NCP_
WIDERA.NET

2021-2025

SUCCESS STORIES

Widening Participation & Spreading Excellence

Funded by the European Union

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Introduction

NCP _ WIDERA.NET overall objective is to support the capacity and effectiveness of WIDERA National Contact Points with a special attention to less experienced entities in low performing Member States (MS) and Associated Countries (AC) to bridge the knowledge gaps to enhance access to funding possibilities under the Framework Programme.

Through strengthening and enhancing the role of the NCPs, the project shall support international networking and coordination and improve the quality of proposals from legal entities from low R&I performing MS and AC ensuring them better access to services during the application process in particular with regard to Widening Participation and Strengthening the European Research Area, as well as Pillar 11 actions.

NCP _ WIDERA.NET will focus on identifying and sharing good practices within NCP community and raising standards of support offered by NCPs to the applicants, taking into account the diversity of actors that constitutes both the Widening and ERA parts. Moreover, this project will equip the transnational network of NCPs to be in a better position to effectively address and ensure cross-cutting objectives such as gender equality and open science. The objective will be reached using tailored measures targeted at improving NCPs ' capacities to deliver services of high-quality standards, enhancing transnational collaboration between NCPs and applicants, delivering complex information on WIDERA activities, and promoting the network.

Dear readers,

The overall objective of the NCP_WIDERA.NET is to enhance the capacity and effectiveness of National Contact Points providing services at national level during the application process and thus improving the quality of proposals submitted to the Widening Participation and Strengthening the European Research Area in Horizon Europe.

The focus of the project is mainly on less experienced entities in low performing Member States (MS) and Associated Countries (AC) with the goal to bridge the knowledge gap between these countries and regions that are defined by their R&I performance as less performing compared to the advanced countries participating in Horizon Europe. The NCP_WIDERA.NET focuses on identifying and sharing good practices within NCP community and raising standards of support offered by NCPs to the applicants.

This document will equip the NCPs for the best possible service and to effectively support stakeholders at national level. The collection of Success Stories should give insights to success criteria and how successful project are executed.

The projects coordinators have contributed to the stories by sharing their experience.

As the projects are all from the Horizon Europe programming period, they are still ongoing and many are only a few months into the project lifecycle. The stories cover most of the calls in the Widening Participation program part in Horizon Europe and will show how advanced partners can increase the capacity of an institution in a widening country and how to fill the knowledge gap between the advanced partners in Europe and those lagging behind.

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Teaming

Teaming actions will create new or modernise existing centres of excellence in Widening countries through strategic partnerships with leading institutions abroad.

The impact will be amplified by the conditionality of securing complementary investment from structural funds or other sources.

Q-CIRCLE

ACCELERATING QUANTUM IMPACT ON SUSTAINABILITY

CALL: HORIZON-WIDERA-2022-ACCESS-01-TWO-STAGE | START: JULY 2023 | DURATION: 72 MONTHS | WEBSITE: HTTPS://WWW.ARQUIMEA.COM/

Which are the reasons that drove your decision to participate in TEAMING for Excellence calls?

The Canary Islands were recently included as Widening Regions, like all the other outermost regions. A year before. Arquimea Research Center was created and we were in the process of growth, recruiting talent and launching our laboratories. So, TEAMING for Excellence was a perfect opportunity for us.

How have you been involved in the creation of the R&I (RIS3) strategy in the Canary Islands? What role have you played?

In May 2021, the Canary Islands Progress 2030 strategy was presented. One of the objectives was to create a new Canarian Smart Specialization Strategy (S4), after the completion of RIS 3. For this purpose, the participation of all R&D agents was requested. We submitted a proposal in order to:

- Strengthen the knowledge transfer system.
- Promote private participation in the R&D&I ecosystem.

After that, we have some online sessions to ex-

-plain it and as specialist in some areas of the RIS3 strategy.

Did you have the option to participate in the draft of the RIS3 as Digitalization was not a priority in the last Smart Specialization Strategy? Which arguments did you provide to make Digitalisation a priority in the new S3 if any?

As mentioned before, we took part in different meetings in the draft of the RIS3. Several topics were discussed. On one way or another, Digitalisation was mentioned, to diversify the economy beyond tourism.

Which are the main risks and advantages you face according to your geographical location?

Advantages:

1. Strategic location for international collaborations: The Canary Islands' position between Europe, Africa, and the Americas offers a unique opportunity to foster global partnerships and attract diverse talent and investment.

Risks:

1. Logistical challenges and higher transportation costs: Being geographically isolated, the Canary Islands may face increased shipping costs and longer lead times for importing materials or specialized equipment, potentially delaying projects.
2. Distance from major European tech hubs: The physical separation from leading tech centers in Europe, such as Berlin or London, could limit frequent interactions with the broader innovation ecosystem and make talent recruitment more difficult.

What were the main success factors of your proposal?

The main success of our proposal is the ARQUIMEA Research Center model of market transfer, through which we accelerate the process of innovation and development of technologies to turn them into products or business models that have a real impact on society.

Which added value will provide each partner to create a common knowledge or a full puzzle?

We chose our advanced and associated partners to create a consortium with experts in

Sergio Capitán

Project coordinator

all areas related to quantum technologies. According to this:

- AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS- CSIC
- UNIVERSITAET ULM- UULM
- OESTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN- OEAW
- UNIVERSITY OF BIRMINGHAM - UoB

Does the project provide a strong engagement of your research organisation as a whole, exploitation of existing institutional resources, for instance including training activities on site to improve the effectiveness, usefulness, productivity, etc of institutional resources you already have?

Yes, the project ensures strong engagement from our research organization by leveraging existing institutional resources effectively. It includes on-site training activities designed to enhance the efficiency, usefulness, and productivity of our current resources. These efforts contribute to capacity building and sustainable institutional development.

Have the links between research academia and industry been strengthened?

Yes, in fact we collaborate closely with Universidad Carlos III from Madrid and two Canary Island public universities (ULL and

ULPGC).

Relation with the Canary Island ecosystem - How did you mobilize it?

Leveraging local institutions and universities: Engaging with local universities and research institutions, such as the University of La Laguna or ITER, to build partnerships and tap into local expertise. Collaborating on joint research projects, involving students and researchers in the initiative.
Engagement with local government and policy makers: Working closely with regional government bodies to align your project with local development strategies, securing support, incentives, and funding. Advocating for policy initiatives that promote quantum technology and innovation in the Canary Islands.

How important is international collaboration in science? Do you have the ambition of international cooperation in the long term? How do you foresee to consolidate your international presence/role and to attract foreign companies/investments (as Internationalisation in the 3rd priority line of RIS3)?

Given the strategic importance of international collaboration in science, it is essential to build strong ties with leading research institutions, universities, and industries across the globe. In the long term, having an international network will not only elevate the scientific standing of our center of excellence center but also position it as a key player in the global science ecosystem.
The CoE will attract international expertise and investment and will act as a springboard for exporting Canarian/Spanish-German-Austrian-United Kingdom knowledge and high-tech re-

-lated solutions globally.

Is there a previous project idea or successful project which helped or inspired you to go for the Teaming call?

This was the first time the Canary Islands were eligible as a widening region.
There was some prior experience at the national level with one of the Advanced Partners (AP), which facilitated contact with the rest of the APs. The other APs already had previous collaborations.
During the first year and a half some of our researchers and project managers had useful secondments in the APs facilities.

With regards to the employment rate, will the academic positions in the Canary Islands increase because of the results or impact of the project?

As the center grows, it will require more researchers and technical staff, creating new academic roles in fields such as quantum computing, cryptography, bioscience, robotics or Artificial Intelligence. Also, collaboration with local universities will likely result in the development of new academic programs (e.g., Master's and PhD programs) expanding Interdisciplinary and Support Roles:
The center could also create interdisciplinary positions that combine research with other areas such as physics, engineering, computer science, and applied mathematics.
Additionally, administrative and technical support roles (e.g., lab technicians, project managers) will be needed to support the growing.
Beyond research, the project's success could stimulate start-ups and spin-offs, offering additional job opportunities and reinforcing the region as a hub for tech innovation.

How will this CoE help to change the regional ecosystem? What are the main impacts you expect in this sense? What are the main impacts you expect in each part of the ecosystem?

The Center of Excellence will transform the Canary Islands into a prominent hub for scientific research, attracting top scholars and establishing new academic programs. It will drive industry growth by fostering start-ups, facilitating technology commercialization, and creating high-tech job opportunities. The local economy will benefit from enhanced policy support for innovation, while the workforce will gain advanced training and new career paths in quantum technologies. Internationally, the center will forge global research partnerships and draw foreign investment. Additionally, it will boost public interest in STEM and deliver societal benefits through quantum, biotechnologia, IA or robotic advancements.

What can we expect next with the project? What are the long terms expectations?

The QCIRCLE project, led by ARQUIMEA Research Center, is making significant strides in establishing a Center of Excellence for quantum technologies in the Canary Islands.
The long term expectations are:

- **Economic Diversification:** By positioning the Canary Islands as a hub for quantum research, QCIRCLE aims to diversify the local economy, reducing reliance on traditional sectors and fostering innovation-driven growth.
- **Job Creation:** The project is expected to generate high-quality employment opportunities, attracting talent and fostering a knowledge-based economy in the region.
- **Technological Leadership:** QCIRCLE aspires to place the Canary Islands at the forefront of the second quantum revolution, contributing to Europe's leadership in emerging quantum technologies.

Through these initiatives, QCIRCLE seeks to drive scientific advancement, economic development, and societal benefits, establishing the Canary Islands as a key player in the global quantum technology landscape.

What are some of the positive aspects high-lighted?

Some of the positive aspects include:

1. **Economic and Technological Growth**

- Strategic Investment: QCIRCLE will receive €14.5 million in EU funding and, at least €6 million from the Cabildo de Tenerife, and other private funding, showing strong financial support.
- Job Creation and economic diversification, as shown before.

2. Advancing Quantum Technologies

- Global Leadership: The project places the Canary Islands at the forefront of the second quantum revolution in Europe.
- Innovative Research Areas: It focuses on four key fields—sensing & metrology, quantum computing, secure communications, and integrated photonics.
- Collaboration with Leading Institutions: Partners include CSIC, University of Ulm, and the Austrian Academy of Sciences, ensuring high research standards.

3. Societal and Environmental Impact

- Tackling Global Challenges: Quantum technology developed at QCIRCLE aims to improve energy distribution, climate monitoring, and CO_2-neutral transport.
- Healthcare Benefits: Quantum applications could enable earlier disease detection, improving medical diagnostics.
- Security Improvements: Quantum cryptography will help create ultra-secure communication systems, benefiting businesses and governments.

4. Recognition and Support

- Declared a Strategic Project: The Government of the Canary Islands has officially recognized QCIRCLE's economic and scientific importance.
- International Recognition: The center is gaining momentum globally, attracting researchers and investors.

What are some of the recommendations from your experience to increase the impact of projects?

As a lesson learned, to ensure from the very beginning the commitment of the local and regional Government as part of the public cofunding.

How do you think the project will impact the economy of the region/country? Has the project contributed to enhance the capacity of their researchers to successfully parti-

participate in research activities at EU level?

The QCIRCLE project is expected to have a major economic impact on the Canary Islands and Spain by fostering innovation-driven growth. Some key effects include:

1. Economic Diversification & New Industries

- The Canary Islands have traditionally relied on tourism. QCIRCLE will help shift the economy toward a high-tech and knowledge-based model.
- The project can attract investment in quantum-related fields such as AI, cybersecurity, and advanced computing, leading to the creation of startups and spinoff companies.

2. Job Creation & Talent Attraction

- The project will create highly skilled jobs in quantum physics, photonics, and computing and other technological fields.
- It will retain and attract researchers, preventing brain drain and positioning the Canary Islands as a scientific hub.
- The need for specialized infrastructure and services will also boost local businesses, such as tech suppliers and educational institutions.

3. Strengthening Spain's Position in Quantum Technology

- Spain is aiming to be a leader in quantum technologies, and QCIRCLE aligns with the EU's quantum initiatives.
- The project will help Spain gain technological sovereignty, reducing dependence on foreign quantum computing solutions.

On the other hand, QCIRCLE is already enhancing the capacity of researchers to participate in European research projects by:

1. Strengthening Research Collaboration

- QCIRCLE collaborates with top EU institutions like CSIC, the University of Ulm, and the Austrian Academy of Sciences.
- This gives researchers access to world-class expertise, training, and networking opportunities.

2. Attracting European Funding & Partnerships

- The project has secured €14.5 million from the EU's Teaming program, increasing Spain's success rate in competitive EU funding calls.
- The involvement of EU research centers ensures that QCIRCLE researchers can actively contribute to Horizon Europe and other quantum funding programs.

3. Building State-of-the-Art Infrastructure

- By establishing a Center of Excellence, QCIRCLE is creating cutting-edge laboratories and facilities that can support world-class research.
- This makes it easier for Spanish researchers to lead or participate in high-impact EU projects.

4. Knowledge Transfer & Training Programs

- The center provides training, workshops, and knowledge-sharing opportunities, helping researchers develop competitive skills in quantum science.
- This makes them more prepared for EU-level collaborations and funding proposals.

QCIRCLE is not only transforming the Canary Islands' economy but also enhancing Spain's research capacity at the European level. By attracting talent, investment, and research collaborations, the project is setting a strong foundation for long-term scientific and economic success.

Do you think that your CoE will contribute actively to the regional or European economy and social welfare?

Yes, more in a regional level, as we are hiring lot of researchers and new workers, some of them Canarians that went abroad in order to have a scientific career and then they have learned about the project and see the opportunity to return to their land.

In the RIS3 - priority line 5: territory; → the participation of citizens is one of the main priorities. How do you plan to get citizens onboard or how is this social factor reflected in your project? What activities do you foresee in this sense?

To engage citizens in the Quantum Center of Excellence project, we are implementing a range of activities that promote public involvement and education. This includes hosting workshops, and public forums to raise awareness and explain our technologies. We also take part in citizen science projects to actively involve residents in research. Collaborations with local schools and universities are providing educational opportunities and internships related to quantum science. Transparent communication through digital platforms and open days at the CoE are also part of our activities.

Would it be possible to hear about the acti-

-vities that you foresee during the project life? What impact do you expect from them?

Yes, through our website, social networks or newsletter. Through these channels, we communicate technological advances, new developments, various activities, open days or the participation of our researchers in events and congresses, among others.

Research component of the project - Did you foresee dedicating a piece of the grant to research activities? If yes, how much? Which impact/results do you expect from that?

Yes, we hope to use part of the funding to carry out a project in collaboration with the AP, which will pave the way for new innovative projects.

In the Canary Islands there was not a special dedication to the Digital sector. How do you think this project will help in the modernisation of this field? Were there difficulties to start a project based in Digital technology from the bottom - without any existing tradition in this area and being Digitalisation an horizontal priority (new in RIS3 21-27) and not a sectoral one? Which were the main challenges you faced in this sense? Why a center in Quantum technology in the islands?

In the Canary Islands, there has not been a specific focus on the Digital sector, but the QCIRCLE project will contribute significantly to the modernization of this field. Starting a project focused on digital technology without an existing tradition in this field was certainly a challenge. However, this also presents a unique opportunity. The project's interdisciplinary nature allows for the development of innovative approaches, and by aligning with European priorities, we can bridge the gap between the islands and the rest of Europe.
The main challenge we faced was the need to create a solid foundation for the development of digital skills and infrastructure in the region. However, the support from European funding and the strategic positioning of the Canary Islands as a hub for international collaboration in science and technology will help overcome these initial hurdles.
A center for Quantum Technology in the Canary Islands is a strategic decision due to the region's unique advantages, such as its geographical location, stable environment, and the potential for fostering international collaborations. Tenerife, specifically, offers an excellent infrastructure for research and innovation, along with a growing network of scientific institutions. This makes it an ideal location for the development and application of quantum technologies, with the potential to drive technological advancements not only in the Canary Islands but also in Europe and beyond.

How much funds will the advanced partners bring to the project to ensure its sustainability?

They will collaborate in the development of proposals for European program calls, participating as coordinators or partners, depending on the call.

Which type of funds will you use to ensure sustainability at the regional level? How will sustainability be ensured in the long term?

We expect STEP funds from Gobierno de Canarias and funds from the Cabildo Insular de Tenerife. Also, we have other private funding.

How did you get it? How did your government/region support you in terms of complementary funding?

We presented the project and the expected benefits for the Island of Tenerife to the Cabildo Insular. The complementary funding will be materialized through STEP funds managed by the Government of the Canary Islands and through specific agreements with the Cabildo Insular de Tenerife.

> **we are implementing a range of activities that promote public involvement and education**

Will you receive private funds?

Yes, as part of Arquimea Group we receive funds every year

Do you foresee applying for other European projects during the project life?

Will you receive private funds?

Yes, as part of Arquimea Group we receive funds every year

Do you foresee applying for other European projects during the project life?

Yes, in fact, we have already submitted proposals to some calls and are actively searching for new calls.

What are the benefits you think that the Canary Islands could have being a Widening country?

As a Widening region, the Canary Islands can benefit significantly through enhanced EU funding opportunities, which support research and innovation in less developed areas. This financial backing can improve local research infrastructure and increase R&D capacity. The region will also gain from strengthened regio-nal collaboration, facilitating partnerships and knowledge exchange with other European institutions. Economic growth will follow, driven by job creation and sector development in high-tech fields like quantum technology. Additionally, the Canary Islands will be better positioned to attract and retain top research talent.

Have you benefited from other Widening actions?

Yes, we obtained a project in the Hop-On facility call, as members of Graph-X consortium

Are there other Widening actions you plan to apply or are interesting for you?

We´ve aplied twice at Twinning Call, without success. There are other widening calls that could be useful for us, as Excellence Hubs.

Contact

Q-CIRCLE

Web:

https://www.arquimea.com/es/imasd/research-center/qcircle/

CELESTE

TEAMING FOR EXCELLENCE

CUTTING EDGE LEAP TO EXCELLENCE IN SPACE AND OPTICS TECHNOLOGIES

COORDINATED BY THE INSTITUTO DE ASTROFISICA DE CANARIAS, A REFERENCE ASTRONOMICAL CENTRE IN THE NORTHERN HEMISPHERE

CALL: HORIZON-WIDERA-2023-ACCESS-01 | START: FEBRUARY 2025 | DURATION: 72 MONTHS | WEBSITE: HTTPS://WWW.IAC.ES/EN

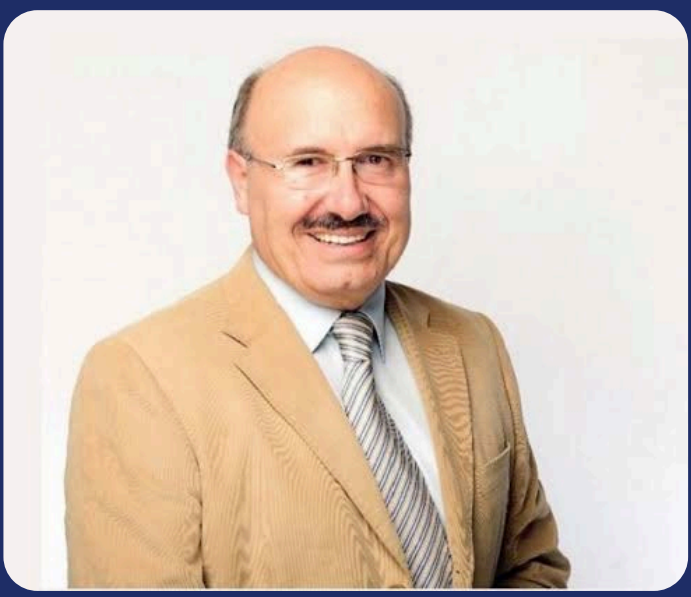
Which are the reasons that drove your decision to participate in TEAMING for Excellence calls?

The Instituto de Astrofísica de Canarias (IAC) is an international research center that uses different cutting-edge ground/space facilities and attracts new very talented young/senior researchers to develop advances and breakthroughs in physical modeling, computer simulations and technology. Although the IAC is well integrated in the international scientific community, there are two strategic scientific and technological sectors where the IAC is poised for rapid expansion of research activity and innovation, with the potential for significant impact on the regional and national R&I ecosystem:

1. Advanced Optics Systems: This cutting-edge technology is a rising value and, with the necessary requirements in Astrophysics, it is available to very few centers in the world, being the IAC well positioned to acquire and exploit these advanced design and manufacturing capabilities.
2. New Space: the IAC could contribute to this

sector with the manufacture of forefront payloads for micro and nano satellites, with new promising technologies such as astrophotonics in Space and optical communications. The IAC has recently accomplished strategic milestones in this sector, the design and development of detectors (control, hardware, image pre-processing) and the optical design of high resolution cameras, with an important focus on the selection of new light materials for space, and on the use of advanced ultra-resolution.

The CELESTE proposal represents a visionary initiative by the IAC to positionate the Canary Islands as a hub of excellence for pioneering research and technology development in Space and Optics by establishing a full autonomous CoE independent from the IAC.



Rafael Rebolo

Lead researcher

How have you been involved in the creation of the R&I (RIS3) strategy in the Canary Islands? What role have you played?

A key driver of CELESTE proposal is the Smart Specialization Strategy for the Canary Islands (RIS3 extended) (2021-2027), which strongly supports the international leadership in Astrophysics and Space Sciences by delivering excellent scientific and technological outcomes, strengthening the "astronomical reserve" of the Canary Islands' astronomical Observatories, and promoting the transference of knowledge. The IAC actively participated in the definition of the RIS3 extended through working groups and public consultations.

Which are the main risks and advantages you face according to your geographical location?

The Canary Islands are one of the Spanish regions with the lowest investment in R&I (below 0.5% GDP), clearly behind Spain (1.24% of GDP) and far away from the European averages (2.1%) and targets (3% in 2030). The IAC, as the only Severo Ochoa Centre located in an outermost region, has the potential for reducing these disparities, for which CELESTE aims at establishing a new Center of Excellence and promoting fruitful collaborations with partners from international leading scientific institutions and science-based industry.
One of the main risks the IAC faces due to its geographical location in the Canary Islands is its relative remoteness from mainland Europe and other major research centers. This distance can sometimes complicate logistical operations, collaborations, and the transportation of equipment. Additionally, there are potential challenges related to infrastructure, as maintaining cutting-edge technology in a relatively isolated location may involve higher costs and more extended time frames.
However, the IAC's location also presents significant advantages. The Canary Islands offer one of the best places on the planet for astronomical observations, thanks to the clear skies, low levels of light pollution, and favorable atmospheric conditions, such as low turbulence and stable air masses. The altitude of the observatories, particularly at Roque de los Muchachos on La Palma and Teide on Tenerife, allows a unique quality of its sky.

What were the main success factors of your proposal? Which added value will provide each partner to create a common knowledge or a full puzzle?

CELESTE will elevate IACTEC (the IAC's division dedicated to industry collaboration) into a self-sustaining Center of Excellence (CoE). This will be achieved in close collaboration with world-leading institutions, the European Space Agency (ESA) and the Centre National de la Recherche Scientifique (CNRS), who will bring

key knowhow in ground-breaking knowledge areas such as advanced astronomical instrument design, quantum communication technologies for secure space-to-Earth data transmission, and the development of ultra-high precision optical elements for astronomical observations.
CELESTE will allow to fully exploit ongoing investments that are already programmed for the next years. It will focus on creating the core structure for the long-term autonomy of IACTEC as self-sustained CoE (securing stable agreements with international partners and ensuring financial stability), foster productive training and exchange programs to attract and consolidate talent, setting up and operating a new battery of high-tech laboratories, and build a robust ecosystem of stakeholders.

