Allegato B1

****

**PR-FESR EMILIA ROMAGNA 2021-2027**

**Priorità 1: RICERCA, INNOVAZIONE E COMPETITIVITÀ**

**Azione 1.1.1.”Sostegno a progetti di ricerca, sviluppo sperimentale e innovazione delle imprese”**

**Azione 1.1.2 “Supporto a progetti di ricerca collaborativa dei laboratori di ricerca e delle università con le imprese”**

**Emilia-Romagna Region**

**Vanguard Initiative – Vinnovate**

**VInnovate Call 2024**

**FULL PROPOSAL**

1. **The project must be thematically linked to the scope of at least one of the Vanguard Initiative Pilot(s).**

The project's associated VI pilots are:

* New Nano-Enabled Products
* Bio-Economy
* Efficient Sustainable Manufacturing
* High-Performance Production through 3D Printing
* Advanced Manufacturing for Energy-related Applications in Harsh Environments
* Smart Health
* Artificial Intelligence
* Hydrogen

1. **The project must be thematically linked to ONE Emilia-Romagna regional Smart Specialization Strategy 2021-2027.**

The project is linked to

* Clean, safe and accessible energy
* Circular Economy
* Climate and Natural Resources
* Blue Growth
* Innovation in Materials
* Digitalisation, artificial intelligence, big data
* Manufacturing 4.0 and future evolutions
* Connectivity of systems on the ground and in space
* Sustainable and innovative mobility and motoring
* Cities and communities of the future
* Territorial heritage and regional identity: cultural assets and contents, activities
* creative, tourism and Made in E-R products
* Personal well-being, nutrition and lifestyle
* Health
* Social innovation and participation
* Inclusion and social cohesion: education, work, territories

**General information**

*Acronym is mandatory*

Acronym

*(max 500 characters)*

Proposal title

Duration in

*Estimated duration of the project in full months.*

months

*Abstract*

*The abstract should provide the reader with a clear understanding of the objectives of the proposal, how they will be achieved, and their relevance to the VInnovate Call 2024. This summary will be used as the short description of the proposal in the evaluation process and in communications to the programme management committees and other interested parties. It must therefore be short and precise and should not contain confidential information.*

*Max 1300 characters)*

**IMPORTANT INFORMATION FOR APPLICANTS**

**The application form must be filled in by the applicant based in Emilia-Romagna in accordance with the call for proposals issued by the Emilia-Romagna Region, but it must refer to the interregional cooperation project as a whole and not only to the activities to be carried out by the applicant based in Emilia-Romagna.**

**This principle must be respected in all the following sections 1, 2 and 3, unless other instructions are given for the specific items of this application form.**

**Furthermore, when preparing the application, the applicant must strictly follow the VInnovate Call 2024 Guide for Applicants.**

**Participants**

List of organisations participating in the **interregional project** and submitting a symultaneus application to their respective regional funding institution (as from the Project Fit Form, they must be based to the Vanguard regions associated to the VInnovate Call 2024)

|  |  |  |
| --- | --- | --- |
| **#** | **Participating Organisation Legal Name** | **VInnovate Region** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

1. **Innovativeness (Max. 2000 characters)**

* *The following aspects will be taken into account only to the extent that the proposed work is within the scope of the VInnovate Call 2024 Guide for Applicants.*
* *This section should be presented as a narrative. The detailed tasks and work packages, and the risks and the corresponding mitigation plan are described below under ‘Implementation’.* 
  1. **Objectives**

Have potential applications been identified and are they plausible? How appropriate are the objectives for the planned technology development and validation of the innovation in relevant application environments?

* 1. **Technological breakthrough**

Does the technology have a high degree of novelty compared to other technologies available or in development; to what extent does this novelty create the potential for new applications and functionalities?

1. **Impact (Max. 2000 characters)**
   1. **Business and Market fit**

How well do the activities propose to develop the business model and product features to address commercialisation and other relevant aspects (intellectual property rights, regulation, certification and standardisation)? How will potential users or customers be involved to test potential demand and acceptability?

* 1. **Covered transitions**

How the project will develop solution(s) for at least one of the VInnovate Call 2024 targeted transitions: 1) a smarter and/or 2) a more sustainable and/or 3) a more autonomous/less dependent industry?

Please, specify relevance of the research with reference to the topics of adaptation to climate change and the circular economy.

* 1. **Entrepreneurship**

How suitable are the proposed measures to build a strong and motivated entrepreneur-lead team with necessary competences in technology, product engineering, and business development to bring the innovation to the market?

