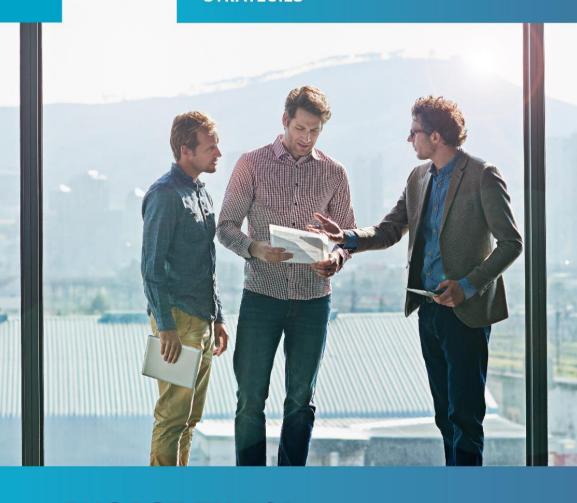


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6

SECOND FOREU2 REPORT ON PROGRESS MADE
IN THE IMPLEMENTATION OF R&I LONG-TERM
STRATEGIES



**ENGAGE.EU R&I** 

The European University Engaged in Societal Change

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# SECOND FOREU2 REPORT ON ROGRESS MADE IN THE IMPLEMENTATION OF R&I LONG-TERM STRATEGIES

PROJECTS FUNDED UNDER HORIZON 2020 IBA-SwafS-SUPPORT-2-2020 CALL



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### **EXECUTIVE SUMMARY**

This joint deliverable aims at putting forward good practices on progress made in the implementation of R&I long-term strategies within pilot II Alliances via case studies provided by 20 H2020 SwafS projects awarded to European University Alliances. The case studies present different types of strategies and activities implemented in order to foster the development of the R&I dimension within Alliances.

The deliverable focuses first on the context and participant Alliances to this joint report. Case studies are then presented within three distinct topical categories: one concerns political strategies, another includes operational features, and the last topic deals with various other relevant good practices. Finally, the last section presents the key elements and lessons-learned from the case studies included in this deliverable.



# STEPS TOWARDS THE IMPLEMENTATION OF ALLIANCES' R&I LONG-TERM STRATEGIES

The 24 Alliances of European Universities, funded with the 2020 Erasmus+ Pilot Call and part of the second Forum of European Universities (FOREU2), agreed to write two joint reports within the framework of their H2020 SwafS projects. The first report focused on "practices and measures taken/to be taken to ensure the mainstreaming of the gender dimension in R&I long-term strategies" and was released in September 2023. This second report has the objective to showcase "progress made in the implementation of R&I long-term strategies, in particular via the identification and removal of legal/financial/regulatory barrier(s)". Three specific topics have thus been identified to fulfil this objective:

- 1. Topic: "Common R&I Strategies to Remove Legal/Financial/Regulatory Barriers"
- 2. Topic: "Platforms And/or Services for Researchers"
- 3. Topic: "Other Relevant Good Practices"

With these three topics, the aim is to cover a large spectrum of activities conducted within Alliances to highlight the progress made.

This particular report is included in the work plan of 18 Alliances' SwafS projects, which are the following:

- Aurora/Aurora RI
- Circle U./Circle U. ERIA
- EC2U/RI4C2
- EELISA/EELISA innoCORE
- ENGAGE.EU/ENGAGE.EU R-I
- ENHANCE/ENHANCERIA
- ENLIGHT/ENLIGHT RISE
- ERUA/Re:ERUA
- EUNICE/REUNICE
- EURECA-PRO/RE-EURECA-PRO
- EUT+/EUt EXTRAS
- FilmEU/FilmEU RIT
- NeurotechEU/NeurotechRI
- RUN-EU/RUN-EU PLUS
- Transform4Europe/T4ERI
- Ulysseus/COMPASS
- UNITA/Re-UNITA
- UNIVERSEH/Beyond UNIVERSEH

Two other Pilot II Alliances have also contributed to this report on a voluntary basis, even though it was not included in their work plan: UNIC/UNIC4ER and EuroTeQ/BoostEuroTeQ.