Does the project provide a strong engagement of your research organisation as a whole, exploitation of existing institutional resources, for instance including training activities on site to improve the effectiveness, usefulness, productivity, etc of institutional resources you already have?

The IAC will commit its own human capital and financial sources from the annual budget allocated by Ministry of Science and the Regional Government, and budget from several other competitive programs to support National Scientific and Technical Infrastructures. Some of the main equipments needed by the proposed laboratories are being acquired by the IAC to pave the way for the future set up of laboratories. The IAC also has the capacity to capture private funding through collaboration agreements with entities established in the Canary Islands, an advantageous economic and tax regime for investors establishing companies in the region.

Have the links between research academia and industry been strengthened?

The IAC has extensive experience in technological development and is starting to promote closer industry collaboration through its division IACTEC.
Renowned for its work with Spanish companies across various domains, including astrophysical instrumentation and telecommunications, the IAC's commitment to innovation and its network of industry part-nerships are instrumental in driving CELESTE forward, which is expected to start the 1st of January 2025. Particularly noteworthy is its role in securing competitive funding and framework agreements with industrial partners, laying a solid foundation for CELESTE's financial stability.

Relation with the Canary Island ecosystem - How did you mobilize it?

The so-called Astrophysics Sector in the Canary Islands is made up of the IAC, numerous scientific institutions from around the world that operate at the Canary Islands Observatories, the business network dedicated to the industry, and the services related to these facilities. They are all interested in the transference of high-tech by IACTEC. CELESTE project will act as an instrument of change in the region that impulses a strong ecosystem of stakeholders around Space & Optics technologies catalyzing the incipient work of the Canary Islands Aeronautical and Aerospace Cluster (CAAC). For this purpose, a unique business incubator will be launched. To generate the necessary alliances and collaborations for the successful implementation of CELESTE and subsequent sustainability of IACTEC, the IAC will promote the participation of entities from relevant industries in startup projects.

What has been your role in previous R&I Framework programmes/projects?

IAC´s research and technology development activities depend heavily on external funding sources. In previous R&I Framework programmes, the IAC has maintained a success rate higher than 25%, with more than 30 funded projects in the last decade.

How important is international collaboration in science? Do you have the ambition of international cooperation in the long term? How do you foresee to consolidate your international presence/role and to attract foreign companies/investments (as Internationalisation in the 3rd priority line of RIS3)?

International collaboration is, in fact, one of the defining characteristics and strengths of the IAC. Interaction with world-leading institutions and scientists stimulates top-quality research and innovation.

The IAC is involved in the most relevant international consortia to address scientific challenges and develop advanced telescopes and astronomical instrumentation. Now with CELESTE, centered on two domains Advanced Optical Systems and New Space Technologies, the objective will be the set up of the five laboratories opemto international collaborations: 1) Validate the acquisition and configuration of the infrastructure to terminate the Satellite Payload Laboratory (SPL). 2) Integration of the Quantum and Optical Communications Laboratory. 3) Reinforce the Laboratory of
Optomechanics for new optical and tensegrity technologies with testing devices specifically oriented to integrated photonics. 4) Production of the Advanced Optical Systems Lab, which will become a unique infrastructure for optics production in Europe. 5) To set up an AO Laboratory capable of enabling exploratory research and development of adaptive optics systems for the next generation of high-resolution astrophysical instrumentation.

How long is the duration of the collaboration between the project partners? Have you worked together on other R&I projects before? In which kind of projects?

The IAC has collaborated with CNRS and ESA for decades, in projects related to satellite missions and ground-based telescopes.

How and why did you select the Advanced partners involved in the project? Which added value will they bring into the project?

The participation of ESA and CNRS is crucial for the CELESTE's success. They will not only share their specialized expertise in the field of space and optical technologies but also their access to their own international networks and their know-how in management and administration:

- Cooperation with ESA engineers, in particular, has taken place over more than two decades, we foresee to enhance the exchange of know-how and support in the design and construction of the new proposed technology (namely, in optical communications and small space telescopes). ESA and IAC signed in 2019 a framework cooperation agreement to ensure the scientific and technological cooperation in projects of mutual interest, including specifically optical communica-

-tions and small space telescopes). ESA and IAC signed in 2019 a framework cooperation agreement to ensure the scientific and technological cooperation in projects of mutual interest, including specifically optical communications with space.

> **Interaction with world-leading institutions and scientists stimulates top-quality research and innovation**

- On the other hand, we rely on the exchange of skills and abilities of the CNRS scientists, engineers and technicians in the design, construction and operation of the centre for advanced optics. CNRS and IAC have signed in 2021 a Cooperation Agreement to promote the scientific and technical cooperation in various fields of astronomy, which includes a new International Unit of the CNRS at IAC designated as the French-Spanish Laboratory for Astrophysics in the Canary Islands.

Is there an EU tradition or long-term collaboration between the partners? How did you find each other? Who made the first step to create the consortium?

The IAC has subscribed international agreements with ESA and with CNRS to boost scientific and technological collaboration, previously to this TEAMING proposal, and now the collaboration is focused in the new proposed Center of Excellence. The IAC proposed to ESA and CNRS the creation of CELESTE with the ultimate goal of positioning the Canary Islands as a hub of excellence for pioneering research and technology development in Space and Optics.

Is there a previous project idea or successful project which helped or inspired you to go for the Teaming call?

Over the past decade, the IAC has significantly enhanced its international presence by attracting several major European research infrastructures, such as the Cherenkov Telescope Array (CTA), the European Solar Telescope (EST), the New Robotic Telescope (NRT), and the Exo-Life Finder (ELF). These projects rely heavily on critical optical components, integrated photonics, adaptive

optics, and active control of optical elements, which currently depend largely on external expertise.
In the space sector, the IAC has garnered extensive experience through its participation in European Space Agency (ESA) missions and its collaboration with the National Institute of Aerospace Technology (INTA), Spain's foremost institution in the aerospace sector. For example, the IAC has developed instrumentation for several prominent space missions including ISO, SOHO, Planck, Herschel, AMS, Solar Orbiter, and Euclid. Presently, an immense opportunity awaits in the New Space sector, where IACTEC is called to play a pivotal role in the manufacture of forefront payloads for micro and nano satellites, empowering it to spearhead advancements in critical areas of space exploration and Earth observation.

Which will be the added value of this project for all the partners?

The Canary Islands, with one of the lowest R&I investments in Spain (below 0.5% GDP), lag behind national and European averages. CELESTE aims to address this disparity by establishing a Center of Excellence at the IAC, enhancing international leadership in Astrophysics and Space Sciences through the Smart Specialization Strategy (RIS3). By focusing on advanced optical systems, adaptive optics, and the New Space sector, CELESTE will foster innovation and strengthen collaborations with leading institutions like ESA and CNRS. For these partners, CELESTE offers a strategic ally in the Canary Islands, diversifying their network of advanced partners and suppliers while facilitating access to a region equipped with cutting-edge infrastructure and expertise.

With regards to the employment rate, will the academic positions in the Canary Islands increase because of the results or impact of the project?

CELESTE involves the recruitment of specialized personnel and knowledge exchange with leading institutions such as ESA and CNRS, directly addressing the shortage of essential skills needed to consolidate both sectors in the Canary Islands. The initiative is linked to specialized training to ensure that the workforce is equipped with the critical capabilities required to maintain the Union's leadership in the development of fundamental technologies, and it is expected to create some new academic positions in the coming years.

How will this CoE help to change the regional ecosystem? What are the main impacts you expect in this sense? What are the main impacts you expect in each part of the ecosystem?

CELESTE fits perfectly with the regional development strategy that identifies astrophysics, aeronautics and space as one main specialization industry for the Canary Islands, and sets the aim to create an innovation and industrial hub in these areas by promoting the creation of spin-offs from centers of excellence and the consolidation of private companies, co-investing in special infrastructures open to the participation of multiple stakeholders, and setting the Islands as a communication gateway thanks to constellations of satellites.

What can we expect next with the project? What are the long terms expectations?

Apart from direct contributions from CELESTE to these objectives, IACTEC will bring a unique opportunity to close the existing gap between scientific production in the Canary Islands and its conversion into innovative solutions driven to the markets and society.

What are some of the positive aspects highlighted?

CELESTE will fully leverage the strategic investments already made by forming highly qualified technical teams, developing and manufacturing innovative new products, and demonstrating their potential through relevant prototypes. Firstly, the technological infrastructure of its Advanced Optical Systems Center, is already under development, enabling the production of the first ultra-light optical elements using new materials. Secondly, the technological developments in adaptive optics required for next-generation giant telescopes are already underway, with several research prototypes advancing systems for optical and quantum communications, particularly those related to space. These advancements require integrating AI into wavefront sensing while incorporating new digital technologies. Finally, CELESTE will develop and test the space qualification of various next-generation optical systems using its own microsatellites, enhan-

skills enhancement. By establishing five strategic laboratories and organizing annual and monthly reviews, CELESTE will facilitate long- and short-term stays at leading public and private institutions worldwide. These stays, involving PhD students, engineers, and technicians, will provide hands-on experience in cutting-edge technologies, such as adaptive optics, integrated photonics, and free-form optics manufacturing. Furthermore, exchanges with Advanced Partners like CNRS and ESA will foster collaboration at both scientific and management levels, ensuring continuous improvement in best practices. Through intensive training programs, CELESTE will equip its staff with forward-thinking innovation skills, strengthening their ability to drive technological advancements, foster entrepreneurship, and enhance regional and European competitiveness.

Research component of the project - Did you foresee dedicating a piece of the grant to research activities? If yes, how much? Which impact/results do you expect from that?

Yes, a portion of the grant will be dedicated to research activities with clear objectives aimed at technological advancement and innovation. Specifically, the focus will be on:

1. Developing cutting-edge payloads for small satellites,
2. Experimenting toward a prototype Quantum Key Distribution (QKD) payload,
3. Advancing integrated photonics for satellite system testing and hyperspectral research, and
4. Innovating in optics manufacturing to produce optical components for new IAC telescopes and other international instruments.

These research activities will result in technological demonstrators that will help define our strategic lines of work for the coming years, while also setting priorities for securing future funding and fostering collaborations at a European and international level.

How much funds will the advanced partners bring to the project to ensure its sustainability?

At this stage, no direct financial contribution from the advanced partners has been formally planned. However, the advanced partners are strongly committed to the long-term success and sustainability of the project and will support its implementation through significant in-kind contributions.
These contributions will include the allocation of dedicated person-months of highly qualified personnel—researchers, technical experts, and administrative staff—who will be actively involved in key areas of the project. These person-months will support activities such as mentoring, training, co-supervision, knowledge transfer, joint research planning, and technical assistance.
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Which type of funds will you use to ensure sustainability at the regional level? How will sustainability be ensured in the long term?

Own funds provided by the Governing Board, competitive funding, paid services and Revenues from the exploitation of IPR.

Letter of commitment - How did you get it? How did your government/region support you in terms of complementary funding?

We have the support of the Regional Government of the Canary Islands and of the Cabildo Insular in Tenerife. For both the performance and added value of the IAC and the proposed Center of Excellence are perfectly aligned with the expanded RIS3.

What are the benefits you think that the Canary Islands could have being a Widening country? Have you benefited from other Widening actions?

As IAC, we believe that being part of a Widening country offers significant opportunities for the Canary Islands to bridge existing gaps in research and innovation, allowing us to enhance our research capabilities, develop cutting-edge technologies, and position the Canary Islands as a key hub for astrophysics and space sciences in Europe. Additionally, they facilitate the retention and attraction of specialized talent while contributing to the local economy and creating high-value jobs. On a broader scale, Widening programs promote inclusivity within the European Research Area, ensuring that regions like the Canary Islands play an active role in advancing scientific excellence and innovation.
Yes, we have already benefited from other Widening actions, which have helped us establish stronger international partnerships (Twinning and ERA-Chair).

Contact

Instituto de Astrofísica de Canarias (IAC)

Web: https://www.iac.es/es

Email: otai@iac.es

A REFERENCE ASTRONOMICAL CENTRE IN THE NORTHERN HEMISPHERE

PHAETON

RESEARCH AND INNOVATION CENTRE OF EXCELLENCE FOR INTELLIGENT, EFFICIENT AND SUSTAINABLE ENERGY SOLUTIONS

CALL: HORIZON-WIDERA-2022-ACCESS-01-TWO-STAGE | START: LATE 2023 | DURATION: 72 MONTHS | WEBSITE:HTTPS://FOSSCY.EU/INDEX.PHP

Which are the reasons that drove your decision to participate in TEAMING for Excellence calls?

The concept underpinning the project proposal was the upgrading and transformation of UCY-FOSS, a highly successful Research Centre for Sustainable Energy of the University of Cyprus (UCY), to a world class Centre of Excellence (CoE) by building excellence through the adoption of an autonomous and modern governance structure, enhancement of its research agen-da, recruitment and retention of top-class researchers, enhanced competencies of researchers, state-of-the-art infrastructure, effective research valorization and the creation of multi-disciplinary partnerships towards an energy Research and Innovation (R&I) ecosystem with significant global socio-economic reach.

How does the PHAETHON Project align with the RIS3 strategy and other strategic priorities in Cyprus?

The research focus of PHAETHON CoE is a key area of significant growth potential and a high priority of Cyprus since the green and digital energy transition is completely aligned with the Smart Specialization Strategy of Cyprus (S3Cy). The project aims to directly contribute to S3Cy by establishing a national energy R&I taskforce that will coordinate S3Cy energy priorities and stimulate R&I investments with industrial and policy stakeholders (e.g. smart energy communities, green hydrogen).

Which are the main specific challenges addressed by the CoE at the national and/or regional level? Does your geographical location impose any specific risks and advantages in addressing these challenges?

The R&I focus of PHAETHON CoE is on intelligent, efficient and sustainable energy solutions, aligned to the European Green Deal priorities to ensure a secure and renewable-based energy supply that addresses the climate change challenges. Moreover, the CoE will contribute to diminishing the disparities between advanced and Widening countries in their quest for decarbonization in the energy domain and will play a pivotal role in developing an R&I ecosystem, towards a climate-neutral economy.
The geographical location of PHAETHON CoE in an island state in the Eastern corner of Europe imposes certain advantages and at the same time challenges. On the one hand, the CoE's scientific capacity and state-of-the-art infrastructure in key energy domains will render it as the driving R&I force in the Eastern Mediterranean, Middle East and North Africa (EMMENA) region. On the other hand, this same region is vulnerable to external political instability.

What were the main success factors of your proposal?

George Georghiou

Director of Foss

The success of the PHAETHON, which was ranked among the first proposals in the evaluation procedure, is believed to be the result of several factors.
The project proposal built on the success of an already existing Research Centre.
A dedicated team started working on the proposal months before each deadline, something that allowed the drafting of numerous versions of the proposal. Each expected outcome described in the Work Programme and Call for Proposals was addressed, providing concrete data. Where needed, external expertise was utilized and feedback was requested, allowing the exchange of views. Moreover, a robust Investment Plan was provided covering the post-project period (until Y10).
Last but not least, the PHAETHON consortium is composed of leading in the field Advanced Partners i.e. the University of Groningen (UG), the Technical University of Denmark (DTU) and the top Cypriot start-up accelerator Cyprus Seeds (CS), each contributing with complementary and

interdisciplinary expertise that reinforces the ability of the consortium to reach the project objectives.

What is the added value each partner will provide in creating a common knowledge base?

UG will bring its enhanced R&I capacity as well as expertise in human resource management, gender aspects and quality assurance.
Collaboration with DTU is critical for expanding the technological research agenda for new high-priority fields of renewables and grid integration, storage and e-mobility.
Moreover, excellence in innovation towards a fully-functional Innovation Hub will be facilitated through the expertise of DTU Skylab and CS in innovation management. Specifically, Cyprus Seeds will enhance the capabilities to drive innovative growth and stimulated valorisation.

> **“The project aspires to advance the uptake of novel smart energy solutions by the high-tech energy sector”**

It should be noted that a win-win situation is envisaged for all partners, who will expand their research ventures in next-generation energy topics, as they will have joint access to highly skilled researchers and state-of-the-art infrastructure for joint research activities and hands-on experience in addressing energy challenges in the EMMENA region.

Has the project foreseen a strong engagement on behalf of the University of Cyprus as your Host Organization, including exploitation of existing institutional resources?

UCY is the coordinating organization of PHAETHON project, until the incorporation of the PHAETHON CoE as a non-profit limited company, and the handover of the project. UCY is the only founding member of PHAETHON CoE and inevitably, a strong engagement on behalf of UCY is foreseen.
Despite being an autonomous and independent legal entity, PHAETHON CoE will be hosted in the UCY campus, thereby creating synergies for attracting talented students, academic staff, access to infrastructure, collaborating in joint proposals, designing of educational programmes etc.
The creation of the Centre will have a significant impact and benefits for UCY in numerous ways. UCY is also committed to supporting PHAETHON CoE through administrative and in-kind (e.g. allocation of workspace until the PHAETHON CoE building is constructed).

How has your project contributed to strengthening the links between research academia and industry?

The project aspires to advance the uptake of novel smart energy solutions by the high-tech energy sector through the CoE’s Innovation Hub. Despite being at the early stages of the implementation of the project, industrial collaborations have started to materialize. Until the end of the project enhanced industrial collaborations will be sought and 30+ international industrial MoUs with renewable energy sources, storage and smart grid companies and SMEs for joint research and Development are foreseen.

What is the relation of the CoE with the Cyprus ecosystem? How did you mobilize stakeholders from the local ecosystem?

PHAETHON CoE - and its predecessor FOSS – is collaborating closely with the other Centres of Excellence, Research Institutes, the public sector (Ministries and other wider public sector authorities) and enterprises.
A national Taskforce encompassing at least 10 key energy stakeholders and policy makers will be created for evidence-based policymaking.
Moreover, the organizational structure of PHAETHON CoE foresees the creation of a Stakeholder Advisory Group (SAG), comprising representatives from local and regional energy organizations, which will assist in shaping key decision-making processes at the CoE based on local needs and will provide an effective bridge with the key energy stakeholders. The initial response of the stakeholders to the invitation to join SAG provides evidence of the reputation of CoE and their willingness to be part of the green transition endeavour.

What has been your role in previous R&I Framework programmes/projects?

FOSS (the predecessor of PHAETHON CoE) has been actively submitting proposals in the EU

Framework and national Programmes for R&I (80 submissions/yr) and has been participating in a considerable number of successful projects, mainly as project partner. In Horizon 2020, FOSS participated in 21 successful projects (in 4 as coordinator) and in Horizon Europe in 5 projects (2 as coordinator).

How important is international collaboration in science? Do you have the ambition of international cooperation in the long term? How do you foresee to consolidate your international presence/role and to attract foreign companies/investments?

The project provides a first-class opportunity for international collaboration in science which is of utmost importance in modern societies, especially in pressing topics such as green transition.
The increased research capacity, scientific contributions to international energy thematic networks through the Advanced Partners and the established collaborations with energy R&I stakeholders i.e. the creation of a European Energy Hub, will substantially enhance the CoEs' reputation globally.
Activities will be in place to increase the global outreach of the CoE to research centres, universities, industry, scientific community and policy makers in other countries. Specifically, PHAETHON CoE will be the bridge between Europe and the region, whereas the strengthened presence of the Advanced Partners in the EMMENA region will lead to new collaborations and attract investments.

How long has there been a collaboration between the project partners? Have you worked together on other R&I projects before? In which kind of projects? How did you find each other? Who made the first step to create the consortium?

The Teaming Project consortium is a complementary mix of academic institutions and a business accelerator. The partners are amongst the leading European academic institutions and have complementary multidisciplinary knowledge to reach the ambition to achieve R&I excellence in intelligent, efficient and sustainable energy solutions. This is the reason behind the coordinating team's decision to invite them to join the proposal.
A solid foundation exists between FOSS and DTU with prior collaboration on another Widening project i.e. a Twinning project. This very successful project enabled FOSS to create a strong and reputable research project in photovoltaic and grid integration.
Moreover, FOSS was one of the successful projects supported by Cyprus Seeds between 2019-2022.

How and why did you select the specific Advanced Partners involved in the project? Which added value will they bring into the project?

The strategic partnership with the two Advanced Partners was a crucial factor in the success of PHAETHON CoE. Further to the previous successful collaboration, the Advanced Partners were chosen based on research excellence and interdisciplinary expertise (technological (DTU) and green hydrogen, socio-economic geopolitical and environmental energy fields (UG)), as well as anticipated added value (e.g. DTU is ranked #1 and UG #39 on overall research assessment in Europe in the World University Research Ranking 2020.

Was there a previous project idea or successful project which helped or inspired you to go for the Teaming Call?

For the Advanced Partners, PHAETHON CoE is considered as the bridge between Europe and the region, providing them with access to the EMMENA market.
Cyprus Seeds will be able to expand their network, learn from the Advanced Partners, and gain an insight into European funded projects.

Which are in general the activities that you foresee during the project life? What impact do you expect from them?

The CoE's activities, during its lifetime, revolve around the following categories:

- Research & Innovation
- Education & Vocational Training
- Infrastructure
- Services to Industry
- Spin-offs

The long-term situation, compared with the FOSS baseline situation is presented in the following diagram:

How do you think the project will impact on the economy of the region/country? How do you think the CoE will help in the modernization of the energy field in Cyprus?

Integrating high shares of renewable in Cyprus due to the CoE's enabling smart energy solutions and policy recommendations, will contribute to achieving 30% renewable shares by 2030. This will alleviate emission penalties, reduce taxes and electricity costs in Cyprus. In addition, the expertise in testing novel smart energy solutions will enable standardization bodies to develop new smart grid standards.

Moreover, the project's activities aim at structural changes leading to a modernized and more competitive R&I system. Integrating the CoE at the heart of the Cypriot energy R&I system, is believed to facilitate the provision of scientific support for changing business R&D strategies and evaluation government instruments.

Has the project contributed to enhance the capacity of researchers to successfully participate in research activities at EU level?

An R&I support Unit has been established within PHAETHON CoE, with experienced personnel, providing guidance to researchers, training on proposal writing and pre-screening of proposals (Pre-Award), as well as guidance on the implementation of the successful proposals (Post-Award).
Moreover, a long-term research strategy with the Advanced Partners will be established to provide institutional trainings and to participate in joint research proposal submission in the energy field which will increase the potential for higher success rates and the formation of high-caliber consortia for Horizon Europe and other proposals.

How do you think that the CoE will contribute to the regional or European economy and social welfare?

The project will expand the scientific critical mass of Cyprus, by recruiting, training and retaining top-quality talented researchers, diversifying its portfolio to build synergies for

inter-disciplinary collaborations and creating a state-of-the-art research infrastructure in key energy application domains.
The CoE will increase capacity in terms of the highly skilled researchers to be channeled to the energy sector, and through its research infrastructure it will create the ideal environment (considering the suitable climate conditions of Cyprus) for providing innovative solutions to local industry. Through its generated knowledge and activities, it will increase public acceptance and commitment to sustainable energy development. Turning research ideas into exploitable opportunities will also increase socio-economic outreach.

Talents → How do you plan to retain Talent from Cyprus and attract Talent from abroad? With regards to the employment rate, will the academic positions in Cyprus increase because of the results or impact of the project?

PHAETHON CoE will become a reformed R&I institution leading to increased attractiveness and retention of research talents and other personnel. It is believed that better career prospects in cutting-edge fields and modern employment models will create an appealing work environment, attracting and retaining rising stars. The foreseen continuous upskilling, trainings and access to flagship facilities will reform Cyprus' researcher support system and reverse brain drain.
PHAETHON CoE's target is to increase human capital of energy-field researchers by 135% after 10 years, leading to a sustained highly skilled workforce of 141 FTE research positions at CoE, increasing FOSS baseline by a factor of 2.35 and reducing the energy-field research personnel brain drain from Cyprus after 10 years.
Moreover, taking into account that PHAETHON CoE will not be an academic institution, Research Professorships are foreseen, providing attractive career opportunities for excellent researchers from Cyprus and abroad.

