties, sol-gel, photocatalysis, materials with biological activity Contributions to cooperative and interacting science teaching for kids and university grades.
María Gabriela Lagorio Senior researcher/ teacher	FCEN-UBA	Science education and advisor, professor	Chemistry PhD. Professor at DQIAQF. Head of researcher group in nanobiophotonics. Expertise: biospectroscopy and biophotochemistry, catered in the interaction of light with material organisms as plants or algae.
Dario Estrin Senior researcher/ teacher	FCEN-UBA	Science education and advisor, professor	Chemistry PhD. Professor at DQIAQF. Head of researcher group in molecular dynamics simulations. Expertise: QM-MM, heme-protein
Mario Tagliazzucchi Senior researcher/ teacher	FCEN-UBA	Development of learning units and support. Summer school support	Chemistry PhD. Adjunct Professor DQIAQF. Expertise: theoretical and experimental studies in soft materials (polyelectrolytes, amphiphiles and nanoparticles), with special focus in their self-assembly behaviour and electrochemical-related applications.
Florencia Di Salvo Senior researcher/ teacher	FCEN-UBA	Development of learning units and support. Summer school support	Chemistry PhD. Adjunct Professor DQIAQF. Expertise: crystallography, material structure in polymeric and discrete structures in systems with relevance in biology.

Diego Onna Junior researcher /expert / trainer / teacher	FCEN-UBA	Development of learning units. Building of innovative learning resources Summer school support	Chemistry PhD. Assistant Professor DQIAQF Expertise in the preparation, characterization and modeling of nanomaterials and the application of machine learning techniques. Highly involved in teaching strategies for the use of machine learning and programming in the area of chemistry and materials science.
Maria Ana Castro Junior researcher/ trainer/ teacher	FCEN-UBA	Development of learning units Building of a digital pedagogical platform support	Chemistry PhD, area: spectroscopy, nanoparticles. Adjunct Professor DQIAQF. Expertise: surface spectroscopies, Raman enhancement.
Lucila Mendez de Leo Junior researcher/ trainer/ teacher	FCEN-UBA	Development of learning units. Summer school support	Chemistry PhD, area: electrochemistry and monolayers. Adjunct Professor DQIAQF Expertise: surface spectroscopies, soft matter at nanostructured surfaces. Specialist in surface IR and electrochemistry in monolayers
Ana Sol Peinetti Junior researcher/ trainer/ teacher	FCEN-UBA	Development of learning units. Summer school support	Chemistry PhD, area: bioelectrochemistry Expertise: ADN bioengineering, sensors, nanomaterials.
Lucy Coria Junior researcher/ trainer/ teacher	FCEN-UBA	Building of innovative learning resources Summer school support	Chemistry PhD, area: electrochemistry and monolayers. Assistant Professor DQIAQF Expertise: redox polymers and polyelectrolytes, enzymes and energy storage for devices.
Andrea Bragas Senior researcher/ teacher	FCEN-UBA	Science education and advisor, professor Summer school support	Physics PhD. Associate Professor DF. Expertise: Nanophotonics; time-resolved optical spectroscopies; plasmonics; dielectric nanoantennas; metamaterials; 2D materials. Development of novel optical tools that allow light to be used both as interrogation and manipulation methods at the nanoscale.
Diana Skigin Senior researcher/ teacher	FCEN-UBA	Science education and advisor, professor Building of a digital pedagogical platform support	Physics PhD. Associate Professor DF. Expertise: electromagnetic modelling in optics and microwaves, structural and plasmonic colour in natural and artificial composites
Christian Tomás Schmiegelow Junior researcher/ teacher	FCEN-UBA	Development of learning units	Physics PhD. Associate Professor DF. Expertise: quantum optics, ion trapping and laser quantum cooling.
Miriam Gonzalez Secretary of Interinstitutional Relations FCEN- UBA	FCEN-UBA	International cooperation manager	Degree in Geological Sciences. Coordinator of Special Projects of UBA Extension: Vice-Secretary of Planning at FCEN UBA, Coordinator of International Cooperation at UBA. Advisor delegate of UBA in AUGM- (Association of Universities Montevideo Group), Secretary of the Board of Directors and Institutional Relations FCEN-UBA and Secretary of Interinstitutional Relations FCEN-UBA.
Galo Soler Illia Project manager/ Senior Researcher/ trainer /teacher	Universidad Nacional de San Martin (UNSAM),	NANOMER coordination at UNSAM	Chemist PhD, Full Professor at EByN. Director of the Nanosystem Institute (INS) Expertise: Chemical synthesis, specialized in nanomaterials, nanocomposites and nanostructures. Thin

	Argentina – EByN - INS	Students exchanges coordination (WP)	films and mesoporous materials fabrication and characterization.
María Fernanda Cardinal Project manager/ Researcher/ trainer /teacher	UNSAM – EByN - INS	Coordination of pedagogic methodologies Development of learning units and support	Chemist. International PhD in Physical-chemistry, program area: colloids and surfaces technologies. Adjunct Professor of undergrads and graduated students in Nanotechnology courses at INS, EByN. Expertise: Nanoparticles synthesis, functionalization and characterization. Modelling of optical properties. Surface enhanced Raman spectroscopy.
Cintia Belén Contreras Researcher/ trainer /teacher	UNSAM	Development of learning units and support	Chemistry PhD. Assistant Professor of undergrads and graduated students at ECyT. Expertise: responsive polymers and smart hybrid nanosystems synthesis and characterization.
Valeria Pattacini Institutional coordinator	UNSAM – International Office SICI	Internationalization management. Intero-institutional partnerships	Secretary of Internationalization and International Cooperation Expertise: International Projects. Institutional Management. Project Management. Student exchanges. European and Northamerican calls for funds and exchanges. Mag. Political Science
Lovisa Ericson Institutional co-coordinator	UNSAM – International Office SICI Coordination of WP8	Leader in the institutional and technical tasks for international exchanges of students and teachers.	Director of the Internationalization and International Cooperation area at UNSAM. Expertise: International Projects. Project Management. Student exchanges. European and Northamerican calls for funds and exchanges. Partnerships Pol. Mag. Political Science
Roberto Candal Researcher/ trainer /teacher	UNSAM – EHyS - 3iA	Development of learning units and support.	Chemistry PhD. Professor at EHyS. Expertise: oxidative photocatalysis, biopolymers, nanocomposites, environmental remediation and sensors.
Diego Lamas Researcher/ trainer /teacher	UNSAM - ECyT - ITECA	Development of learning units and support.	Physic PhD. Professor at ECyT. Expertise: solid state physics, materials characterization by crystallography and X rays techniques.
Laura Steren Researcher/ trainer /teacher	UNSAM - IS	Development of learning units and support.	Physic PhD. NanoAndes Coordinator. INN Director. Expertise: Magnetism, Micro and Nano fabrication.
Dr. Javier Gustavo García Mendoza	Universidad Mayor de San Andres (UMSA), Bolivia	NANOMER Coordinator at UMSA, Summer school 1 organisation (WP4)	Chemistry PhD. head of the Inorganic Chemistry Division at the Chemical Research Institute. Coordinator of two SIDA-UMSA projects for PhD training in Sweden. member of nanoandes Network Expertise: nanomaterials for renewable energies, solid electrolytes and applications of non-metallic minerals. He was collaborating in the organization of Nanoandes 2013 in La Paz, Bolivia.
Dr. María Eugenia García Moreno Admin-staff	UMSA	Support in the administrative tasks related to the project and responsible of the international relationships at UMSA.	Chemistry PhD a. vice chancellor at UMSA and responsible of the international relationships. coordination/ participation of joint international research projects on topics such as the Study of water quality, Energy Use of Biogas and Study of Climate Changes, among others.

PhD candidate Laura Whendy Romero Cuevas	UMSA	Development of learning units and support	Master in design and elaboration of educational projects. PhD candidate at Université Sorbonne Nouvelle - Paris 3 with the subject about educational politics.
Dayana Mariza Capcha Vargas Head of the nanotechnology laboratory Technical personnel	Escuela Militar de Ingeniería (EMI), Bolivia	NANOMER Coordinator at EMI Development of Project and Contents	Master's and Bachelor's Degree in Chemical Sciences Expertise: nanomaterials: synthesis of nanomaterials and nanoparticles via the pyrrolytic-atrane pathway and nanocolloids.
Lic. Nelson Figueroa Solíz Head of Research Evaluation, Intellectual Property and Scientific Publication	EMI, National Directorate of Science and Technology Research Military School of Engineering	Project Management, support in the administrative tasks related to the project	Degree in Biochemistry UMSA and Diplomas in Scientific Research, Chemistry of Natural Products, specifically in the determination of biological properties and chemical-biological and instrumental characterization of the active ingredients of native plant species. Management of Research Processes in Universities.
Lic. Paulo Araujo	DNISEU	Support in the administrative tasks related to the management of internationalization	degree in public relations and works at EMI as the staff in charge of carrying out public activities, managing agreements and organizing and developing protocol acts.
Dr. Daniela F. Báez Associate Researcher	University of Talca, (UTalca), Chile Faculty of Medicine	NANOMER Coordinator at UTalca Summer school 4 organisation (WP6)	PhD in Chemistry. Associate Researcher of the Medicine School and Institute for Interdisciplinary Research (I3), UTalca. Expertise: Medical Chemistry, synthesis and characterization of nanomaterials and micro-nanomotors with applications in biomedicine
Dr. Esteban Durán Associate Researcher Associate Professor from Department of Microbiology	University of Talca Faculty of science Health	Development of learning units and support Summer school organisation	Medical Technologist and PhD in Development of Bioactive Products. Expertise: design and development of advanced bio and nanomaterials that include hydrogels and metallic nanoparticles with different biomedical applications (drug delivery systems for the treatment of infectious and cancer diseases).
Dr. Horacio Poblete Associate Researcher	University of Talca Faculty of Engineering	Development of learning units and support Summer school organisation	BS in Chemist and PhD in Applied Sciences Director of Ph.D Program in Sciences Mention in Modeling of Chemical and Biological Systems. Center for Bioinformatic and Molecular Simulation. Expertise: Theoretical and Computational Biophysics: The use of computational tools to study the structure-function relationships between biomolecules and nanoparticle.
Dr. Cristian Vilos Associate Researcher Associate Professor at the School of Medicine	University of Talca Faculty of Medicine	Development of learning units and support Summer school organisation	PhD in Biotechnology. Director of Lab. of Nanomedicine and Targeted Delivery, and Director of the Center for Nanomedicine Diagnostic & Drug Development ND3, University of Talca. Main Researcher of the Center for the Development of Nanoscience and Nanotechnology (CEDENNA), Universidad de Santiago de Chile, Santiago, Chile.

			Expertise: combinatory drug therapy based on polymeric nanoparticles for colorectal cancer, advanced nanotherapies for chronic pain, and on the study of fundamentals of nano-bio interactions in the physiological environment.
Lisbet Yañez	University of Talca International Affairs Office	Coordinator of International Cooperation Summer school 4 organisation (WP6)	International Cooperation Officer in charge of bringing together different areas among the UTalca community in order to concrete and foster global linkages, supporting the academic staff by facilitating activities related to international mobility, collaboration and project management. Expertise: grants management from different international institutions,
Marcos Avilez	University of Talca International Affairs Office	Director of International Affairs Office	Lawyer with experience in Higher Education internationalization and International Cooperation. Expertise: administration positions for strategic coordination, international relations direction, academic training and exchange programs, generation of scientific and academic international cooperation networks, international development and international cooperation initiatives, projects management and internationalization consulting.
Prof. Ana Luisa Riveros Salvatierra Assistant Professor at Chemical and Pharmaceutical Sciences School.	University of Chile (UCHile)	NANOMER Coordinator at UChile	PhD in Biochemistry. Coordinator of Unit for Research and Characterization of Advanced Materials (UICMA). Member of Nanoandes Network Expertise: nanobiotechnology, including cellular biology, and electron microscopy for biomedical applications. Teaching competencies associated with educational use of Information and Communication Technologies, (ICT).
Dr. Martin Perez Comisso Coordinator of Interdisciplinary Projects Development of learning experiences support	University of Chile (UCHile)	Coordinator of Pedagogical support of students and teachers Coordinator of WP 2	PhD Human and Social Dimensions in Science and Technology. lecturer in the School of Chemical and Pharmaceutical Sciences in UCH, Expertise: role of emerging technologies in Latin America; inter and transdisciplinary initiatives; science and society; teaching innovation
Prof. Marcelo Kogan Full Professor Senior researcher Director of Academic Development	University of Chile (UCHile)	Science education and advisor, professor Summer school support	Biochemist and Pharmacist at the University of Buenos Aires and PhD in Organic Chemistry Director of the Laboratory of Nanobiotechnology and Nanotoxicology. Member of Nanoandes Network Expertise: applications of nanobiomaterials in biomedicine for diagnosis and treatment of conformational diseases including drug delivery, Alzheimer's, Cancer and cardiovascular diseases.
Prof. Soledad Bollo Full Professor Senior researcher	University of Chile (UCHile)	Professor, Researcher Summer school support	Ph.D. in Chemistry Full Professor and vice-dean at the Faculty of Chemical and Pharmaceutical Sciences. Expertise: design and characterization of electrochemical and optical (bio)sensors based on carbon nanomaterials,

<p>Dra. María Gabriela Villamizar</p> <p>Postdoctoral Researcher</p>	<p>University of Chile (UCHile)</p>	<p>Profesor, Researcher Summer school support</p>	<p>Chemist with a Ph.D. in Pharmaceutical Sciences postdoctoral researcher in the Laboratory of Nano and Micro Encapsulation and the Laboratory of Biochemistry and Molecular Biology, Expertise: soft interactions for the development of nanomedicines using small drugs and polymers, including their synthesis and characterization. dissemination activities oriented for students,</p>
<p>Prof. Javier Morales Montecinos</p> <p>Associate Professor</p> <p>Director of International Affairs</p>	<p>University of Chile (UCHile)</p>	<p>International Relations Cooperation</p>	<p>Director of International Relations of Chemical and Pharmaceutical Sciences School, UCH. Leader of the team of Institutional International Relations, responsible for strategic partnerships with international organizations. Director of the Drug Delivery Lab at UCH and an expert of drug delivery through alternative routes of administration, drug delivery system development for small drug molecules and biologics, and medical device development.</p>
<p>Manuel Rodríguez, Executive secretary, International Relations Office</p> <p>Admin staff</p>	<p>University of Chile (UCHile)</p>	<p>International Relations Cooperation</p>	<p>Executive secretary of the International Relations office who will be in charge of facilitating all actions involving researchers and students involved in international mobility. Experience in international exchanges, university regulation and project management.</p>
<p>Prof. Felipe Oyarzun Ampuero</p> <p>Associate Professor</p>	<p>University of Chile (UCHile)</p>	<p>Profesor, Researcher Summer school support</p>	<p>Chemist and Ph.D in Research and Development of Medicines; Director of the Department Sciences and Pharmaceutical Technologies, Associate Professor at the UCH. Expertise: nano and microsystems for active molecule encapsulation, chemical interactions, and formulation stability. CEO of "Austral Bioactive Materials (ABAM)" and Chief of Research and Innovation of "Matchetune SpA."</p>
<p>Prof. Javier Morales Valenzuela</p> <p>Associate Professor</p>	<p>University of Chile (UCHile)</p>	<p>Profesor, Researcher Summer school support</p>	<p>Pharmaceutical Chemist and Ph.D graduate from the UCH, Expertise: nanosystems, particularly in silica and biomolecules; coordination of Pharmaceutical Physicochemistry. undergraduate courses and teaching at master's and Ph.D. .</p>
<p>Victor Manuel Diaz Garcia, Ph.D.</p> <p>Assistant Professor</p>	<p>Universidad San Sebastián (USS) Chile</p>	<p>NANOMER Coordinator at USS</p>	<p>Assistant Professor at the Faculty of Engineering, Architecture and Design member of nanoandes Network: Expertise: application of nano materials in biomedicine and nanosensors.</p>
<p>Eric Fabián Forcael Durán, Ph.D., Full Professor</p> <p>Director of Doctoral Program in Engineering</p>	<p>Universidad San Sebastián (USS, Chile)</p>	<p>Pedagogical expert and advisor, professor</p>	<p>Director of Doctoral Program in Engineering in the Faculty of Engineering, Architecture, and Design at the Universidad San Sebastián. Expertise: innovative pedagogical approaches for engineering educators</p>
<p>Alvaro Gonzalo Alvarez Martinez Ph.D.</p> <p>Assistant Professor National Director of</p>	<p>Universidad San Sebastián (USS, Chile)</p>	<p>Science education and advisor, professor</p>	<p>Assistant Professor at Medicine and Science Faculty. National Director of Department of Basics Science at the Universidad San Sebastian. Expertise biomedicine, signal transduction</p>