Each Alliance was able to contribute to one or more topics, depending on the good practices they wished to put forward. The main takeaways from the case studies are then presented in the last section.



1.

COMMON R&I
STRATEGIES
TO REMOVE
LEGAL/FINANCIAL/
REGULATORY BARRIERS

## 1.1 EC2U/RI4C2 – Developing a Common R&I Strategy

#### **SUMMARY**

The RI4C2 project aims at accompanying the members of the EC2U Alliance in a process that will lead to a true transformation of their R&I strategy. The aim is to enrich the existing individual R&I strategies with all the results and tools of the RI4C2 project and make the joint EC2U R&I agenda a reality. Another objective is to study the feasibility of developing a network of shared R&I platforms both from governance and financial viewpoints, establishing a list of potential obstacles (regulatory, financial, political, etc.). The objective of the project has been met via the creation of a joint R&I agenda which translated into the establishment of new Virtual Institutes and with the design of recommendations on shared R&I platforms.

#### **DESCRIPTION**

#### Context

To transform the R&I strategy of the EC2U Alliance, a participatory process was developed. It involved gathering data and interviewing key stakeholders and decision-makers in order to build consensus. For instance, in the case of the joint R&I agenda, this process involved Vice-Rectors for Research and Innovation, Research Managers and Support Officers, with the objective of drafting a cohesive EC2U R&I agenda.

#### Objectives

 Create a Unified R&I Strategy: Achieve agreement on a collective and impactful R&I strategy that harmonises with current

- capabilities and that facilitates cooperation between the EC2U partner universities.
- Broaden R&I Initiatives in EC2U: Enhance R&I
  efforts within the EC2U Alliance by
  introducing innovative entities like Virtual
  Institutes focused on targeted applications
  linked to chosen Sustainable Development
  Goals (SDGs) and foster joint research
  projects via the sharing of R&I platforms.

#### **Implementation**

- Identify the R&I structure and the regulations regarding R&I platforms at each university through a mapping exercise.
   Conduct interviews with Vice-Rectors for Research and/or Heads of Research Offices as well as with platform managers.
- 2. Determine the priorities of each university community, as well as potential barriers.
- Recommend the creation of joint structures based on the finding of previous phases.
   These structures will consolidate previously disparate R&I strategies into unified entities, fostering a pan-European approach to R&I.

#### Successes

- Establishment of four new EC2U Virtual
   Institutes (in addition to 3 Virtual Institutes
   created under the pilot E+ project) and
   development of a framework to support and
   identify priority research groups within
   existing Virtual Institutes.
- Identification of a digital tool to develop a shared R&I platform network: OpenIRIS.

#### Challenges

Differences are noticeable in how universities manage their structure, organise research groups, and carry out research projects. These variations are shaped by local organisational cultures and pose challenges in finding common ground and building connections within the Alliance.

#### Conclusions

Merging the Agenda and Action Plan into one document streamlined the Alliance's strategy for collaborative research and innovation endeavours. Concrete agreements were reached on interdisciplinary themes for establishing (new) Virtual Institutes, and there was a commitment to incorporating skilled researchers, including senior management with limited prior involvement. Additionally, there is a firm dedication to securing funding for future Virtual Institute activities.

Regarding a potential shared R&I platforms network, the main findings led to outlining some short and long-term recommendations for setting up such an Alliance network.

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#### **REFERENCES**

D1.5 – Shared R&I platforms (confidential)

#### D2.1 Survey on R&I needs

D2.2 Mapping R&I Capacities of the EC2U Alliance (confidential)

#### D2.3 EC2U R&I Agenda

D2.4 Identification of priority research groups inside the existing VIs (confidential)



## 1.2 EELISA – Protocol for the Nomination of EELISA Industrial Chairs

#### **SUMMARY**

An Industrial Chair is a prestigious academic position or agreement that involves a close partnership between a university or research institution and an industry or a consortium of industrial partners. The primary objective of an Industrial Chair is to foster collaboration, knowledge exchange, and innovation between academia and industry. EELISA partners agreed on a joint protocol for the nomination of EELISA Industrial Chairs in September 2023.