How will the CoE help to change the regional ecosystem? What are the main impacts you expect in this sense? What are the main impacts you expect on each part of the ecosystem?

The expected wider long-term impacts are the following:

Scientific: Increased publications and citations and the energy-field open access scientific knowledge will become a valuable resource for the research community.
Economic: Integrating high shares of renewable in Cyprus due to the CoE's enabling smart energy solutions and policy recommendations, will contribute to achieving 30% renewable shares by 2030. This will alleviate emission penalties, reduce taxes and electricity costs in Cyprus. In addition, the expertise in testing novel smart energy solutions will enable standardization bodies to develop new smart grid standards.
Societal: Training citizens in new energy paradigms will generate lasting consumer behavior and changes towards responsible energy use. Community engagement is expected to increase interest in low-carbon energy technologies, achieving optimal resource use and reducing energy poverty.
Environmental: The clean energy solutions developed by the project will contribute to a cleaner environment and to the United Nations' Sustainable Development Goals (SDGs), particularly SDG7 - Affordable and Clean Energy, SDG12 - Responsible Consumption and Production, by improving energy efficiency, and SDG13 - Climate Action, by reducing pollution.

Research component → Did you foresee dedicating a piece of the grant to research activities? If yes, how much? Which impact/results do you expect from that?

PHAETHON CoE research agenda and infrastructure will be incorporated into a research project embedded in the Grant Agreement. The project's aim is transforming UCY campus into a Smart Energy Community (SEC). This project will lay the foundations for the entire campus to operate as the first SEC in Cyprus, showcasing novel clean energy technologies, new governance paradigms and environmental and socio-economic effects. This flagship project will further create a blueprint platform for the design and benchmarking of such SECs and will provide tangible impact evidence to communities, to replicate solutions form the Living Lab to the country, the region and beyond.

Citizens Participation → The participation of citizens is one of the main priorities. How do you plan to get citizens onboard or how is this social factor reflected in your project?

The activities foreseen in the project that are specifically targeted to the General Public are the following:

- **General Public Lectures to communicate project results**
- **School Visits and guided tours to educate on energy topics**
- **Citizen Science Mobile App to engage with citizens**
- **Project Website and Social Media**
- **Press releases and media presence**
- **Participation in major events,** e.g. European Researchers' Night, organized every year by the national R&I funding agency, attracting a significant number of visitors, mainly schools.

Which type of funds will you use to ensure sustainability at the regional level? How will sustainability be ensured in the long term?

A solid foundation for the CoE's long-term sustainability is the €30 mln of complementary funding, in addition to the requested EU contribution, provided by the Government of the Republic of Cyprus and private sources, whereby €12 mln will be committed after the completion of the Teaming project i.e. in Years 7-10.
Self-sustainability after the end of the grant will be further ensured by creating diversified revenue streams through the increased success rate with research proposal submissions, educational and vocational activities and the exploitation of intellectual property to be generated by the CoE research outputs.

Which synergies will you put in place to ensure long-term sustainability of the project? Do you foresee getting complementary funds from other EU funding programmes? If yes, from which one(s)?

Synergies will be sought with other EU funding mechanisms and schemes such as the Recovery and the Resilience Plan and the Cohesion Policy Programme.

Letter of commitment → How did you get it? How did your government/region support you in terms of complementary funding?

Following a decision of the Council of Ministers of the Republic of Cyprus, the Deputy Ministry for Research, Innovation and Digital Policy provided multi-annual financial support as Complementary Funding amounting up to €15 mln over a period of ten years. Specifically, €5 mln will be channeled to the CoE in the years following the end of the grant, helping to ensure its sustainability in the longer term.

Will the advanced partners contribute with funding to support sustainability?

The Advanced Partners will not contribute directly with funding to support sustainability. However, they might do so indirectly since representatives of the Advanced Partners have been invited to participate in the Board of Directors which will be dealing with the CoE's sustainability strategy.

Have you received funds from private sources?

Yes, an Action Plan is in place in order to attract funds from various private sources.

Which do you believe are the benefits for Cyprus being a Widening country? Have you benefited from other Widening actions?

Apart from the Teaming project, FOSS has already benefited from other Widening Actions (has coordinated 3 Twinning projects).

Cyprus, being a Widening country has benefited and will be benefiting from the "Widening Participation" Programme and there is concrete evidence of the programme's contribution to diminishing the disparities between advanced and widening countries.
In PHAETHON CoE's case, these disparities relate to the quest for decarbonization in the energy domain. Through the Teaming action, the CoE will play a pivotal role in developing an R&I ecosystem, towards a climate-neutral economy. Moreover, the Action enables to target national, institutional and R&I shortfalls by capitalizing on FOSS's foundations and transferring excellence through partnership with leading European institutions in the field, and benefiting from their knowledge, experience and expertise.

Are there other Widening actions in which you plan to apply, or which are interesting for you?

> ERA Chairs
> ERA Talents
> Excellence Hubs
> Twinning
> Hop-On Scheme

What can we expect next with the project? What are the long-terms expectations?

Make a significant contribution to a green energy future by creating an inspiring environment for conducting state-of-the art research on intelligent, efficient and sustainable energy solutions and to become a world class Innovation Hub, thereby enhancing socio-economic development at the national and regional levels.

Can you give us some of the positive aspects to highlight about your Project?

Interest in the research focus of the project on energy transition and climate change challenges, an area of significant growth potential and a European priority, is a positive aspect which attracts the interest of policy makers and potential investors.

What are your recommendations for other TEAMING projects to increase the impact and success of their activities?

- Collaborate closely with the Advanced Partners and utilize their full potential
- Seek collaboration with industrial partners
- Invest on provision of education / vocational training which in turn can become a source of income
- Employ top-class personnel and introduce measures for retaining them (training, upskilling)

What additional information, support or assistance would you like to be made available nationally?

Some suggestions for consideration:

- Provide more visibility for the Centres of Excellence, their achievements, their added value and the potential for collaboration.
- CoEs should be viewed as the research centres of governments, providing solutions, feedback to policy and generating income.
- Facilitate the provision of services to the public / wider public sector and by the public sector, e.g. by adopting lean procedures for recruiting researchers from Third Countries or purchasing infrastructure.
- Provide high-quality services similar to those provided by the Horizon Europe NCPs in Cyprus, for the other EU funding programmes e.g. INTERREG, Erasmus+, Life+.
- Utilize further synergies with structural funds and/or other funding mechanisms

Contact

Phaeton

Web

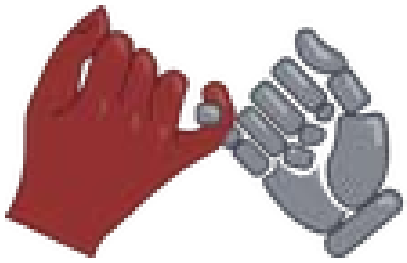
https://fosscy.eu/teaming.php

PHAETHON
CENTRE OF EXCELLENCE

RESEARCH AND INNOVATION CENTRE OF EXCELLENCE FOR INTELLIGENT, EFFICIENT AND SUSTAINABLE ENERGY SOLUTIONS

Twinning

Twinning aims to enhance networking activities between research institutions of the Widening countries acting as co-ordinators, and top-class leading counterparts at European Union level, by linking at least two research institutions from two different Member States or Associated Countries. Therefore, building on the huge potential of networking for excellence through knowledge transfer and exchange of best practices.



TERAIS

TERAIS

TOWARDS EXCELLENT ROBOTICS AND ARTIFICIAL INTELLIGENCE AT A SLOVAK UNIVERSITY

CALL: HORIZON-WIDERA-2021-ACCESS-03 | START: OCTOBER 2022 | DURATION: 36 MONTHS | WEBSITE: HTTPS://TERAIS.EU/

Which motives drove your decision to participate in the Twinning call?

Our Faculty management was systematically encouraging the researchers to be active in EU calls. For us, the main motivation was an opportunity to improve the functioning of our Department towards excellence. We submitted the twinning proposal two times in previous years, and the third, reworked trial turned out to be successfully funded.

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

In general, we completely agree that international collaboration in science is crucial. The teams can benefit from mutual interaction, and this helps us improve. Our Faculty of Mathematics, Physics and Informatics has traditionally been among the top faculties at UKBA regarding the number of international projects (mostly at physics departments), but in recent years, our Department has become the most successful

in the informatics section. Moreover, international collaboration is one of the pillars of TERAIS. It is becoming intensified during the project implementation and we want to make it sustainable in the future. Both partners are very active.

What were the main success factors of your proposal? Which are the secrets to your success?

I think the major factor was that we had hired an experienced project manager who helped us write an excellent proposal. Actually, we got max. 15 points which is indeed remarkable. The previous two versions apparently had shortcomings which were eliminated in this proposal. Another factor was that the third proposal was stronger in a sense that we could include in the research part the semi-humanoid robot NICO - the platform also owned by the partner from Hamburg. Having this robot had been possible thanks to our dean's initiative to open a Faculty call for smaller investments (~30.000 Eur) into research where we succeeded.

How did you find partners? Who initiated the process?

I knew both PIs - prof. Stefan Wermter from University in Hamburg and prof. Giulio Sandini from Italian Institute of Technology in Genova - from previous events. I contacted them and explained my intention. Then in July 2018, we met at a WCCI conference in Rio de Janeiro where we discussed the submission of (the first version of) the twinning proposal.

How well did the consortia partners know each other in advance?

I think consortia partners had known each other very well before from many conferences where they had met.

Did you work well together during the proposal writing process?

Both partners were helping us, providing various forms of strategic advice and information but the main burden was on us as coordinators.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

Igor Farkaš

Professor

Did your government support you?

If you mean Slovak government - no, I am not aware of any help from this direction.
Was it easy to find other funding – private sources?
We did not have to find any other sources. Those 80.000 Eur are being covered by our Department.

What lessons can be derived from the experience of preparing the financial part of this proposal?

Our project manager prepared a very good, reasonable financial plan, complying with the rules. Compliance is extremely important, as we could learn from our own mistake: in another recent EU project proposal, we made a small mistake (last change at five to twelve, without checking), which led to an immediate rejection of the proposal.
In TERAIS, as the coordinating institution we received 62% of the overall budget, but our person-months for the project are as much as 78% (since Slovak man rates are considerably lower to partners' rates). During the project implementation we now see that we have to ask for small adjustments in the budget (money transfer between work packages) but I

think this is acceptable.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

Given the research topic (robotics and AI) which is one of the project goals, our project focuses on our Department of Applied Informatics (DAI) which has 40 staff members and 25 doctoral students. Currently more than half of DAI and several doctoral students are involved in TERAIS in various roles. This is the largest project DAI has had so far, so I am glad it has eventually attracted so many people (the group was growing gradually).

How will the project exploit existing institutional resources in the pursuit of capacity building in the Widening countries?

The TERAIS project aims to go beyond the level of the Department of Applied Informatics: (1) by building synergies with the project management at the Faculty and University levels and making the processes more effective; (2) by engaging the project experts in general discussion on various aspects of AI (around 40 media entries in major Slovak media); and (3) by raising profile of Slovak research through building strong international collaborations (e.g., two other Horizon Europe projects submitted).

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

The training activities have been conducted mainly in relation to research support and two types can be identified: **(1) on-the-job training –** the DAI staff are offered an opportunity to receive consulting support during preparation of new projects; in the case of Horizon Europe actions, it is a more structured mentoring by an experienced project manager; in the case of national funding opportunities, the Research Support Unit staff provides feedback on the prepared applications; **(2) organized training sessions in the area of project preparation –** several formal training sessions have been organised for the DAI staff to increase their understanding of Horizon Europe as a programme and project management related methodologies and to support their motivation and effectiveness in raising funds for their research projects; **(3) managerial training –** A year ago, we submitted a project application (as part of UKBA) whose focus was on managerial training for more Department members, but it was not successful. Within TERAIS, we have prepared a leadership training program for researchers in leading roles and potential leaders at UKBA DAI, developed and administered with the help of external experts, covering e.g. leading oneself, leading a team, leading change (incl. basics of coaching), leading management (strategic planning, PR). Currently, we are still working on raising additional funds beyond TERAIS for such training support.

Does the project aim to strengthen links between research, academia and industry?

The TERAIS project is mostly focused on building internal capacities at DAI in the areas of research excellence, international networking and research support. However, some activities of a limited scope are envisioned to be directed at the business community. In terms of specific results: so far 4 student research projects were led by experts from industry, 2 more are expected by 09/2025; 4 internships of students in companies are planned in 2025; 3 joint projects with industry partners have been submitted and several meetings with representatives of companies were initiated to discuss potential avenues for collaboration.

How do you think the project will impact the economy of the region/country?

In terms of the economic impact, we believe the project will (1) create sufficient momentum at the UKBA Department in terms of project pipeline and build the foundation of its long-term sustainability and a basis for systematic support of research excellence. Moreover, by strengthening international collaboration and networking, the project partners will be better equipped to (2) win support for new joint international research activities (since 10/2022, almost 40 projects submitted at DAI, including 2 from Horizon Europe). In addition, enhancement collaborations with the business

community should result in (3) increased economic use of business-academia links in the form of new projects, contracted research, or IP rights.

Has the project contributed to the enhancement of the capacity of the researchers to successfully participate in future research activities at EU level?

Within TERAIS implementation, the newly established Research Support Unit (RSU) at the Department, currently with capacity of 1.5 FTU, has already significantly helped several Department members in responding to various calls and a few applications have already been successful. The researchers are learning how to write excellent project proposals. We also involve junior researchers and doctoral students in this process. So far, two additional applications were submitted to Horizon Europe projects (one as a Twinning action, one as a RIA action). Additional project (a Teaming action) is envisioned to be submitted in 2025.

Could you explain the ambition of this project? Are you aiming at creating a Centre of Excellence or exploring other calls in the Widening part of the EU Framework Programme for Research and Innovation?

The project is based on four pillars: **(1) PEOPLE –** aiming at creating a life-long career development system at UKBA; **(2) NETWORKING –** focusing on strengthening collaboration links with international partners and the business community; **(3) RESEARCH –** focusing on cognitive robotics, a part of embodied artificial intelligence, in which all project partners have outstanding expertise; and **(4) SUPPORT –** directed towards building the necessary research support structures at UKBA. The project is expected to contribute to promoting research excellence at different levels (UKBA: DAI, Faculty, University; Slovakia; international scientific community) and achieving wider economic and social impacts - with UKBA serving as a key agent of transformation. The Department submitted a Twinning application in 2023 (not successful) and is planning to submit a Teaming action in 2025 which will encompass creation of a specific centre of excellence in AI-related research.

What would be your recommendations from this experience to increase the impact of other projects?

The projects need to focus on building substantial internal expertise in the methodology and process of preparation/implementation of Horizon Europe funded projects by leveraging external support (if needed) in the initial phases.

Did you use the services provided by the National Contact Points in your country?

I visited the NCP once and received critical feedback to our previous unsuccessful proposal. Then we happened to meet the current project manager and she was a big help.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

In general, I think their services are important and NCPs should be able to provide competent advice. However, the staff working as NCPs should have experience and at the senior level since otherwise the NCP advice would be of little use.

What additional information, support or assistance would you like to be made available nationally?

For me, personally, having TERAIS is a satisfaction, since I have been trying to be involved in EU projects for a decade. Now retrospectively, I discern a message - do not give up, try to improve, cooperate, and success may come. In terms of support or assistance, it would be beneficial if universities could receive funding for expert support during the preparatory phase of Horizon Europe project (e.g., in a simplified voucher format) since most of the Horizon Europe projects require also strong expertise in research planning (ERC grants), research organization (RIA/IA), organizational development and management (Widening participation calls) or innovation development and business collaboration (EIC). For instance, in the process of preparing a second stage application for the Teaming project, it will be necessary to conduct a more detailed cost-benefit analysis of the proposed organization of the centre of excellence and the DAI as an applicant will need to find resources to cover the external expertise needed.

Contact

Terais

Web
https://terais.eu

TERAIS

TOWARDS EXCELLENT ROBOTICS AND ARTIFICIAL INTELLIGENCE AT A SLOVAK UNIVERSITY

ENCRYPTON

TWINNING TOWARDS EXCELLENCE FOR PRIVACY ENHANCING TECHNOLOGIES LEVERAGING HOMOMORPHIC ENCRYPTION

CALL: HORIZON-WIDERA-2021-ACCESS-03 | ESR: 21/04/22 | START: OCTOBER 2022 | DURATION: 36 MONTHS | WEBSITE: HTTPS://WWW.ENCRYPT-ON.COM/

Which motives drove your decision to participate in the Twinning call?

The Twinning call contains unique instruments that enable collaborating with leading experts in the field such as Ingrid Verbauwhede of KU Leuven, Elisabeth Oswald of Klagenfurt University/University of Birmingham, and Amir Moradi of Bochum University/Darmstadt University, gaining more experience in advanced cryptographic algorithms such as homomorphic encryption, and expanding my collaboration network not only in Europe, but also in North America and Asia.
Also, the governance structure and goal of the Twinning call allow inexperienced researchers and institutes to be coordinators and gain experience in project management and governance.

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

I strongly believe that international collabora-

tion in science is not only important but necessary for the success of any scientific endeavour. To address increasingly complex scientific problems, challenges and any other associated issues such as societal, ethical and legal, international scientific community must collaborate and adopt inter- and cross disciplinary approach.
Sabancı University strongly promotes international collaboration, offering substantial incentives to encourage it. A key characteristic is its emphasis on inter- and cross-disciplinary education and research.

What were the main success factors of your proposal? Which are the secrets to your success?

Three primary factors contributed to our success:
1) The subject's significance and opportune timing. The increasing importance of data collection and processing in fields such as artificial intelligence and large language models (e.g., ChatGPT) has heightened the need for privacy-enhancing technologies to address associated privacy and security concerns. Homomorphic encryption (HE) is a nearly mature technology, ready for practical application in addressing privacy concerns; our proposal addresses the remaining challenge of existing HE solutions' computational complexity.
2) Our pre-existing expertise. Our established expertise in this area enabled the development of a feasible and compelling project proposal.
3) Strategic partner selection. The selection of our partners and their institutions was crucial to our success. Our partners are internationally recognized researchers in directly related fields, evidenced by their receipt of prestigious grants such as ERC funding.

How did you find partners? Who initiated the process?

My long-standing relationships with our partners within the same research community proved invaluable. Their familiarity with and interest in my work significantly facilitated the project's conception. Upon suggesting collaboration, they readily expressed their enthusiastic support.

How well did the consortia partners know each other in advance?

Erkay Savas

Project coordinator

Although we have been highly active in related research areas - which could be broadly categorized as "applied cryptography" or "cryptographic engineering" - our individual research focuses differ slightly, with some overlap and significant complementarity. Consequently, all partners possessed a clear understanding of each other's work and expertise.

Did you work well together during the proposal writing process?

We engaged a professional service to assist with the proposal writing process, though I personally drafted most of the text and conducted a final review. The near-final version was then shared with our partners, who provided valuable feedback that further improved the proposal.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

Due to certain rules and regulations on project spending, we indeed needed additional funding. Specifically, the project budget only partially covered the cost of essential high-performance computing hardware (GPUs and

and FPGAs). Furthermore, supporting graduate students presented additional challenges due to differing funding models between European and Turkish universities. Securing additional funding is inherently difficult and often diverts a project coordinator's time and energy from research-focused activities.

Did your government support you?

Unfortunately, I have to say we have received support only the project proposal writing stage. After that, there is none. This support need not be solely financial; public institutions could significantly contribute by assisting with the dissemination, communication, and exploitation of project results.

Was it easy to find other funding – private sources?

We secured additional funding from both national and international private companies interested in the project's outcomes. However, this supplemental funding introduced additional requirements, making the overall process more complex.

What lessons can be derived from the experience of preparing the financial part of this proposal?

The coordinator must carefully adhere to the project's budgetary rules and regulations.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

Due to the nature of the Twinning project, the technology transfer office, in addition to the faculty, is heavily involved in developing and enhancing not only technical and scientific capacity but also project management and governance capabilities.

How will the project exploit existing institutional resources in the pursuit of capacity building in the Widening countries?

I do not think that I understand this question clearly. Naturally, the project heavily uses universities resources during and after the project execution.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Yes, the Twinning call requires these activities as an integral part of the project's broader scope. These activities are detailed in the project proposal and are supported extensively by the project office.

> **International collaboration in science is not only important but necessary for the success of any scientific endeavour**

Does the project aim to strengthen links between research, academia and industry?

One of the primary goals of the project is to do just that. The dissemination, communication and exploitation activities in the project proposal were written with this goal in mind, which I believe contributed to the success of the project proposal. This focus led to outreach to numerous companies potentially interested in the project's outcomes, gathering valuable feedback on their industrial applicability. Consequently, we established collaborations with one national and three international private companies.

How do you think the project will impact the economy of the region/country?

The developed capacity will initially introduce the technology to our country and train our human resources, enabling national participation in related technological fields. Furthermore, the experience gained from coordinating this project and closely collaborating with our partners' scientific and administrative staff significantly strengthens our university's ability to secure research funding in competitive areas.

Has the project contributed to the enhancement of the capacity of the researchers to successfully participate in future research activities at EU level?

Researchers from Sabancı University and other

institutions participated directly and indirectly in the project. This experience enhanced not only our project management expertise but also increased the visibility of project participants and their capabilities within the wider research community. In fact, project team members were invited to participate in two other EU-funded projects.

Could you explain the ambition of this project?Are you aiming at creating a Centre of Excellence or exploring other calls in the Widening part of the EU Framework Programme for Research and Innovation?

This project develops hardware accelerators for homomorphic encryption, a powerful privacy-enhancing technology. Our ambition extends beyond the current funding to explore opportunities for securing additional EU and other external grants to further develop and fully exploit the project's results and to transition the technology into practical applications.

What would be your recommendations from this experience to increase the impact of other projects?

Dissemination, communication and exploitation activities are extremely important. Clear and viable use cases also play crucial roles to this end, as well.

Did you use the services provided by the National Contact Points in your country?

We did, but not to a great extent.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Generally, yes. But not much for our specific project

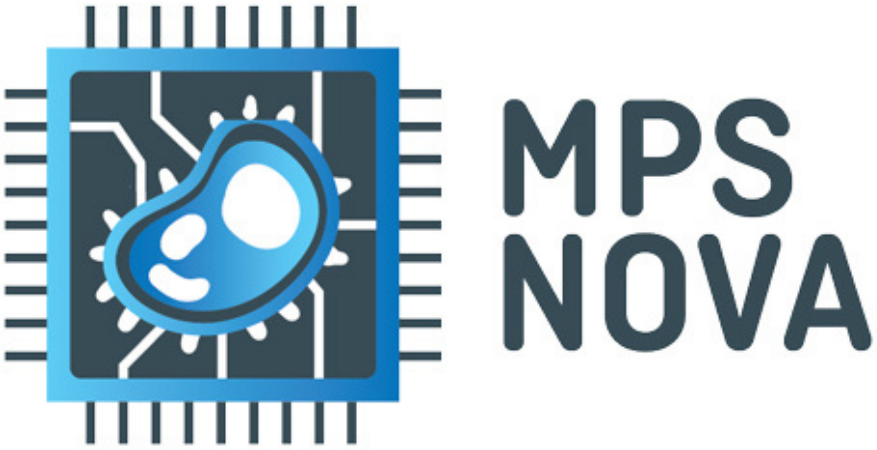
What additional information, support or assistance would you like to be made available nationally?