Department of Basics Science			and neuroscience; teaching and learning using virtual tools and applied platforms for biology and chemistry.
María Jesús Herrero Ramón, Ph.D., Coordinator of International Projects	Universidad San Sebastián (USS, Chile)	Advisor and administrative support	Research experience in Biomedicine. Coordinator of International Projects at the Vice-Rectorcy of Research and Doctoral Programs. Support for research projects and international mobility: dissemination of calls, consolidation of networks, support in project preparation, administrative and management support for research and mobility projects, organization of international workshops, co-tutorship and joint doctorates.
Silvia González, Ph.D. Profesor, Researcher	Universidad Técnica Particular de Loja (UTPL) Ecuador	NANOMER Coordinator at UTPL Coordination of WP9 Summer school support	Chemical Engineer PhD in Chemistry and Ph. D. Theoretical and Computational Chemistry, Research professor in the Department of Chemistry of the Universidad Técnica Particular de Loja (UTPL), Ecuador, His field of research is Computational Chemistry applied to materials. Member of Nanoandes Network Expertise: Theoretical study of the effect of the properties of a metallic catalyst in its activity and molecular modelling of molecules and reactions.
Ximena Jaramillo Fierro, Ph.D.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Profesor, Researcher Summer school support	Ph.D. in Nanoscience, Materials and Chemical Engineering. Professor UTPL Member of Nanoandes Network Expertise: teaching innovation projects. development of materials for various technological applications, management of characterization techniques (DRX, SEM, FTIR, TGA, DRS, NMR) and computational modeling. Innovation and prototyping of advanced and pharmaceutical materials
Talia Tene, Ph.D.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Profesor, Researcher Summer school support	PhD Physics and Quantum Technologies. Associate professor at the Chemical Department at UTPL Expertise: design of experiments, synthesis, and data analysis of novel materials, with particular emphasis on their electronic and optical applications.
María Isabel Loaiza, Ph.D.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Profesor, Researcher Pedagogical Project Support. Building of a digital pedagogical platform support	Engineer in Computer Systems and Computing PhD in Competencies and Innovation in Higher Education; Master's Degree in Innovation and Development of Competences in Higher Education Master's Degree in Evaluation, Management and Direction of Educational Quality; Director of Innovation, Training and Teacher Evaluation UTPL Expertise: Teaching Innovation. MBA Master's Program Teacher. Teacher of the Business Administration Career. "Educational Technological Innovation – Educational Technology and New Technologies applied to education,.

Eileen Velez, Mgtr.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Knowledge dissemination and replication plan support	Biotechnology Engineer Master's degree in design and management of technological projects Expertise: project design and management (research, animal facilities and specialized) with national and international quality standards;
Ana Bravo Muñoz, Mgtr.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Exchange Program Support	Engineer in Business Administration, Master in Territorial Planning and Environmental Management, Master in International Higher Education. She currently leads the Institutional Relations team at the Private Technical University of Loja (UTPL), being responsible for strategic alliances with both national and international organizations and for managing comprehensive internationalization activities at the institutional level.
Marlon Carrión Martínez, Mgtr.	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Building of innovative learning resources	Master's degree in educational technology and Knowledge Management Diploma in Digital Transformation Computer Engineer and Bachelor of Science in Education mention in Physics and Mathematics Expertise: design, implementation and management of e-learning projects Furtwangen University-Germany.
Luis Ríos,	Universidad Técnica Particular de Loja (UTPL, Ecuador)	Profesor, Researcher Building of innovative learning resources	Computer Systems Engineer Master's in Software Engineering for the Web; diploma in Digital Transformation, Guest teacher at the Faculty of Social Sciences, Education and Humanities, UTPLExpertise: Analyst of Educational Innovation, Manager of Virtual Learning Environments, Emerging Technologies and Active Learning Methodologies.
Prof. César Costa Vera Professor, researcher, Manager EPN	Escuela Politécnica Nacional de Quito (EPNQuito), Ecuador	NANOMER Coordinator at EPN Quito Development of Project and Contents	Professor of Physics. Director Spectroscopy Laboratory and leads the Mass Spectrometry and Optical Spectroscopy (MSOS) at the Dept. Physics. Member of nanoandes Network Expertise: nanospectroscopy, development and application of optical and spectroscopical methods in the characterization of inorganic and biological materials.,
Prof. Víctor Guerrero Senior Teacher/Researcher	EPNQuito	Development of learning units and support	Professor of Mechanical Engineering and Materials Science at EPN. He directs the Metrology Laboratory at EPN and leads the SEMAV (Síntesis, evaluación y aplicaciones de materiales avanzados) Group. Expertise :novel nanostructured material development and application to environmental and industrial applications.

Mrs. Tania Tufiño Monteros Admin-staff	EPNQuito	Support in the administrative tasks related to the project and the management of internationalization	BA on Public Relations Lead the team of Institutional Relations, which is responsible for strategic partnerships with both national and international organizations and managing comprehensive internationalization activities at the institution level.
Ing. Víctor Santos Junior Teacher/ Researcher	EPNQuito	Development of learning units and support	Diploma in Electronics Engineering. Expertise: management and supervising of practical laboratories and classes at undergrad level. He also participated in optoelectronics research.
M.Sc. Eng. Ricardo Araguillín, Junior Teacher/ Researcher	EPNQuito	Development of learning units and support	Electronics Engineering Diploma Masters in Optoelectronics Expertise: development of optoelectronic methods and instruments for molecular and nanostructure characterization and implementation of practical laboratories and classes for teaching.
Dr. Belén Albela Associate Professor	Ecole Normale Supérieure de Lyon, France (ENSLyon)	NANOMER Coordinator	Deputy Director of the Chemistry Department and responsible for the first year of the master Physics and Chemistry, option Chemistry, at ENS de Lyon. Member of the 'Photonics and Functional Materials' group of the Chemistry Laboratory of ENS de Lyon. Expertise: coordination chemistry and porous nanomaterials for applications in remediation, catalysis and nanomedicine. In the last years high implication in innovative teaching in higher education and science dissemination in high school and university grades.
Bruno Sécordel Agré-gé-préparateur	ENSL	Scientific pedagogy and methodology	Graduate engineer of ESPCI Paris, master degree in theoretical design, PhD in materials chemistry. Member of the 'Photonics and Functional Materials' group of the Chemistry Laboratory of ENS de Lyon. Teacher at the Chemistry department of ENS de Lyon (general and organic chemistry, for lectures and practicals setup and supervising). Expertise: materials (esp. silica) synthesis, green chemistry, scientific methodology and design of synthesis.
Stéphane Parola Professor Laboratoire de Chimie École Normale Supérieure de Lyon / University Claude Bernard Lyon 1	ENS Lyon-IUT Lyon	Exchange students coordination	Vice President "Strategy" of the Ecole Normale Supérieure de Lyon Expertise: molecular precursors of materials, design of ligands, sol-gel science, chemistry of Inorganic and Hybrid Organic/Inorganic (nano)materials, colloidal chemistry, thin films and monoliths, 2-photon lithography, synthesis and surface modification of nanomaterials, properties of materials (optics, photonics, photocatalysis)

Mrs. Anna Clavel, learning specialist	ENSLyon-IFé (Institut Français de l'Education)		Research Manager at IFé, coordinator of research and training projects related to university pedagogy. Associate Professor of Physical Education PhD. in sociology of organizations and Associate Researcher to UGA (LAB SENS). Expertise: Research, training and support projects related to inclusion, pedagogical innovation to develop students' competencies. In last years, high implication in coordination of pedagogical innovant and collaborative projects in higher education (national).
Mr. Pierre Bénech, learning specialist	ENSLyon-IFé		Engineer and Pedagogical Advisor, Development of the Laboratory of Pedagogical and Digital Innovation (LIPn, Sanchez et al., 2015) and the accompaniment of research, training and accompaniment projects (serious games, collaborative research in didactics of mathematics, the program approach and the competency-based approach, etc.) in this framework.
Emilie Leroy, learning specialist	ENSLyon- DUNES	Pedagogical platform	Learning specialist at DUNES service Expertise: digital tools for teaching, moodle, innovation in pedagogy
Mrs. Karin Kim Lim Head of International Cooperation & partnerships Admin staff	ENSLyon	Internationalisation Management, Implementation of collaborative and cooperation actions within the project	Head of International Cooperation and Partnerships, in charge of international cooperation agreements and projects with foreign universities and institutions. Master's degree in International Business. Before joining the Higher Education sector, she worked as a senior consultant in intelligent transport systems and smart cities, with proven success in managing European projects and networks. She is a member of the EAIE - European Association for International Education - Expert Community for the 2022-2024 term (www.eaie.org).
Fabien Dubois Ph.D. Assistant Professor	Université Grenoble Alpes (UGA) France	NANOMER Coordinator at UGA Development of Project and Contents	Assistant Professor in chemistry at UGA Researcher at Neel institute in field of nanoparticles synthesis and surface functionalization for applications in fluorescence imaging, correlation spectroscopy or catalysis
Xavier Cattoën Ph.D., Researcher	CNRS	Coordinator of the CNRS NanoAndes IRN/ Coordinator for the internships at Neel Institut	Researcher at Neel institute in field of synthesis of organosilica materials from original, home-made organosilanes for application in drug delivery, bioimaging, sensing or catalysis. member of NanoAndes network
Elisabeth Charlaix Ph.D., Professor	UGA	Coordinator for the internships at Liphy laboratory	Professor at UGA, where she researches fluid mechanics to the sub-nanometre level. She was a co-developer of a surface-forces measuring device for very small-scale interactions.
Franck Dahlem	UGA	Coordinator for the internships at	Assistant professor at UGA, where he studies the structure and the properties of

Ph.D., Assistant Professor		CERMAV/ UGA courses planning and teaching	glycomaterials for materials sciences and energy applications. Coordination of courses in the field of nanochemistry of the master nanosciences and nanotechnologies
Emmanuel Bossy Ph.D., Professor	UGA	UGA courses planning and teaching	Professor at UGA, where he researches in the field of high-resolution imaging Coordination of course in the field of soft-matter and biophysics of the master nanosciences and nanotechnologies
Hermann Sellier Ph.D., Assistant Professor	UGA	UGA courses planning and teaching	Assistant professor at UGA, where he researches in the field of quantum nano-electronics and spectroscopy. Coordination of course in the field of nanophysics – quantum physics of the master nanosciences and nanotechnologies
Yoann Roupioz Ph.D., Researcher	CEA	Coordinator for the internships at CEA/SyMMES	Resercher at CEA Institut in the SyMMES laboratory, where he researches in the field of surface functionalization and the development of biochips Member of nanoandes network
Chrisian Geindreau International project– UFR PHITEM– UGA Admin staff	UGA	Project Management, support in the administrative tasks related to the project and the management of internationalization	Professor at the UGA, he is developing his research at the 3SR laboratory in the fields of mechanics and civil engineering. co-direction of the UGA PHITEM UFR’s international unit – administrative management
Greg Cabailh Assoc. Prof.	INSP Faculty of Science and Engineering Sorbonne University (SorbonneU)	NANOMER Coordinator at Sorbonne U	Member of the ‘Low Dimensional Oxide’ group of the Institut des Nanosciences de Paris at Sorbonne University. Member of Nanoandes Network. Expertise: oxide surfaces and interfaces and principally surface defects characterisation at the atomic scale by scanning probe microscopies and X-ray photoemission spectroscopy. thin metal-oxide films supported on metals as systems in which changes in stoichiometry and orientations allow mastering reactive sites. urface x-ray diffraction anSd near-ambient x-ray photoemission spectroscopy (NAPXPS).
Ms. Pauline Rovillain	Faculty of Science and Engineering Sorbonne University	Associate professor	Associate professor Sorbonne leader of the “Acoustics for Nanosciences” at INSP. Expertise: magnetoacoustic coupling in ferromagnetic compounds, particularly cobalt and iron. magnetization under strain, specifically surface acoustic waves (SAW). and SAW-FMR, involved in first-year undergraduate teaching, preparing courses and tutorials.
Ms. Hanna Hertwig	Faculty of Science and Engineering	Head of the Internrtional Division, Department for	Ms. Hertwig holds a tri-national Master’s degree in Intercultural European Studies and has been working in the area of international education and research for over 10 years. She has an extensive

Head of International Division Admin staff	Sorbonne University WP7 coordinator	Education and Student Life Project Management, support in administrative tasks related to the project and the management of internationalization	experience in European educational programs and projects (Erasmus+) in cooperation with European and Non-European Higher Education Institutions and the set-up and management of international double degree programs at Master and PHD level.
Ms Séverine Maillet International project manager Admin staff	Faculty of Science and Engineering Sorbonne University	Project Officer, Department for Education and Student Life Project Management, support in administrative tasks	Master's degree in American civilization. international project manager at Sorbonne University's Faculty of Science and Engineering. In charge of the administrative and financial follow-up of several Erasmus+ projects (KA2 cooperation partnerships, KA1 international mobilities).
Prof. Ana B. Descalzo Trainer, Teacher UCM courses coordinator	Complutense University of Madrid (UCM) Faculty of Chemistry	NANOMER Coordinator at UCM Project manager. Courses coordinator.. Senior expert, teacher, researcher.	Assoc. Professor. UCM and senior researcher at the "Chemical Optosensors and Applied Photochemistry Group (GSOLFA), Expertise: organic chemistry, photochemistry and (nano)materials (nanoparticles, organic-inorganic nanocomposites, molecularly imprinted polymers) for applications in optical sensing and molecular recognition. Teaching Innovation Projects
Prof. Guillermo Orellana Trainer, Teacher	UCM Faculty of Chemistry	Senior expert, teacher, researcher. UCM courses planning and teaching. UCM-research Group Leader	Full Professor of Organic Chemistry & Photochemistry UCM Head of the UCM "Chemical Optosensors and Applied Photochemistry Group Expertise: application of tailored photoactive probes in environmental, industrial, medical and aerospace chemical sensing; molecular recognition (nano)materials and applications of the photodynamic effect. science dissemination collaborations with high-school institutes.
Prof. Elena Benito-Peña Trainer, Teacher	UCM Faculty of Chemistry	Senior expert, teacher, researcher. UCM courses planning and teaching.	Associated professor UCM senior researcher at GSOLFA Expertise: optical sensing, bio(mimetic) sensors, (nano)materials, molecularly imprinted polymers, phage display techniques, epitope-mimicking peptides, recombinant antibodies, and their applications to food, clinical and environmental analysis. Dissemination activities of Chemistry,
Prof. Rocio Ranchal Trainer, Teacher	UCM Faculty of Physics	Senior expert, teacher, researcher. UCM courses planning and teaching.	Full Professor of Applied Physics Expertise: Magnetism and Magnetic Materials: new nanomagnetic systems for spintronic devices. magnetoelasticity and correlation between structural and magnetic properties