#### **DESCRIPTION**

#### Context and objectives

EELISA Industrial Chairs can facilitate hands-on collaboration between academia and industry, involving multiple partner institutes to harness their collective expertise and resources for the advancement of research and innovation. To harness this potential, EELISA partners agreed on a joint protocol that is being piloted.

#### **Implementation**

The protocol was subject of intense negotiations among EELISA strategic contacts and finally approved in September 2023. The protocol is part of D6.3.

#### Successes

The 1<sup>st</sup> call for EELISA industrial chairs opened until 19 November 2023 and ACRI (Advisory Council on Research and Innovation) endorsed the nomination of the 1st EELISA Industrial Chair in December 2023: Prof. Adrián Horváth, industrial professor at the Department of Structural Engineering at BME (Budapest University of Technology and Economics).

#### Challenges

- Fitting together different concepts. The ultimate goal being the same, i.e., to foster collaboration with industry, EELISA partners implement the concept of industrial chairs in different ways. Therefore, in its protocol, EELISA is using two types of schemes for the industrial chair: an individual acting as industrial chair (model used by partners such as BME) or an agreement between the university and a company (model used by partners such as FAU, ENPC or UPM).
- Piloting the scheme. The actual implementation of the concept will bring to the surface new challenges and possible flaws of the protocol.
- Monitoring. Chairs have a term of several years to meet their objectives. This clashes with the short-term nature of the InnoCORE project. For now, it was decided that the monitoring of the EELISA Chairs would be subject to the EELISA 2.0 governing structure.

#### **Conclusions**

The kick-start and implementation of the actions planned as part of the first EELISA Industrial Chair will be crucial for testing, future adaptation and improvement of the protocol.

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#### **REFERENCES**

https://eelisa.eu/eelisa-searches-for-an-industrial-chair/

https://eelisa.eu/academy-industry-collaboration/

D6.3 Recommendations for novel structures for governance: academic and industrial participation.



# 1.3 RE-EURECA-PRO – Joint Research Structures Utilization Strategy

#### **SUMMARY**

The objective of the Joint Research Structures Utilization Strategy (developed within WP7 of RE-EURECA-PRO) is to identify and map research potential as well as legal and regulatory hampering factors for joint research activities at individual university and state level.

#### **DESCRIPTION**

#### **Context and Objectives**

Research is one of the most important pillars of every university's mission. One of the main goals of RE-EURECA-PRO is to support research-related actions of the EURECA-PRO European University by depicting best practices facilitating joint research.

#### **Implementation**

The work on a Joint Research Structures
Utilization Strategy included an analysis of the structural and organisational configuration of each partner institution and the development of governance maps related to research administration. Available research funding sources, programmes by national grant agencies, university funds and national funding sources dedicated to enhancing cooperation with industry were also investigated. Research funding sources available for RE-EURECA-PRO partners were analysed at state and EU levels.

#### Successes

All alliance members were provided with a comprehensive summary of results in an internal

report. Thereafter, legal issues that may limit the sharing of individual university research actions and equipment were analysed and good practice examples addressing the enhancement of research quality through dedicated administrative, regulatory, IT and other solutions were collected. Moreover, a mapping of the research equipment and key laboratories in the priority research areas of the alliance was carried out. Finally, a model for the facilitation of joint research structures was derived from the analysis and presented to the alliance to spark a discussion of model implementation within the governance structures of each EURECA-PRO partner institution.

#### Challenges

An ongoing challenge is how to harmonise different regulatory structures and administrative procedures relating to research activities in the individual partner universities. RE-EURECA-PRO's role is to propose solutions and recommendations for joint research structure utilization to the executive board of EURECA-PRO.

#### **Conclusions**

The first draft of the Strategy was presented to external experts for evaluation and a completed model for the utilization of joint research structures was proposed to the consortium in the form of an internal report. The model proposes ways of tapping into the existing governance structures of partner universities to prepare pilot

tests of joint research actions. The model proposal is composed of three elements: a management structure of joint units, a description of research administration procedures, and infrastructure sharing guidelines which, at this stage, are confidential as per grant agreement definitions.