AS securing EU research grants is exceptionally challenging for institutions in our country, preparing a strong project proposal is crucial, for which there exists an adequate level of national support mechanisms. However, (probably more) challenging hurdles also arise during project implementation. Therefore, equivalent national support is vital during this phase, yet currently, almost none exists, leaving researchers largely isolated. I am fortunate that Sabancı University provides exceptional support to its researchers, actively assisting them in navigating the many challenges of project execution.

Contact

enCRYPTON

Web:
www.encrypt-on.com



MPS-NOVA

ADVANCED MICROPHYSIOLOGICAL SYSTEMS AND PLURIPOTENT STEM CELL TECHNOLOGIES TO UNVEIL CHRONIC DISEASE MECHANISMS AND HOST-MICROBE INTERACTIONS

CALL: HORIZON-WIDERA-2023-ACCESS-02 | START: OCTOBER 2024 | DURATION: 36 MONTHS | WEBSITE: HTTPS://WWW.ITQB.UNL.PT/

Which motives drove your decision to participate in the Twinning call?

There were several reasons. First, we were aware of successful Twinning projects in Portugal that had significantly enhanced research in specific areas through international collaboration with experts. These projects facilitated PhD training, mobility, and the establishment of important international networks. The second reason was a connection that I, along with the project co-coordinator, established during a networking event in the Lisbon area. During that meeting, we discovered a shared interest and a mutual need to implement more relevant host models in our research compared to those we were currently using. Additionally, we realized that we were both collaborating with the same researcher, Alexander Mosig, at Jena Uniklinikum, who is an expert in developing organ-on-chip models for research. Here, we decided that a Twining call could be a way by which we could reach the needed training to incorporate microphysiological systems to our research, while establishing meaningful colla-

collaborations between ourselves and with international partners.

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

Collaboration, whether national or international, undoubtedly adds value to any research project. International collaboration, in particular, provides additional benefits, such as increasing the international visibility of the research group and the institution. It enhances institutional capacity by facilitating the incorporation of new knowledge, state-of-the-art methodologies, and the exchange of expertise with global leaders in various fields. Ultimately, these collaborations contribute to the broader goal of advancing scientific knowledge.

What were the main success factors of your proposal? Which are the secrets to your success?

This proposal emerged through a bottom-up approach, driven by a need initially identified by two researchers from different units at Universidade Nova de Lisboa: ITQB NOVA and NMS. While discussing funding options that could support both groups in implementing advanced host models, known as microphysiological systems, we realized it was likely that other researchers within our institutions faced similar needs. To confirm this, we conducted a survey to gauge the interest of ITQB NOVA and NMS researchers in adopting these models. The response overwhelmingly highlighted a strong demand. At this point, I, as coordinator, Claudia Santos, as co-coordinator, and the funding offices of both institutions began drafting the proposal. Everyone involved contributed by outlining their specific research needs and strengths. From the outset, we knew who our international partners could be (groups with whom we or members of the MPS_NOVA team had previously collaborated). The willingness of these international partners to participate in such a proposal was another key factor in our success. Additionally, guidance and insights from teams who had led similar proposals in the past was also key.

How did you find partners? Who initiated the process?

Ana Paula Gomes Marques

Project coordinator

The international partners emerged very organically. Once we clearly defined our objectives and what we aimed to achieve for our community through this project, it became straightforward to identify the partners and their areas of expertise. As I previously mentioned, the emerging interest in these new models made that we had already starting collaborations towards this end. We initiated the contact with them, and fortunately, they shared the same enthusiasm for the project as we did.

How well did the consortia partners know each other in advance?

As the coordinator, I had a strong collaboration with one of the partners, while Claudia Santos, the co-coordinator, and members of her group had already established collaborations with this and the other two international partners. This existing network was instrumental in bringing the partners together to successfully prepare the proposal.

Did you work well together during the proposal writing process?

During the writing process, Claudia and I, as project coordinators, took the lead. We received significant support from both our

funding officers. To streamline the process, we prepared a list of questions for our partners and local team members, which were answered promptly. Using this input, we developed an initial draft of the proposal, which was then circulated for feedback among all involved researchers. This iterative process was repeated twice, ensuring the proposal was thoroughly refined by the submission deadline. A collaborative effort like this would not have been as successful without the valuable contributions and feedback gathered over the three-month writing period.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

No additional funding was needed.

What lessons can be derived from the experience of preparing the financial part of this proposal?

Preparing the financial part of the proposal was particularly challenging. It was the first time our institution worked with a lump-sum budget, and there was limited guidance on how to manage it. This added complexity to budgeting for numerous work packages, activities, trainings, workshops, staff exchanges, meetings, and research. Preparing this section requires a significant amount of time, but the details of activities and responsibilities often only become clear towards the later stages of the proposal process. The key lesson learned is to avoid leaving the financial planning until the very end. Instead, begin working on it during the advanced draft stages, ensuring there is adequate time to refine it before submission.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

Both ITQB NOVA and NMS are broadly engaged in this project. A total of 12 groups from ITQB NOVA and 14 groups from NMS are actively involved in MPS_NOVA. Additionally, the management bodies of both institutions are highly supportive of the initiative, recognizing its importance and relevance for the researchers involved.

How will the project exploit existing institutional resources in the pursuit of ca-

-pacity building in the Widening countries?

The primary institutional resources we rely on are our researchers and staff. Our expertise lies in areas such as microbiology and chronic human diseases, which is particularly appealing to our international partners who have stronger capacities in developing models, and are very interested in topics on which they could apply them. This partnership leverages our strengths in basic research while collaborating with our partners to address biological questions using more advanced and relevant models.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Yes, the project is structured to include significant on-site training activities, where various techniques will be demonstrated locally. Additionally, a core focus of the project is to encourage the mobility of our students. To achieve this, we leverage the resources, infrastructure, and ongoing activities of our international partners, allowing our students to train at their institutions. These trainings were planned during the proposal writing phase, and while the specific content remains somewhat flexible, their overall objectives were clearly defined. We have established the duration and frequency of these activities, with some scheduled to occur two to three times over the three-year grant period. Beyond the specific trainings, we have also incorporated staff exchange programs with the partners, ranging from 1-2 weeks to 2 months in duration. Moreover, we have introduced a call for exploratory projects, where collaboration with an international partner is a key evalution

> **Portugal had significantly enhanced research in specific areas through international collaboration with experts**

criterion. We aim to fund approximately 20 of these projects, each with a budget of €10,000.

Does the project aim to strengthen links between research, academia and industry?

While strengthening connections with industry is one of the goals of the project, it is not the primary focus. However, we have incorporated activities designed to facilitate industry involvement, such as the interim and final meetings, where we aim to foster interactions between researchers and industry partners.

How do you think the project will impact the economy of the region/country?

The MPS_NOVA Twinning Project has the potential to significantly impact the economy of the region and the country by fostering innovation, enhancing research capabilities, and promoting collaboration between academic institutions, industry, and policymakers. For example, by:

1. **Boosting research and development (R&D):** the project will strengthen the research capacity of participating institutions, attracting national and international funding. Further, enhanced R&D leads to the development of innovative technologies and solutions that can be commercialized, creating new economic opportunities.
2. **Job creation:** training programs and workshops as part of the project will upskill the workforce, making the region more attractive to knowledge-intensive industries, bringing high-skilled job opportunities, particularly for scientists, researchers, and technicians.
3. **Knowledge transfer to industry:** through our connections with industry partners during the Project duration, we can contribute to bridge the gap between academia and industry, enhancing networks, and also job opportunities.
4. **Attracting investments:** the successful implementation of the project, and our increased international visibility, can position the region as a hub for innovation and excellence, attracting investments from both domestic and international stakeholders.
5. By **fostering innovation,** the project may lead to the establishment of startups and spin-offs, particularly in sectors aligned with the project's focus, contributing to regional development and economic resilience

Has the project contributed to the enhancement of the capacity of the researchers to successfully participate in future research activities at EU level?

We expect that MPS_NOVA will significantly contribute to enhancing the capacity of researchers to successfully participate in future research activities at the EU level by:

1. **Improving research skills and expertise:** the project will facilitate specialized training sessions, workshops, and knowledge exchange programs that will equip researchers with advanced skills and methodologies. Further, exposure to cutting-edge research tools and practices will improve their technical and analytical capabilities.
2. **Enhancing collaboration and networking**: the project will foster collaborations with leading EU research institutions, creating a strong network for future partnerships in Horizon Europe and other EU-funded initiatives. The participation in joint activities and exchanges will help researchers to establish valuable connections with international peers and experts.
3. **Increasing visibility and recognition:** the project's outputs and dissemination activities will raise the profile of the participating researchers and institutions, making them attractive partners for future EU consortia. MPS_NOVA has specific activities to enhance the participation of PhDs in high-profile conferences and publications, where they can showcase their expertise on a larger stage.
4. **Developing of interdisciplinary competencies:** these collaborative efforts across disciplines within the project will enhance researchers abilities to adopt holistic approaches to problem-solving, a key requirement for many EU-funded research calls.
5. **Strengthening institutional support:** the project will enhance the capacity of the hosting institution to provide administrative and strategic support for EU-level research activities, indirectly benefiting individual researchers. Further, our students will learn EU research standards, policies, ethics, and open science principles will prepare researchers to meet the expectations and requirements of EU-funded projects.

Could you explain the ambition of this project? Are you aiming at creating a Centre of Excellence or exploring other calls in the Widening part of the EU Framework Programme for Research and Innovation?

Did you use the services provided by the National Contact Points in your country?

We contacted the NCPs for some information during the project preparation. Further, there was a session organised by the NCPs specifically related to Twinning.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes, the session was informative.

What additional information, support or assistance would you like to be made available nationally?

At the time, more support in preparing the budget would have been beneficial, as well as a comprehensive overview of the proposal to ensure that all specific legal requirements of the call were met. I understand that reviewing all submitted proposals from a specific country could be challenging, but having support after the approval stage, particularly during the negotiation process, would have been helpful. The negotiation was especially stressful due to our limited knowledge of how the European Commission operates and the specific expectations related to the call.

Contact

MPS-NOVA

Web:

https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/opportunities/projectsdetails/43108390/101159729/HORIZON

Excellence Hubs

Excellence Hubs will strengthen regional innovation excellence, through innovation ecosystems in Widening countries and beyond, by teaming up and creating robust linkages between academia, businesses, governments and civil society.

CHESS

CYBER-SECURITY EXCELLENCE HUB IN ESTONIA AND SOUTH MORAVIA

CALL: HORIZON-WIDERA-2022-ACCESS-04 | START: JANUARY 2023 | DURATION: 48 MONTHS | WEBSITE: HTTPS://CHESS-EU.CS.UT.EE/

Which motives drove your decision to participate in the Excellence Hubs call?

The Excellence Hubs call was the first opportunity in the framework of HE Widening actions, where collaboration across quadruple helix sectors was actively promoted. Cross-sectoral collaboration has been a long-standing strength of the South Moravian Region due to its proactive approach to Smart Specialisation. Also, the possibility of designing a project based entirely on excellence in the Widening countries, without the need to inclu-de partners from which we would be expected to learn, was something that raised our interest. With the Excellence Hubs, we were able to showcase and develop excellence that is fully based in the participating Widening countries. Apart from the appealing new project format, one thing that motivated our decision was great cross-regional cooperation in earlier European Cybersecurity Competence Network pilots (more details below).

How important is international collabora-

-tion? Is it one of the main goals of your institution and projects?

Involving the university in strategic international cooperation and building strong international partnerships is one of the strategic goals of Masaryk University. The university has been creating grant strategies at the level of faculties and other workplaces, aiming to obtain grants from international schemes. The strategic plan of Masaryk University for 2021–2028 also highlights the importance of developing long-term cross-sector cooperation and strengthening close research cooperation with industry, state administration and local government. Therefore, submitting a project proposal to the excellence hubs call was the logical choice.

What were the main innovation success factors of your proposal? Which are the secrets to your success?

The project addresses one of the most important issues confronting Europe today: Cybersecurity.
Both Estonia and South Moravia have already become important centres in the IT industry and cybersecurity research. Moreover, our Excellence Hub builds upon the involvement of the CHESS institutions in all four H2020 flagship cybersecurity pilot projects (CONCORDIA, ECHO, SPARTA and CyberSec4Europe). As multiple CHESS partners were part of the pilots, we will be able to ensure that our strategy aligns with Euro-

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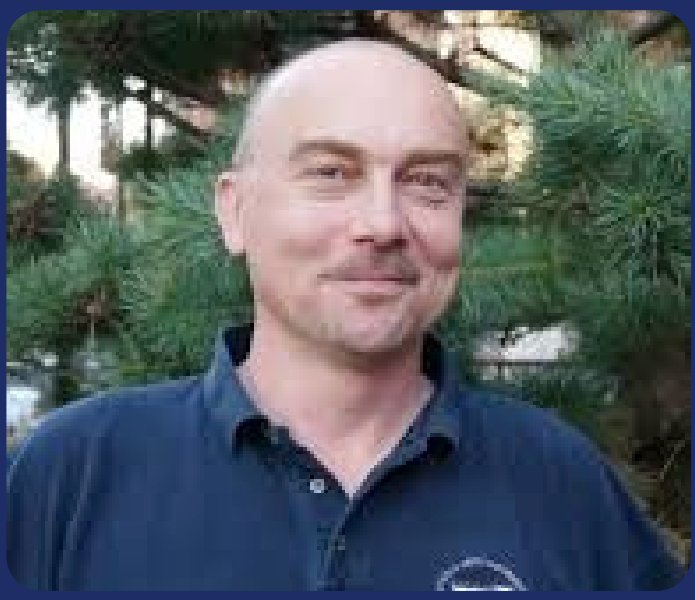

Vashek Matyáš

Project coordinator

pean goals. Also, CHESS is well grounded in the Smart Specialization Strategies of both regions and addresses the EU-level priority of Digital Transition.
What helped us significantly was the existing links between partners and well-functioning innovation ecosystems both in Estonia and South Moravia.

How did you propose to team up and create better linkages between academia, busi-

-ness, government and society?

At the beginning of the project preparation, we identified six Challenge Areas in cybersecurity we want to work with. We created six working groups, one for each topic, to develop a proposal and implement the project. We asked each team to define the situation in Estonia and South Moravia in terms of research being done and potential development opportunities; we asked about other institutions they work with in the field with a special focus on the companies. Also, the groups were asked to discuss how research institutions, companies, government and civil society organisations could work together to improve the field. We have defined our Challenge Areas in a way that (i) a particular strength of one region either allows knowledge transfer that will significantly improve the quality of R&I partner region or where (ii) both regions deliver excellent R&I, which justifies the assumption that their connection may result in synergies for developing the cybersecurity strategy (iii) all

Challenge Areas include people from both regions and various sectors and thus serve as ideal platforms to reinforce collaboration between the two regions across various sectors and help engage regional innovation ecosystems. The research activities within the project are conducted as small-scale research projects within the selected six Challenge Areas (CAs). So far, CHESS teams have initiated 22 small-scale R&I projects (or mini-projects as we call them) focused on different aspects of cybersecurity.
Our Challenge Areas were established based on common research interests but have become the centres of all project activities. In addition to focusing on their research, all Challenge Areas have been contributing to other project activities, like organising training events, contributing to the strategy development or preparing new project proposals. The crucial thing is that CAs work largely independently of each other and have a high degree of autonomy. Once a year, we evaluate the results of the mini-projects, and if some of the teams wish to shift their research focus, they are allowed to do so. This gives them plenty of leverage when they want to reflect the needs of the ecosystem.

> **The project addresses one of the most important issues confronting Europe today: Cybersecurity**

How did you find the other R&I ecosystems/partners? Who initiated the process?

The idea to submit a proposal to the Excellence Hubs call originated at the Grant Office at the Rectorate of Masaryk University. The Grant Office has several experts who provide support in the pre-award phase. They viewed the new Excellence Hubs scheme as a great opportunity in line with the university's strategic goals.

So, brainstorming and discussions began. What are the topics interesting for the South Moravian region? We looked at the key economic sectors defined in the Regional

Innovation Strategy RIS JMK, research at Masaryk University, and potentially interesting international connections the university had. In the beginning, there were more options on the table; these gradually narrowed down to the topic of cybersecurity. The next question was who should be involved in shaping the project within the South Moravian region. Who are the key players? Which regions can be considered partners? After some discussions, it became apparent that Estonia would be a perfect option. Estonia is renowned for its digital government and advanced digital public services. The country is among the most advanced digital societies globally, which makes it vulnerable to various cyber threats, so the topic of cybersecurity is crucial. Most importantly, there were solid established collaborative links between our teams and different Estonian institutions, both universities and companies. The initiation of proposal preparation was then driven by two academic sector institutions: Masaryk University (CZ) and University of Tartu (EE).

How well did the consortia partners know each other in advance?

There were several existing links between the two regions before the projects. For example, Petr Švenda, a researcher on cryptography and security at Masaryk University, discovered a vulnerability in Estonian ID cards in 2017. Thanks to his connections to Estonian Computer Emergency Response Teams, he was able to notify Estonia's Information System Authority which is now one of the project partners. (More information here: https://e-estonia.com/card-security-risk/) Also, there were several collaborations in European projects between MUNI and both Estonian universities involved in the project. As soon as our academic partners in Estonia confirmed their interest in participating in the project, finding the right partners from other sectors was quite easy. As our Estonian colleagues always say, Estonia is a small country where everybody knows everybody, which proved to be a huge advantage when building a consortium.

Did you work well together during the proposal writing process?

Yes, the consortium proved itself to be capable of working successfully right from the beginning, and the collaboration with our partners has been excellent.

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

The project is coordinated by the Faculty of Informatics and involves teams from different faculty departments. Also, the Rectorate is engaged in the project and offers support in project management.

How will the project exploit existing institutional resources in the pursuit of capacity building in the Widening countries?

The project is built on a long strategic development track of cybersecurity as a smart specialisation area of the South Moravian Region. It has been enabled by previous investments from Structural Funds, building

research capacity and key facilities such as the KYPO Cyber Range Platform.

How have you prepared for and implemented the long-term joint R&I strategies?

Preparing the joint cybersecurity R&I strategy is one of the main goals of our project. We are still in the process of preparing this strategy.

Does the project include training activities onsite to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Our project includes numerous onsite training activities focused on different aspects of cybersecurity. We offer training on how to conduct high-quality cybersecurity training for students and professionals. We work with high-school teachers, for example. We organise hands-on training, workshops and seminars to share know-how between Estonia and South Moravia involving people from different sectors. We host so-called CHESS Industrial Days, which bring together people from academia and industry. We organise summer schools for students, workshops at

How does the project aim to strengthen links between research, academia and industry?

The project is a joint venture of all these sectors, stretching also towards the public and societal domain.

How do you think the project will impact the economy of the region/country?

The consortium has been working on several cybersecurity solutions improvements, such as migrating an e-voting system to post-quantum cryptography or setting up a post-quantum Virtual Private Network (VPN). Our teams have been working on novel methods for improving trust in software that can have important economic benefits by enabling companies to avoid software malfunctions. We also have researchers working on improving the usability of cybersecurity solutions for ICT professionals. Making security products and processes usable to those who need them can be an important catalyst for more efficient adoption of security and privacy technologies.

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

We are still in the first half of the project; however, providing training for people from different sectors is one of our important goals. So far, we have been working with high school and university students, researchers, companies, governmental institutions, educators, and NGOs. We plan numerous training activities that we believe will contribute to new competencies and skills of people from various sectors.

Have you foreseen strengthened linkages between science and business?

Yes, it is a must in this kind of project. We designed the project in such a way that it provides very good conditions to strengthen links between academia and business.

Have you been successful in creating syner-

-gies with other EU programmes?

From the very beginning, we have been discussing the sustainability of the initiative. Our teams have been working on several new project proposals. However, it is too early to have any tangible results.

What would be your recommendations from this experience to increase the impact of other projects?

Too early to say.

Did you use the services provided by the National Contact Points in your country? Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Masaryk University cooperates quite closely with the National Contact Points. Technology Centre Prague, the Czech national information and consultation centre for the EU Framework Programmes for Research, Development and Innovation, has been a valuable partner for quite some time. Our project also used their services. We invited our National Contact Points for Horizon Europe Financial and Legal Aspects to Brno to lead the seminar for our Czech partners focu-sed on the financial and legal aspects of Horizon Europe. The event was tailored to the specific needs of the participants, i.e. management and administrative staff involved in the project, including people from grant offices and economic and HR departments from all Czech participating institutions. We discussed the specifics of our Excellence Hub project and shared our experience with the administration and management of HE projects.

Contact

CHESS

Web:

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CHESS

CYBER-SECURITY EXCELLENCE HUB IN ESTONIA AND SOUTH MORAVIA

CHANGEING
EXCELLENCE HUBS

CHANGEING

CONNECTED HUBS IN AGEING: HEALTHY LIVING TO PROTECT CEREBROVASCULAR FUNCTION

CALL: HORIZON-WIDERA-2022-ACCESS-04 | START: JANUARY 2023 | DURATION: 48 MONTHS | WEBSITE: HTTPS://WWW.CHANGEING.EU/

How important is international collaboration? Is it one of the main goals of your institution and projects?

Excellence hubs match perfectly the alignment and mission of our regional network/partnership Ageing@Coimbra. This is a quadruple helix-based ecosystem with approx. 90 partners that allowed us to build both regional internationally relevant projects related with smart specialization strategy of the region and Horizon H2020/Europe. This background supported us to link with our co--lleagues in Crete to build an innovative project based on the concept that Mediterranean diet culture will support healthy living and prevention of cerebrovascular diseases.

What were the main innovation success factors of your proposal? Which are the secrets to your success?

Sharing good practices and knowledge across Europe is critically important specially in widening regions.

How did you propose to team up and create better linkages between academia, business, government and society?

The concept of the quadruple helix consortia, previous successful projects, including ERA Chairs, Teaming for Excellence, ERCs and others. I consider Ageing@Coimbra a sucessful example.

How did you find the other R&I ecosystems/partners? Who initiated the process?

The process was initiated by me as project coordinator. Our international Greek partners have been identified based on previous collaborations and expert advice through national contact points.

How did you prepare nationally for your country's R&I ecosystem? (must comprise four different categories of actors i.e. a) academic institutions (universities and/or non-university, research centres or labs), b) business entities, c) public authorities or authorised agencies operating at regional or local level and d) societal actors (e.g. civil society organisations, citizens, end users, media, cultural actors etc.).

Ageing@Coimbra became a relevant player in advising the regional authority in building the Smart Specialization Strategy related with Ageing and Health.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

We are applying to secure additional funding to support WP6 pilot and demonstrator. The process is moving according to the plan, with positive expectations.

Did your government support you?

No direct involvement of National Government, but high political support from Regional Authority.

Was it easy to find other funding – private sources?

Money from private sources is just a dream...

What lessons can be derived from the expe-

João Malva

Project coordinator

-rience of preparing the financial part of this proposal?

No big issues...

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

Excellence hubs CHAngeing involves many partners in the quadruple helix and is highly interdisciplinary ... it involved many disciplines inside the University of Coimbra, eg. Health Sciences, Sport Sciences, Psychology, Sociology, Physical Education and Sport Science, Nutrition, Technologies, among others.

How will the project exploit existing institutional resources in the pursuit of capacity building in the Widening countries?

National Contacts Points may play a critical role in disseminating succes stories. Also, an Excellence Hub community will be built in the near future.

How have you prepared for and implemented the long-term joint R&I strategies?

Our joint Scientific & Innovation strategy was build based on a co-creation process between both hubs, following a mapping exercise of R&I assets.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Our project is organizing many collaborative activities in different dimensions (WPs), including management and funding attraction, science development, Advanced training, technology readiness level mapping exercise, PhD student co-mentoring, etc. Moreover, we organize joint scientific and consortium meetings on site to support twinning projects.