Prof. M. Luz Mena Erasmus+ Coordinator Senior Advisor	UCM Faculty of Chemistry	Vice-Dean. Coordinator of Erasmus+ and Internat. Relations Office at the Fac. of Chemistry	Associate professor UCM. Assoc. Dean and the Erasmus Coordinator at the Office for International Relationships in the Faculty of Chemistry:
M. Pilo Santos Admin. Personnel	UCM Faculty of Chemistry	Admin. Personnel. Erasmus+ and Internat. Relations Office at the Fac. of Chemistry	Admin. Assistant at the Office for International Relationships at the Fac. of Chemistry (UCM):
Prof. M^a Dolores Marcos Martínez Trainer, Teacher UPV courses coordinator	UNIVERSITAT POLITÈCNICA DE VALÈNCIA (UPV) Spain Interuniversity Research Institute for Molecular Recognition and Technological Development (IDM)	NANOMER Coordinator at UPV Project manager. Courses coordinator. Senior expert, teacher, researcher. UPV courses planning and teaching.	Ph.D. in Chemistry. Full Professor UPV . Expertise: design of new hybrid organic-inorganic materials for the development of new advanced functional systems to obtain porous functionalized silicas for the recognition and capture of species of environmental interest; hybrid materials applied to smart microcarriers for controlled release of substances of food , with optimization of the anchoring of biomolecules designed for encapsulation and controlled release; design of antimicrobial systems based on nanoparticles and functionalized surfaces.
María de los Llanos Gómez Torres	UPV, Development Cooperation Center	Coordinator of International Cooperation	PhD in Development Studies. Director of the Development Cooperation Center of UPV. Expertise: role of the university as an actor in international development cooperation, especially on issues of global education for citizenship. Participation in cooperation projects in collaboration with different NGOs, carried out project evaluation work, and in training in international cooperation in master's and postgraduate degrees. Incorporation of the 2030 Agenda in the university environment through the instruments of university development cooperation.
Prof. Ramón Martínez Máñez Trainer, Teacher	UPV Interuniversity Research Institute for Molecular Recognition and Technological Development (IDM) DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	Full professor in Inorganic Chemistry. Scientific Director of The Biomedical Research Networking Center in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN). Expertise: design of molecular probes and chemosensors for different chemicals and biological species of interest, electrochemical sensors and electronic tongues for applications in diagnostics, environment and food technology, design of functionalized hybrid materials for controlled release with applications in nanomedicine, in agriculture and in food technology. Co-founder of two spin-off companies.
Dr. Luis Villaescusa Alonso Trainer, Teacher	UPV, IDM, DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	lecturer at UPV. Diploma in University Pedagogy. Expertise: synthesis, characterization, and applications of nanoporous solids,

Dra. Elena Aznar Gimeno Lecturer	UPV, IDM, DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	Expertise: gated nanomaterials for controlled release purposes co-founding of a spin-off company. Development of gamification methodologies for the application of electronic voting systems in the practical classes of chemistry and in photovoice active methodology as community-based participatory research that gathers participant-taken photographs and narratives to translate experience into actionable knowledge. Dissemination of Science.
Dr. Andrea Bernardos, Trainer, Teacher	UPV, IDM, DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	Distinguish Researcher, at UPV. Expertise: material science, chemistry, nano: technologies, nanomaterials and sensors. development and synthesis of hybrid materials for the controlled release of bioactive molecules.
Dr. Vicente Martí Centelles Trainer, Teacher	UPV, IDM, DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	PhD in Chemistry Expertise: synthetic chemistry and physical chemistry; supramolecular chemistry applications to biology. use of innovative teaching tools.
Dr. Antoni Llopis Lorente Trainer, Teacher	UPV, IDM, DEPARTMENT OF CHEMISTRY	Senior expert, teacher, researcher. UPV courses planning and teaching.	PhD in chemistry and nanotechnology, ' <i>Ramón y Cajal</i> ' senior researcher at UPV. Expertise: teaching practical and theoretical courses of chemistry in Bachelor's and Master's degrees.
Vicenta Eloina García Félix Pedagogical advisor	UPV, Institute of Pedagogical Sciences	Pedagogical expert	PhD in Philosophy and Educational Sciences. Pedagogical advisor at the Institute of Educational Sciences UPV Expertise: pedagogical training of university teaching staff and the coordination of educational innovation teams (interdisciplinary), and transversal competences "lifelong learning". Educational innovation and teaching-learning process at the university.
Beatriz Julián López Project manager/ Senior Researcher/ trainer/ teacher	Universitat Jaume I de Castellón (UJI) Castellon Spain Institute of Advanced Materials ((INAM)	NANOMER Coordinator at UJI Castellon Scientific coordination. Students exchanges coordination.	Chemist PhD, Assistant Professor at the Department of Inorganic and Organic Chemistry (Universitat Jaume I). Senior researcher at the Institute of Advanced Materials (INAM) Expertise: Chemical synthesis, specialized in photoluminescent nanomaterials and nanocomposites. Nanocrystals fabrication (metal oxides and metal halide perovskites), structural and optical characterization.
Sixto Giménez Juliá Senior researcher/ trainer/ teacher	UJI (INAM)	Students exchanges coordination.	Physicist PhD, Full Professor at the Department of Physics (Universitat Jaume I). Senior researcher at the Institute of Advanced Materials (INAM). Expertise: Development of new concepts for photovoltaic and photoelectrochemical devices based on nanoscaled materials, particularly studying the optoelectronic and electrochemical responses of the

			devices by different spectroscopic techniques (impedance spectroscopy...). http://orcid.org/0000-0002-4522-3174
Maria Dolores Merchán Mundina Admin staff	UJI (INAM)	Support in the administrative tasks related to the project.	She is Economist (Graduated at Universidad de Valencia). Expertise: She is responsible for the administration issues at INAM and she has experience in managing projects at regional, national and European level. She has been developing this position since 2008. She has a lot of expertise in hosting and welcoming visitors and foreign students in our University.

Outside resources (subcontracting, seconded staff, etc)
Only for UTPL in Ecuador for WP9: white book edition and programmer for the NANOMER website.

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2.1.4 Cost effectiveness and financial management

Cost effectiveness and financial management <i>(n/a for prefixed Lump Sum Grants)</i>
<p>The NANOMER budget has been collectively discussed and drafted by all involved European and LA partners, in order to make best use of budget and resources (Total requested EU funding: 399 902 €). Besides the discussions led to the best allocation of the leading of WPs according to specific and complementary competences and skills of staff people involved in the project. The exchanges have been facilitated by existing experiences from running NanoAndes project.</p> <p>ENS de Lyon, as NANOMER project coordinator, has extensive experience in research and training programmes and in-depth expertise of project management (FP7, H2020, Horizon Europe) providing advice to partners in accordance with EC guidelines. An internal project manager will be in charge with the project coordinator of supervising the financial reporting of all partners involved, cooperating with the financial coordinators of each HEIs. The ongoing financial monitoring will allow to quickly react to any deviations in spending or potentially necessary reallocation of resources between partners or tasks to guarantee the best implementation of the project (see more details in WP1).</p> <p>A Partnership agreement will be concluded to attribute clear responsibilities to the partner and coordinating organisations and will contain the corresponding division of the grant. Even if all partners are involved in the follow-up of the project, they are not all beneficiaries. Each beneficiary has financial and administrative services working for follow-up and management of the projects.</p> <p>The allocation of budget is essentially focused on LA institutions, for students, administrative staff and teachers. The NANOMER summer schools will be organised at the same time as the NanoAndes scientific summer school in order to optimize travel costs of the participants to reduce carbon footprint. European countries will contribute with local funding to promote short internships for EU master students in the 10 institutions of the LA HEIs participating in NANOMER.</p> <p>It has been decided not to consider the staff salaries in the requested EU funding, in order to essentially focus on summer schools (30% of the requested budget) and organisation of students' exchange program (55% of the requested budget). However, salaries of European permanent staff are considered as part of the co-financing (856 355 €, higher than 200%), as well as funding from the French IRN (International Research Network) that supports the mobility of French staff and students to the NanoAndes summer schools (total co-funding: 25 000 € for 2025). The salaries of LA people have not been included in the co-financing since they were difficult to estimate due to their frequent variation (for example in Argentina).</p> <p>The Commission Decision C(2021)35 amended by Commission Decision C(2023)4928 was applied for unit costs of travels.</p> <p>Regarding the management of the funding in Latin America, it will be done through special foundations such as Fundacion Balseiro in Argentina. These foundations have experience in the management of international projects and will manage the EU funding between UCuyo (signatory representative for EU)</p>

and Instituto Balseiro, where the summer school (WP5) will take place. A financial short report will be done for each semester in order to justify all the funding used for the project.

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2.1.5 Risk management

Critical risks and risk management strategy			
Risk No	Description	WP	Proposed risk-mitigation measures
1 (low)	Pandemic crisis	WP4,5,6	Summer school on line
2 (medium in Argentina)	Political instability	WP5	Summer school on line or in another country
3 (low)	High number of partners	WP1,2,3	Establish a partnership agreement and an administrative and financial guide, do frequent on-line meetings to follow the project.
4 (low)	NanoAndes summer school does not take place face-to-face	WP4,5,6	NANOMER summer school will be added to another scientific meeting occurring in the country. The aim is to optimize travel costs for the participants to reduce carbon footprint.

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2.2 PARTNERSHIP AND COOPERATION ARRANGEMENTS

2.2.1 Consortium set-up

Consortium cooperation and division of roles (if applicable)																																																					
<p>In this project, 16 HEIs from 6 different countries will participate, which are the beneficiaries of the NANOMER project (Scheme 4):</p>																																																					
<p>Argentina:</p> <ul style="list-style-type: none"> Universidad de Buenos Aires (UBA) Universidad Nacional de San Martín (UNSAM) Instituto Balseiro-Universidad Nacional de Cuyo (IB-UCuyo) <p>Bolivia:</p> <ul style="list-style-type: none"> Universidad Mayor de San Andrés (UMSA) Escuela Militar de Ingeniería (EMI) <p>Chile:</p> <ul style="list-style-type: none"> Universidad de Chile (UCH) Universidad de San Sebastián (USS) Universidad Talca (UTalca) <p>Ecuador:</p> <ul style="list-style-type: none"> Universidad Técnica Particular de Loja (UTPL) Escuela Politécnica Nacional de Quito (EPNQuito) 	<p>France:</p> <ul style="list-style-type: none"> Ecole Normale Supérieure de Lyon (ENSLyon) Sorbonne University (SorbonneU) Université Grenoble-Alpes (UGA) <p>Spain:</p> <ul style="list-style-type: none"> Universitat Politècnica de València (UPV) Universidad Complutense de Madrid (UCM) Universitat Jaume I de Castellón (UJICastellon) 	<table border="1"> <thead> <tr> <th>Number</th> <th>Partner</th> <th>Type</th> </tr> </thead> <tbody> <tr><td>1</td><td>ENS de Lyon</td><td>COO</td></tr> <tr><td>2</td><td>Sorbonne U</td><td>BEN</td></tr> <tr><td>3</td><td>UGA</td><td>BEN</td></tr> <tr><td>4</td><td>UCM</td><td>BEN</td></tr> <tr><td>5</td><td>UPV</td><td>BEN</td></tr> <tr><td>6</td><td>UJI</td><td>BEN</td></tr> <tr><td>7</td><td>UMSA</td><td>BEN</td></tr> <tr><td>8</td><td>UNCuyo</td><td>BEN</td></tr> <tr><td>9</td><td>UTALCA</td><td>BEN</td></tr> <tr><td>10</td><td>UTPL</td><td>BEN</td></tr> <tr><td>11</td><td>FCEN-UBA</td><td>AP</td></tr> <tr><td>12</td><td>UNSAM</td><td>AP</td></tr> <tr><td>13</td><td>EMI</td><td>AP</td></tr> <tr><td>14</td><td>USS</td><td>AP</td></tr> <tr><td>15</td><td>U Chile</td><td>BEN</td></tr> <tr><td>16</td><td>EPN Quito</td><td>AP</td></tr> </tbody> </table>	Number	Partner	Type	1	ENS de Lyon	COO	2	Sorbonne U	BEN	3	UGA	BEN	4	UCM	BEN	5	UPV	BEN	6	UJI	BEN	7	UMSA	BEN	8	UNCuyo	BEN	9	UTALCA	BEN	10	UTPL	BEN	11	FCEN-UBA	AP	12	UNSAM	AP	13	EMI	AP	14	USS	AP	15	U Chile	BEN	16	EPN Quito	AP
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<p>Scheme 4. NANOMER consortium (COO: coordinator, BEN: Beneficiary, AP: Associated partner)</p> <p>Belén Albela, associated professor in chemistry, from ENS Lyon, will be the coordinator of NANOMER. She is associated professor and the deputy director of the Chemistry Department. She has already participated in the NanoAndes network and she knows all the coordinators of the all the other 15 partners. In addition, she speaks Spanish, the main language of NANOMER. In the last years she has developed</p>																																																					

innovative projects in education at ENS de Lyon in collaboration with Anna Clavel and Pierre Bénech, learning specialists, from IFé, the French Institute of Education.

The pedagogical project will be coordinated by Martin Pérez Comisso, from University of Chile. He is doctor in Human and Social Dimensions in Science and Technology. He is in charge of coordinating inter and trans-disciplinary initiatives at UChile since 2023. He will work on this part of the project, mainly with University of Talca, which have a lot of experience in competency-based education, with IFé in France and with UTPL in Ecuador, pioneering on the on-line teaching.

The three summer schools will be coordinated by UMSA in Bolivia (2025), Instituto Balseiro-UNCuyo (2026) in Argentina and UTalca in Chile (2027).

The student exchange program will be coordinated by UNSAM from Argentina. They have a very active International Relations service and will take care of the students' selection. The students from LA will be welcomed in the Spanish and French Universities. Sorbonne University will coordinate the exchange of international service staff: NANOMER will propose short stays in Europe for staff from Latin America Institutions.

The NANOMER communication and dissemination aspects, including the webpage and final white book, will be coordinated by UTPL from Ecuador.

The consortium includes newcomers, institutions with less experience or located in remote areas, as well as bigger institutions within a same country/region, which is beneficial since they already have knowledge of the ecosystem and on-going issues. The diversity of the partners (16 institutions and 6 countries) is one of the key aspects of NANOMER, which will allow us to include diversity at different levels: pedagogy, internationalization and networking.

Affiliated Entities: Institut NEEL (UGA-CNRS), Institut des Nanosciences de Paris (INSP), Instituto Balseiro (IB), Centre d'Energie Atomique (CEA), Centre national de la recherche scientifique (CNRS), Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET, Argentina), Secretaria Nacional de Investigacion, Ciencia y Tecnología (Bolivia).

Experts: Christelle Lison, Sherbrook University Canada, specialist in learning, teaching and innovation in pedagogy.

2.2.2 Consortium management and decision-making

Consortium management and decision-making

Due to the high number of partners the management of the consortium will be a key aspect for the success of the project. However, the fact that most of the participants already know each other because many of them belong to the NanoAndes network, is an advantage for the project to be successful.

The consortium organisation and administration will be implemented through several instruments, ensuring effective cooperation and communication among partners and efficient decision-making. Dedicated bodies will be created, persons in charge will be nominated, roles and tasks will be attributed, interactions and directing processes will be defined.

The management structure of NANOMER will be based on three levels in order to ensure an efficient and successful management:

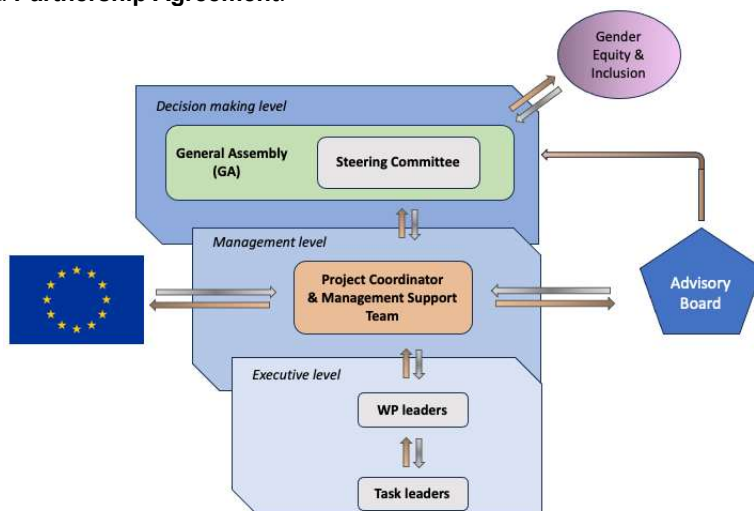
- **Decision making level:** This level consists of the NANOMER General Assembly which is the highest authority and the central body for strategic discussions within the project consortium, being responsible for the overall performance.
- **Management level:** This level is shared by the Project Coordinator with his Management Support Team for operational management.
- **The executive level:** The WP leaders and Task Leaders within this level are responsible for carrying out all activities and tasks as described in the individual work packages, keeping close contact with the partners involved in specific tasks and WPs.