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#### **REFERENCES**

RE-EURECA-PRO website - Description of WP7 outcomes:

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- <a href="https://www.eurecapro.eu/research-funding-sources/">https://www.eurecapro.eu/research-funding-sources/</a>
- https://www.eurecapro.eu/legal-issues-andgood-practices/
- <a href="https://www.eurecapro.eu/standards-and-international-state-of-the-art-report/">https://www.eurecapro.eu/standards-and-international-state-of-the-art-report/</a>



# 1.4 Transform4Europe – T4ERI Fundraising Strategy for International Doctoral Research Networks

#### **SUMMARY**

A well-designed fundraising strategy can play a significant role in removing financial barriers to long-term collaboration beyond the initial project funding. The T4ERI Fundraising Strategy for International Doctoral Research Networks aims to provide a funding pathway to train highly skilled doctorate candidates. It consists of a preliminary survey, the identification of applicable financial sources and an action plan for the implementation of fundraising activities. The strategy diversifies sources, thereby reducing dependency on the continuous funding by the EC, which also provides stability should one of the identified sources diminish or disappear. It also has the potential to form the basis for developing further sustainability strategies, aimed at maintaining and further enhancing the activities initiated by the alliance.

#### **DESCRIPTION**

#### Context

The strategy was developed by the T4ERI experts at the University of Silesia in Katowice in the frame of the Work Package *The Best Careers for the Brightest Minds*. It contributes to the overarching objective of recruiting and retaining the brightest early-career researchers at the T4EU universities by developing a targeted joint strategy to promote young talent.

The fundraising strategy aims to identify financial support needed to establish *International* 

Doctoral Research Networks within the T4EU alliance. The network endeavours to deliver doctoral programmes in partnership with organisations representing different business sectors in Europe and beyond, to train highly qualified young researchers, stimulate their creativity, enhance their ability to think innovatively and strengthen their long-term employability. Two types of doctoral programmes are particularly promoted: The Professional Doctorates are designed to train doctoral students who wish to take their first step outside academia into industry or business. The doctoral studies are jointly supervised by academic and non-academic partners. The Joint Doctorate is a form of doctoral training based on international, cross-sectoral, and interdisciplinary cooperation. The doctoral studies are conducted according to a common programme and are jointly supervised by the participating institutions.

#### **Objectives**

The strategy not only provides a comprehensive guide for universities to develop and execute successful fundraising to train highly skilled doctoral candidates but is firstly intended to draw attention to the necessity of these International Doctoral Research Networks. Its goal is to set out a funding pathway that is flexible, diversified, and reliable, depicting advantages and disadvantages of the potential funding sources (public and private) and identifying the one(s) aligning best with the scope of the network. The strategy provides

recommendations for a six-month fundraising campaign to raise sufficient financial support for two doctoral students per university to participate in the programme.

#### **Implementation**

In preparation for the creation of the strategy, the authors have conducted a survey among the T4ERI partners to see which institutions already had their own internal fundraising strategies, which national public and private funding programmes could align with the objectives of the network, and if the partner universities offer professional doctorate programmes or whether they have joint doctoral programmes. The results were not only crucial to the development of the strategy, but also led to a greater understanding between the partner universities, particularly regarding the existence of internal fundraising strategies. As the alliance aims to align their strategic views, and in the long term create a joint sustainability strategy, such preliminary exercises are crucial and will be carried out throughout the life of the Transform4Europe initiative to further create common ground.

Based on the results of the survey, the T4ERI experts have designed a fundraising campaign that will be implemented under the supervision of a task force at each university according to the timeline set out in the strategy. The main objective is first to raise funds in the amount determined for the sponsorship of the two doctoral students per university as well as additional funds to finance accompanying marketing and advertising activities and a promotional event for potential scholars. To this end, the task force will have to communicate with external stakeholders to incentivise cooperation and thus build promising relationships with

potential donors, from both the public and private sector. However, it must be noted that the preliminary survey depicts the sources available at the time of the enquiry, which must be checked again by each university at the stage of implementation to ensure that it is up to date. Secondly, sponsorship agreements need to be signed, followed by the establishment of a fund tracking scheme for monitoring purposes and the selection of the future beneficiaries.