How do you think the project will impact the economy of the region/country?

Mainly through innovation, business creation and human development.

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

Yes, we are training 8 PhD students in both hubs and organizing several events to support innovation and entrepreneurship.

Have you foreseen strengthened linkages between science and business?

Yes, our WP4 and WP5 support links towards R&I and technology adoption.

Have you been successful in creating synergies with other EU programmes?

Yes, we are building solid links/synergies with other projects, including Teaming for Excellence Multidisciplinary Institute of Ageing (MIA-Portugal), EIT Health Ageing PhD School, and other submitted projects including innovative doctoral networks.

What would be your recommendations from this experience to increase the impact of other projects?

To build other funding synergies with ERC to attract best talents to widening regions.

Did you use the services provided by the National Contact Points in your country?

Yes, we seek expert advice through national contact points. This was very important to shape our CHAngeing proposal.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes!

Contact

CHANGEING

Web:

https://www.changeing.eu/

INNO2MARE

STRENGTHENING THE CAPACITY FOR EXCELLENCE OF THE INNOVATION ECOSYSTEMS OF WESTERN SLOVENIA AND ADRIATIC CROATIA

CALL: HORIZON-WIDERA-2022-ACCESS-04 | START: MARCH 2023 | DURATION: 48 MONTHS
WEBSITE: HTTPS://WWW.INNO2MARE.EU/

Which motives drove your decision to participate in the Excellence Hubs call?

Through this project, we aim to discover new ways to stimulate innovation in Slovenia, Croatia (within their respective ecosystems), and the broader EU maritime industry. A key objective is to strengthen the role of place-based ecosystems as engines of innovation within the EU. There are two main challenges we address:

1. Finding new and efficient ways to stimulate the development and uptake of innovations represents the key to the competitiveness and sustainability of maritime industries, and in so doing, their contribution to the green and digital transitions of Europe.
2. There is an urgent need to mobilise resources towards a strategic and coordinated approach in the governance of the Western Slovenian and Adriatic Croatian maritime innovation ecosystems.

In the past, we have considered and applied to similar calls for the development and establishment of innovation and demonstration centers or hubs, the creation of

local, national, and even EU innovation hubs (such as DIH - Digital Innovation Hubs, EDIH), the development of strategies, and the establishment of technology experimental centers for demonstrating technologies in industrial applications (TEF - Technology Experimental Facility), as well as the development and creation of a national center for smart technologies, Smart Factories (suitable for various fields). Our plan was to involve as much as possible number of stakeholders and connect different actors such as academic institutions, industry, governmental organizations, and, to some extent, non-governmental organizations. Another important aspect was leveraging existing knowledge, competencies, and best practices in the field of manufacturing, and transferring these to the particular maritime sector (with a stronger focus, which we have not done extensively so far). For example, we collaborate with port of Koper and some companies focused on maritime products (UL FME) and port of Rijeka, maritime companies (UNIRI).

Hrvoje Marušić

Project coordinator

How important is international collaboration? Is it one of the main goals of your institution and projects?

International collaboration is very important to us. Although we already work with Croatian partners and many EU partners, stakeholders. It is one of our main goals to develop strong collaboration and strong network between Slovenian, Croatian and Belgium partners to form joint Innovation maritime ecosystem. The main focus of this collaboration is:

- It facilitates the development and transfer of knowledge across different fields and partners, fostering both cross-border and interdisciplinary collaboration.
- It enables the successful transfer of knowledge to both Slovenian and Croatian industries. In particular, EU partners are often more receptive to implementing new technologies compared to Slovenian and Croatian companies, and can serve as strong references to demonstrate the impact of innovations. This, in turn, creates opportunities for collaboration with Slovenian and Croatioan industry (more conservative), based on proven best practices.

What were the main innovation success factors of your proposal? Which are the secrets to your success?

The project involves two main innovation ecosystems that have the potential to greatly benefit from one another. The Westerns Slovenian ecosystem is strong in the areas of digitalization, Industry 4.0, logistics, and smart cities, which can be used also in the maritime sector and have potentially high impact (port of Koper, other maritime stakeholders in Slovenia). The Adriatic Croatian ecosystem (University of Rijeka and the Rijeka regional community) excels in innovations and technologies specific to the maritime sector, so most of the innovations and developments are focused on maritime. Both ecosystems are supported by a third partner, Flemish Belgium ecosystem involving main players such as University of Antwerp, Antwerp Maritime Academy and Port of Antwerp. This partnership provides a supportive environment for both ecosystems in terms of strategy and innovation development as well as transfer of technologies and good practices. Additionally, there are several other factors that convinced the evaluators: Objectives corelated to the call, very clear, sound, measurable, verifiable and achievable.

- Effective quadruple helix approach within the two innovative ecosystems based in the widening countries and efficient support from the non-widening country on each of the individual components of the helix (strong support network in each cate-

-gory).

- Joint action plan and investment plan for the future sustainability of the Excellence Hub is carefully prepared.
- Pilot projects carefully selected to achieve significant progress in the maritime industry. All relevant technological approaches integrated.
- Pre-planning for pilots and demonstrators is led by an experienced company (scale-u, implementation, after-project activities).
- A balanced approach to activities, with the involvement of all four key stakeholders, and the demonstrated potential impact of project activities on each of these stakeholders.

How did you propose to team up and create better linkages between academia, business, government and society?

A clear partnership structure was proposed at the project preparation phase and initial mapping of the partners characteristics and ecosystems were defined. The initial mapping of the ecosystem was done (general SWOT) to highlight the weaknesses and strengths, opportunities. A description of supporting ecosystem from Belgium, was provided, along with an identification of potential connections (where synergies exist, where gaps are, how we can support one another, and how the Belgian ecosystem and its partners can assist us). In addition to the directly involved project partners (those receiving funding), we establish Public-Private Partnerships with the aim of extending the network of supporting partners and members (Letters of Support), with whom we have successfully collaborated for several years, and who are ready to be indirectly involved in the project activities (through the policy framework). This approach allowed us to map out what each partner is doing and identify areas for mutual support and collaboration through various activities aligned with the quadruple helix principle. For this purpose, we establish Collaborative MS Teams Platform and INNO2MARE website to achieve transparency between partners and to exchange knowledge, share resources, and align goals. The Joint and Innovation Strategy, developed within the deliverable represents the backbone of our collaboration strategy.

How did you find the other R&I ecosystems/partners? Who initiated the process?

The initiative came from both sides: the Slovenian ecosystem (University of Ljubljana - UL) and the Croatian side (University of Rijeka - UNIRI, along with some companies that had previously collaborated with UL) based on previous R&D common activities. UL and UNIRI facilitated discussions among partners within the ecosystem to ensure compliance with the quadruple helix principle and to assure the capabilities of implementation of project activities. The partnership was formed based on the success of previous collaborations on past projects. In some cases, such as with non-governmental organizations, we identified partners through our network of contacts and knowledge of their work in the field of NGO and societal activities that fits withing the INNO2MARE strategy.

How did you prepare nationally for your country's R&I ecosystem? (must comprise four different categories of actors i.e. a) academic institutions (universities and/or non-university, research centres or labs), b) business entities, c) public authorities or authorised agencies operating at regional or local level and d) societal actors (e.g. civil society organisations, citizens, end users, media, cultural actors etc.).

UL and UNIRI, as leading partners within their respective ecosystems, had already established strong connections with the business sector (a robust network with top companies) and governmental organizations. This meant we had already developed an initial network covering at least three key partners categories: academic institutions, business entities, and public authorities or authorized agencies operating at the regional or national level. The fourth category—societal actors—posed a challenge, as they were typically not involved in previous R&I EU projects and operated more at the regional or national levels. Based on our knowledge of their activities, we identified the relevant actors and defined their roles within the project, outlining the specific activities they would carry on.

How well did the consortia partners know each other in advance?

The invited partners covering academic institutions, businesses, and some governmental organizations knew each other since we collaborate on other EU projects. Although we were familiar with certain non-governmental organizations, we had not previously worked with them on projects—only with their activities. For this reason, we sought out potential partners, held meetings with them, and identified the most suitable ones for carrying out project activities or for establishing long-term collaboration beyond the project's duration.

Did you work well together during the proposal writing process?

We collaborate effectively in defining roles, activities, and responsibilities. Since we defined some of the activities in more general way, we notice that preparing an additional document also in the preparation (proposal) phases showing the detail execution steps for the project implementation will help us to prepare also the financial scheme especially the distribution of activities for the Purchase costs, Travel and Other goods, works and services.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

Since we propose the funding scheme in the project proposal involving all costs for all activities, we do not need additional funding.
Did your government support you?
In terms of financial support no, in terms of project proposal ideas, and support yes (LoS).

What lessons can be derived from the experience of preparing the financial part of this proposal?

Given that this type of project involves all four types of actors, each with distinct activities targeting different audiences and having particular goal, a huge attention is essential when preparing the financial component. Since the promotion of the project and widening is core component of the project, it is crucial to carefully outline activities related to dissemination, exploitation, and communication, as well as any other efforts designed to achieve implementation of the project and significant impacts across all four actors in the quadruple helix framework. Usually the costs are well, defined for the personnel's and experts working on the project, the travel could be problematic if you do not count more travels for the on-site activities, the purchase costs could be problematic if you do not count the prepara-

preparations for all on-line meetings, workshops or user-experience on-line demonstrations. On of the challenges could be a development of attractive websites with all functionality, in our case the development of Career Connector platforms to connect job seekers and stakeholders in a proper way.
The financial section should detail costs associated with travel, goods, works, and services. Each activity should be individually itemized, with a clear definition of potential costs. Consider who will be involved (internal or external partners), how each activity will be organized and executed, and the estimated expenses required for successful implementation. This thorough approach will enhance transparency and facilitate effective resource allocation.

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

The coordinator is the University of Ljubljana (UL), specifically the Faculty of Mechanical Engineering (FME). The Department of Manufacturing Technologies and Systems, along with the LASIM laboratory, serves as the main contact point and is responsible for carrying out and coordinating activities.
As a laboratory, we operate at various levels, collaborating not only with different departments within the faculty but also with various departments and offices across UL, Knowledge Transfer Office, Alumni Club, Career Center and Career Development Office, Office for Equality and Inclusion (Gender equality) , Research and Innovation (R&I) office, Research Project office, the Dissemination and Communication office.

How will the project exploit existing institutional resources in the pursuit of capacity building in the Widening countries?

The project proposes several objectives:

1. Increase the role of wider community in innovation creation, adoption and diffusion;
2. Enhance the level of collaboration between individual ecosystems' actors through innovative approaches to knowledge and technology transfer and mutual secondments;
3. Build entrepreneurial and risk-taking culture through investment in human resources' skills and competences
4. Improve the attractiveness of the involved innovation ecosystems to best talents.

The project proposes an efficient structure of work packages to foster capacity building. This includes developing a cross-border joint research and innovation (R&I) strategy that involves all partners from Widening countries, providing a transparent and effective platform to monitor the progress of pilot projects, and highlighting new approaches, methodologies, and technologies used in development.
Additionally, we will plan pilot project demonstrators ready to conduct workshops and technology demonstrations for stakeholders. The project will also involve monitoring and promoting results, providing an action and investment plan to attract various stakeholders, and organizing a range of workshops, innovation meetups, and networking breakfasts to exchange knowledge and best practices between all actors. Furthermore, we will arrange both online and on-site periodic events for all quadruple helix actors and create engaging events for citizens to promote the maritime sector.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Yes, we do. We proposed several types of on-line activities.
Citizens' skills development (short-term training programmes in basic programming, robotics and 3D modelling with maritime applications; Thematic camps (one-week training programmes for children and youth focused on maritime challenges; Digital & green events (makeathons, hackathons; Citizens Connect, facilitated by the Innovation Council, where bottom-up civic participation is sought in tackling key issues related to the two innovation ecosystems through thematic discussions; Training of ecosystems' actors on demand-driven knowledge transfer for matching of societal and business needs with R&I expertise; advisory support on knowledge and technology transfer activities related to collaborative projects with a commercial potential developed by various ecosystems' actors; INNO2MARE Challenge, a competition in multidisciplinary teams on solving specific problems related to R&I pilot projects; short-term secondments of staff of ecosystems' actors within and between the involved ecosystems and short-term missions; Training sessions of ecosystem actors on research and innovation management, start-up, entrepe-

entrepreneurship, business growth and leadership skills; Attraction of talents and career development (recruitment of new highly skilled workforce for R&I pilot projects; development of the INNO2MARE Career Connector platform for employers and job seekers; brainstorming sessions on talent attraction and retaining of the Innovation Council members; Bootcamp IT for the new talents).

How does the project aim to strengthen links between research, academia and industry?

Establishing joint R&I ecosystem collaborating on monthly basis and showing the main innovation, findings to all actors.
Building a trust between all actors by showing research results, best practices, highlighting the competences and capability of research and academia.
Defining the real challenges by implementing three Pilot projects solving real industrial problems.
Preparing young talents, students and other professional for industrial work environment. Organizing different educational and training events to build the knowledge, competences.
Establishment of Innovation Councill to promote latest technology innovations and their potential use in industry.
The project will identify and promote funding opportunities that encourage collaborations between academia and industry. By pooling resources and expertise, both sectors can undertake larger, more impactful research initiatives.
With dedicated activities related to dissemination, communication and exploitation. Promotion of project through Newsletters, to publish project results in open access, promotion of results on different channels, website, social medias (Facebook, LinkedIn, X (Twiter), Youtube), established the Career connector platform to connect citizens with interesting and successful companies.
Monitoring the real impacts and gathering the industrial feedbacks.

How do you think the project will impact the economy of the region/country?

Since we plan to upgraded capacities of the ecosystems' R&I actors for collaborative, competitive R&I the new knowledge applicable to the maritime industries will be developed. The main expected indicators: to increase the number of human resources ca-

-pable of engaging in co-creative R&I (20%); 20% increase of employment in innovative enterprises targeted with the project; innovative products and processes for safer, cleaner and more efficient maritime industries (20% increase); achieve coordinated mobilisation of public and private funding sources in the two maritime ecosystems beyond the project duration – expected average annual 20% increase; higher participation success in Horizon Europe - expected average annual 20% increase (Scientific & societal impacts); stronger academia-industry links - expected average annual 20%; increase in collaborative projects, joint theses, publications & IP; seconded experts (Scientific & technological impacts); developed true innovation culture - at least 100 new collaborations between the ecosystems' actors (Economic and societal impacts); Improved international outreach of ecosystems' actors and good practices transferrable to at least 10 other place-based innovation ecosystems in Widening countries and beyond (Societal impact).

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

Yes

Have you foreseen strengthened linkages between science and business?

Yes.

Have you been successful in creating synergies with other EU programmes?

The INNO2MARE proposals is in close relation to other EU Programmes: 2030 Digital Compass, The European Green Deal, EDIHS, EIT strategy 2021 – 2027. Other synergies in progress

What would be your recommendations from this experience to increase the impact of other projects?

Pay attention to promotion activities; dissemination, communication exploitation activities are key, make networking, be visible to world.

Did you use the services provided by the National Contact Points in your country? Yes, within the project proposal phase to discuss some important topics, within the project im-

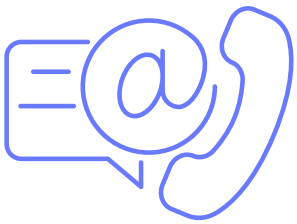
-plementation to discuss the financial part and cost distribution as well as how to use the other services from UL or additional external service providers.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes, definitely, to support us promoting our project, to find new collaborations and to coconnect us with potential partners for the future, to exchange a good practice from other projects, etc.

What additional information, support or assistance would you like to be made available nationally?

To support us in connecting with the government and national institutions, to help us or to inform us more frequently about the regional and national initiatives, strategies, policy events.



Contact

INNO2MARE

Web:

https://www.inno2mare.eu/

European Excellence Iniciative

The action will engage with universities and empower them further to be actors of change in R&I. It will raise excellence in science and in value creation through deeper and geographically inclusive cooperation in alliances of higher education institutions.

BETTER LIFE

BRINGING EXCELLENCE TO TRANSFORMATIVE ENGAGED RESEARCH IN LIFE SCIENCES THROUGH INTEGRATED DIGITAL CENTERS

CALL: HORIZON-WIDERA-2021-ACCESS-05 | START: SEPTEMBER 2022 | DURATION: 36 MONTHS | WEBSITE: HTTPS://BETTERLIFEHORIZON.EU

Which motives drove your decision to participate in the European Excellence Initiative call?

The partners in the project BETTER Life originally established a consortium of universities. Before submitting the project to the European Excellence Initiative, the consortium did not succeed in application for the European University Initiative (EUI) in 2021. The work on the proposal for EUI brought us together and we searched for other possibilities how to continue our joint activities

The call on European Excellence Initiative was one of such opportunities. Generally speaking, we searched for an “opportunity window” how to foster the collaboration of the network which already worked on another (not successful) application. When drafting the proposal for EUI, we found the need for supporting transdisciplinary approaches in research, which we turned into the concept of “socially engaged research”. Therefore, another motive was to react on findings indicated in the preparation of another grant application. We also wanted to support the need of socially

engaged research when dealing with complex problems such as climate change or other areas studied by life sciences. To address complex issues, life sciences must go beyond these sciences (must transcend their focus, must be transdisciplinary – socially engaged). Therefore, another motive was a challenge to change the paradigm of the sciences (from disciplinarity to transdisciplinarity).

How important is international collaboration? Is it one of the main goals of your institution and projects?

International cooperation is one of the priority areas in Long term strategy of CZU. International projects form the networks (within our project, we are now mapping the situation with other projects as for the synergy of projects). Networks are the main channels for sharing information about good practices (or failures). All partners in international projects learn from these projects different research cultures in various countries. International projects are incubators of new methods and new approaches because they bring people with various experience that results in novelties. For instance, some of tools already elaborated in BETTER Life project are used not only to train early career researchers but because they are interesting, they "make live" also classes with master degree students. Without international collaboration, "the interesting" will be missing because international milieu creates bigger room for bringing something interesting, which is not available if working only in national contexts.

What were the main success factors of your proposal? Which are the secrets to your success?

Bringing appropriate partners from non-academic sphere into the consortium of universities looks to be a decisive factor. This partner was knowledgeable and works on promoting quadruple helix activities. Through accreditation this partner supports universities to be engaged in deepening partnership with industries which is one of the main elements of socially engaged sciences. This partner brought real cases how universities can be (and need to be) socially engaged. Simply speaking, if talking about socially engaged life sciences, not only position and views of life science universities but also other partners in the society must be considered. It is the case with non-academic partners in the project BE-

Patrik Toula

Project coordinator

-TTER Life. They perfectly fitted into the project.

How did you propose to achieve institutional reform and an upgrade of the higher education institution?

As already stated in the answer to the first question, one of the motives was the challenge farmed by the question "why not to change existing dominating paradigm of life sciences"? This paradigm assumes the researchers are "outside the world" they live. Such position (outside the world) is assumed to be because of producing "objective" (unbiased) knowledge. However, also life science researchers are part of society (they live in the society). We consider bringing this view into science is highly important. Ph.D. education is now enriched by the materials and study support to develop knowledge, skills and competencies for socially engaged research. The project might contribute to changing the paradigm in life sciences when the researcher is not any more "above the world observing the world from the coordinates of unmistakable reason" but is also a part of the world s/he investigates. It should bring science closer to the citizens and eliminate mistrust science existing among some social groups.

How did you find the other partners? Who

initiated the process?

Majority of the consortium knew each other from previous application for European University Initiative (the application was, however, not successful). The consortium for EUI was initiated by another partner based on personal networks related to the environmental science and previous projects

Did you work well together during the proposal writing process?

As the coordinator of the project we had the experience from other project proposals when we worked together (a sort of reference to game theory is used here).

What lessons can be derived from the experience of preparing the financial part of this proposal?

It was sometimes difficult to align the requirements of the European Commission and the requirements of national regulations as for preparing the budget for the project.

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

The whole university because the project is coordinated by vice-rector, and more faculties are involved. It brings also social and life science researchers together because of the nature of the project (socially engaged research in life sciences).

How will the project modernise research careers in the higher education sector and become interoperable with other sectors?

The project focuses on early career researchers. Since the idea behind is the challenge in the paradigm of social sciences in the way to do life sciences not outside the society but within and inside the society, the focus on early career researchers is used because they are not "spoiled" yet by long-term existing "business as usual" in doing life sciences. If to change the paradigm, the start with early career researchers looks to be important. By the very nature of the project, it supports interoperability with other sectors in quadruple helix (governments – mostly local, society and NGOs and businesses). The project develops the capacities among early career researchers to be sensitive and to work together with other sectors in their research.

How will the project raise excellence in science and in value creation, and ensure inclusive cooperation in alliances of higher education institutions?

At least thinking about a new paradigm in research (namely socially engaged research) might contribute to excellence in the science because the research will not be conducted as "business as usual" but in an innovative way (we are, however, aware that not all innovations become part of everyday practices).
It also creates new values in the research – it means showing that good research is not only the one where researchers are outside the society. As for inclusive cooperation, socially engaged research fosters collaborative networks by actively involving diverse communities and stakeholders in the research process, breaking down barriers between academia and society. This approach enables alliances to address real-world challenges with

more relevance and inclusivity, encouraging knowledge exchange across various disciplines, cultures, and perspectives.

How will the project accelerate the digital transition of the R&I dimension of the higher education sector?

The project is about digital centre of excellence. That is why all tools developed in the project and most of the training activities are done in digital form. However, throughout the course of the project, we got the experience that sometimes it is difficult to fully digitalize all activities (we found out that some elements of training are better to be physical, for instance, because society is not 100 % digital; sometimes it is more efficient to use face-to-face activities because on-line activities, for instance, necessitate more time from participating people to be prepared for them). The project necessities all sectors in quadruple helix will follow digital transition, but the segments of this helix are not equal in this transition.

Does the project include training in knowledge valorisation, entrepreneurship and access to finance?

Not directly. The tools development does not address this issue directly. When preparing the proposal, we found out it will be difficult due to budget and time of the project to have also this dimension. But it will be main pillar in a project which was already submitted.

How does the project aim to strengthen cooperation with economic and industrial partners within local and regional innovation ecosystems, academic researchers and support staff?

This is very nature of the project. For instance. Using "Academic bridge" tool (an easy platform for support the communication between academia and municipalities), CZU organizes so-called academic pubs. These meetings (scientific pubs) bring together mayors asking the help from academia in issues needed for their municipalities (for instance planting new trees) with the academicians who provide needed expertise. Mayors acknowledge this expertise higher than the one from other sectors of industry. On the other hand, Academic Bridge serves also for academicians to present their expertise or to call for the cooperation the municipalities (they offer their capacities to be used by municipalities). It is done together with Czech Technical University because this university has the experience which CZU does not have.

> **Networks are the main channels for sharing information about good practices (or failures)**

ow does the project implement the European Research Area policy objectives?

If we are talking about the European Research Area policy objectives for 2022-2024, the project advances key ERA policy objectives by engaging citizens in science, promoting accessible research careers, enhancing research infrastructure, and strengthening local R&I ecosystems.
Through socially engaged research, it connects scientists and citizens, fostering public understanding and participation in science (Bringing Science Closer to Citizens, Objective 14).

It also supports rewarding career paths and talent mobility across sectors, encouraging balanced and diverse research networks within the ERA (Promoting Sustainable Research Careers and Mobility, Objective 4). By prioritizing sustainable, accessible infrastructure, the project enhances resilience and adaptability for researchers across Europe (Strengthening Research Infrastructure, Objective 8). Collaborations with local institutions enhance regional competitiveness and excellence, aligning research with local needs and strengths (Building Regional and National R&I Ecosystems, Objective 15).