Each partner organisation will be represented in the **General Assembly GA**, highest decision-making body, thus allowing direct communication. Due to the high size of the consortium, a **Steering Committee** composed of 4-6 persons will be created. It will provide guidance, direction and control of the project.

The GA will be assisted by the **Management Support Team MT**. An **advisory Board AB**, composed of external stakeholders, will advise the GA on the strategic orientations of the project.

The overall task will be supervised by the **Project Coordinator** and implemented by a specifically dedicated **Management Support Team**, composed of the project Coordinator and an European project manager (description in WP1). The management structure is illustrated in Scheme 5.

This organisational and decision-making structure is appropriate to the scale of the NANOMER project. Detailed rules and thorough governance procedures, as well as rights and obligations of the partners, will be specified in a **Partnership Agreement**.



Scheme 5. NANOMER management structure

A **Gender Equity and Inclusion (GEI)** responsible will be designated in order to verify that the composition of all the committees respects gender equity and inclusion of all the HEIs of the different countries. The GEI responsible will also participate in the selection committee for the attribution of internships in Europe, the students' selection for the summer schools and the selection of the international cooperation's staff for a stay in Europe. Inclusion of students with lower resources and/or fewer opportunities will be also a priority in NANOMER.

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3. IMPACT

3.1 Impact and ambition

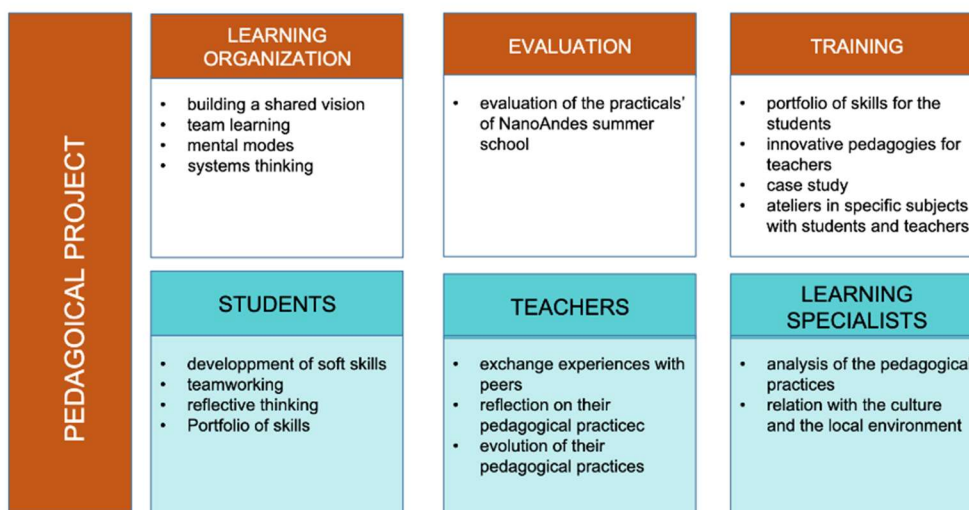
Impact and ambition

Ambitions of NANOMER

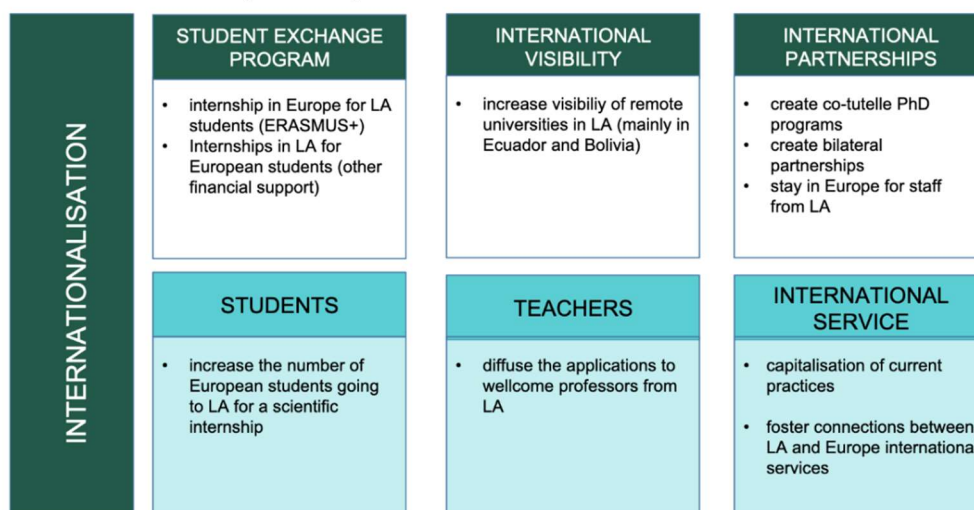
A1. Creation of a **pedagogic platform** to share pedagogic tools and methodology: videos of courses, practical in chemistry, physics and biology, innovative pedagogies, etc.

PEDAGOGICAL PLATFORM	DIGITAL TRANSFORMATION	SUSTAINABILITY	EXPERIENCES SHARING
	<ul style="list-style-type: none"> cooperative building of the digital learning platform Incorporation of the pedagogical resources Implementation of the platform training the users 	<ul style="list-style-type: none"> reuse of pedagogic material (courses, practicals, etc) reduction of carbon footprint 	<ul style="list-style-type: none"> sharing practical 's and courses' experiences
	STUDENTS	TEACHERS	LEARNING SPECIALISTS
	<ul style="list-style-type: none"> preparation of practicals of the summer schools development of student's competencies 	<ul style="list-style-type: none"> evaluation of the courses and practicals implementation of the courses and practicals 	<ul style="list-style-type: none"> following of the teaching transformations evaluation of the coherence of the teachings replication program dissemination

A2. Training of educators in innovative pedagogies through on-line workshops and the three pedagogy summer schools in Latin America to train both students and teachers, therefore creating an international pedagogy community (learning organization) with sociologists, learning specialists, teachers and researchers in sciences (multidisciplinary approach).



A3. Training of administrative staff from LA in internationalisation strategies and student exchange organisation: on-line meetings and stays in EU



A4. Exchange of Latin American students with Spanish and French HEIs

NANOMER project can only support exchange from LA to Europe. The pedagogy summer schools and workshops and the creation of the pedagogy community will foster interactions between teachers from different countries and will allow to also exchange students from Europe to LA, by using other financial supports. For example, at ENS de Lyon, there are local internships for the master students to do an internship of 3 months abroad. A list of laboratories from LA to welcome students from Europe is given in annex.

A5. Collaborative coordination of the different trainings and the pedagogical platform

Our final ambition is that all the NANOMER project will be performed in a collaborative manner. Indeed thanks to on-line tools we can organise workshops and meetings through all the year in order to better optimise the moments that we will be all face-to-face, in particular during the summer schools. Most of the participants are teachers that are very much invested in learning and our main aim is to improve students learning in order to form the future specialists in nano-sciences research and education.

Impact of NANOMER

Pedagogical level

We have analysed the state of each NANOMER institution in terms of pedagogical innovation and innovative techniques in education (Table 5, details in Annex). The analysis has been performed at

different levels: **macro** institution), **meso** (educational program) and **micro** (courses). This will be our starting point for assessing NANOMER's impact at pedagogical level. The starting point in the HEIs partners of NANOMER is different, and we expect to catalyse pedagogical actions in all the institutions — both in Latin America and in Europe— by training all the teachers involved in the project.

SCALE	ARGENTINA			BOLIVIA		CHILE			ECUADOR			SPAIN			FRANCE		
	UBA	UNSAM	IB-U Cuyo	UNSA	EMI	UTalca	U Chile	USS	UTPL	EPN	Quito	UPV	UCM	UIJ Castellón	ENS Lyon	UGA	Sorbonne U
MACRO																	
Competency-based education																	
Competency-based program for a specific department	1	1	1	2	2	3	3	2	3	1	2	2	1	1	1	1	1
Institutional competency-based educational project	1	2	1	1	1	3	3	2	2	2	2	2	0	0	0	0	0
Teacher training offer by institution	2	2	0	2	2	3	3	2	3	3	3	3	3	3	1	2	2
Teacher training outside institution	0	0	0	1	0	1	2	2	2	3	0	2	1	1	1	1	1
MESO																	
Innovative Pedagogy and pedagogy reflexivity																	
Evaluation of the course by the students	3	3	3	0	0	3	3	3	3	3	3	3	3	3	3	3	3
Technical support: platform, video service, ...	2	2	2	3	2	3	3	3	3	3	2	3	3	3	3	3	3
On-line pedagogical workshop (ateliers, taller)	1	1	0	2	2	3	3	2	3	3	3	3	3	3	2	2	2
In-person pedagogical workshop (ateliers, taller)	0	1	0	3	3	3	2	2	3	3	3	3	3	3	2	2	2
Individual pedagogical coaching	0	0	0	2	2	2	2	3	1	2	3	2	1	2	2	2	2
Pedagogical coaching in group	0	0	0	2	1	2	1	2	2	2	3	2	0	2	2	2	2
C. Compulsory / T. Teacher initiative / P. Pedagogic team's initiative	T	T	T	C	T	C	T	T	T	T	T	T	C	T	T	T	T
Course-skills correlation matrix for skills-based-education	1	1	0	1	2	2	3	2	1	1	1	1	2	1	1	1	1
Team building meetings between professors	2	2	0	2	2	2	1	3	3	2	2	1	1	1	2	0	0
MICRO																	
Courses																	
Interdisciplinary courses	1	1	2	1	1	1	3	2	2	2	2	2	0	2	3	3	3
Flipped-classroom / reversed classroom	2	1	2	2	1	3	2	2	2	2	3	2	1	2	2	2	2
PROJECT - Project-based courses	2	2	3	2	2	3	2	1	2	2	3	3	1	3	2	2	2
PROJECT - The projects are: T: Trimestrial / S: Semestrial / A: Annual	S	S	S	S	S	S	S	S	S	S	S	S	T	T	S	S	S
PROJECT - T: Team working / I: individual project	T	T	T	T	T	T	I	T	T	T	T	I	T	T	I	I	I
Courses where the students have a lot of autonomy	1	1	3	1	1	1	3	2	1	2	1	3	1	2	2	2	2
Competency-based evaluation	2	2	0	2	2	3	2	2	2	1	2	2	1	2	2	2	2
Assesment: CA: Continuous assesment / FE: Final evaluation / ME: Mixed evaluation	ME	ME	ME	ME	ME	ME	ME	CA	CA	CA	CA	ME	ME	ME	ME	ME	ME
Auto-evaluation (self evaluation by the student)	0	0	0	1	1	3	2	1	0	1	2	2	0	1	0	0	0
Co-evaluation (students and professors)	0	0	0	1	1	1	1	1	0	2	2	2	0	1	1	1	0
Skills portfolio training for the students?	0	1	1	1	1	1	0	2	1	2	1	1	0	0	0	0	0
Help for the students to promote reflexivity	1	2	1	2	0	2	2	2	2	1	2	0	0	2	2	1	1
Development of digital skills (transversal)	2	1	3	2	1	3	3	2	2	2	2	2	0	3	3	3	3

MACRO : institution (Ex: The university policy)
 MESO : educational program (Ex: Physics and Chemistry Master)
 MICRO : during the courses (Ex: Nanomaterials course)

0 Nothing
 1 In progress, under reflection
 2 Partially used or practised
 3 Currently used or practised

Table 5. Pedagogical situation before NANOMER

Social impact of NANOMER

Nanosciences and nanotechnology are new multidisciplinary branches where different disciplines such as physics, chemistry, biology and engineering are converging. The synergy produced by the intersection of all these disciplines is without doubt a very important impact due to the human exchange of the diverse disciplines specially when there are different participating countries. Nanotechnology has been incorporated into various production processes, generating its own production and export market niches, especially in new materials with applications in health, agriculture, environmental remediation, construction materials.

The social impact increases when the human exchange between the participating countries is between LA and European countries making it feasible to strengthen cooperative science and at the same time give global visibility to the knowledge produced. We believe that this social impact will be very well covered by the exchange programs and the summer schools. It is important to denote, that the objective of teaching soft skills to students is transversal to any discipline giving to all the participating students relevant tools for their employability potential.

In particular, in LA, even with uneven development, the teaching of nanosciences and nanotechnologies is dispersed in the converging disciplines. At the same time, teaching follows a traditional mode of lectures and standardised evaluations. In this scenario, NANOMER will have a great impact in LA as it:

- promotes sustainable economic growth in the region,
- contributes to a better quality of life through biomedical applications and environmentally friendly technologies for industry and agriculture,
- strengthens local capacities,
- enhances the training of new generations in an area of innovation in constant expansion,
- develops new learning tools that will in turn impact on the education of traditional disciplines.

Gender dimension

Within the framework of the Erasmus+ project, aimed at strengthening ties between Latin America and Europe, it is crucial to pay special attention to the gender dimension. We are committed to promoting gender equality and the inclusion of all gender identities in all aspects of our collaboration. This will be reflected in actions aimed at ensuring equal participation of women and men in project activities, combating gender stereotypes, analysing the differential impact of policies and practices on genders, and integrating a gender perspective into the design and implementation of all activities.

Our goal is to create an inclusive environment where everyone, regardless of their gender, can fully contribute to and benefit from the opportunities offered by this project. Several institutions within the consortium are already involved in this inclusion, as exemplified by the ENS de Lyon and University Jaume I in Castellón:

Examples at ENS de Lyon:

- For four years, ENS Lyon has been actively supporting the operation "Science, a women's profession" led by the Aslan LabEx (laboratory of excellence) in partnership with the non-profit organization "Femmes & Sciences". This program is carried out on International Women's Day, with high schools, to fight against gender stereotypes in girls' future career choices.
- Some of the teachers and researchers are involved in various associations to promote scientific careers for women. Its recruitment and career management policy is working on reaching gender equity at various levels of teacher-researchers' careers.
- <https://www.ens-lyon.fr/en/about-us/our-commitments/professional-equality>

Examples at UJI Castellon:

- UJI is at the forefront of promoting gender equality in Spain. Since 2010, they have implemented comprehensive Programs for Equality aimed at ensuring gender equity across all levels of their institution, including students, teachers, researchers, and administrative staff. They have established various units, protocols, and mechanisms dedicated to advancing gender equality, such as the UJI's Equality Unit, the Institute of Feminist and Gender Studies "Purificación Escribano," the "Isonomia" Foundation, periodic conferences, congresses, and training courses focused on gender equality for UJI personnel. Additionally, they provide a guide for teaching with a gender perspective, protocols for preventing violence and gender discrimination, and support resources like the violet point initiative (<https://www.uji.es/serveis/ui/>).
- In 2018-2019, UJI actively participated in the Erasmus+ Program through the E-STEAM Project, which stands for "Equality in Science, Technology, Engineering, Art and Mathematics" (<http://e-steamerasmusproject.com/index.html>). Moreover, as part of this initiative, the coordinator of NANOMER's partnership at UJI, Beatriz Julián, together with other colleagues at INAM, mentored high school girls in Castelló to challenge gender stereotypes.
- Furthermore, UJI organizes various annual events aimed at bridging the gap between science and society while highlighting the contributions of women in science. These include activities like "FirUJlciencia" (April), "el dia de la xiqueta i la dona en la ciència" (February), European Researchers' Night (September), and "The Global Women's Breakfast" (February) held in conjunction with the U.N. Day of Women and Girls in Science, among others.