Due to the simultaneous nature of the many pilot activities, the action plan could not yet be realised by the T4ERI partner universities. However, implementation can begin at any time, as the schedule of the plan can be easily adapted to the needs of the universities.

Fundraising is not just about securing donations; it's also about building relationships with supporters and stakeholders. Long-term collaboration often requires ongoing engagement with these parties, fostering trust, and demonstrating impact over time. At the same time, joint project applications also strengthen internal cohesion and the desire to continue research together with long-standing partners. Through joint fundraising, the Transform4Europe partners have not only been able to contribute to increased research cooperation, but also to support their universities' internationalisation strategies and strengthen interpersonal relationships. The authors of the underlying document have succeeded in creating a blueprint for fundraising strategies for other alliance purposes. Thus, it will be further developed and adapted to current political and economic trends in the framework of the second phase of the Transform4Europe initiative. To this end, the authors will closely collaborate with the newly established T4EU Joint Grants Office, ensuring

that the R&I dimension of the T4EU alliance will continuously grow and align with the overall strategic view for the alliance, not only when it comes to securing the *Joint Doctoral Research Networks* but also other relevant cooperation that should last beyond the contractually agreed funding period.

#### Challenges

Identifying appropriate funding sources is not only time-consuming but can be quite disillusioning in today's competitive 'funding climate'. The availability and amount of public funds is often dependent on current political and economic developments, such as the war in Ukraine, global inflation, or costly climate adaptions. At the same time, cooperation between academia and business partners that could act as sponsors, is often still not very profitable.

However, a successful fundraising strategy should be adaptable to changing circumstances and flexible to accommodate the diverse needs and priorities of project partners. The further development of fundraising strategies in the T4EU alliance will aim to ensure such adaptability and allow partners to respond effectively to evolving financial challenges and opportunities.

Additionally, consideration is being given to opening some of the offers and services created within the alliance to external stakeholders on a fee-for-service basis, which could contribute to greater independence in the financing of activities in the future.

#### **Conclusions**

Overall, a well-executed fundraising strategy can mitigate financial barriers by ensuring consistent support, fostering collaboration and trust among partners, and building the capacity needed to sustain long-term cooperation within a European University Alliance. The *T4ERI Fundraising Strategy for International Doctoral Research Networks* has the potential to serve as a basis for sustaining these ambitious endeavours.

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#### **REFERENCES**

The strategy can be downloaded from our website.



# 1.5 Ulysseus – A Blueprint for Research Innovation and Global Partnerships

#### **SUMMARY**

Over three years, Ulysseus's COMPASS project aimed to establish a strategic vision for excellence in research and innovation, bridging European research and education areas. Set to conclude in May 2024, it has fostered an action plan for Ulysseus' transformation in research and innovation. Adopting an Innovation Ecosystem, the alliance expanded from six to eight hubs, demonstrating its commitment to enhancing cross-sector dialogue and knowledge transfer. COMPASS has also been instrumental in organising events that promote collaboration and focus on research and innovation, consolidating Ulysseus as a leader in driving change and fostering collaboration within the ecosystem.

#### **DESCRIPTION**

Ulysseus has developed a Research & Innovation Action Plan to enhance its strategic positioning in research and innovation. This comprehensive plan, structured around a detailed analysis of each initial partner, incorporates findings from a SWOT analysis and proposes seven strategic objectives with corresponding recommendations. It also considers potential funding sources and monitoring indicators, emphasising a design thinking approach to include diverse actors and perspectives. This initiative is part of the larger COMPASS project, aimed at identifying challenges and areas for convergence within the alliance.

The primary goal of the Action Plan is to establish a solid foundation for Ulysseus to build upon, aiming for excellence in research and innovation. Key objectives include fostering equality, diversity, gender mainstreaming, ethics, public engagement, and science education. The plan seeks to enhance knowledge transfer, facilitate collaboration, and align Ulysseus's activities with significant R&I funding programmes, ensuring a gender-balanced and inclusive research environment.

Implementation involved the creation of visual guides and the conduct of an internal survey to assess the capacities and interests at the researcher and entrepreneur levels. This led to the establishment of the R&I Capacities and Synergies Database, hosted on the Ulysseus Digital Platform, to streamline the process of forming expert pools for various academic and research activities. Furthermore, the development of the R&I Gender Agenda and a New Trends Report aimed to address the gender dimension in research and prepare the alliance for future challenges.