How do you think the project will impact the economy of the region/country?

It will not have a direct impact on the economy. At least not the one that could be anyhow measured. However, by building new skills and fostering collaborations between researchers, industries, and communities, it lays the groundwork for long-term economic benefits. These could emerge through a more skilled workforce, enhanced innovation capacity, and the strengthening of research-driven regional partnerships that might attract future investments and contribute to local conomic resilience over time.

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

Yes. As demonstrated above, it fosters early-career researchers in conducting socially engaged research, equipping them with valuable skills in community collaboration, communication, and impact-driven research design. This approach enhances their ability to work across disciplines and sectors, preparing them to address complex societal challenges and adapt to diverse professional environments in research and innovation.

Have you foreseen strengthened linkages between science and business?

Yes, involving quadruple helix actors.

Have you been successful in creating synergies with other EU programmes?

There were some joint activities with projects under ERASMUS programme (presenting the projects and working on synergy among the projects implemented under different EU programme schemes – the last activity was at CZU on Gender dimension in agriculture and projects funded by Horizon programme, Erasmus programme and Interreg programme were presented and discussed through round table.

What would be your recommendations from this experience to increase the impact of other projects?

The continual search for synergies of the projects. Stakeholders engagement. Flexible Strategy that allows flexibility to adapt to emerging trends and challenges, ensuring projects remain relevant and resilient in changing environments. Sharing of knowledge and results, which can inspire new ideas and improvements across projects.
Services and national circumstances

Did you use the services provided by the National Contact Points in your country?

Yes, in financial matters /consultancy as for financial reporting and legal matters connected to an amendment).

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes, the advice given for financial reporting and legal aspects were extremely important.

Contact

BETTER LIFE

Web:

https://betterlifehorizon.eu/

EINSTEIN

EXCELLENCE INITIATIVE FOR NUTRIFOOD-BASED THERANOSTICS FOR HEALTHY EUROPEAN SOCIETY

CALL: HORIZON-WIDERA-2023-ACCESS-03-01 | START: JANUARY 2024 | DURATION: 60 MONTHS | WEBSITE: HTTPS://EINSTEINEUPROJECT.COM/

Which motives drove your decision to participate in the European Excellence Initiative call?

Our motivation stems from the need for institutional reform and capacity building in Widening countries like Serbia. Despite strong potential, Serbia requires modernization in research and education to integrate effectively into the European R&I landscape. The EINSTEIN consortium – comprising nine partners from Serbia, Austria, the Netherlands, and Denmark – was formed to elevate Serbia's scientific and innovation potential, modernize education, and position the country at the forefront of European research excellence. The additional motivation is always wish to rise funding and provide better opportunities for our staff members to release own potentials.

How important is international collaboration? Is it one of the main goals of your institution and projects?

International collaboration is a fundamental pillar of our institution's strategy to achieve re-

-search and innovation excellence. Through EINSTEIN, we unite leading expertise from multiple countries to enhance organic crop production and develop nutrifood-based sensors with theranostic functions. This collaborative approach accelerates scientific progress and supports our broader goal of making the University of Novi Sad globally competitive, improving its Shanghai ranking to the top 700 by 2030.

What were the main success factors of your proposal? Which are the secrets to your success?

The key success factors of our proposal were a clear vision, a dedicated team, and a well-structured plan. From the start, we knew exactly what we wanted to achieve with EINSTEIN – transforming Serbia's research and innovation landscape. Our team was deeply engaged in proposal writing, ensuring every aspect was carefully planned and aligned with our long-term goals. We had a clear picture of how Serbia should evolve and structured the project to make that vision a reality. The secret to our success? Strong commitment, strategic planning, and a shared ambition to drive real change. Previous knowledge and experience in writing successful project proposals was also an important factor for success.

How did you propose to achieve institutional reform and an upgrade of the higher education institution?

EINSTEIN introduces curriculum modernization, the integration of green and digital technologies, and stronger academia-industry linkages to equip researchers and students with skills that align with real-world needs. The project fosters international collaboration, bringing in expertise from leading EU institutions to enhance research quality and expand global partnerships, ultimately reinforcing Serbia's position in the European research landscape.

How did you find the other partners? Who initiated the process?

The University of Novi Sad (UNS) initiated the formation of the EINSTEIN consortium, selecting partners based on complementary expertise to cover the project's full value chain. Some partners, like Denmark Technical University, were longstanding collaborators, while others, such as Johannes Kepler Univer-

Goran Stojanovic

Project coordinator

-sity Linz and Wageningen University, brought fresh perspectives and specialized knowledge.

How well did the consortia partners know each other in advance?

Not all partners had prior collaborations, but the consortium was strategically structured to balance experience, innovation, and interdisciplinary expertise. The inclusion of universities, industry clusters, a science and technology park, and a hospital created a dynamic and well-rounded team.

Did you work well together during the proposal writing process?

We have a mindset we follow when we write project proposals – starting with a tight core team of dedicated collaborators to ensure clarity, structure and direction. Once the foundation is solid, we bring in partners to refine and enhance the proposal with their expertise. This approach keeps the process efficient, collaborative and goal-oriented – which is exactly how we successfully structured the EINSTEIN project.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

No, we did not need additional funding. The

project was carefully planned to align with the available budget, ensuring that all activities could be carried out effectively within the allocated resources.

What lessons can be derived from the experience of preparing the financial part of this proposal?

Careful budgeting is critical in proposal writing. We ensured that all activities were financially sustainable within the project scope, risks were assessed, with mitigation strategies in place and long-term sustainability was considered, avoiding dependency on additional funding sources.

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

The project engages the University of Novi Sad as a whole, with multiple faculties, research centers, and administrative units actively participating. As the coordinator, UNS is deeply committed to fostering innovation, sustainability, and digital transformation, working closely with a diverse consortium of nine partners, including universities, industry clusters, a science and technology park, a hospital, and a non-governmental organization. The involvement of key innovation drivers such as the Science and Technology Park strengthens the university's role in shaping the regional research and innovation ecosystem.

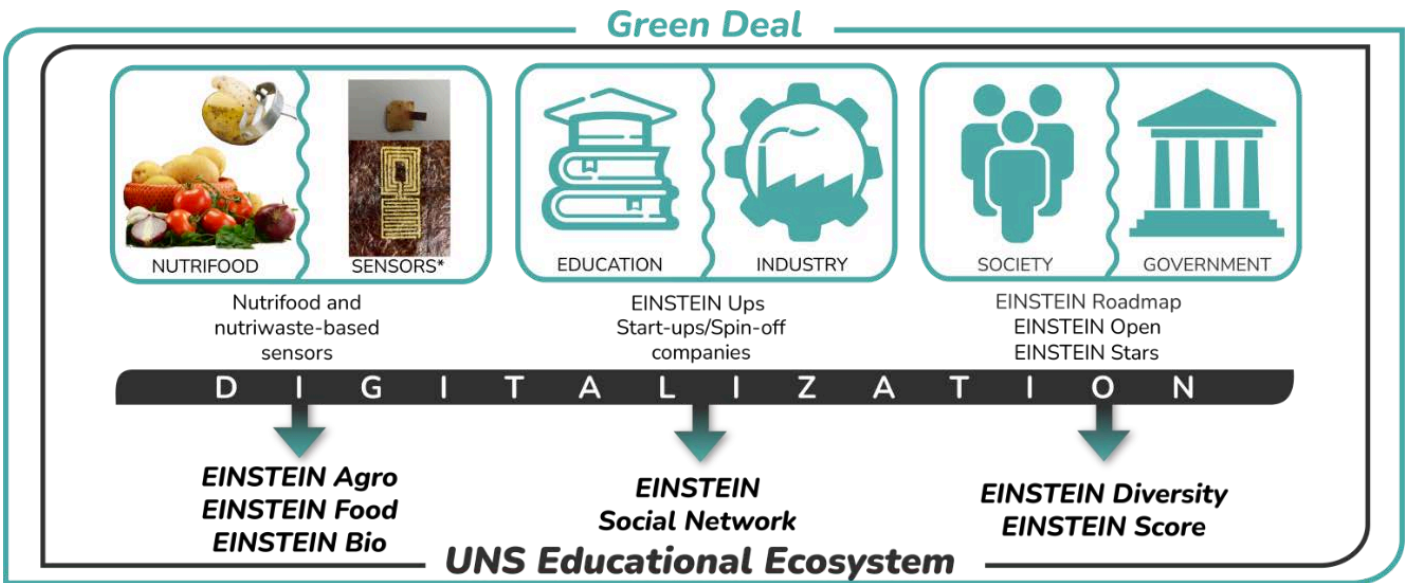
How will the project modernise research careers in the higher education sector and become interoperable with other sectors?

The project aims to modernize research careers by integrating green and digital technologies into educational programs, enabling researchers and students to develop skills that align with industry and societal needs. Through interdisciplinary collaboration in fields such as agriculture, medicine, and technology, the project fosters knowledge exchange and enhances career opportunities within and beyond academia. By creating stronger links with industry and non-academic sectors, EINSTEIN ensures that research careers become more dynamic, competitive, and adaptable to the evolving European R&I landscape.

How will the project raise excellence in science and in value creation, and ensure inclusive cooperation in alliances of higher education institutions?

The project enhances excellence by providing opportunities for international research collaboration, mobility programs, and capacity-building activities. By fostering partnerships with top European institutions, it strengthens research management capacities, bridges the knowledge and innovation gap, and supports the rapid implementation of advanced research methodologies. The initiative promotes inclusivity by enabling balanced talent circulation across Serbia, Austria, the Netherlands, and Denmark, ensuring that all participants benefit from enhanced research capabilities and career development prospects.

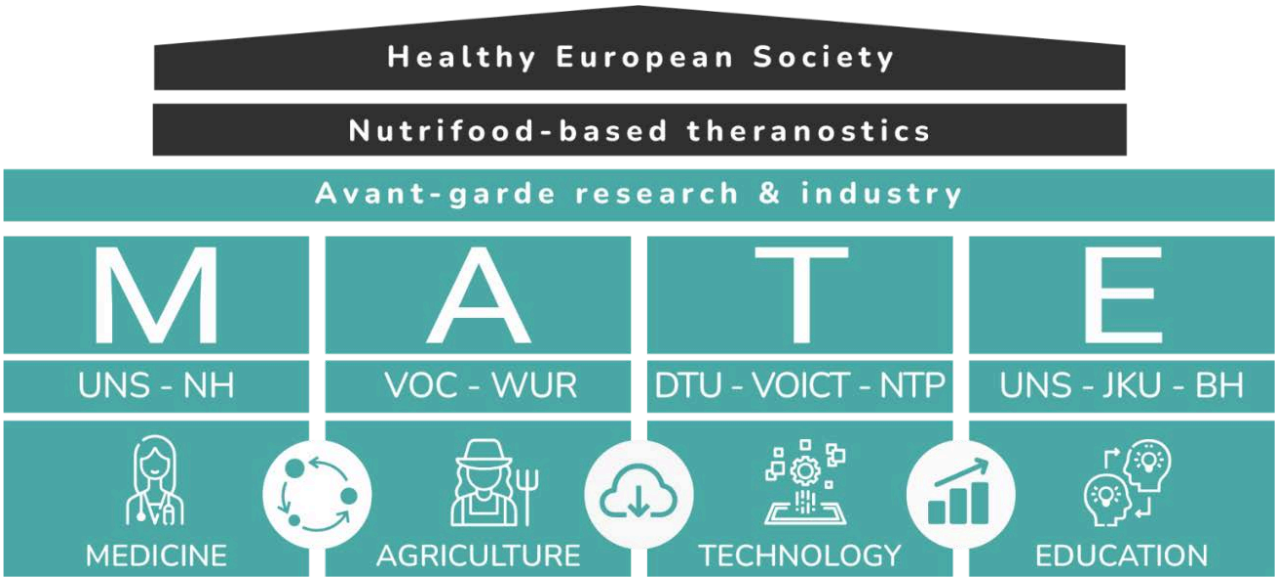
How will the project accelerate the digital transition of the R&I dimension of the higher education sector?



§UNS will contribute to regional development, improving innovation through research, promoting business growth by contributing to human capital development and improving social equality.
EINSTEIN results will contribute to the impact regarding successful institutional reform and upgrade of Higher education institutions in the R&I dimension, through integrated collaboration between institutions and with other actors in local ecosystems. UNS will create an environment for generating ideas

Does the project include training in knowledge valorisation, entrepreneurship and access to finance?

Yes, the project includes comprehensive training programs focusing on knowledge valorization, intellectual property rights, and commercialization strategies.
Entrepreneurship training will be supported through workshops, start-up boot camps, and networking events designed to equip researchers with the necessary skills to trans-



and inventions and establishing a knowledge-based economy by commercializing innovations through spin-off and start-up companies.
The EINSTEIN project will transform education and the whole academic sector in several steps:

1. **Identifying potential for excellent research avenues in each scientific field at UNS**, following the EINSTEIN project example where medicine, agriculture, technology, and education (MATE) will jointly approach to develop innovative green devices for the healthcare industry
2. **Creating a critical mass of leaders** by upskilling and reskilling of researchers, professors and other academic and non-academic staff who will be able to see beyond science and openly collaborate with industry and other multi-stakeholders;
3. **Changing the procedures and regulations for promoting scientists and professors**, which will give priority to the number of projects, innovations, cooperation with industry, open science, and academic leadership as competent criteria for promotion in the higher title.

transform their innovations into market-ready solutions. Access to finance will be addressed through targeted sessions on funding opportunities and financial management for research-driven enterprises.

How does the project aim to strengthen cooperation with economic and industrial partners within local and regional innovation ecosystems, academic researchers and support staff?

The project establishes structured mechanisms for knowledge transfer, ensuring that research outputs are effectively utilized by industry and other stakeholders. By fostering partnerships with key industrial players, innovation clusters, and technology parks, EINSTEIN facilitates the commercialization of research, enhances industry-academia collaboration, and supports regional economic development. Dedicated networking events, training programs, and industry-academia matchmaking activities will ensure that cooperation remains strong and impactful.

How does the project implement the Euro-

-pean Research Area policy objectives?

The EINSTEIN will directly contribute to the implementation of ERA Action no. 13: "Empower higher education institutions to develop in line with the ERA, and in synergy with the European Education area", because the project will step up Responsible Research and Innovation to a new level of intensity and will bring European dimension of excellence in the project field through the cooperation with universities in the project. Moreover, the project will boost UNS's position as a center of the local innovation ecosystem, intensively collaborating with non-academic organisations included in the consortium with the science and technology park, clusters and NGO. Cooperation with EU leaders and ecosystem-relevant actors will enable a holistic approach - covering all missions of the UNS and supporting institutional transformation and mainstreaming a culture of excellence in research and business creation.
§ Additionally, the project will contribute to ERA Action No. 16: "Improve EU-wide access to excellence", enabling access to the excellence of involved staff from Serbia thanks to the secondments to the leaders in EU - universities in the consortium. The EINSTEIN will create an environment for sharing infrastructure and equipment for the transparent collection and processing of data on research assessment practices.

Have you prepared for and implemented a long-term joint R&I strategy?

By transforming the Education Ecosystem that will be done by generating the EINSTEIN Roadmap for creating an innovative education ecosystem, improving links between science and business, accelerating innovation process-oriented twin green and digital transitions, sizing multidisciplinarity for nurturing a culture of excellence and co-creation, creating inventory of genetic resources of micronutrient-rich plant species and testing a working collection of nutri-crops in an eco-friendly multi-crop cultivation technology system.

How do you think the project will impact the economy of the region/country?

The project will significantly contribute to the economic development of Serbia and the wider Western Balkans region by fostering institutional reform, strengthening research and innovation capabilities, and enhancing knowledge transfer between academia and industry.
By supporting the organic production of high-value crops and the development of nutrifood-based sensors with theranostic applications, EINSTEIN will create new opportunities for the biotechnology, agritech, and healthcare industries. Additionally, the promotion of start-ups and spin-offs emerging from research activities will generate high-skilled jobs and strengthen the regional innovation ecosystem, positioning Serbia as a key player in the European knowledge-based economy.

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

Although still in its early stages, the project has already begun fostering new competencies and skills through interdisciplinary collaboration and planned capacity-building activities. EINSTEIN will introduce Industrial PhD opportunities, skill-development programs, and targeted study visits for researchers, ensuring that they acquire expertise in advanced research methodologies, entrepreneurship, and innovation management. The project's open competition for study visits will further support knowledge exchange within the consortium, while the creation of the EINSTEIN social network platform will facilitate connections between Serbian scientists and European innovators, expanding their professional opportunities.

Have you foreseen strengthened linkages between science and business?

Yes. An office for Internationalization and networking with EU research & business networks will be established at the University of Novi Sad. A far-reaching goal of the project is to transform the University of Novi Sad, to contribute to regional development, promote business growth by contributing to regional human capital development, and improve social equity through regeneration and cultural development. The establishment of the alliance with top-class universities from Austria, the Netherlands, and Denmark with the Science and Technology Park and Industry Clusters will be a key momentum for achieving this long-term strategic direction.

Have you been successful in creating synergies with other EU programmes?

Not yet, as the project is still in its early implementation phase

What would be your recommendations from this experience to increase the impact of other projects?

- Assessment of research quality and impact, and researchers' performance, is fundamental to selecting research proposals for funding, to decide which researchers to recruit, promote or reward, and to identify which research units and institutions to support. To establish and to create guidelines for reforming the Responsible Research and Innovation assessment system.
- Develop and adapt the project Roadmap and include all participants from the Quadruple Helix as well as key players from the Public–Private partnership, develop an Exploitation plan that will require a collaborative approach during the lifetime of the project and beyond.
- Establish internal communication, strengthen the potential of all project partners, and properly communicate the achieved results to the wider audiences and target groups.

Did you use the services provided by the National Contact Points in your country?

No, we did not use the concrete services of the National Contact Points for this project, but we are sometimes in communication with our NCPs.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

In general, National Contact Points can provide valuable support in terms of proposal guidance, partner searches, and understanding specific funding requirements, which could be beneficial for institutions seeking to strengthen their participation in EU-funded initiatives.

What additional information, support or assistance would you like to be made available nationally?

A stronger national-level dissemination strategy is needed to raise awareness about European excellence initiatives and their societal impact. More structured support in promoting successful projects, highlighting scientific achievements, and accelerating the transfer of research results to industry would be beneficial. Additionally, enhanced visibility of innovations emerging from universities and research institutes, as well as faster integration of research-driven solutions into industrial applications, could further strengthen Serbia's participation in the European Research and Innovation landscape.

Contact

EINSTEIN

Web:

https://einsteineuproject.com/

INITIATE

SUPPORTING EUROPEAN R&I THROUGH STAKEHOLDER COLLABORATION AND INSTITUTIONAL REFORM

CALL: HORIZON-WIDERA-2023-ACCESS-03 | START: FEBRUARY 2024 | DURATION: 42 MONTHS | WEBSITE: HTTPS://INITIATEPROJECT.EU/

Which motives drove your decision to participate in the European Excellence Initiative call?

Our decision to participate in the European Excellence Initiative call was driven by our commitment to strengthening research and innovation (R&I) capacities in widening countries and fostering collaboration between higher education institutions, industry, and policymakers. We saw this as a unique opportunity to bridge gaps in R&I excellence not only in Croatia, but also in Europe, and to empower institutions in less-established research regions by providing them with tools, training, and networks to enhance their competitiveness. For this, we proposed three pilot cases – in Zagreb, Lisbon and Skopje – in INITIATE project, that will implement three institutional reforms to stimulate R&I growth. Later, these solutions will be replicated to six other institutions. Additionally, the call aligned perfectly with our goal of supporting the green energy transition and digitalization, ensuring that knowledge and innovation contribute to sustainable societal and eco-

-nomic development.

·How important is international collaboration? Is it one of the main goals of your institution and projects?

International collaboration is central to the mission of the Faculty of Mechanical Engineering and Naval Architecture at the University of Zagreb (UNIZAG FSB). Our institution actively engages in various international partnerships to enhance research quality, increase global visibility, and foster academic excellence. As for our Department of Energy, Power and Environmental Engineering at UNIZAG FSB, we are currently collaborating on many European projects and coordinating two of them – INITIATE and EMERGE.

What were the main success factors of your proposal? Which are the secrets to your success?

I think that the success of our proposal can be attributed to several key factors. First, our consortium brought together a well-balanced mix of experienced partners, including universities, research centers, industry representatives, and policy advisors, ensuring a holistic and impactful approach. Second, the proposal was highly aligned with European priorities, particularly in fostering R&I excellence, sustainability, and cross-sector collaboration. And third, our emphasis on practical implementation, through demonstration projects, pilots sites and replicator sites, R&I Labs, and the Knowledge Hub, made our approach both realistic and scalable which is the key of defining best use-cases that could have longterm usefulness.
The "secret" to our success was a combination of strong collaboration, clear strategic vision, and meticulous proposal preparation. We engaged stakeholders early, ensuring our objectives addressed real needs. We also emphasized long-term impact, sustainability, and the potential for replication beyond our pilot regions. Finally, a well-structured, compelling proposal with clear objectives, measurable outcomes, and a solid dissemination plan helped us stand out in a competitive funding landscape.

How did you propose to achieve institutional reform and an upgrade of the higher education institution?

Marko Mimica

Project cordinator

The goal is to reform and upgrade FSB and the University of Zagreb by modernizing the curriculum to meet industry needs, focusing on emerging fields like digitalization and renewable energy. Faculty development will enhance teaching and research. The university will improve digital tools, e-learning, and administrative systems. International collaboration, student exchanges, and industry partnerships will boost global competitiveness. Sustainability will be integrated into education and practices, preparing graduates to address global challenges.

How did you find the other partners? Who initiated the process?

The process of forming the INITIATE consortium was a combination of existing professional networks and targeted outreach. The project was initially conceptualized by a core group of institutions that recognized the need for strengthening research and innovation capabilities in widening countries. From there, we identified key partners who could bring complementary expertise, whether in policy development, stakeholder engagement, or technical research. Some partners were long-standing collaborators, while others were brought in based on their experience with similar projects and their potential to contribute to INITIATE's goals.

• How well did the consortia partners know each other in advance?

The level of familiarity among partners varied. Some institutions had collaborated in previous EU-funded projects, which helped establish a foundation of trust and shared understanding. Others were newer to the group but had strong reputations in their respective fields, making it easy to align interests and expertise. The diversity of backgrounds actually enriched the project, as it brought fresh perspectives and innovative approaches to the table.

Did you work well together during the proposal writing process?

Yes, despite the usual challenges that come with writing a complex, multi-partner proposal, the collaboration was smooth and productive. Each partner brought valuable input, and there was a strong sense of shared commitment to the project's vision. Clear communication and well-structured coordination helped streamline the process, ensuring that everyone's expertise was reflected in the proposal. While time constraints and differing perspectives occasionally required adjustments, the overall experience was positive, setting a strong foundation for the project's implementation phase.

What lessons can be derived from the experience of preparing the financial part of this proposal?

One key lesson from preparing the financial part of this proposal is the importance of detailed planning and coordination among partners to ensure that budget allocations align with project needs and objectives. Clearly defining cost categories and justifying expenses in line with Horizon Europe guidelines was crucial in ensuring a smooth approval process. Additionally, early discussions on financial management, reporting requirements, and potential risks helped establish a solid foundation for project execution. Another takeaway is that while the EU funding covers a wide range of activities, understanding national co-funding opportunities and potential regulatory barriers in different countries can help in better financial planning for future projects. INITIATE project is a Lump sum project which means that the planning of the budget was a bit more complicated in the proposal preparation phase, but the administrative burden in the implementation of the project is significantly reduced so we definitely support Lump sum as it allows us to focus more on research.