Examples in Latin America:

In Argentina, for example, there is a long tradition of including women in science, although the picture remains one of great inequality. According to 2017 data, the population of young researchers (doctoral students, postdocs and junior researchers) is approximately 60% women, inverted in the highest categories, to 75% men. The same is true for research grants where women lead only 30-40% of projects in STEM. At the private sector 26% of qualified STEM employees are women, and 10% of institute leaders in 2017 were women (https://www.ragcyt.org.ar/noticias/original_9729_3159_0.jpg)

Numerous actions have been carried out to reverse this inequality and to give visibility to work led by women, as well as to address certain research - especially biomedical research - with a gender perspective. Among these actions, the following stand out:

- Argentine Gender, Science and Technology Network (RAGCyT). Since 1994 it has been a space for exchange between women scientists and researchers to diagnose the situation of women in science and technology, to elaborate strategies for recording, promoting and valuing the contribution of women in science and technology, as well as to strengthen gender awareness in STEMs. <http://www.ragcyt.org.ar/institucional>
- National Programme for Gender Equality, of the National Ministry of Science, Technology and Innovation (MINCyT), which aims to make science, technology and innovation institutions environments suitable for equitable performance and progress. <https://www.argentina.gob.ar/ciencia/igualdaddegeneros>. This program emphasises the visibility of Argentinean women's contributions to scientific culture and their dissemination in society. <https://www.educ.ar/recursos/155547/mujeres-y-ciencia-una-historia-a-medias>.
- Area of Gender and Diversity Policies as a space for mainstreaming the gender perspective in CONICET. <https://www.conicet.gov.ar/area-de-politicas-de-genero-y-diversidades/sobre-el-area/>
- Several universities have intensified actions for training on gender issues and violence against women. <https://www.uba.ar/genero>
- At FCEN-UBA, in addition to the GENEX program to promote an environment free of gender violence (<https://exactas.uba.ar/genex/>), actions have been taken to give visibility to women's work. Among others, a mural with pioneering women <https://exactas.uba.ar/web/pioneras/>, as well as a (female) Professor appointment for Mathematics department where women represent less than 25% of the Professors.

However, in other countries such as in Bolivia, the difference in opportunities between men and women in work and scientific environments is still latent.

In Bolivia, for some years now, policies have been developed to support women in the workplace, one of them is that at least 50% of the staff must be female in government companies, this reality is not always respected. In the field of science, in the last 3 years, some seminars and conferences have been held showing women who carry out research in different fields of science, events organized by researchers from universities.

Moreover, in the NANOMER project we have a quite good gender balance: **10/16 HEIs coordinators in NANOMER are women.**

The project dissemination and exploitation outputs will ensure gender inclusive language and images. NANOMER will make sure that all communications and learning content are free from gender stereotypes or biases and will promote **gender equality**.

Data management

We will establish a data management plan in compliance with EC requirements, which will be regularly updated. The data of the project will comply with the FAIR data principles.

Various exchanges and achievements will comply with the Data Protection Act, the General Data Protection Regulation (GDPR), and particular attention will be given to the security of the collected data. All European institutions are committed to complying with the current regulations. The digital tools developed during this project will also be in compliance. ENS Lyon, as the host and developer of its tools, commits to this compliance by name.

The Moodle educational platform is hosted on ENS de Lyon's own servers. In order to identify users, Moodle (an open-source software) collects and stores their first name, last name, and email address as long as the account is active. Deletion of the personal account can be requested at any time.

During video recording, authorization for the use of personal data for adults will be signed by each participant, in accordance with the conditions defined in the Data Protection Act No. 78-17 of January 6, 1978, as amended. These videos will be hosted on ENS de Lyon's internal video server and distributed through the Moodle platform. The Data Protection Officer (DPO) of the institution is responsible for ensuring compliance and can be contacted at the following address: dpo@ens-lyon.fr.

On the same principle, all data collected for scholarship applications, exchanges, pedagogical summer schools, and various meetings will only be retained for the necessary duration. Particular attention will be paid to data security during exchanges to prevent any leaks or security breaches that could lead to serious consequences. The security officers of European institutions will be informed and consulted to establish a common security policy, taking into account cybersecurity risks.

Summary

SPECIFIC NEEDS	EXPECTED RESULTS	TARGET GROUPS
<ul style="list-style-type: none"> LA students' soft skills Innovation in pedagogy Internationalization of LA HEIs Strengthen connexions between LA and EU 	<ul style="list-style-type: none"> Improvement students' soft skills Creation of an international community in pedagogy for nanosciences teaching 	<ul style="list-style-type: none"> LA students LA and EU teachers and learning specialists LA interantional service staff
IMPACTS	OUTCOMES	DISSEMINATION
<ul style="list-style-type: none"> Pegagogical: innovation of teaching Societal: inclusion Economical: better use of nanosciences knowledge to solve technological societal problems 	<ul style="list-style-type: none"> Pedagogical platform 3 summer schools in LA Students' skills portfolio Students' Exchange program International service staff stays in Europe 	<ul style="list-style-type: none"> Webpage Videos of important lectures in the platform Publications White book

3.2 Communication, dissemination and visibility

Communication, dissemination and visibility of funding

Several communication axes and levels are planned, both at internal and external level. Firstly, within the consortium, a communication strategy for each action will be implemented to disseminate it internally within each institution. This communication aims to raise awareness of the project and its deliverables among students and teachers in the institutions. The various deliverables of the NANOMER project rely in part on the participation of students and teachers, so this communication campaign is of great importance. Visual materials will be created and shared on the various websites, and presentation

meetings will be scheduled to introduce the project and its deliverables. A dedicated NANOMER website will be launched during the first semester of the project.

Summarized videos will be created to highlight the different pedagogical summer schools. This will increase the visibility of the achievements and enable the promotion and dissemination of productions. The NanoAndes network's YouTube channel will also be a key point for promotion: this channel is followed by many researchers outside the NanoAndes network. It will help raise awareness of the Nanomer project and its objectives, including open educational resources and pedagogy training workshops available on the Moodle platform for the entire academic community.

At a broader level, a research axis is also involved at two levels: in pedagogy and in nanosciences. IFé, as an expert institution in pedagogy, will be a major asset. It will collect various information for research purposes and disseminate its results in scientific productions and publications, as well as various professional resources made available to the community. The same goes for scientific exchanges.

The NanoAndes website will be a significant support for communication and promotion to extend NANOMER's outreach. We will also use the networks of other stakeholders who have expressed support for the project, such as the French Embassies in Latin America (see letters of support in appendix). The various institution websites will also have a dedicated page for the NANOMER project. The open Moodle platform will be the cornerstone for promoting and disseminating pedagogical resources. At a minimum, the EU logo will be placed on all productions and on all places, objects, etc., that mention the project. Explanatory paragraphs about the funding will be integrated wherever the medium allows it.

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3.3 Sustainability and continuation

Sustainability, long-term impact and continuation

Sustainability

NANOMER actions will promote sustainable economic growth in the LA region. In addition, the project is designed in an eco-friendly way. It will incorporate green practices in different project phases:

- One of the GA members will be nominated as the **network spokesperson for sustainability**. This aspect will be present at all times in the project.
- Internships on projects in the framework of the **Green Deal** will be privileged.
- **Green travel**: the NANOMER summer schools will be held in Latin America after the scientific NanoAndes summer school in order to minimize the carbon footprint of the participants' travels. Indeed, 80% of the participants will come from LA. It will be more eco-friendly that teachers and staff from Europe travel to LA, and some of the lecturers do remote presentations.
- **Eco-friendly meals**: during the summer schools' eco-friendly meals will be privileged, if possible coming from local fair trade. Special meals will be considered for vegan participants.

Long-term impact and continuation

This project involves 16 HEIs. Only three years is very short to establish good synergies and cooperation between all the institutions involved. Indeed, some of the partners know each other, which will help to succeed in the project, but there are new comers. The objective of NANOMER is to seed new collaborations through these exchanges, and we hope that after these three years we can find other financial support to maintain this international exchange, which is a key aspect in the training of our students. The consortium plans to apply to other co-funding schemes in parallel such as cooperation calls for proposals from the Embassies to encourage a leverage effect.

We hope to implement this virtuous system in which joint research or teaching funding will allow the financing of short intensive study and mobility periods, which in turn will encourage PhD and scientific collaborations, and so forth.

On a longer-term basis, the NANOMER project could lead to an Erasmus+ application under the Jean Monnet actions framework for example. In a more specific context, the Moodle educational platform will remain available and active so that the results produced contribute to the training of teachers and students in the university landscape.

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4. WORK PLAN, WORK PACKAGES, ACTIVITIES, RESOURCES AND TIMING

4.1 Work plan

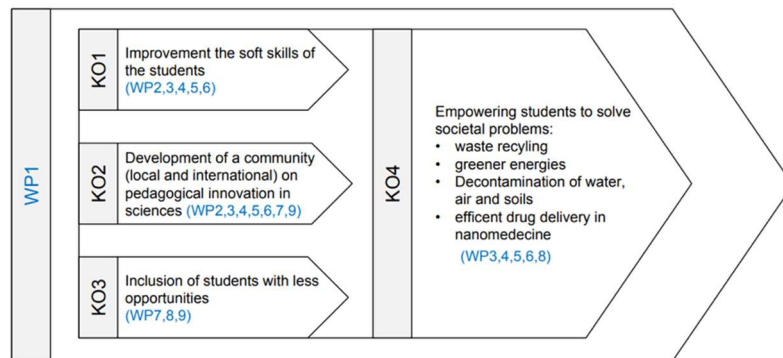
Work plan

The main objective is to train both professors and students (master and PhD level) to develop competencies that are transversal and complementary to those in the field of nanosciences. Some of them are soft skills such as communication, team working, reflexivity on what they are doing, etc. Others involve the transformation of current classes and practical's by the incorporation of innovative pedagogical tools. NANOMER will promote:

- The creation of pedagogic project thanks to the set-up of a pedagogical platform and the training of both professors and students in soft skills. For the students this will be key in order to establish a skill portfolio to foster employability.
- The exchange of students between LA and Europe in order to establish new bilateral partnerships, and to foster internationalisation of smaller universities and in remote regions.

Three summer schools will be organised: the first in Universidad Mayor de San Andrés, La Paz, in Bolivia in 2025, the second in the Instituto Balseiro-Universidad Nacional Cuyo, in Bariloche, in Argentina in 2026, and the last one at the University of Talca in 2027. These summer schools will be connected to the NanoAndes Summer schools, and specific sessions concerning pedagogy and training of the students to develop soft skills will be added. Indeed, during the year previous to the summer school, on-line sessions on specific pedagogical subjects, such as students' assessment, how to foster reflexivity in students, etc will be conducted coordinated by learning specialists. The results of this work will be presented in the summer school. In addition, the work of the students during the NanoAndes scientific summer school will be also presented at the end of the school. Workshops allowing to share teaching experiences and to discover innovative teaching tools will also be organised during these summer schools.

ENS de Lyon will coordinate the project and UTPL in Ecuador will take care of a website in order to favour dissemination. UChile, ENSLyon and UTPL will coordinate the writing of a white book on « Case studies on teaching sciences ».



- WP1** - Project management and coordination
- WP2** - Pedagogical support of students and teachers
- WP3** - Collaborative digital pedagogical platform
- WP4** - Pedagogy Summer School 1
- WP5** - Pedagogy Summer School 2
- WP6** - Pedagogy Summer School 3
- WP7** - Staff training in international cooperation
- WP8** - Students' exchange program
- WP9** - Knowledge dissemination and replication plan

4.2 Work packages, activities, resources and timing

Work Package 1: Project management and coordination			
Duration:	Q1 - Q12	Lead Beneficiary:	ENS Lyon
Objectives			
<p>This WP will plan, organise and control processes to achieve the objectives of the project. It will take care of its smooth overall coordination, its scientific, administrative, financial and legal management, the effective co-operation and communication among partners, as well as the making of decisions and the identification of potential risks and the set-up of an implementation plan for problem and conflict resolution. The specific objectives are:</p> <ul style="list-style-type: none">• Reformulation of the specific objectives in a collaborative manner: project charter and partnership agreement• Identification of the main actors for each WP in each HEI and determine stakeholders• Elaborating a project management plan in a collaborative way• Building the different committees: NANOMER steering committee, WP steering committees, the committee for the exchange student program and attribution of the international service staff stays in Europe, gender equity and inclusion referent, ...• Defining project control: how to monitor progression, establish performance indicators, revisit project management if necessary• Recording project processes and findings, handover deliverables• Elaborating of a financial and administrative guideline• Ensuring flow of information between the Commission and the Researcher/Host Institution.• Identifying potential risks for the project and set up an implementation plan for problems and conflicts resolution. <p>The purpose of this task is the general management of the project. The coordinator will care that effective co-operation and communication among the team members, as well as efficient decision-making is ensured. The coordinator and the nominated task leaders will be in charge of monitoring the progress of the research activities, as well as taking decisions regarding the global orientation of the project.</p> <p>The coordinator will also be in charge of the general organisation and management of the project. He will be supported in these responsibilities by a European Project Manager working at ENS de Lyon.</p> <p>The coordinator together with the tasks leaders will be in charge of the daily follow-up of the project progress with respect to the original objectives; the delivery, adoption and approval records upon achievement of each milestone. They will meet on a regular basis. The coordinator can decide, if needed, to organise an extraordinary meeting or to consult with the team members when urgent decisions have to be taken.</p> <p>Management Team. The specifically dedicated management team will be constituted of the project coordinator and a European Project Manager working at ENS de Lyon. The team will be in charge mainly of being a permanent contact point for the coordinator and the participants; easing the coordinator of administrative tasks and notifying the team of due dates; reminding the participants of the deadlines for the deliverables; managing delivery and follow-up of administrative and financial documents; preparing and maintaining contractual documents (agreements, contract, annex...); following up the budget; informing team members of deadlines, if any; being a help desk.</p>			

For maintaining the strong interactions and synergies that already exist between the collaborators, the team will, in particular, organize periodic project meetings. Meetings will also be opened to other members of the team and national and international collaborators of individual researchers, who will be invited to visit the laboratory and exchange ideas on the project.

All the team members are aware that communication will be the key for successful achievement of the project, and will always carefully listen, analyse the situation and make decisions together in case of misunderstanding, problem, or conflict.

The NANOMER Consortium strives to be **inclusive and to promote equality**, and we will apply best practices with regard to **Gender, Diversity and Inclusion**:

- Foster gender balance in partner teams;
- Ensure gender balance in decision-making processes (for Student grants)
- Integrating gender/sex analysis in research / actions
- A Gender Equity and Inclusion (GEI) referent will be stated.
- The policies against Sexual Harassment, Violence and Gender Discrimination from the different HEIs participating in this project will be applied

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions & Subcontracting
			Name	Role	
T1.1	Creating a management project plan	Make the project plan below readable with its milestones and objectives to be achieved in a way that is clear for participants and coordinate tasks.	ENS de Lyon, all participants	COO, BEN, AP	NO
T1.2	Kick-off meeting organisation	Gather all project stakeholders and prepare the project framework presentation.	ENS de Lyon, all participants	COO, BEN, AP	NO
T1.3	WP management	Identification of the main actors for each WP in each HEI and determine stakeholders	ENS de Lyon, All participants	COO, BEN, AP	NO
T1.4	Elaborating of a financial and administrative guideline	Create and enforce the financial and administrative guideline.	ENS de Lyon, UGA, UBA, UTalca, UTPL, UMSA,UPV,UCM,UJI	COO, BEN	NO
T1.5	Verify and disseminate the deliverables.	Record the project processes and outcomes, transfer the deliverables, promote them, and keep them alive.	ENS de Lyon, all participants	COO, BEN, AP	NO

Deliverables (outcomes)							
Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Disse. Level	Due Date	Description
D1.1	Kick-off meeting	1	ALL	[DEM]	[PU]	Q1	On-line Spanish - English
D1.2	Partnership Agreement	1	ALL	[R]	[PU]	Q1	Report, English
D.1.3	Financial and administrative guideline	1	ALL	[R]	[PU]	Q1-Q2	Guide, English
D1.4	Data Management Plan	1	ALL	[DMP]	[PU]	Q4, Q8,Q12	Report, English
D1.5	Project Quality plan	1	ALL	[R]	[PU]	Q2-Q12	Legal aspects, quality processes, quality assurances
D1.6	Internal Management report	1	ALL	[R]	[PU]	Q2-Q12	project management, financial status
D1.7	Activity reports	1	ALL	[R]	[PU]	Q2-Q12	Financial reports, cost statements and audit certificates
D1.8	Final Meeting	1	ALL	[DEM]	[PU]	Q12	Review of the project, future perspectives

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>										
Participant	Costs									
	A. Personnel	B. Subcontracting	C.1a Travel	C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs
ENS de Lyon							7000€		490 €	7490 €

Total							7000€		490€	7490€
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For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Work Package 2: Pedagogical support of students and teachers

Duration:	Q1 - Q12	Lead Beneficiary:	UChile
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Objectives

- Draw up a detailed inventory / cartography of the pedagogical activities carried out by the institutions in the consortium
- Create a learning organisation around pedagogical issues: set up working groups and workshops to prepare for the summer school.
- Create and moderate interactions with teacher into identify the problematic situations they wish to work on as a priority.
- Mobilize pedagogical research to share tools those involved to question and develop their practices. Train and support teacher on analysis activity methodology.
- Monitor teaching experiments in schools and analysing the effects on practices
- Create teaching and student workshops in order to help teacher to transform their pedagogical practices
- Analysis of experimental pedagogical activities.
- Capitalise on the resources produced

The specific objectives for each actor are:

Teachers: This WP aims to enable NANOMER project members to develop professionally through training and support in teaching methods. The aim of the system that we will be co-construct with the local actors is to support them in transforming their teaching practices with a view to promoting student success. The purpose of the work we are carrying out is to develop concrete, gradual and acceptable pedagogical and innovative changes in the different contexts of NANOMER's institutions. **Pedagogical LAB:** we are therefore proposing incubation workshops approach to enable us to start from problematic situations in the field and offer training/coaching that responds to concrete concerns. What we're seeing in training courses on teaching in higher education is that colleagues don't always identify where their needs lie, so we'd like to get colleagues to problematise their practices and work with them to come up with possible courses of action to try out. It is in this process of **agile system** that workshops during summer schools will be prepared: a group of volunteer teachers will be set up and we will work together to analyse their teaching situations then support them to analysis et find solutions with theoretical and practical inputs. We're betting that interactions and feedbacks of working group will help teachers to think about innovative changes and progress. **Summer School:** the results of this experimentation will be share during summer schools and be analysed by pedagogical experts. The workshops created by the group for summer school will be designed to promote feedbacks and will offer the possibility of disseminating and appropriating the ideas proposed in other contexts.