The action plan's development has led to several successes, including the identification of strategic areas for international cooperation and the establishment of a strategic partnership with the University of Danang in Vietnam. The approach has significantly contributed to spreading best practices across the alliance, enhancing the research and innovation ecosystem, and

establishing a proactive stance towards addressing future challenges.

Navigating the turbulent, unpredictable, uncertain, novel, and ambiguous (TUNA) conditions of today's global research and innovation landscape presents significant challenges. The alliance faces the task of continuously adapting its strategies to these evolving conditions while maintaining coherence among its diverse partners and objectives.

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COMPASS Research & Innovation Gender Agenda
- Ulysseus

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### 1.6 UNITA – High-Level Political and Strategic Dialogue

#### **SUMMARY**

A reinforced dialogue process has been set up within the UNITA Alliance's Re-UNITA (SwafS) project, made up of the vice-rectors dedicated to research. Their commitment towards UNITA common R&I strategy, and their close monitoring of strategical issues, has led to reduce and remove institutional barriers. Monthly meetings are key tools to discuss the implementation of UNITA R&I strategy, and to effectively work on common strategies and agreements.

#### **DESCRIPTION**

#### Context

In the Re-UNITA project, a board of Research vicerectors has been created in September 2021, meeting monthly. From April 2023, this board has been opened to new UNITA partners, now composed of 12 universities.

#### **Objectives**

This board, and their common work, aims to design the R&I UNITA strategy and follow its implementation, through the current UNITA constellation projects, and with the objective of applying for other common R&I projects.

#### **Implementation**

Vice-rectors for research launched several works and priorities, dedicated to the following subjects:

- Sharing research infrastructures network
- Creation of a UNITA Doctoral School network

Reinforcing to R&I hubs to build future
 European R&I institutes

#### Successes

- Agreement on shared infrastructures network signed by the UNITA rectors
- Roadmap to build European R&I Institutes
- Common framework on UNITA PhD co-tutelles (49 funded up to now)
- UNITA MSCA-COFUND project funded and launched: CHORAL
- Common Roadmap towards HRS4R

#### Challenges

Our R&I landscapes and environments can differ from one university to another. Our first work to tackle this challenge has been to obtain clear information on how our universities are organised.

Another challenge has been to find a common path from our local and national strategies towards a common UNITA R&I strategy. This roadmap was possible thanks to the mapping of our funding environment and the close dialogue.

#### Conclusions

Implementing common strategies and practices for research in UNITA requires high-level dialogue and political agreement.

The early, continuous and intense involvement of political leaders dedicated to research in our universities has helped to implement genuine political agreements, and to promote the broad involvement of the research community in the activities of the UNITA Alliance.

#### **CONTACT POINT**

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#### **REFERENCES**

https://www.research.univ-unita.eu/en/about-us/re-unita-project.html



# 2.

# PLATFORMS AND/OR SERVICES FOR RESEARCHERS

# 2.1 Aurora RI – Interactive Research Resources Map and MoU

#### **SUMMARY**

The Aurora research resources map aims to map relevant resources for research and, when possible, make them accessible to other members. Critical infrastructure (e.g., large or specialised equipment) with a high degree of specialisation is present within the consortium and making this accessible to the project partners can generate mutual benefits. A sub-page for the Aurora website was developed with the following content online:

- Interactive map, locating relevant research resources within the consortium;
- Information on the memorandum of understanding (MoU) between the Aurora RI partners to better facilitate sharing of the mapped research resources;
- Templates for researchers and universities to support them in developing separate written agreements for sharing research resources;
- Information on other strategically relevant resources of the consortium.

#### **DESCRIPTION**

#### Context

The Aurora RI project develops closer research and innovation support structures to complement the excellent research, innovation and education activities within the Aurora universities.

#### Objectives

Aurora RI WP3 aims to drive sharing of research resources between Aurora RI partners.