* 1. **Interregional dimension**

How is the partnership fit for purpose, able to deliver the intended impact and beneficial to the regions involved?

Remember that the partnership must be composed of at least two organisations located in at least two of the VInnovate regions/countries (namely: East NL, South NL (Noord Brabant), Lower Austria, Lower Saxony, Flanders, Emilia-Romagna, Wallonia, Wales, Galicia, North East Romania, Norte).

Please specify membership and/or connection of the project with regional/national/European networks.

* 1. **Creation of additional skills with a view to employability in the reference supply chain**
  2. **Relevance of the research object of the intervention with respect to the topic of disability, social innovation and quality of life and sustainable development**

1. **Quality and efficiency of the implementation (Max. 2000 characters)**

|  |
| --- |
| ***Quality and efficiency of the implementation – aspects to be taken into account*** |

* 1. **Quality of the team (Max. 1500 characters)**
* *This section must be completed by the Emilia-Romagna based applicant corresponding to the call lounched by Emilia-Romagna Region, referring exclusively and only to the team the same applicant will commit to will perform the project activities under his/her responsibility in case the application is successful and NOT the team of the whole project partnership.*

To what extent do the applicant(s) bring the necessary high-quality expertise, capabilities and motivation to move decisively towards innovation, create a unique commercial value from the emerging technology and develop an attractive business and investment proposition?

* 1. **Milestones and Work plan (The length of the input is detailed under the subheadings)**

Is the pathway towards deployment clearly described? Are milestones adequately and clearly defined (measurable, timed, etc.) to track progress along the pathway and towards objectives? How coherent and effective are the work plan (work packages, tasks, deliverables, time-line, etc.), the innovation methods and the risk mitigation methods, in order to reach the milestones and to achieve the project objectives?

* List of Work packages (WP) (table 3.2a)
* WP description (table 3.2b)
* List of milestones (table 3.2c)

**Tables for section 3.2**

**Table 3.2a: List of Work packages (WP)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WP No** | **WP Title** | **WP Lead Participant Short Name** | **WP short description** | **Start Month** | **End month** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Table 3.2b: WP description (Max. 1 page per WP)**

* *The WPs to be described in this section, among those listed in Table 3.2a, are only and exclusively those where the same applicant based in Emilia-Romagna is directly involved. Refer to the work package numbers as they appear in Table 3.2a. Of the total number of work packages listed in Table 3.2a, the maximum number allowed here is 3.*

**For each work package for which the Applicant from Emilia-Romagna is operating:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** |  | | **Lead partner of the WP** | | | | |  | |
| **WP title** |  | | | | | | | | |
| **Participant number** |  |  | |  |  |  |  | |  |
| **Short name of participant** |  |  | |  |  |  |  | |  |
| **Person months per participant:** |  |  | |  |  |  |  | |  |
| **Start month** |  | | | | **End month** |  | | | |
| **Objectives of the WP** | | | | | | | | | |
| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants | | | | | | | | | |
| **Deliverables** (brief description and month of delivery) | | | | | | | | | |

**KEY**

*Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.*

**Type:**

*Use one of the following codes:*

R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

DATA: Data sets, microdata, etc.

DMP: Data management plan

ETHICS: Deliverables related to ethics issues.

SECURITY: Deliverables related to security issues

OTHER: Software, technical diagram, algorithms, models, etc.

**Dissemination level:**

*Use one of the following codes:*

PU – Public, fully open, e.g. web

SEN – Sensitive, limited under the conditions of the Grant Agreement

Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444

Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444

Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444

**Delivery date**

Measured in months from the project start date (month 1)

**Table 3.2c: List of milestones (Max. 0.5 page)**

* *Please note that this section must be completed with reference to the interregional cooperation project as a whole and with reference to all the WPs listed in Table 3.2a.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Milestone number** | **Milestone name** | **Related WPs** | **Due date (in month)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**KEY**

**Due date**

*Measured in months from the project start date (month 1)*

**Means of verification**

*Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is ‘up and running’; software released and validated by a user group; field survey complete and data quality validated.*

* 1. **Allocation of resources**

How appropriate and effective is the allocation of resources (person-months and equipment) to tasks and partners?