Students: On the **student** side, the idea would be to get them to express the skills developed during international exchanges and to be able to share/value them during the summer school.

Portfolio and reflexivity: Specific work will be carried out with teachers on portfolio issues, with the idea that they, like the students, can build a portfolio of their own. One of the challenges is to support reflective thinking, but also to provide cross-disciplinary input on issues related to competencies approach and inclusive teaching. The aim is to get the stakeholders involved to adopt a reflective approach (Schön, 1994).

In order to help this community to be able to function and this work of reflexivity to take place, it seems essential to build/share a **training reference framework** on cross-cutting skills, which will enable this work of collecting traces and of the co- and self-assessment necessary for the logic of progress to be carried out. This institution will help to disseminate the work and maintain an ongoing link.

Actors involved in this community will be support to develop competencies in **brokering**. They will be able to mobilize theory to understand and modify practices.

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions & Subcontracting
			Name	Role	
T2.1	Preparation and analysis of previous data	Share results of previous data, co-construct strategy of teachers mobilization and framework of the WP. Elaboration of indicators.	ALL	COO,BEN,AP	NO
T2.2	Pedagogical workshops Set-up: choice of the language, software, roles, access, ...	Define common problematics, pedagogical contents and ways of teaching and how to document this activity	ALL	COO,BEN,AP	NO
T2.3	Several practical Community Meetings Incorporation of the content	Analysis of experiment and discussion. Preparation of Summer School Workshop.	ALL	COO,BEN,AP	NO
T2.4	Tests and implementation	Analysis of experiments Choice of shared resources on platform	ALL	COO,BEN,AP	NO
T2.5	Analyses of the indicators for the evaluation	Assessment and future perspectives	ALL	COO,BEN,AP	NO

Deliverables (outcomes)							
Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Disse. Level	Due Date	Description
D2.1	Analysis of previous data	2	ALL	[R]	[PU]	Q3,Q7,Q11	Share experiences and analyse previous data
D2.2	Indicators & analysis	2	ALL	[R] [[DATA]	[PU]	Q5,Q9,Q12	Indicators for monitoring the project. Analysis for intermediate reports.
D2.3	Pedagogical tools	2	ALL	[DEC]	[PU]	Q5,Q9,Q12	pedagogical activities : videos, audios etc. resources.
D2.4	Workshops on pedagogy	2	ALL	[R] [[DEC] [DATA]	[PU]	Q4,Q8,Q12	reflexive pedagogical workshops during Summer Schools
D2.5	Case studies	2	ALL	[R] [DEC]	[PU]	Q3,Q7,Q11	Cartography of pedagogical resources on specific subjects
D2.6	Conception of the “white book” on case studies	2	ALL	[R]	COO,BEN ,AP	Q12	Draft a white paper on pedagogy case studies

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>										
Participant	Costs									
	A. Personnel	B. Subcontracting	C.1a Travel	C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs
U Chile							5000€		350€	5350€
Total							5000€		350€	5350€

Work Package 3: Collaborative pedagogical digital platform

Duration: Q1 - Q11 **Lead Beneficiary:** ENS Lyon

Objectives

1. Set-up of the platform:

- Analysis of the previous pedagogical data
- definition of the architecture of the platform
- Pedagogical innovations
- technical innovations
- identification of the software to use and the language for each item
- roles and permissions for the users (students, educators, staff, external users)
- definition of the content and its organisation
- incorporation of the pedagogical items (lectures, practical's, manuals, videos,)
- technical evaluation: definition of the indicators to follow its use
- pedagogic evaluation: definition of the indicators

2. Implementation of the platform

- Technical evaluation: analysis and implementation
- Pedagogical evaluation: analysis of the use of the platform
- Creation of a space to allow feedback of the users of the platform
- Creation of a space to communicate, propose offers of internships, ...

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions & Subcontracting
			Name	Role	
T3.1	Technical evaluation of the platform	Current state analysis.	ALL	COO, BEN, AP	NO

T3.2	Pedagogical evaluation of the platform	Determine exhaustively possible pedagogical scenarios.	ALL	COO, BEN, AP	NO
T3.3	Creation of a space for the feedback of the use of the resources	Imagine a space for exchanges between users and administrators for continuous improvement.	ALL	COO, BEN, AP	NO
T3.4	Creation of a space to communicate between users	Imagine a social exchange space among users that will be utilized.	ALL	COO, BEN, AP	NO

Deliverables (outcomes)							
Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Disse. Level	Due Date	Description
D3.1	Pedagogical platform	3	ALL	[DEC]	[PU]	Q2	Set-up of the platform
D3.2	Implementation of the platform	3	ENSLyon	[DEC]	[PU]	Q6, Q10	Implementation of the platform

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>										
Participant	Costs									
	A. Personnel	B. Subcontracting	C.1a Travel	C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs
U Chile							2000€		140€	2140€
Total							2000€		140€	2140€

Work Package 4: Pedagogy Summer School 1

Duration: Q1-Q4 **Lead Beneficiary:** UMSA, Bolivia

Objectives

- Preparation of the program of the school: choice of the lectures and the workshops
- Selection of the students that will participate and organisation of the school
- Evaluation of the out-comes and definition of the perspectives for the next school

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	
T4.1	Program of the summer school 1	Preparation of the program of the school	UChile, UMSA, ENS Lyon, UTalca	COO, BEN, AP	NO
T4.2	Selection of the students	Selection of the students that will participate	UBA, Uchile, UGA, UMSA	COO, BEN, AP	NO
T4.3	Organisation of the summer school 1	Organise the event	UMSA	COO, BEN, AP	NO
T4.4	Evaluation and perspectives for next school	Provide feedback on the event.	UChile, ENS Lyon, UTalca	COO, BEN, AP	NO

Milestones and deliverables (outputs/outcomes)

Milestone No	Milestone Name	WP	Lead Ben.	Description	Due Date	Means of Verification
MS1	Summer School 1 Program	4	UMSA	Choice of the lecturers and workshops	Q2	Confirmation of the participants
MS2	Summer School 1 Budget	1,4	UMSA	Verification of the financial support	Q2	Expenses estimate

Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Dissemination Level	Due Date	Description						
D4.1	Summer school 1 communication	4	ALL	[R] [DEC]	[PU]	Q3	Through the webpage, Spanish						
D4.2	Summer school	4	ALL	[DEM]	[PU]	Q4	Pedagogy workshops at UMSA						
Estimated budget – Resources (n/a for prefixed Lump Sum Grants)													
Participant	Costs												
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c	C.2	C.3	D.1	E. Indirect costs	Total costs
ENS Lyon				2 travels	2 persons travelling	5000X €	360€					375,20€	5735,20€
SU				1 travel	1 person travelling	2500€	180€					187,60€	2867,6€
UGA				1 travel	1persons travelling	2500€	180 €					187,60 €	2867,6 €
UCM				1 travels	1persons travelling	2500€	180 €					187,60 €	2867,6 €
UPV				1 Travels	1persons travelling	2500€	180 €					187,60 €	2867,6 €
UJI				1 travel	1persons travelling	2500€	180 €					187,60 €	2867,6 €
UMSA				20 travels	20 persons travelling	5600€	6400 €	5000€				1190 €	18190 €

Total			27 travels	27 persons travelling	23100 €	7660 €	5000€				2503,2 €	38263,2 €
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Work Package 5: Pedagogy Summer School 2

Duration: Q5-Q8 **Lead Beneficiary:** UNCuyo – Instituto Balseiro, Bariloche, Argentina

Objectives

- Preparation of the program of the school: choice of the lectures and the workshops
- Selection of the students that will participate and organisation of the school
- Evaluation of NANOMER project by an international expert in pedagogy. Feedback on the workshops of the summer school definition of the perspectives

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	
T5.1	Preparation of the program of the summer school 2	Preparation of the program of the summer school 2	UChile, UCuyo, UBA, UNSAM, ENS Lyon, UTalca	COO, BEN, AP	NO
T5.2	Selection of the students	Selection of the students that will participate	UBA, UNSAM, UGA, UMSA	COO, BEN, AP	NO
T5.3	Organisation of the school	Organisation of the event	UCuyo, UBA, UNSAM	COO, BEN, AP	NO
T5.4	Evaluation and perspectives for next school	Provide feedback on the event	UChile, ENS Lyon, UTalca, UCuyo, UBA, UNSAM	COO, BEN, AP	NO

Milestones and deliverables (outputs/outcomes)

Milestone No	Milestone Name	WP	Lead Ben.	Description	Due Date	Means of Verification
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MS3	Summer School 2 Program	4	UCuyo	Choice of the lecturers and workshops		Q6	Confirmation of the participants						
MS4	Summer School 2 Budget	1,4	UCuyo	Verification of the financial support		Q6	Expenses estimate						
Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Dissemination Level	Due Date	Description						
D5.1	Summer school 2 communication	4	ALL	[R] [DEC]	[PU]	Q7	Through the webpage, Spanish						
D5.2	Summer school 2	4	ALL	[DEM]	[PU]	Q8	Pedagogy workshops at Instituto Balseiro, UNCuyo						
D5.3	Evaluation by an expert	5	[R]	[PU]	[PU]	Q8	During the school						
Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>													
Participant	Costs												
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c	C.2	C.3	D.1	E. Indirect costs	Total costs
ENS Lyon				2 travels	2 persons travelling	5000X €	360€					375,20€	5735,20€
SU				1 travel	1 person travelling	2500€	180€					187,60€	2867,6€
UGA				1 travel	1person travelling	2500€	180 €					187,60 €	2867,6 €
UCM				1 travel	1person travelling	2500€	180 €					187,60 €	2867,6 €

UPV				1 Travels	1persons travelling	2500€	180 €				187,60 €	2867,6 €
UJI				1 travel	1persons travelling	2500€	180 €				187,60 €	2867,6 €
UCuyo				19 travels	19 persons travelling	94840€	5400 €	4680€			1394 €	21314,4 €
Total				26 travels	26 persons travelling	27340 €	6660 €	4680€			2707,2 €	41387,2 €

Work Package 6: Pedagogy Summer School 3

Duration:	Q9-Q12	Lead Beneficiary:	UTalca, Chile		
Objectives					
<ul style="list-style-type: none"> • Preparation of the program of the school: choice of the lectures and the workshops • Selection of the students that will participate and organisation of the school • Evaluation of the students and teachers' training over the 3 years. Evaluation of the skills portfolio. 					
Activities and division of work (WP description)					
Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	
T6.1	Preparation of the program of the summer school 3	Preparation of the program of the school	UChile, ENS Lyon, UTalca, USS	COO, BEN, AP	NO
T6.2	Selection of the students	Selection of the students	UBA, Uchile, UGA, UMSA, USS	COO, BEN, AP	NO

T6.3	Organisation of the school 3	Organisation of the school			UTalca, UChile, USS		COO, BEN, AP		NO				
T6.4	Evaluation of the hole training over the 3 years	Evaluation and perspectives for next school			UChile, ENS Lyon, UTalca		COO, BEN, AP		NO				
Milestones and deliverables (outputs/outcomes)													
Milestone No	Milestone Name	WP	Lead Ben.	Description		Due Date	Means of Verification						
MS5	Summer School 3 Program	6	UTalca	Choice of the lecturers and workshops		Q10	Confirmation of the participants						
MS6	Summer School 3 Budget	1,6	UTalca	Verification of the financial support		Q10	Expenses estimate						
Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Dissemination Level	Due Date	Description						
D6.1	Summer school 3 communication	6	ALL	[R] [DEC]	[PU]	Q11	Through the webpage, Spanish						
D6.2	Summer school 3	6	ALL	[DEM]	[PU]	Q12	Pedagogy workshops at UTalca						
Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>													
Participant	Costs												
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c	C.2	C.3	D.1	E. Indirect costs	Total costs
ENS Lyon				2 travels	2 persons travelling	5000X €	360€					383,6€	5863,6 €
SU				1 travel	1 person travelling	2500€	180€					191,8 €	2931,8 €

UGA				1 travel	1persons travelling	2500€	180 €				191,8 €	2931,8 €
UCM				1 travel	1persons travelling	2500€	180 €				191,8 €	2931,8 €
UPV				1 Travels	1persons travelling	2500€	180 €				191,8 €	2931,8 €
UJI				1 travel	1persons travelling	2500€	180 €				191,8 €	2931,8 €
UTalca				20 travels	20 persons travelling	8300€	8300 €	6620€			1625,4 €	24845,41 €
Total				27 travels	27 persons travelling	25800 €	9980 €	6620€			2968€	45368€

Work Package 7: Staff training in international cooperation			
Duration:	Q2 - Q11	Lead Beneficiary:	Sorbonne University
Objectives			
Train the staff of the international relations department from Latin America. Exchange good practices about HEIs internationalization			
Activities and division of work (WP description)			
	Task Name	Description	Participants

Task No			Name	Role	In-kind Contributions and Subcontracting
T7.1	Determine the framework for the staff exchange	Based on the host institutions, propose dates and assignments for the exchange.	ALL	COO, BEN, AP	NO
T7.2	Identify Participants	Select staff members from Latin American and European universities	SorbonneU,ENSLyon,UMSA,UTalca,UMSA,UTPL	COO, BEN, AP	NO
T7.3	Organise the staff exchange	Define logistics	SorbonneU,ENSLyon	COO, BEN, AP	NO
T7.4	Feedback from the exchange	Provide feedback on the experience	ALL	COO, BEN, AP	NO

Deliverables (outcomes)

Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Dissem. Level	Due Date	Description
D7.1	exchange program	7	ALL	[R]	[PU]	Q4-Q12	Student exchange
D7.2	exchange report	7	SorbonneU	[R]	[PU]	Q5, Q9 , Q12	Spanish or English

Estimated budget — Resources *(n/a for prefixed Lump Sum Grants)*

Participant	Costs											
	A. Personnel	B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2	C.3	D.1	E. Indirect costs	Total costs
Sorbonne Université			5 travels	5 persons travelling	12 500 €	2750 €	1250 €				1155 €	17655 €

Total			5 travels	5 persons travelling	12 500 €	2750 €	1250 €					1155 €	17655 €
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Work Package 8: Students' exchange program

Duration: Q1 - Q12 **Lead Beneficiary:** UNSAM

Objectives

- Selection of the LA students for the internships (1 or 3 months) in the 6 HEIs in Spain and France (2 internships per HEIs, one-month and three-months). The administrative organisation of the exchange will be performed by the European institutions (travel tickets, scholarship, etc).
- A committee will be established with representants of the 16 partners, as well as the gender equity and inclusion referent. The students with fewer opportunities will be a priority, and for the 1-month internship the candidates that have children. The committee will be coordinated by UNSAM. A call will be published in the website.
- After the internships, an on-line workshop will be organized to present the results and the feedback of the internships in Europe.