#### **Implementation**

To achieve this, we:

- gathered information on existing research resources (data, expertise, networks, and infrastructure) at each partner;
- established a common basis on how to share these research resources that were gathered;
   and
- created a MoU on sharing research resources within Aurora RI.

Thanks to prior work in the Aurora Alliance, we were able to use an already programmed interactive map to present the collected information and to implement the data gathered earlier on the relevant research resources. The interactive map offers an overview of the different research resources within the Aurora universities for which the MoU apply. Researchers can look for specific types of research resources, can search through the database via keywords and names, and filter by research area or university.

With the signing of the MoU, a web-based registration form (see this weblink) was published. This form allows us to keep the information provided actual, practicable, usable, effective, and meaningful. Any researcher or user who fill out the registration form confirm that they can share, have the capacity to share, would like to share, and believe that sharing this resource could drive collaboration within Aurora RI and confirm that they agree with the MoU (see here).

#### Successes

As of 13.03.2024, 196 research resources for which the MoU applies were published on the map. Via regular reminders the number of published research resources should be expanded.

#### Challenges

The development of the interactive map did not pose any major problems. Only the model of the data to be processed had to be well coordinated with all universities.

The creation of the MoU was more complicated as all partners in Aurora RI had to sign it, even though not all partners are part of the EU. This was tackled by planning a lot of time for the preparation and negotiation of the MoU and involving legal experts from the universities from the very beginning.

#### Conclusions

The Research Resources website was designed, developed, and completed to date during the existing project. Ongoing maintenance is provided for the duration of the Aurora RI project, but also beyond through the provisions in the MoU. A broad and repeated dissemination of the website and its possibilities of use is taking place, so that especially early career researchers learn about it and at best come to joint collaborations via this tool.

In summary, the MoU is not legally binding regarding individual research collaboration, which is important so that the freedom of research and the partners is not hindered. This MoU provides incentives for researchers to collaborate more within the Aurora Alliance, either through financial incentives, easier access, or easier setup of separate written agreements if needed.

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Registration form: <a href="https://aurora-universities.eu/research-resources-registration/">https://aurora-universities.eu/research-resources-registration/</a>

Info on MoU and templates: <a href="https://aurora-universities.eu/research-resources/mou/">https://aurora-universities.eu/research-resources/mou/</a>

News item on signing of MoU: <a href="https://aurora-universities.eu/auroras-mou-on-sharing-infrastructure-and-resources-for-research-collaboration/">https://aurora-universities.eu/auroras-mou-on-sharing-infrastructure-and-resources-for-research-collaboration/</a>

## 2.2 Circle U. ERIA Sandpits

#### **SUMMARY**

Interdisciplinary and transdisciplinary research is at the core of the Circle U. ERIA project. Thus, the Work Package (WP) 2 "Fostering interdisciplinarity to co-construct solutions with other sectors" has focused on promoting this goal by supporting and encouraging researchers to adopt these perspectives. In this context, the Circle U. Sandpits offer a truly unique opportunity to gather both junior and senior researchers, as well as PhD and post-doctorate students, from Circle U. partner universities, along with stakeholders beyond academia. The goal of the Circle U. Sandpits is to encourage the emergence of transdisciplinary and interdisciplinary projects through sharing and collective brainstorming under the guidance of professional facilitators trained in Sandpits' methodology. Designed to foster research and serve as a starting point for new collaborations within the Circle U. alliance, the Sandpits have been held annually since 2022.

#### **DESCRIPTION**

#### Context

The Circle U. European Alliance brings together nine research-intensive, multidisciplinary and international universities with the aim of creating a European university ecosystem that trains engaged citizens, promotes quality and excellence in teaching and research, and is open to society.

Interdisciplinary and transdisciplinary research depends on networking and collective approaches to problem-oriented research. This requires new enabling tools to bring stakeholders

together and foster a co-creation mind-set. The Circle U. Sandpits offer an innovative tool to foster interdisciplinarity and to connect internal and external stakeholders.

While preparing the Sandpits, the Circle U. ERIA WP2 leads thoroughly discussed the options for facilitation. Given the nature of the Sandpits concept, which originated in the United Kingdom in the early 2000s, it was decided to search for native English-speaking facilitators with a long-standing experience. Sandpit facilitators from the Horizons Institute at the University of Leeds were chosen, in part due to the institute's dedication to the promotion of interdisciplinary research both on a national and international level.