> **INITIATE focuses on strengthening the connection between academia, industry and policymakers**

Does the project provide a strong engagement of your organisation as a whole or is it one department that is involved?

The project involves strong engagement from the Faculty of Mechanical Engineering and Naval Architecture (UNIZAG FSB) as a whole, rather than just a single department. Various departments and experts collaborate to ensure comprehensive participation and contribution to the project's success. However, most of the project work for INITIATE is done withing the research group of professor

Krajačić.

How will the project modernise research careers in the higher education sector and become interoperable with other sectors?

The INITIATE project aims to modernize research careers in the higher education sector by fostering a dynamic institutional transformation centered on research and innovation (R&I) and scientific excellence. It addresses key challenges such as security in research careers, policy inconsistencies and a lack of connection between business and research. The project supports institutional reforms, co-design activities, and stakeholder engagement through R&I Labs, ensuring that higher education institutions (HEIs) become more competitive and attractive to researchers.
To achieve interoperability with other sectors, INITIATE focuses on strengthening the connection between academia, industry and policymakers. This is done by facilitating collaboration with businesses, supporting joint projects and integrating regional actors into the R&I process. The project also promotes interdisciplinary approaches by engaging diverse stakeholders and forming alliances for the green energy transition.

How will the project raise excellence in science and in value creation, and ensure inclusive cooperation in alliances of higher education institutions?

This will be done by fostering a culture of scientific excellence among higher education institutions, particularly in less research-intensive countries. It will be achieved through the consolidation of geographically inclusive alliances, ensuring long-term collaboration. The project will implement joint activities such as knowledge exchanges and study visits, webinars and MOOCs, joint scientific publications and new project proposals. Additionally, the INITIATE Knowledge Hub and supporting tools will help policymakers and decision-makers have “everything in one place” to design sustainable strategies and policies.
To ensure inclusive cooperation in alliances of higher education institutions, INITIATE will promote institutional transformation that balances the diverse goals, interests and needs of experts and research institutions.

This will be done through collaborative activities involving universities, alliances, and local ecosystems, particularly in Widening countries. The project will also establish an Alliance for promoting green and digital community initiatives, encouraging policies to strengthen research and innovation in green energy transition.

How will the project accelerate the digital transition of the R&I dimension of the higher education sector?

The INITIATE project will accelerate the digital transition of the research and innovation (R&I) dimension in the higher education sector by developing a comprehensive ICT Toolkit that supports stakeholders in collaboration and knowledge creation, with a strong focus on sustainable energy transition and digitalization. This will include a user-friendly web-based tool and an investment advisor with educational modules on clean energy, enabling broad stakeholder participation. The INITIATE Knowledge Hub will serve as an online forum for knowledge sharing and stakeholder engagement, fostering collaboration between universities, industry, and policymakers. To enhance digital competencies, the project will provide online training resources, including interactive MOOCs and webinars, ensuring that researchers and institutions gain the necessary skills for digital transformation. Additionally, a series of co-creation workshops and hackathons will encourage innovative solutions and interdisciplinary cooperation, further integrating digital tools into R&I activities and promoting interoperability with other sectors.

Does the project include training in knowledge valorisation, entrepreneurship and access to finance?

Yes, the INITIATE project includes training in knowledge valorisation, entrepreneurship, and access to finance. As I already mentioned, it features an online accelerator that integrates training and knowledge-sharing content, such as webinars, interactive videos, MOOCs, and tools tailored to different backgrounds and user needs. This platform will connect learners with trainers to ensure personalized learning experiences. Additionally, the project includes a Knowledge Exchange Programme that fosters information exchange between uni-

universities, startups, researchers, and other stakeholders
The programme also features study visits and a fellowship programme to enhance research and innovation capacities through mobility opportunities. Furthermore, a web-based investment advisor will provide educational content on clean energy investments, helping participants understand financial opportunities related to the green transition.

How does the project aim to strengthen cooperation with economic and industrial partners within local and regional innovation ecosystems, academic researchers and support staff?

The INITIATE project strengthens cooperation with economic and industrial partners by fostering ties between academia and business through co-design activities, collaborative actions, and knowledge circulation. It engages SMEs, startups, and industry representatives via participatory workshops and Research & Innovation Labs, integrating universities into regional innovation ecosystems. The project also promotes institutional transformation by forming new alliances, particularly stakeholder and university alliances, and encouraging interdisciplinary collaboration, ensuring structured cooperation that drives regional economic growth and enhances research and innovation competitiveness.

How does the project implement the European Research Area policy objectives?

The INITIATE project supports the European Research Area (ERA) policy objectives by promoting open knowledge sharing, talent circulation and institutional transformation. It enhances research career pathways, fosters academia-industry collaboration and advances the green and digital transition through R&I Labs and policy recommendations. By engaging stakeholders and developing digital tools like the INITIATE Knowledge Hub, the project strengthens European research networks and innovation ecosystems.

Have you prepared for and implemented a long-term joint R&I strategy?

We have developed a long-term joint R&I strategy aimed at strengthening research and innovation capacities, particularly in widening countries. This strategy focuses on collabora-
-tion between higher education institutions, industry, and policymakers to create sustainable and impactful research ecosystems.
Key elements include the establishment of R&I Labs, the development of a Knowledge Hub for continuous learning, and policy recommendations to support institutional reforms. Our goal is to ensure that these efforts extend beyond the project's duration, creating something to last and contributing to the broader European research and innovation landscape.

How do you think the project will impact the economy of the region/country?

The INITIATE project will positively impact the regional and national economy by fostering a highly skilled workforce aligned with industry needs, particularly in emerging sectors like digitalization and renewable energy. By strengthening research, innovation, and industry partnerships, the project will drive technological advancements, improve competitiveness, and create new business opportunities. Additionally, the focus on sustainability will contribute to green technologies, which can lead to more sustainable economic growth and attract investment. Overall, the project will enhance the university's role as a key driver of economic development and innovation.

Has the project contributed to new competencies and skills for researchers, entrepreneurs and professionals in R&I?

Absolutely. INITIATE has played and will play a key role in enhancing the skills and competencies of researchers, entrepreneurs, and professionals by providing workshops, targeted training, interactive learning opportunities, and access to cutting-edge research and innovation (R&I) methodologies. Through the Knowledge Hub, participants will engage with lectures focused on the green energy transition and digitalization. Additionally, the establishment of R&I Labs has allowed researchers to discuss on practical, real-world challenges, fostering problem-solving skills and cross-sector collaboration. The project has also encouraged entrepreneurial thinking by equipping professionals with the tools to develop and implement sustainable solutions in their respective industries.

Have you foreseen strengthened linkages between science and business?

Yes, one of INITIATE's key objectives has been to bridge the gap between academia and industry. By supporting collaboration between higher education institutions, businesses, and policymakers, the project is facilitating knowledge exchange and practical applications of research. Industry partners and partner researchers will play an active role in shaping the project's training materials and research focus, ensuring that the competencies developed align with market needs. The demonstration projects in Croatia, Portugal, and North Macedonia will also provid a platform for businesses to engage with researchers in testing and implementing innovative solutions, further strengthening the connection between science and business.

·Have you been successful in creating synergies with other EU programmes?

Yes, INITIATE is actively searching for synergies with other EU-funded initiatives to maximize its impact and build upon existing knowledge. The project has aligned its efforts with Horizon Europe and other regional R&I strategies, ensuring that its objectives complement broader EU sustainability goals. By collaborating with other projects focused on energy transition, digitalization, and capacity building, INITIATE can benefit from shared expertise, joint events, and networking opportunities. These collaborations help amplify the project's results and extend its reach beyond its initial target regions.

What would be your recommendations from this experience to increase the impact of other projects?

Based on our experience, a few key recommendations stand out. First, ensuring strong stakeholder engagement from the beginning is crucial—bringing academia, industry, and policymakers together early on helps align goals and expectations. Second, practical application is key; projects should prioritize real-world demonstration and capacity-building activities to ensure their solutions are not just theoretical but also actionable. Third, communication and dissemination strategies should be robust, everaging digital tools and partnerships to maximize visibility and impact. Lastly, fostering synergies with other EU projects and initiatives can enhance knowledge sharing and create more sustainable, long-term outcomes. By focusing on these aspects, future projects can increase their effectiveness and long-term influence.

Did you use the services provided by the National Contact Points in your country?

For the INITIATE project specifically, we did not seek direct support from the National Contact Points (NCPs). However, we have worked with the Croatian NCP from AMPEU, on another EU-funded project, where their assistance proved to be very valuable.

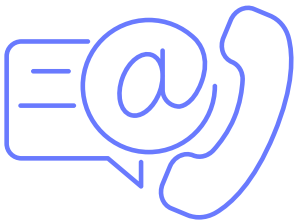
Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes, the services provided by NCPs can be highly beneficial for EU project participation. In our experience, AMPEU played a crucial role in supporting another project by highlighting its strengths during program committee discussions, which ultimately helped secure unding from the reserve list. Additionally, NCPs provide useful resources, such as information days on various Horizon Europe calls, helping organizations stay informed about funding opportunities and best practices for proposal writing. While we did not engage with them for INITIATE preparation, however we will involve them in later stages of the project when we have policy related tasks.

What additional information, support or assistance would you like to be made available nationally?

While the existing support from National Contact Points (NCPs) is valuable, there are a few areas where additional assistance could further benefit organizations applying for EU projects. One improvement could be more tailored, one-on-one mentoring for proposal development, especially for first-time applicants or smaller institutions that may lack experience with Horizon Europe. It would also be helpful to have more targeted matchmaking services to connect potential

project partners across different countries and sectors. Additionally, more detailed guidance on financial and administrative aspects of EU project management, particularly in the post-award phase, would be beneficial. Lastly, increased follow-up support for funded projects—such as helping with dissemination strategies, networking opportunities, and ensuring long-term sustainability—could maximize the impact of EU-funded initiatives. We are still working on the collaboration between the government, policy makes, universities and industry – that is definitely something that should see its improvement in the following periods. Besides supporting the applicants, I think role of NCPs is essential in raising Croatian reputation in Horizon Europe. As pointed out by Croatian members of EIC Jury Board, some recent studies showed that evaluators can favour proposals that are coming from non-widening countries which is a significant handicap for all applicants from widening countries. There are some statistics related to Croatia that are in line with this, for example bad statistics for ERC and EIC grants about Croatia participation. I think that NCPs are in good position to point this out and make an impact on different EU levels. As coordinators of Horizon Europe projects, we can help with this also by reaching out to out Project Officers and working together on providing equal opportunities for all.



Contact

INITIATE

Web:

https://initiateproject.eu/

EUTOPIA HEALTH

EMPOWERING WIDENING UNIVERSITIES IN THE EUTOPIA ALLIANCE AND FOSTERING ACADEMIC EXCELLENCE IN HEALTH

CALL: HORIZON-WIDERA-2023-ACCESS-03 | START: JANUARY 2024 | DURATION: 60 MONTHS | WEBSITE: HTTPS://HEALTH.EUTOPIA-UNIVERSITY.EU

Which motives drove your decision to participate in the European Excellence Initiative call?

The EUTOPIA Alliance is a network of like-minded universities committed to growing together and fostering excellence across Europe. Our decision to participate in the European Excellence Initiative call was not only a strategic opportunity for Babeș-Bolyai University to coordinate the project, but also a collective step forward for the Alliance. This shared vision inspired us to seize the opportunity presented by this call, as it aligns with our mission to address disparities in research capacity across Europe, specifically concerning widening countries. Since the EUTOPIA alliance has three-member universities that come from widening countries (Babeș-Bolyai University – Romania, University of Ljubljana – Slovenia, NOVA University of Lisbon – Portugal) we were uniquely positioned to take on this challenge, and nine out of ten-member universities decided to participate. This allows us to target specific support and capacity-building efforts, helping to address existing gaps in the absorption capacity of widening universities,

and also strengthen collaboration within the EUTOPIA_HEALTH consortium. The focus on Health was also well thought, as this research field was identified as being strategic in all three widening HEIs, and of great significance to the alliance, but also to the European Union.

How important is international collaboration? Is it one of the main goals of your institution and projects?

International collaboration is of significant importance to our institution. We recognize that the exchange of knowledge, expertise, and resources across borders is essential for addressing Health-related global challenges and advancing research and innovation. International collaboration is one of the main goals of both our institution and the projects we undertake, as it enables us to expand our research capacities, build strong global partnerships, and contribute to addressing pressing global issues through collaborative efforts. EUTOPIA alliance has a well-developed network of Global Partners and is actively concerned with responsible internationalization.

What were the main success factors of your proposal? Which are the secrets to your success?

A key factor in our success was a collective commitment of the EUTOPIA Alliance, whose members worked closely throughout the proposal phase to ensure a cohesive, shared vision. The main success factors of our proposal were a clear and well-defined objective, a strong alignment with the goals of the funding program and of the Commission's priorities, and the collaboration of a highly skilled and interdisciplinary team drawn from across the alliance. The 'secret' to our success lies thus in a combination of thorough planning, the strength of our partnerships within EUTOPIA, and our ability toidentify key capacity-building needsand propose impactful approaches to strengthen research and innovation capabilities across participating organisations that are also highly relevant for Europe.

How did you propose to achieve institutional reform and an upgrade of the higher education institution?

To achieve institutional reform and upgrade

Sergiu Miscoiu

Project coordinator

the higher education institution, we proposed modernizing R&I management strategies and policies across the three widening members of the consortium. This includes aligning research evaluation policies with the European research assessment reform (CoARA), enabling seamless transitions for early-career researchers, and fostering transdisciplinary collaborations through joint Health-related research groups. Additionally, we aim to enhance synergies in Health R&I agendas within the consortium and provide comprehensive training programs to strengthen the capacity of widening institutions to secure EU fundings.

How did you find the other partners? Who initiated the process?

All partners involved in the consortium are part of the EUTOPIA Alliance. The process was initiated by UBB, who took on therole of project coordinator, which then reached out to the partners from the other two widening universities, University of Ljubljana (Slovenia), and NOVA University of Lisbon (Portugal). Following this, most of the remaining EUTOPIA partners quickly recognized the value of the initiative and joined to ensure a collaborative and well-aligned effort across the alliance. Thus,out of ten member HEIs of the alliance nine decided to take up the challenge,

all widening members included.

How welldid the consortia partners know each other inadvance?

All beneficiaries are part of the EUTOPIA Alliance, a European University network that brings together ten universities from across Europe committed to fostering collaboration, innovation, and excellence in education, research, and societal impact. Through previous and ongoing joint initiatives such as EUTOPIA 2050, EUTOPIA MORE, EUTOPIA TRAIN, EUTOPIA SIF, Flecslab, EduLab and other projects, the partners have established strong working relationships and a solid foundation for collaboration.

Did you work well together during the proposal writing process?

The proposal was primarily drafted by the widening partners, with valuable contributions and feedback from all consortium members throughout the process. Each partner actively participated, ensuring that the proposal was comprehensive, well- rounded, and aligned with the objectives of the call. Overall, the collaboration was seamless, with each partner playing a role in shaping the proposal, resulting in a high-quality application. This process not only strengthened our working relationships but also demonstrated the collective commitment to the uccess of the project.

What lessons can be derived from the experience of preparing the financial part of this proposal?

The existing expertise within UBB, which had previously implemented applications based on lump-sum budgets, was a key component of co-creating a budget that is realistic and that answer the project's needs.
The main takeaway from this exercise was the crucial role of communication within the consortium and seeing the budget as another important puzzle piece in the fabric of a proposal, one that needs to be developed early on, so that it can mature with the proposal.

Does the project provide a strong engagement of your organisation as a whole or is it one department that isinvolved?

Given the comprehensive nature ofthe research field targeted, and the institutional dimension of the call, as well as the transdisciplinary approach used, the project provides a strong engagement of the institution as a whole, with the involvement of different Health-related domains (Biology, Clinical and Health Psychology, Chemistry, Environmental Sciences, Public Health, Health Economics, etc.).

How will the project modernise research careers in the higher education sector and become interoperable with other sectors?

The project tackles with the task of modernising research careers pathways in a dedicated Work Package, focused on enabling universities from the consortium to develop a new and innovative framework for the integrative academic management of different health-treated scientific areas. In WP2 (Frameworks for common transformation in Health), in alignment with the priorities of the European Research Assess-

-ment Reform, as put forward by the Coalition for Advancing Research Assessment (CoARA), which has been endorsed by all three Widening universities within EUTOPIA, the EUTOPIA_HEALTH Consortium will facilitate the establishment of joint, transdisciplinary research groups and enable seamless transitions across various sectors.

How will the project raise excellence in science and in value creation, and ensure inclusive cooperation in alliances of higher education institutions?

The project will raise excellence in science and value creation while ensuring inclusive cooperation in alliances of higher education institutions through a range of strategies. These include offering both short-term and long-term mobilities for researchers, facilitated via a dedicated mobility platform, which will encourage cross-institutional collaboration and knowledge exchange. To further support innovation and scientific advancement, seed funding will be provided to help foster new research initiatives. Together, these strategies will promote a culture of excellence, foster inter-/ trans- disciplinary cooperation, and enhance the impact of research across the participating institutions.

How willthe project accelerate the digital transition of the R&I dimension of the higher education sector?

Through the EUTOPIA_HEALTH project we develop the first EUTOPIA_Health Research map and a Researchers' Mobility Portal, two interactive digital tools that allow stronger collaboration between institutions and researchers and facilitate access to partners' infrastructure.

Does the project include training inknowledge valorisation, entrepreneurship and access to finance?

Yes, the project includes training in knowledge valorisation, entrepreneurship, and access to funding. Throughout the project, several training sessions are planned, and some have already been delivered. These training programs are designed to help early carreer researchers develop essential skills in grant writing, impact and science communication, and knowledge valorisation. Additionally, selected researchers will benefit from continuous supervision and support in the grant application process, with dedicated guidance provided by non-widening partners.

How does the project aim to strengthen cooperation with economic and industrial partners within local and regional innovation ecosystems, academic researchers and support staff?

The cooperation with economic and industrial partners is also taken into consideration. In one of the project's work package we aim to facilitate the establishment of innovation ecosystem in Health addressing health-related challenges and proposing solution through Citizen Science activities, as well as collaborations with industry partners in order to provide empirically based products and services.

How does the project implement the European Research Area policy objectives?

The EUTOPIA_HEALTH project actively supports the European Research Area (ERA) policy objectives by fostering attractive and sustainable research careers, encouraging ba-

alanced talent circulation, and promoting international and transdisciplinary mobility. It also contributes to creating a positive environment and a level playing field for international cooperation based on reciprocity. This is achieved through the provision of diverse international collaboration opportunities and by targeting researchers at all career stages, with a particular focus on supporting early-career researchers.

Have you prepared for and implemented a long-term joint R&I strategy?

The project aims to establish the basis for a joint R&I strategy in Health for the EUTOPIA_HEALTH Consortium.

How do you think the project will impact the economy of the region/country?

The project is expected to impact the economy of the widening regions by fostering innovation and enhancing collaboration between academia, industry, and other stakeholders. The activities that target the upskilling of researchers' potential (trainings, mobilities, seed funding) will not only improve their individual skills but also increase the overall research capacity within the region, positioning it for greater success in securing competitive international grants. By cultivating a more skilled workforce and fostering a vibrant innovation ecosystem, the project will contribute to sustainable economic growth and help to integrate the region into broader European research and innovation networks.

Has the project contributed to new competencies and skillsfor researchers, entrepreneurs and professionals in R&I?

Researchers, particularly those from the widening universities, are offered specialized training programs focusing on Impact and Science Communication, as well as Intellectual Property and Knowledge Valorisation. These initiatives are designed to strengthen their capacity to effectively communicate scientific findings to the public, promote engagement with citizens, and ensure the successful disclosure of innovations. In addition, these training sessions aim to foster collaborations with business partners, empowering researchers to translate their scientific work into tangible, real-world impact. Researchers will also develop entrepreneurial skills as they will have opportunities to be involved in "virtual enterprises". Furthermore, tailored mentorships provided by EUTOPIA_HEALTH Consortium experts will further enhance participants' abilities to address solution- and market-related challenges, offering valuable guidance to the most motivated teams with the best solutions. Looking ahead, we also plan to develop an online catalogue that will feature a comprehensive collection of courses and best practices. This resource will serve as a valuable tool for researchers, providing them with easy access to training materials, and strategies that can be applied across various Health-related fields. By consolidating knowledge and providing ongoing educational opportunities, we aim to further enhance the skills of researchers, facilitate greater knowledge transfer, and encourage the growth of innovation ecosystems that link academia with industry.

Have you foreseen strengthened linkages between science and business?

Yes, we have foreseen strengthened linkages between science and business through several initiatives. For instance, we plan to establish a Health Living Lab ecosystem, where representatives from academia, industry, and citizens will collaborate through online and on-site hackathons to develop solutions aimed at promoting health and well-being.

Furthermore, through events such as EUTOPIA_Health Day and Science Cafés, which are organized annually, we aim to create valuable opportunities for researchers to engagedirectly with the business sector and policymakers. These events will serve as platforms for fostering dialogue, facilitating knowledge exchange, and promoting collaboration between academia, industry, and citizens. By encouraging these interactions, we aim to bridge the gap between scientific research and its real-world applications, ensuring that research outcomes lead to impactful solutions and policies that address critical societal challenges in health and beyond.

What would be your recommendations from this experience to increase the impact of other projects?

Based on our experience, we would recommend focusing on the following key areas to increase the impact of other projects:

- **Collaboration and Partnerships:** Building strong, interdisciplinary partnerships both within and outside the academic community is crucial. Engaging with industry stakeholders and international partners can enhance the relevance and reach of the project.
- **Clear Objectives and Measurable Outcomes:** Defining clear goals and measurable outcomes from theoutset ensures that progress can be tracked, and the impact can be assessed effectively.
- **Effective Communication and Outreach**: Establishing robust communication channels to share results with both academic and non-academic audiences is key to maximizing impact. Outreach acti-

-vities should target policymakers, in-industry leaders, and the broader public to ensure the relevance of the project's findings.

Did you use the services provided by the National Contact Points in your country? Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects? What additional information, support or assistance would you like to be made available nationally?

Specifically for this project we did not request services from the National Contact Points (NCPs).

However, we recognize the importance of their support and expertise, which can be highly beneficial for the success of EU projects.

Contact

EUTOPIA HEALTH

Web:

https://health.eutopia-university.eu/

Era Talents

This action aims to boost the interoperability of careers and employability of research and innovation talents across sectors, with a centre of gravity in widening countries. Focuses on cross-sectoral talent circulation and academia-business collaboration for knowledge transfer.

NESTOR

CROSS-SECTORIAL ALLIANCE AS THE KEY FOR INNOVA□ON-DRIVEN BUSINESS SUCCESS OF ESTONIAN AND GREEK REPRODUCTIVE HEALTHCARE

CALL: HORIZON-WIDERA-2022-TALENTS-03 | START: SEPTEMBER 2023 | DURATION: 36 MONTHS | WEBSITE: HTTPS://NESTORHORIZONEU.COM/

The NESTOR Consortium brings together Academic and Industry partners from Estonia, Greece and the Netherlands to lead research and innovation activities towards the development of personalized reproductive medicine solutions.
NESTOR is a cross-disciplinary ecosystem for the life-long training of researchers to help them carve their niche by pursuing ethical and responsible innovation in reproductive medicine.

Which motives drove your decision to participate in the ERA Talents call?