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	
T8.1	Creation of the scholarship selection framework	Determine the selection criteria for one-month and three-month scholarships.	ALL	COO, BEN, AP	NO
T8.2	Candidate selection	Select the interns with a committee and assign them to laboratory themes accordingly.	ALL	COO, BEN, AP	NO
T8.3	Organisation of the exchange	Set up all the logistics to welcome the students	ALL	COO, BEN, AP	NO
T8.4	Feedback from the exchange	Provide feedback on the experience	ALL	COO, BEN, AP	NO

Milestones and deliverables (outputs/outcomes)

Deliverable No	Deliverable Name	WP	Lead Beneficiary	Type	Dissemination Level	Due Date (quarter)	Description (including format and language)
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D8.1	Call for the internship in EU	8	ALL	[R]	[PU]	Q1, Q5, Q9	Application, webpage (Spanish and English)
D8.2	List of candidates accepted	8	UNSAM	[R]	[PU]	Q1, Q5, Q9	Webpage (Spanish and English)
D 8.2	Internship report or presentation	8	ALL	[R] [DEC]	[PU] , [DEM]	Q5,Q9,Q12	Report to be submitted, and on line workshop (Spanish and English)

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>													
Participant	Costs												
	A. Personnel		B. Subcontr.	C.1a Travel			C.1b Accom.	C.1c Subs.	C.2 Equip.	C.3 Other goods, works and services	D.1	E. Indirect costs	Total costs
ENS de Lyon				6travels	6 persons travelling	15 000 €				20400 €		2478 €	37878 €
UGA				6travels	6 persons travelling	15 000 €				20400 €		2478 €	37878 €
Sorbonne Université				6travels	6persons travelling	15 000 €				20400 €		2478 €	37878 €
UCM				6travels	6 persons travelling	15 000 €				20400X€		2478 €	37878 €

UPV				6travels	6 persons travelling	15 000 €				20400 €		2478 X €	37878 X €
UJI				6travels	6persons travelling	15 000 €				20400 €		2478 X €	37878 X €
Total				36 travels	36 persons travelling	90 000 €				122 400 €		14868 €	227268 €

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Work Package 9: Knowledge dissemination and replication plan

Duration: Q2 – Q12 **Lead Beneficiary:** UTPL

Objectives

- creation and maintenance of the NANOMER webpage
- edition of a white book on pedagogy case studies at the end of the project
- dissemination to the whole Spanish-speaking community interested in sciences teaching

Activities and division of work (WP description)

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	
T9.1	NANOMER webpage	Creation and maintenance	UTPL	COO	YES
T9.2	White book edition	Edition of the electronic white book on case studies	UTPL	COO	YES

Deliverables (outcomes)

Deliverable No	Deliverable Name	WP	Lead Ben.	Type	Dissemination Level	Due Date	Description
D1.1	webpage	1	ALL	[DEC]	[PU]	Q2	Creation and maintenance of the NANOMER webpage, Spanish
D1.2	white book	1	ALL	[R]	[PU]	Q12	Edition of the white book on case studies, Spanish/English

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>												
Participant	Costs											
	A. Personnel	B. Subcontracting	C.1a Travel			C.1b Accomodation	C.1c Subsistence	C.2 Equipment	C.3 others	D.1	E. Indirect costs	Total costs
UTPL		14 000 €									980 €	14980 €
Total		14 000 €									980 €	14980 €

Staff effort per participant											
<i>Identify the work-package leader for each work package by showing the relevant person/month figure in bold.</i>											
Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	Total Person-Months	
ENS de Lyon	12	16	13	3	3	3	2	10	3	65	
Sorbonne U	1	0	1	1	1	1	2,5	1	0,5	9	
UGA	4	3,5	0	2	2	2	0	11	0	24,5	

UCM	0,5	1,8	0,8	0,8	0,8	0,8	0	4,8	0	10,3
UPV	0,5	2,2	0,7	1,22	1,22	1,22	1	3,5	0,2	11,76
UJI	0,5	0,75	0,75	1,5	1,5	1,5	0	4,9	0,2	11,6
UMSA	1	1,8	2	5	0	0	1	1	0,5	12,3
UNCuyo	2	0,8	2,8	0	9	0	16,8	7	3,6	42
UTALCA	1	1	1	0	0	6,4	0	0,5	0,5	10,4
UTPL	3	4	8	1	1	1	3	3	7	31
FCEN-UBA	3	6,8	8	7,8	7,8	7,8	1	8,5	7,5	58,2
UNSAM	1	3	6	6	6	6	1	9	3	41
EMI	1	1	1	0,5	0	0	1	1,5	0,5	6,5
USS	1	4	1,5	1,5	1,5	2	0,5	2,5	1	15,5
U Chile	3	20	5,5	1	1	4	0	0,5	1,5	36,5
EPN Quito	2	2,5	2	2	2	2	1	1	1,5	16
Total Person-Months	36,5	69,15	54,05	34,32	37,82	38,72	30,8	69,7	30,5	401,56

Subcontracting						
WP	Subcontract No	Subcontract Name	Description	Estimated Costs (€)	Justification	Best-Value-for-Money (how do you intend to ensure it?)
WP9	S1.1	website	creation and maintenance of the website	10 000	necessary for dissemination	call for tender
WP9	S1.2	white book	book with case studies	4 000	useful for the community	call for tender

Events meetings and mobility							
Event No	Participant	Description					Attendees
		Name	Type	Area	Location	Duration (days)	Number
E1.1 (WP4)	ALL	Summer School 1	Summer school	Pedagogy in Sciences	La Paz, Bolivia	2	30-50
E1.2 (WP5)	ALL	Summer School 2	Summer school	Pedagogy in Sciences	Bariloche, Argentina	2	30-50
E1.3 (WP6)	ALL	Summer School 3	Summer school	Pedagogy in Sciences	Talca, Chile	2	30-50

Timetable Q = Quarter of a year (3 months)												
ACTIVITY	YEAR 1				YEAR 2				YEAR 3			
	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12
T1.1 Creating a management project plan												
T1.2 Kick-off meeting organisation												
T1.3 WP management												
T1.4 Elaborating of a financial and administrative guideline												
T1.5 Verify and disseminate the deliverables.												
T2.1 Preparation and analysis of previous data												

T2.2 Pedagogical workshops Set-up: choice of the language, software, roles, access, ...	■	■	■		■	■	■		■	■	■	
T2.3 Several practical Community Meetings Incorporation of the content		■	■			■	■			■	■	
T2.4 Tests and implementation				■	■			■	■			
T2.5 Analyses of the indicators for the evaluation				■	■			■	■			
T3.1 Technical evaluation of the platform	■	■										
T3.2 Pedagogical evaluation of the platform	■	■										
T3.3 Creation of a space for the feedback of the use of the resources		■	■	■	■	■	■	■	■	■	■	
T3.4 Creation of a space to communicate between users				■	■	■	■	■	■	■	■	■
T4.1 Program of the summer school 1		■										
T4.2 Selection of the students		■										
T4.3 Organisation of the Summer school 1			■	■								
T4.4 Evaluation and perspectives for next school				■								
T5.1 Preparation of the program of the summer school 2					■	■						
T5.2 Selection of the students						■						
T5.3 Organisation of the school							■	■				
T5.4 Evaluation and perspectives for next school								■	■			
T6.1 Preparation of the program of the summer school 3									■	■		

#@ETH-ICS-EI@#

5. OTHER

5.1 Ethics

Ethics (if applicable)
<p>The proposed project will be implemented with the highest ethical standards of Horizon Europe: the principle of proportionality; the right to privacy; the right to the protection of personal data; the right to the physical and mental integrity of a person; the right to non-discrimination; the need to ensure protection of the environment; the need to ensure high levels of human health protection'</p> <p>As a disruptive technology, there are issues regarding the interaction of nanoparticles with living beings that remain uncertain. The project will take into account emerging international regulations and will emphasize the safety conditions for students and researchers, as well as the treatment of waste produced in the research. These ethical issues will be addressed in the Summer Schools and internships.</p> <p>Children's rights protection is not within the scope of the proposed project, as none of the planned activities implies or indicates any involvement with violating children's rights.</p> <p>Finally, diversity and inclusion aspects in different phases of the project will be considered and evaluated. As such, gender mainstreaming will be ensured as both males and females, as well as transgender and individuals who self-identify as non-binary gender will have equal opportunities to participate to summer schools, workshops and exchange programs.</p>

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5.2 Security

Security
Not applicable.

#§SEC-URI-SU§# #@DEC-LAR-DL@#

6. DECLARATIONS

Double funding	
Information concerning other EU grants for this project	YES/NO
<p> Please note that there is a strict prohibition of double funding from the EU budget (except under EU Synergies actions).</p>	
<p>We confirm that to our best knowledge neither the project as a whole nor any parts of it have benefitted from any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g., Erasmus, EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.</p>	YES
<p>We confirm that to our best knowledge neither the project as a whole nor any parts of it are (nor will be) submitted for any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g., Erasmus, EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.</p>	YES

#§DEC-LAR-DL§#

LIST OF ANNEXES

- Description of all the partners and the pedagogical innovations and tools available for the teachers
- List of the laboratories for the students' exchange program, both in Europe and in Latin America
- Commitment letters and support letters

PROPOSED CHANGES – NANOMER PROJECT

MAIN CHANGES

We would like to propose some changes from our initial proposal. These changes would happen at three different levels:

1. Budget: when building the NANOMER application, we were advised not to include the staff salary in the total project budget. We therefore built the budget (400k€) thinking that the co-funding would come from the salary. Now that we learnt that Europe would fund only 360k€, we would like to make some changes on the overall budget, without compromising the core of the project (student exchange and summer schools). We therefore made some changes in the core activities and added time (and associated salary) from the NANOMER team to account for this 10% co-funding.
2. Deliverables: we would like to simplify the list of deliverables from the initial proposal to consider the budget decrease; and to also make sure that the proposed deliverables are specific enough and compliant with the EU request.
3. Milestones: we kept the milestones associated with the summer schools (although we simplified them) and we added milestones linked to the student exchange program.

WP1 – Project Management and coordination

Budget

We initially planned 7k€ for this WP for travels and meetings organization, notably to organize face-to-face meetings with the European universities to coordinate the work for the summer schools and student exchanges: in line with activities decrease, we decreased this budget line. We would like to add project management time both from a project manager and the principal investigator, as we are convinced that a close management is a key success factor for this project. We therefore allocated 3 person/month for the coordination and management of this project.

Deliverables

We would like to simplify the list of deliverables for this WP1 to make sure they are all concrete and compliant with EU request.

- D1.1 Kick Off meeting minutes (M1)
- D1.2 Project Management Handbook (M6)
- D1.3 Quality Assurance Plan (M6)
- D1.4 Mid-term report (M18)

Removal of

- D1.2 Partnership Agreement and D1.4 Data Management Plan as they are not mandatory.
- D1.6 internal management reports and D1.7 activities reports to simplify the list of deliverables in the portal, they will however be kept internally for the consortium.
- D1.8 Final Meeting as it will be the final report to be issued two months after the end of the project.

Change of names from financial and administrative guidelines into D1.2 Project management handbook

Addition of the D1.4 Mid-term report as it is a mandatory deliverable for the commission.

We change the dissemination level of all these deliverables from PUBLIC to SENSITIVE.

WP2 – Pedagogical support of students and teachers

Budget

We added 0.2 person/month from an Associate Professor from the Universidad de Chile, that will be leading the coordination and implementation of this WP.

Deliverables

We would like to simplify the list of deliverables as some were redundant (case studies and white book) or not concrete enough (workshops)

- D2.1 Presentation / Slides for the workshops on pedagogy during Summer Schools (M11, M23, M35)
- D2.5 Final white book on case studies (M36)

Removal of

- D2.1 Analysis of previous data
- D2.2 Indicators & analysis
- D2.3 Pedagogical tools
- D2.5 Case studies

Change of names of

- D2.4 workshops on pedagogy into D2.1 presentations for the workshops during summer schools
- D2.6 conception of the white books on case studies into D2.5 final white book on case studies

Change of dissemination level into SEN.

WP3 – Design and implementation of a collaborative pedagogical digital platform

Budget

We added 0.2 person/month from an Educational Engineer from the ENS de Lyon, that will be leading the coordination and implementation of this WP.

Deliverables

- D3.1 Analysis of previous data from NanoAndes Summer Schools: Set up of Platform with pedagogical contents - Version 1 (M8)
- D3.2 Final version of the platform after NanoAndes / Nanomer Summer Schools (M36)

Change of names of deliverables

- D3.1 Pedagogical platform into set up of the platform
- D3.2 Implementation of the platform into final version of the platform

Change of dissemination level into SEN.

WP 4– Summer school 1 – Chili (UTALCA)

Change of country

The Nanomer summer schools join the summer schools organized by the NanoAndes network. In the proposal, the initial country was Bolivia (UMSA). However, Bolivia had to take the lead in the organization of the 2024 summer school of the NanoAndes network. Therefore, Bolivia is not eligible for the Nanomer summer school anymore. Chili (UTALCA) was initially leading the summer school 3 and will therefore lead the summer school 1. In addition, the University of Talca, where this first summer school will be held, is a pioneer in competency-based teaching, which will be an essential aspect of the project's launch. It also means that UMSA (BOLIVIA) won't receive any budget for this activity and for the whole project.

Budget

For this first summer school, the budget from the IRN project from CNRS (International Research Network) could allow a co-funding and cover the expenses for 1 professor from UGA and 1 professor from ENSL. It would enable to save 5k€ without compromising the quality of this first summer school. We also added 1,5 person/month from an Associate Professor from UTALCA to lead the implementation of this WP.

Deliverables

- D4.1 Summer school program (M7)
- D4.2 Summer school workshop report (M12)

We changed the names of deliverables from D4.1 summer school communication to summer school program and D4.2 the start of the summer school into summer school workshop report to be more specific.

Change of dissemination level into SEN.

Milestones

- We simplified the 2 milestones MS1&2 Summer school 1 program and summer school 1 budget into one which is the start of the summer school 1 (M11)

WP5 – Summer school 2 – Argentina (U. Cuyo)

Budget

We propose to decrease the number of European universities involved in the organization and participation in the summer schools. The cost of one professor from a French University and one from a Spanish University would be removed from the initial budget. These two participants could give a course on line during the summer school. The budget decreases from 38,5k€ to 33,5k€. We keep the visit from the external pedagogic expert (external advisory board), as it appears as a high added value to the project. We also added 1,5 person/month from an Associate Professor from the University of Cuyo to lead the implementation of this WP.

Deliverables

- D5.1 Summer school Program (M19)
- D5.2 Summer school Workshop report (M24)

We changed the names of deliverables from D5.1 summer school communication to summer school program and D5.2 the start of the summer school into summer school workshop report to be more specific. We removed D5.3 evaluation by an expert.

Change of dissemination level into SEN.

Milestones

- We simplified the 2 milestones MS3&4 Summer school 2 program and summer school 2 budget into one which is the start of the summer school 2 (M23)

WP 6– Summer school 3 – Ecuador UTPL

Change of country

The Nanomer summer schools join the summer schools organized by the NanoAndes network. In the proposal, the initial country was Bolivia. However, Bolivia had to take the lead in the organization of the 2024 summer school of the NanoAndes network. Therefore, Bolivia is not eligible for the Nanomer summer school anymore. Chili was initially leading the summer school 3 and will therefore lead the summer school 1. Ecuador accepted to take the lead in the organization of the summer school 3.

Budget

One university from Spain will not be travelling to Ecuador for this last summer school. We propose UJI as it is a small university with less researchers involved. We also added 1,5 person/month from an Associate Professor from UTPL to lead the implementation of this WP.

Deliverables

- D6.1 Summer school program (M31)
- D6.2 Summer school workshop report (M36)

We changed the names of deliverables from D6.1 summer school communication to summer school program and D6.2 the start of the summer school into summer school workshop report to be more specific.

Change of dissemination level into SEN.