* Personnel requirement (table 3.3a)
* Personnel employed by typology of contract (table 3.3b)
* Expenses for new research equipment and instruments, including specialised software (table 3.3c)
* Expenditure on consultancy and the acquisition of goods and services (table 3.3d)
* Other direct expenses (table 3.3e)
* TRL Level covered by the Project (table 3.3f)

**Table 3.3a: Personnel requirement**

* *Please indicate the number of person/months over the whole duration of the planned work, only for the WP(s) for which the Emilia-Romagna-based applicant is acting. In case of being relevant please include the person/months that other Participants are providing in performing the activities just under these same WPs.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **WP n°** | **WP n°** | **WP n°** | **Total Person-**  **Months per Participant** |
| **Participant from Emilia-Romagna Number/Short Name** |  |  |  |  |
| **Other participant Number/**  **Short Name** |  |  |  |  |
| **Other participant Number/**  **Short Name** |  |  |  |  |
| **Total Person Months** |  |  |  |  |

**Table 3.3b:** **Personnel employed, by typology of contract**

* *Considering only the personnel of the participant from Emilia-Romagna listed in the table above, please indicate the number of months they are expected to work, according to the type of contract.*

|  |  |  |
| --- | --- | --- |
|  | Number of months | **Tipology of contracts and duration of the contract** |
| **Permanent staff** |  |  |
| **Additional contracted staff** |  |  |
| **Total person months** |  |  |

* **Please specify relevance of the female and youth component in terms of corporate and/or financial participation:**

**Table 3.3c: Expenses for new research equipment and instruments, including specialised software**

|  |  |  |
| --- | --- | --- |
| **Participant Number/Short Name** | | |
|  | **Cost (€)** | **Description of tasks and justification** |
|  |  |  |

**Table 3.3d: Expenditure on consultancy and the acquisition of goods and services**

* *For Emilia-Romagna-based applicant describe and justify the tasks, envisaged under the WP(s) he/she is responsible for, to be subcontracted (please note that core tasks of the project should not be sub-contracted).*

|  |  |  |
| --- | --- | --- |
| **Participant Number/Short Name** | | |
|  | **Cost (€)** | **Description of tasks and justification** |
| **Subcontracting** |  |  |

**Table 3.3e: Other direct expenses**

|  |  |  |
| --- | --- | --- |
| **Participant Number/Short Name** | | |
|  | **Cost (€)** | **Justification** |
| **Internally invoiced goods and services** |  |  |
| **…** |  |  |

**Table 3.3f: TRL Level covered by the Project**

Please indicate the extent to which the following TRLs are covered or not: TRL6, TRL7 and TRL8. As a reminder, the project activities must be at TRL6, TRL7 and/or TRL8, i.e. the project is composed of post-prototyping activities.

**TRL 6:** ☐ YES ☐ NO

**TRL 7:** ☐ YES ☐ NO

**TRL 8:** ☐ YES ☐ NO

|  |  |
| --- | --- |
| **DEFINITIONS** | |
| **Deliverable** | A report that is sent to the Region Emilia-Romagna, the VInnovate Secretariat or other Agency providing information to ensure effective monitoring of the project. There are different types of deliverables (e.g. a report on specific activities or results, data management plans, ethics or security requirements). |
| **Impacts** | Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&I investments (long term). Impacts generally occur some time after the end of the project.  Example: *The deployment of the advanced forecasting system enables each airport to increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs.* |
| **Milestone** | Control points in the project that help to chart progress. Milestones may correspond to the achievement of a key result, allowing the next phase of the work to begin. They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical decision point in the project where, for example, the consortium must decide which of several technologies to adopt for further development. The achievement of a milestone should be verifiable. |
| **Objectives** | The goals of the work performed within the project, in terms of its research and innovation content. This will be translated into the project’s results. These may range from tackling specific research questions, demonstrating the feasibility of an innovation, sharing knowledge among stakeholders on specific issues. The nature of the objectives will depend on the type of action, and the scope of the topic. |
| **Outcomes** | The expected effects, over the medium term, of projects supported under a given topic. The results of a project should contribute to these outcomes, fostered in particular by the dissemination and exploitation measures. This may include the uptake, diffusion, deployment, and/or use of the project’s results by direct target groups. Outcomes generally occur during or shortly after the end of the project.  Example: *9 European airports adopt the advanced forecasting system demonstrated during the project.* |
| **Pathway to impact** | Logical steps towards the achievement of the expected impacts of the project over time, in particular beyond the duration of a project. A pathway begins with the projects’ results, to their dissemination, exploitation and communication, contributing to the expected outcomes in the work programme topic, and ultimately to the wider scientific, economic and societal impacts of the work programme destination. |
| **Research output** | Results generated by the action to which access can be given in the form of scientific publications, data or other engineered outcomes and processes such as software, algorithms, protocols and electronic notebooks. |
| **Results** | What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc.) are ‘Intellectual Property’, which may, if appropriate, be protected by formal ‘Intellectual Property Rights’.  Example: *Successful large-scale demonstrator: trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.* |