Constantly decreasing infertility rates and low success rates of in vitro fertilization (IVF) associated with the advanced age of couples create challenges in reproductive medicine. It is crucial to fill the existing gaps to unlock the socioeconomic benefits and boost the commercial viability of reproductive medicine in Europe. The gap in access to excellence is especially witnessed in Widening countries such as Greece and Estonia, where the academic sector is lagging behind, producing a low volume of commercialised innovations and low-quality clinical services. It poses obstacles in creating competitive positions for

highly talented specialists with career perspectives and a strong interest in boosting local reproductive medicine, stimulating the brain drain, and minimizing life-long learning opportunities.
The contribution of the NESTOR project to solving these challenges is aimed at improving the research and innovation performance of institutions involved in reproductive medicine by boosting the collaboration between industry and academia in Widening and non-Widening countries through cross-sectoral and international mobilities. The NESTOR consortium consists of 8 partners from academic and industry partners from the Netherlands, Greece, and Estonia, ensuring the knowledge transfer and advancement in four key reproductive medicine modalities for the reproductively aged population: personalised medicine solutions, IVF embryo and uterine health studies, and novel non-invasive prenatal testing technologies.
In total, NESTOR will engage 23 ERA Talents from the Widening Countries, boosting their research skills, nurturing their innovative and entrepreneurial mindset, and providing them with other transferable skills. The well-tailored secondment methodology is aimed at raising their research profiles, improving their career perspectives and opportunities for life-long learning, which will help reverse the brain drain in the long term.

How did you address the aim of increasing the number of R&I talents moving to the organisation?

After the secondments, the NESTOR ERA Talents will establish new research directions and the development of novel diagnostic tools, and multiple other projects ensuring the increased excellence of the research performing organisations. They will have a guaranteed senior level position at the sending institution after the secondments, thus increasing the researcher turnover as the previous roles will be filled through the recruitment of young researchers. Moreover, new skills enable to initiate the development of novel diagnostic tools, establish new research directions that will accelerate their career development even further and that later will be translated into impactful products and services that improve the standard of care and success rate of IVF, benefiting the partner organisations (academic – attract research funding; industry – establish new markets,

Andres Salumets

Project coordinator

gain profits), and patients in the long term. Thus, the direct impact on six research-performing organizations in the Widening Countries of Estonia and Greece will be: i) strengthened research excellence and technology transfer capacity of the institute and its staff in reproductive medicine; ii) establishment of strategic long-term partnerships enabling researchers and SRs mobility and exploring new research avenues; iii) increased volume of research grants, EU projects and industry service contracts; and iv) increased number of high-impact peer-reviewed articles.

How did you describe your aim for a more balanced geographical and cross-sectoral talent circulation?

Enhancing international and cross-sectoral collaboration, knowledge transfer and networking raises the scientific excellence of the institutions in reproductive medicine, providing them with a deeper understanding of reproductive health, reproductive ageing and the risk factors involved in infertility associated complications, while also increasing their technological innovation capacities. A more balanced talent circulation also improves the lifelong learning of the talents, providing institutions with more entrepreneurial and better-trained researchers, innovators and

How did you address the training and lifelong learning opportunities for researchers and innovators?

NESTOR will create life-long training eco-systems and talent training hubs, facilitating continuous upskilling in the institutions - mobilizing appointed personnel to positions of seniority or new R&I support positions while young researchers are recruited to fill the previous roles. Thus, the project will help research-performing organizations in the Widening Countries to stay at the forefront of the scientific and technological achievements in the field of reproductive medicine and increase the institutions' research excellence, attracting excellent talents and international researchers to the organisations.

Did you know the consortium partners in advance?

The research groups of the University of Tartu, Celvia and Maastricht University have worked together closely for years. A previous successful H2020 Widening project ERIN ended just in 2023. The ERA Talents call was an excellent opportunity to harness the immense benefit from the previous fruitful collaborations.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

At the University of Tartu, the project engages researchers from the institute of clinical medicine and the institute of genomics for the training of Greek industry talents.
How will the project exploit existing institutional resources in the pursuit of capacity building in your country?
NESTOR makes better use of the existing infrastructures in both the Widening and non-Widening countries to maximise project impacts. The project utilises i) the Estonian Biobank, as the flagship Estonian research infrastructure and a platform for conducting high-quality science, with a current cohort size of more than 200,000 individuals (20% of Estonia's adult population); ii) the core laboratories of UT: Genomics Core Facility for DNA/RNA NGS sequencing and Proteomics Core Facility for proteomic mass-spectrometry studies; iii) the fully equipped laboratory of Celvia with the supporting infrastructure for developing and offering liquid biopsy-based laboratory technologies, including the robotic processing of samples for extraction of the cffDNA, library preparation and the NGS analysis; iv) the extensive repository of samples for reproductive studies, including NIPT samples and endometrial biopsies, of UT and Celvia; v) the computing and storage IT facility (including algorithms) of Celvia.

How does the project work to increase access for private entities to public R&I institutions?

The NESTOR project represents a unique network of 4 academic and 4 non-academic organisations from 2 widening countries – Greece and Estonia, and a non-widening country – the Netherlands. Almost all secondments are intersectoral (from academia to industry and vice versa) and cross-country, which will boost the innovative, scientific capacity and entrepreneurial potential of Greek and Estonian institutions. Moreover, the industrial partners from Widening countries will be actively engaged in translation of R&I to industry practice.

How are you implementing the secondments?

The NESTOR project will engage to secondments ERA Talents from the academic and industry partners of the Widening Countries. Each Talent will visit the partner institutions for several training courses during the project. The courses last several months and are tailored to their skills and needs. Additionally, some joint workshops and conference presentations are planned for the Talents to disseminate the results.
Each researcher will have a mentor at the host institution, who supports with day-to-day questions, inducing introducing to the secondees with organisation's history, structure, and values, and introducing organisation policies, health & safety procedures, and country-specific regulations. To maximise the success of the secondment opportunity, a mentor will oversee arranging an initial meeting to establish the development goals and further evaluation process. The regular review periods will also be built into the secondment, to ensure that the secondee's performance is achieved against set objectives.
The secondments have been designed to integrate specific skills for each researcher to

advance their career, complemented by overall horizontal skills to boost entrepreneurship and industry-specific skills. Each secondment is complemented by the return phase at the sending institution, where the gained skills and expertise will be developed and future nurtured. Each researcher will complete a specific task upon their return that will expand over the return phase, with the aim to improve/develop novel research-heavy solutions (products/services) in the industry, while the academic researchers will establish need-based research directions based on the knowledge gained from the industry.

How does the project aim to strengthen the human capital base in R&I with more entrepreneurial and better trained researchers and innovators?

All academic ERA Talents from Estonia and Greece will be engaged in tailored secondments to gain entrepreneurial/transferrable skills at the industry partner Brightlands Maastricht Health Campus, in the Netherlands. This includes a total of 3 months of training covering entrepreneurial skills, intellectual property protection, funding and financing for trans-

-lational medical research, and IVDR application.

How do you think the project will impact the economy of the region/country?

Sharing the existing competencies, infrastructure, and excellence of the industry partners, will contribute to the upgrading and development of existing and new solutions, methods and innovations, that are more cost-efficient. This will facilitate commercialisation and will promote equity of access to advanced technologies and methodologies in reproductive healthcare. In parallel, the research, innovation and business capacities of the partners will form an effective training platform form talented trainees. Increase the speed of translation of innovative ART technologies developed by industrial partners, more profit, more high-skilled work positions. Impact on the whole reproductive healthcare system and healthcare expenditures by reducing the overall burden of infertility and shift reproductive care from reactive to predictive and preventative. Therefore, the unnecessary repetitive procedures (e.g., can be avoided through better and timely planned IVF procedures), bringing along also a marked economic gain.

Contact

NESTOR

Web:

https://nestorhorizoneu.com/

CLiCAM

CLICAM

CULTIVATING LEADERS FOR INNOVATIVE COATINGS AND ADDITIVE MANUFACTURING APPLICATIONS

CALL: HORIZON-WIDERA-2022-TALENTS-03 | START: SEPTEMBER 2023 | DURATION: 48 MONTHS | WEBSITE: HTTPS://CLICAM.EU/

Which motives drove your decision to participate in the ERA Talents call?

Our commitment to enhancing research and innovation capabilities at the FunGlass Centre motivated our decision to participate in the ERA Talent call. This initiative focuses on fostering secondments between academia and industry. Through similar long-term training programs with advanced academic partners, we have successfully established and maintained a skilled team comprising approximately 40 international researchers, technicians, and around 30 PhD students. Ho-

-wever, we faced challenges in attracting industrial partners from advanced EU member states to collaborate on joint proposals or contractual research.

The introduction of the ERA Talent call presents an opportunity to enhance international cross-sector collaboration and to develop enduring partnerships on targeted topics. This initiative enables us to explore new scientific collaborations while also serving as a platform for cultivating top-tier talent from the widening region, including Slovakia, the Czech Republic, and Poland.

The ERA Talent call allowed us and our con-

-sortium to "test the waters" and create a new network bridging the academic and industrial sectors.

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

From our perspective, science knows no borders; we firmly believe that scientific progress is only achievable through international cooperation. Our FunGlass Centre is fundamentally built on the principle of international collaboration. Currently, approx. 50% of our team comprises talented individuals from various countries around the globe. We have established strong relationships with partners in several EU nations, including Germany, Italy, and Spain and we are committed to further expanding our network.

How did you describe your aim for a more balanced geographical and cross-sectoral talent circulation?

In the CLiCAM project, our objective is to ensure that 90% of secondments are cross-regional and 100% are cross-sectoral. This approach allows researchers to gain valuable insights from the industrial perspective related to their research topics.

How did you address the training and lifelong learning opportunities for researchers and innovators?

The ERA Talents are hosted at the facilities of industrial partners, where they engage in training programs developed through collaboration between academic and industrial entities. Throughout their secondments, these talents receive mentorship from members of the industrial partners. The focus of this mentorship encompasses three key areas: scientific development, effective use of infrastructure, and the enhancement of transferable skills, such as entrepreneurial abilities and intellectual property rights. This collaborative relationship extends beyond the duration of the secondment, as ERA Talents and their mentors are encouraged to disseminate the skills and knowledge gained within their respective institutions. Additionally, ERA Talents are motivated to apply their expertise by pursuing patents, utility models, and co-

Monika Šandrejová

Project coordinator

-llaborating on joint projects with their industrial partners.

What were the main success factors of your proposal? Which are the secrets to your success?

We believe it is the storyline that goes through the proposal. This story is focused on cultivating our researchers to become leaders in innovation by leveraging their experiences and connections with leading industrial players across the EU. Through this initiative, the ERA Talents gain exposure to a non-academic perspective, which is intended to shift their approach to their research topics, to change their mindset. Establishing new connections with industry not only benefits the ERA Talents but also their institutions, as it paves the way for new collaborative opportunities that would not be feasible without the involvement in the ERA Talent call. Additionally, we have committed to providing substantial incentives in exchange for financial resources. Our Key Performance Indicators (KPIs) are ambitious, and if we successfully meet them, the advantages will extend beyond the consortium to society, resulting in innovative solutions in coatings and additive manufacturing that lead to greener, more cost-effective, and more efficient products.

Who initiated the process of applying to the ERA Talents call?

The process was initiated by our FunGlass Centre (European project office).

Did you know the consortium partners in advance?

We did not cooperate with most of the consortium partners before the CLiCAM project. In most cases, we met at some conferences. As mentioned at the beginning, the ERA Talent call allowed all partners to "test the water". It was a unique opportunity to broaden our network and start building new collaborations.

Did you work well together during the proposal writing process?

Consortium members were very flexible during the proposal writing process. The academic partners were mainly responsible for preparing the proposal and the industrial partners were encouraged to comment/correct on the proposal.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

We don't need additional funding for the project so far. However, additional funding will be needed to further develop the most promising results and collaborations beyond the project's scope.

Did your government support you?

Some calls in Horizon Europe are supported through the Recovery plan calls, but not the CLiCAM project (ERA Talent). For the CLiCAM project we have not received any direct support from the government. Nevertheless, it should be noted that, as part of a public university, we benefit from institutional funding provided through performance-linked subsidies.

What lessons can be derived from the experience of preparing the financial part of this proposal?

The rules for allocating the budget resources among consortium members were established at the very beginning. Thus, when building the consortium, we presented and agreed on the rules and allowances that would determine budget distribution once the proposal was finalized. Transparency and fairness were crucial. The budget reflected the amount of work assigned to each beneficiary.

Does the project provide a strong engagement of your research organization as a whole or is it one department?

At FunGlass Centre the project provides a strong engagement of the FunGlass Centre as a whole (more departments are involved). The other partners' involvement is mainly at the department level.

How does the project work to increase access for private entities to public R&I institutions?

We are trying to create a kind of Virtual test bed ecosystem that will allow access of the private sector to public R&I institutions and transparent and fair conditions. The national rules of the involved partners will be considered when the virtual test bed ecosys-

-tems are launched.

How are you implementing the secondments?

We are implementing the secondments as a training stay at partners. The researchers from academia are sent to be trained as the industrial partner premises.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

We are preparing an Innovation Leadership Programme available for the ERA Talents and other innovators to be trained on-site on transferrable skills such as IPR rights, entrepreneurial skills, project preparation, etc. The programme ensures further development of the skills of researchers and innovators through highly intensive workshops and lectures that are going to be held regularly during duration of the project.

How does the project aim to strengthen the human capital base in R&I with more entrepreneurial and better trained researchers and innovators?

We are preparing a highly intensive training programme for the researchers and innovators under the Innovation Leadership Programme that should lead to strengthening of the human capital base in R&I with emphasis also on the entrepreneurial skills.

How do you think the project will impact the economy of the region/country?

The ERA Talents project has the potential to enhance the economy of the regions in Slovakia, Czechia, and Poland. By introducing innovative research methods and developing new patents or utility models, the project can pave the way for the production of value-added products. This is in line with the objectives of the Green Deal and will ultimately contribute to sustainable economic growth in the area.

Has the project contributed to the enhancement of the capacity of the researchers to successfully participate in future research activities at EU level?

The project has significantly enhanced the researchers' ability to engage effectively in research activities at the EU level. The ERA Talents are encouraged to propose collaborative cross-sectoral projects that will further advance innovative research ideas. In the first year of the project's implementation, three cross-sectoral and cross-regional projects were submitted some of them in collaboration with several partners from the CLiCAM consortium. One of these projects secured funding through the EIC Pathfinder, while another received a favourable evaluation and is set to be resubmitted next year. The third project is currently under evaluation. The CLiCAM training and the newly established connections between industrial and academic partners are already yielding positive outcomes.

Did you use the services provided by the National Contact Points in your country?

We utilize the services of the National Contact Point (NCP) in Slovakia, particularly during the

initial stages of our calls. We actively participate in the workshops organized by the NCP to gather as much information as possible. Since this is the inaugural opening of the ERA Talent call, we encountered several uncertainties, primarily concerning the eligibility of costs. We have conveyed our unanswered questions, which were not addressed in the call's FAQ, through the NCP, who subsequently forwarded our inquiries to the call's authors.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

The services offered by the National Contact Points (NCPs) are advantageous as they facilitate discussions regarding the new call conditions. Additionally, the workshops organized by the NCPs provide valuable networking opportunities, allowing participants to connect with others interested in submitting proposals, thereby fostering potential future collaborations.

Contact

CLICAM

Web:

https://clicam.eu/

TBRAINBOOST

ERA TALENTS FOR BOOSTING AND BALANCING BRAIN CIRCULATION

CALL: HORIZON-WIDERA-2022-TALENTS-03 | START: SEPTEMBER 2023 | DURATION: 48 MONTHS | WEBSITE: HTTPS://WWW.TBRAINBOOST.SI/

Which motives drove your decision to participate in the ERA Talents call?

The call offered a natural progression from the Twinning action, targeting widening countries. It presented an opportunity to collaborate with institutions with higher R&I indices.

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

Extremely important. It is central to our institution's goals and projects.

How did you address the aim of increasing the number of R&I talents moving to the organisation?

We offered an engaging topic, opportunities to break away from routine, chances to build new partnerships, and aimed to raise monthly salaries.

How did you describe your aim for a more balanced geographical and cross-sectoral talent circulation?

By closely collaborating with academic and in-

-dustry partners from the same region, and involving startups from universities that are now project partners.

How did you address the training and lifelong learning opportunities for researchers and innovators?

We developed a detailed secondment strategy covering preparatory phases, execution, and reintegration.

What were the main success factors of your proposal? Which are the secrets to your success?

The ability to transfer best practices from higher R&I countries, with the goal of establishing new entities in our academic institutions and encouraging researchers to start their own startups.

Who initiated the process of applying to the ERA Talents call?

I did, as the PI of TBrainBoost.

Did you know the consortium partners in advance?

Not all of them.

Did you work well together during the proposal writing process?

Yes, although one partner from Sweden dropped out two weeks before submission due to administrative issues.

Did you need additional funding for your project? If yes, was it easy to find additional funding?

Yes, as we are only fully funded during the secondment period. The rest is covered by other grants.

Did your government support you?

Not directly.

What lessons can be derived from the experience of preparing the financial part of this proposal?

Since it was the first call, we had extensive exchanges with the project officer. Future ite-

Tanja Vertelj

Project coordinator

-rations should be smoother.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

Initially, it was primarily my department, but now multiple others, including project offices and transfer of knowledge officers, are involved.

How will the project exploit existing institutional resources in the pursuit of capacity building in your country?

We obtained three other projects that will support staff. An academia-industry contact point office will also be established.

How does the project work to increase access for private entities to public R&I institutions?

Through a mix of secondments and educational events, which facilitate knowledge exchange.

How are you implementing the secondments?

Following our secondment strategy, talents write short proposals which are evaluated by

the TBrainBoost board. After selection, they create detailed plans, hold meetings with hosts, and report back at set milestones.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you explain how you have arranged the activities?

Yes, we hold workshops, summer schools, and ERA weeks. We prioritize onsite participation but also offer hybrid events for broader access.

How does the project aim to strengthen the human capital base in R&I with more entrepreneurial and better-trained researchers and innovators?

Talents in secondment explore how to translate their research into products, boosting their entrepreneurial potential. We are still working on facilitating secondments from industry to academia.

How do you think the project will impact the economy of the region/country?

It will likely result in multiple startups, contributing added value. The network formed by talents will foster collaboration with businesses and the innovation sector.

Has the project contributed to the enhancement of the capacity of the researchers to successfully participate in future research activities at the EU level?

Yes, we've submitted three grants with similar groups. One was not funded, and two are still in evaluation.

What would be your recommendations from this experience to increase the impact of other projects?

Focus on minimizing differences in national legislation affecting secondments. Organizations should identify opportunities in advance and increase budgets for experienced innovation managers.

Did you use the services provided by the National Contact Points in your country?

Yes, they were helpful, though they lacked some details due to the novelty of the call. Now I was called to support the others- such activities are very helpful when you are writing such proposal.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Definitely.

What additional information, support, or assistance would you like to be made available nationally?

These projects should align with the national strategy. The institutions should have priority to do this and find academic staff to be included and give the content. I see that in Germany and Belgium it already works like this.

Contact

TBRAINBOOST

Web:

https://www.tbrainboost.si/

Hop On

It allows research institutions from Widening countries to join already ongoing R&I actions under Horizon Europe Pillar 2 and EIC Pathfinder.

CATART
PROJECT

CATART PROJECT

REACTION ROBOT WITH INTIMATE PHOTOCATALYTIC AND SEPARATION FUNCTIONS IN A 3-D NETWORK DRIVEN BY ARTIFICIAL INTELLIGENCE

CALL: HORIZON-WIDERA-2022-ACCESS-07 | THE INITIAL CATART PROJECT IS AN EU-FUNDED PROJECT UNDER THE CALL HORIZON-EIC-2021-PATHFINDEROPEN-01 (GA 101046836) | DURATION: 48 MONTHS | WEBSITE: HTTPS://CATARTPROJECT.EU/

How important is international collaboration in science? Is it one of the main goals of your institution and projects?

International collaboration is one of the main goals in our institution, as we believe that it is very important in science since it allows expanding the research outcomes to a broader audience (among others).

What were the main success factors of your proposal? Which are the secrets to your success?

Although the project has not finished yet, the consortium meets regularly to address the different issues that are arising and how we can overcome them. We believe that this practice is one of the main factors that will help us to succeed in the achievement of the expected outcomes.

Who initiated the process of your institution accessing the on-going project?

The European Project Officers at our institution, together with the principal inves-

-tigators.

How well did you know the consortia partners and how well did they know each other in advance?

We already knew the other partners in the Consortium (and they already knew us) for having worked on similar projects.

Did you work well together during the proposal writing process?

Yes, we wrote the proposal together to describe the research we will all conduct.

Did you need additional funding for your project? If yes, was it easy to find additional funding for the project?

To date, we do not need additional funding for our project.

Did your government support you?

Yes, our institution can assist us in the administrative tasks, if needed.

What lessons can be derived from the experience of preparing the financial part of this proposal?

We believe that transparency and the organization of all costs are two mandatory factors to prepare the financial reports smoothly.

Does the project provide a strong engagement of your research organisation as a whole or is it one department?

CATART project provides a strong engagement in our research organisation as a whole, as the scientific activities demand interdisciplinary actions to achieve the results.

How will the project exploit existing institutional resources in the pursuit of capacity building in your country?

To date, the main exploitable result is the creation of patents to protect the technology we will develop in CATART project.

Does the project include training activities on-site to improve the effectiveness, usefulness, productivity, etc.? Can you ex-

Iker Aguirrezabal Telleria

Project coordinator

-plain how you have arranged the activities?

To date, no training activities to improve the effectiveness, usefulness and/or productivity have been organized within the consortium.

Does the project aim to strengthen links between research, academia and industry?

Yes, the project aims to strengthen links between research, academia and industry through several events and conferences in which the academia and industry attend and show their capabilities on their research field.

How do you think the project will impact the economy of the region/country?

In CATART project, we aim to develop a reaction robot driven by Artificial Intelligence to produce products with relevant interest in the chemical market. This reaction robot will be supplied bysolar energy in order to produce photocatalytic reactions. Thus, it will boost chemical manufacturing options in EU and remote sites, often discarded due to lack of grids. In addition, it will empower individual users to produce chemicals / medicines on demand.

Has the project contributed to the enhancement of the capacity of the resear-

-chers to successfully participate in future research activities at EU level?

To date, CATART project is contributing to the enhancement of the capacity of the researchers to successfully participate in future research activities atEU level, as some young researchers are becoming experts in photocatalysis while they are pursuing their PhD in CATART project.

Could you explain the ambition of this project? Are you aiming at continued collaboration with the consortia and explore other calls in the EU Framework Programme for Research and Innovation?

Yes, the consortium is open to apply for further calls to continue developing the technology created in CATART.

What would be your recommendations from this experience to increase the impact of other projects?

1. Analyse the state of artof the current technologies to produce/manufacture chemicals.
2. Detect the limitations in their capabilities and think on possible actions on how we can expand them.

Did you usethe services provided bythe National Contact Points in your country?

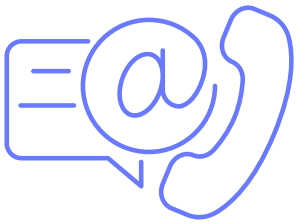
Yes, we have already contacted the National Contact Points to know if some costs were eligible to be paid through the project.

Are the services provided by the National Contact Points (NCPs) beneficial for your participation in EU projects?

Yes, as they can assist us in some administrative tasks, if needed.

What additional information, support or assistance would you like to be made available nationally?

To date, we do not need to request any additional information, support or assistance.

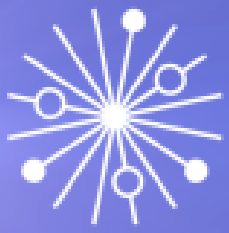


Contact

CATAR PROJECT

Web:

https://catartproject.eu/



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