Milestones

- We simplified the 2 milestones MS5 and 6 Summer school 3 program and summer school 3 budget into one which is the start of the summer school 2 (M35)

WP7 - Staff training in international cooperation

Budget

We initially planned 5 staff from Latin America to travel to France to learn from La Sorbonne University. We decided decrease the budget to 4 staff exchange internships and to give priority to Bolivia and Ecuador, which are less “internationalized” HEIs than Argentina and Chile. We also added 0,5 person/Month from an Associate Professor from the Sorbonne Université to lead this WP.

Deliverables

- D7.1 Staff training report (M18, M36)

We removed the D7.1 exchange program for simplification purposes and changed the name of D7.2 exchange report into staff training report. The due dates changed from Q5, Q9 and Q12 into M18 and M36.

Change of dissemination level into SEN.

WP8 - Students' exchange program

Budget

We propose to remove two 3-month internships the first year: one from a French HEI and one from a Spanish HEI. Additionally, to make it more realistic and achievable, the Spanish universities would like to reduce the number of 1 month-students they will host: from three students to two students each.

We initially had planned 36 internships over the 3 years: 18 three-month internships and 18 one-month internships. It will become 31 internships: 16 three-month internships and 15 one-month internships.

We added 0,5 person/Month to all European University to manage the host of the students.

Deliverables

- D8.1 Report on the exchange program (M15, M27, M36)

We removed the D8.1 call for internship in EU and D8.2 list of candidates accepted for simplification purposes and changed the name of D8.3 internship report into report on the exchange program.

Change of dissemination level into SEN.

Milestones

We added three milestones linked to this WP8: MS4 start of the students' exchange 1 in M9; MS5 start of the students' exchange 2 in M21 and MS6 start of the students' exchange 3 in M30.

WP9 - Knowledge dissemination and replication plan

Budget

We propose to remove the printing of the 200 books for economical and environmental reasons. It will enable to save 3,5k€. We will only produce the e-book.

We also added 0,2 person/Month to an Associate Professor from the UTPL to lead this WP.

Deliverables

- D9.1 Dissemination and Sustainability Plan (M6)
- D9.2 NANOMER webpage (M6)
- D9.3 White book digital publication (M36)

We added the Dissemination and Sustainability Plan at M6 as it is a mandatory deliverable by the European Commission. And we changed the names of D1.1 webpage into D9.2 nanomer webpage and D1.2 white book into D9.3 white book digital publication.

Change of dissemination level into SEN, except for the webpage which remains PUBLIC

Proposal ID	Call for Proposal	Topic	Type of Action
SEP-211010357	ERASMUS-EDU-2024-CBHE	ERASMUS-EDU-2024-CBHE-STRAND-1	ERASMUS-LS

Objectives

- Improve the quality of higher education in third countries not associated to the Erasmus+ programme and enhance its relevance for the labour market and society
- Improve the level of competences, skills and employability potential of students in HEIs in the third countries not associated to the Erasmus+ programme by developing new and innovative education programmes
- Promote inclusive education, equality, equity, non-discrimination and the promotion of civic-competences in higher education in the third countries not associated to the Erasmus+ programme
- Enhance the teaching, assessment mechanisms for HEI staff and students, quality assurance, management, governance, inclusion, innovation, knowledge base, digital and entrepreneurial capacities, as well the internationalisation of HEIs in the third countries not associated to the Erasmus+ programme
- Increase the capacities of HEI, bodies in charge of higher education and competent authorities of third countries not associated to the Erasmus+ programme to modernise their higher education systems, particularly in terms of governance and financing, by supporting the definition, implementation and monitoring of reform processes
- Improve the training of teachers and continuous professional development in order to impact the longer term quality of the education system in the third countries not associated to the Erasmus+ programme
- Stimulate cooperation of institutions, capacity building and exchange of good practice
- Foster cooperation across different regions of the world through joint initiatives

Regional priority areas

Region 10 - Latin America
 Sustainable growth and jobs

Regions involved in the project

Define the type of the project :

- National project
- Multi-country project
- Cross-regional project

Project implementation

Number of higher education institutions (universities) located in remote regions/area 10

Number of newcomer/less experienced coordinating higher education institutions (universities) to the CBHE action

not yet involved in CBHE projects 15
 Coordinating HEI - involved in 1 to 3 CBHE projects 1
 Coordinating HEI - involved in 4 or more CBHE projects 0

Number of newcomer/less experienced partner higher education institutions (universities) to the CBHE action

not yet involved in CBHE projects 8
 Partner HEI - involved in 1 to 3 CBHE projects 4
 Partner HEI - involved in 4 or more CBHE projects 4

People with fewer opportunities


Is your project addressing people with fewer opportunities?

- Yes No
- People with disabilities
- People with health problems
- People suffering from social and economic barriers
- People suffering from discrimination because of gender, age, ethnicity, culture, religion, beliefs, sexual orientation
- People facing geographical barriers
- Refugees, migrants and internally displaced people

Number of students/staff/other target groups with fewer opportunities to be involved in the project 50

Target groups from the third country(ies) not associated to the Erasmus+ programme involved in the project

Number of students following the courses/study programmes (at Bachelor, Master, PhD level) 100

Number of students to be trained/involved in the mobility (studying) 18  Associated with document Ref. Ares(2024)7849123 - 05/11/2024

Number of students/staff females to be involved in the project 60

Number of students/staff with practical placements 23

Number of academic staff to be trained 50

Number of university administrative staff to be trained 30

Number of staff from Ministries and other public authorities to be trained 0

Number of people to be trained that are not enrolled in HEIs 0

Higher Education Institutions (HEI) - Cooperation agreement(s)

Is the project going to establish any cooperation agreement(s) with relevant stakeholders?

Yes

No

Higher Education Institutions (HEI) - Courses/Study programmes/Placements/Structures

Number of new courses 0

Number of new study programs 0

New joint study programmes

New interdisciplinary study programmes

Number of updated courses 0

Number of updated study programmes 0

Updated joint study programmes

Updated interdisciplinary study programmes

Number of study programmes with practical placements 0

Number of new or modernised structures/units/centres/hubs to be created 0

Number of new or modernised labs 1

Impact at the Higher Education sector

Does the proposal intend to impact the Higher Education (HE) sector in the participating third countries not associated to the Erasmus+ programme?

Yes

No

New national policies or legislative framework in HE

New regional policies or legislative framework in HE

Contribution to the creation of a regional HE area (facilitate national and cross-border recognition, support mobility of teachers, learners and workers)

Include the active participation of students in governance and reform of the HE system

Strengthen the links between education, research and innovation

Contribute to the reform of higher education policies that respond to societal and labour market needs

Develop schemes that facilitate the employability of graduates

Other sources of funding

Does the proposal complement other local/national/international sources of funding?

Yes

No

Sources of financial (/logistic) support for sustaining the project result from:

Partner HEIs

HEIs not involved in the project

Local authorities in the third countries not associated to the Erasmus+ programme

Associations, civil society organisations and NGOs

Private sector

Social enterprises

Research institutions

European Union

Other sources of funding

ANNEX 2**ESTIMATED BUDGET (LUMP SUM BREAKDOWN) FOR THE ACTION**

Estimated EU contribution										
Estimated eligible lump sum contributions (per work package)										Maximum grant amount ¹
WP1 Project management and coordination	WP2 Pedagogical support of students and teachers	WP3 Design and implementation of a collaborative pedagogical digital platform	WP4 Pedagogy Summer School 1	WP5 Pedagogy Summer School 2	WP6 Pedagogy Summer School 3	WP7 Staff training in international cooperation	WP8 Students' exchange program	WP9 Knowledge dissemination and replication plan		
Forms of funding	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	
	a	b	c	d	e	f	g	h	i	$j = a + b + c + d + e + f + g + h + i$
1 - ENS DE LYON	19 529.60	0.00	2 889.00	2 580.90	5 161.70	5 277.20	0.00	30 238.20	0.00	65 676.60
2 - SORBONNE UNIV	0.00	0.00	0.00	2 580.90	0.00	2 638.60	16 727.30	38 105.90	0.00	60 052.70
3 - UGA	0.00	0.00	0.00	0.00	2 580.90	2 638.60	0.00	37 918.10	0.00	43 137.60
4 - UCM	0.00	0.00	0.00	2 580.90	2 580.90	2 638.60	0.00	32 019.70	0.00	39 820.10
5 - UPV	0.00	0.00	0.00	2 580.90	0.00	2 638.60	0.00	33 127.20	0.00	38 346.70
6 - UJI	0.00	0.00	0.00	2 580.90	2 580.90	0.00	0.00	25 013.90	0.00	30 175.70
7 - UMSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 - UNCU	0.00	0.00	0.00	0.00	22 360.90	0.00	0.00	0.00	0.00	22 360.90
9 - UTALCA	0.00	0.00	0.00	26 116.60	0.00	0.00	0.00	0.00	0.00	26 116.60
10 - UTPL	0.00	0.00	0.00	0.00	0.00	18 104.50	0.00	0.00	10 535.20	28 639.70
11 - BUENOSAIRES UNIVERSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12 - UNSAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13 - USS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 - UCH	0.00	5 585.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5 585.40
15 - EPN ECUADOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16 - EMI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Σ consortium	19 529.60	5 585.40	2 889.00	39 021.10	35 265.30	33 936.10	16 727.30	196 423.00	10 535.20	359 912.00

¹ The 'maximum grant amount' is the maximum grant amount fixed in the grant agreement (on the basis of the sum of the beneficiaries' lump sum shares for the work packages).

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

SORBONNE UNIVERSITE (SORBONNE UNIV), PIC 909875521, established in 21 RUE DE L'ECOLE DE MEDECINE, PARIS 75006, France,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSITE GRENOBLE ALPES (UGA), PIC 897379108, established in 621 AVENUE CENTRALE, GRENOBLE 38058, France,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD COMPLUTENSE DE MADRID (UCM), PIC 999874546, established in AVENIDA DE SENECA 2, MADRID 28040, Spain,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSITAT POLITÈCNICA DE VALÈNCIA (UPV), PIC 999864846, established in CAMINO DE VERA SN EDIFICIO 3A, VALÈNCIA 46022, Spain,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSITAT JAUME I DE CASTELLON (UJI), PIC 999882985, established in AVENIDA VICENT SOS BAYNAT S/N, CASTELLON DE LA PLANA 12006, Spain,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD MAYOR DE SAN ANDRES (UMSA), PIC 999848162, established in AV VILLAZON 1995 MONOBLOCK CENTRAL, LA PAZ N/A, Bolivia,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD NACIONAL DE CUYO (UNCU), PIC 973810355, established in PARQUE GENERAL SAN MARTIN S/N, MENDOZA 5500, Argentina,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

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SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD DE TALCA (UTALCA), PIC 999442314, established in 2 NORTE 685, CASILLA 721, TALCA 3465548, Chile,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD TECNICA PARTICULAR DE LOJA (UTPL), PIC 999573361, established in SAN CAYETANO ALTO SN, LOJA 1101608, Ecuador,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD DE BUENOS AIRES (BUENOSAIRES UNIVERSITY), PIC 999881336, established in CALLE VIAMONTE 430, BUENOS AIRES 1053, Argentina,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD NACIONAL DE GENERAL SAN MARTIN (UNSAM), PIC 966956335, established in MARTIN DE IRIGOYEN 3100, SAN MARTIN BUENOS AIRES 1650, Argentina,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

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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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD SAN SEBASTIAN (USS), PIC 919073740, established in BELLAVISTA 7, SANTIAGO, Chile,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

UNIVERSIDAD DE CHILE (UCH), PIC 999447067, established in Av. Libertador Bernardo O'Higgins 1058, SANTIAGO 10, Chile,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

ESCUELA POLITECNICA NACIONAL (EPN ECUADOR), PIC 996377890, established in LADRON DE GUEVARA, QUITO 17012759, Ecuador,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

ESCUELA MILITAR DE INGENIERIA 'MCAL. ANTONIO JOSE DE SUCRE' (EMI), PIC 876143189, established in AVENIDA ARCE NRO 2642, ZONA SAN JORGE, LA PAZ 0000, Bolivia,

hereby agrees

to become beneficiary

in Agreement No 101179471 — NANOMER ('the Agreement')

between ECOLE NORMALE SUPERIEURE DE LYON (ENS DE LYON) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

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 terms and conditions it sets out.

SIGNATURE

For the beneficiary

FINANCIAL STATEMENT FOR THE ACTION FOR REPORTING PERIOD [NUMBER]

EU contribution												
Eligible lump sum contributions (per work package)												Requested EU contribution
WP1 [name]	WP2 [name]	WP3 [name]	WP4 [name]	WP5 [name]	WP6 [name]	WP7 [name]	WP8 [name]	WP9 [name]	WP10 [name]	WP [XX]		
Forms of funding	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	
Status of completion	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	PARTIALLY COMPLETED	PARTIALLY COMPLETED	COMPLETED	NOT COMPLETED	
	a	b	c	d	e	f	g	h	i	j	k	$l = a + b + c + d + e + f + g + h + i + j + k$
1 – [short name beneficiary]												
1.1 – [short name affiliated entity]												
2 – [short name beneficiary]												
2.1 – [short name affiliated entity]												
X – [short name associated partner]												
Total consortium												

The consortium hereby confirms that:

The information provided is complete, reliable and true.

The lump sum contributions declared are eligible (in particular, the work packages have been completed and the work has been properly implemented and/or the results were achieved; see Article 6).

The proper implementation of the action/achievement of the results 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 19, 21 and 25).

ANNEX 5

SPECIFIC RULES

INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE (— ARTICLE 16)

Rights of use of the granting authority on results for information, communication, publicity and dissemination purposes

The granting authority also has the right to exploit non-sensitive results of the action for information, communication, dissemination and publicity purposes, using any of the following modes:

- **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- **distribution to the public** in hard copies, in electronic or digital format, on the internet including social networks, as a downloadable or non-downloadable file
- **editing** or **redrafting** (including shortening, summarising, changing, correcting, cutting, inserting elements (e.g. meta-data, legends or other graphic, visual, audio or text elements extracting parts (e.g. audio or video files), dividing into parts or use in a compilation
- **translation** (including inserting subtitles/dubbing) in all official languages of EU
- **storage** in paper, electronic or other form
- **archiving** in line with applicable document-management rules
- the right to authorise **third parties** to act on its behalf or sub-license to third parties, including if there is licensed background, any of the rights or modes of exploitation set out in this provision
- **processing**, analysing, aggregating the results and **producing derivative works**
- **disseminating** the results in widely accessible databases or indexes (such as through ‘open access’ or ‘open data’ portals or similar repositories, whether free of charge or not.

The beneficiaries must ensure these rights of use for the whole duration they are protected by industrial or intellectual property rights.

If results are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they

comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

Access rights for the granting authority, EU institutions, bodies, offices or agencies and national authorities to results for policy purposes

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

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

The access rights also extend to national authorities of EU Member States or associated countries, for developing, implementing and monitoring their policies or programmes in this area. In this case, access is subject to a bilateral agreement to define specific conditions ensuring that:

- the access will be used only for the intended purpose and
- appropriate confidentiality obligations are in place.

Moreover, the requesting national authority or EU institution, body, office or agency (including the granting authority) must inform all other national authorities of such a request.

Access rights for third parties to ensure continuity and interoperability

Where the call conditions impose continuity or interoperability obligations, the beneficiaries must make the materials, documents and information and results produced in the framework of the action available to the public (freely accessible on the Internet under open licences or open source licences).

COMMUNICATION, DISSEMINATION AND VISIBILITY (— ARTICLE 17)

Additional communication and dissemination activities

The beneficiaries must engage in the following additional communication and dissemination activities:

- **present the project** (including project summary, coordinator contact details, list of participants, European flag and funding statement and project results) on the beneficiaries' **websites** or **social media accounts**
- for actions involving public **events**, display signs and posters mentioning the action and the European flag and funding statement
- upload the public **project results** to the Erasmus+ Project Results platform, available through the Funding & Tenders Portal.

SPECIFIC RULES FOR CARRYING OUT THE ACTION (— ARTICLE 18)

EU restrictive measures

The beneficiaries must ensure that the EU grant does not benefit any affiliated entities, associated partners, subcontractors or recipients of financial support to third parties that are

subject to restrictive measures adopted under Article 29 of the Treaty on the European Union or Article 215 of the Treaty on the Functioning of the EU (TFEU).



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