#### **Objectives**

The aim of the Sandpits is to bring together twenty-one participants (junior and senior researchers and PhD students from at least three Circle U. universities) and stakeholders outside academia, including Circle U. associated partners. They are always organised into two sessions.

The first session is specifically designed to gather internal and external stakeholders in a residential workshop in order to break down barriers between disciplines, encourage respect for other disciplines, and explore ways that disciplines can truly integrate with each other. This approach supports the emergence of interdisciplinary projects, and it can be either entirely open (to allow all ideas to emerge) or it can be 'themed.' In our Circle.U programme, the themes center on the Knowledge Hubs (Democracy, Climate and Global Health).

The second Sandpit session is then organised two months later with the aim of understanding how these complex research projects can be developed and which types of assessment might be applied. It is also an opportunity to support new and emerging ideas, in order to turn them into concrete project proposals to be submitted to both internal and external funding bodies.

#### **Implementation**

In the frame of Circle U. ERIA WP 2, all partner universities work on the call for each edition, which is shared through Circle U. and partner universities' communication channels (including the Circle U. website, Twitter, and LinkedIn accounts). Université catholique de Louvain (UC Louvain), as the lead partner of WP2, coordinates the Sandpits and serves as the main contact point for all queries concerning the Sandpits and advises potential applicants.

For the 2023 edition of the Sandpits, twenty-four applicants from seven Circle U. universities responded to the call. The evaluation of the applications and the selection of the participants were carried out both by Circle U. ERIA WP2 Leads (of whom most have an academic background and experience in interdisciplinarity) and by the main Sandpits facilitator, Samantha Aspinall. The ERIA WP2 Leads and Sandpits facilitators based their assessments on the overall quality of relevant motivations and interests of the applicants.

Particular consideration was given to:

- Motivation to participate in the Sandpits
- Demonstration of interest in interdisciplinary and/or transdisciplinary research
- Openness to creative thinking.

Seven applicants seemed to be too early in their academic career (early-stage PhD students) to benefit fully from the Sandpits experience.

Therefore, they were advised to resubmit the application for the 2024 Sandpits. Seventeen participants were selected for participation, but two withdrew their applications shortly after due to other professional commitments. The fifteen final Sandpits participants who took part in the activity represented the University of Belgrade (3), Humboldt Universität zu Berlin (1), Kings College London (4), UCLouvain (3), the University of Oslo (1) and Université Paris Cité (3).

This group of people with backgrounds in an array of disciplines included eleven female and four male participants. In terms of academic age, the participants included three Full Professors, one Assistant Professor, one Associate Professor, one Lecturer, four Research Fellows, one Project Manager and four PhD candidates (two of whom already had established previous professional careers before resuming their studies in a different field). In line with the Circle U. goal to establish closer collaborations with external stakeholders, Circle U. ERIA WP2 Leads also sought participants from outside of academia and welcomed four external stakeholders from Belgium, Denmark and Germany.

#### Successes

All three facilitators invited for the Sandpits (S. Aspinall, Dr. K. Kellett and P. Leeder) have long-standing experience in facilitating interdisciplinary research initiatives and responded to the Circle U. invitation with much enthusiasm. Their preparative work, in-situ facilitation, and the post-Sandpits follow-up highly satisfied both Sandpits participants and local UCLouvain organisers. In response to the

Sandpits, the Circle U. alliance elaborated an ad hoc seed-funding scheme to support up to three projects presented by the Sandpits participants, responding to the need for specific Sandpits seed-funding. This call was open until 22 January 2024 and four applications involving eleven Sandpits participants (out of fifteen) and three external stakeholders (out of four) were submitted. The projects to be supported were selected in February 2024 and are to be completed by the end of the year.

Longer-term links, over and above the Sandpits, have also developed between Circle U. and the Horizons Institute, thus broadening networks and the ethos of interdisciplinary research and collaboration.

#### Challenges

There are some challenges that emerge with this type of approach. First, commitment to the programme is important. It is time-consuming and risky because participants do not know what the outcome will be. However, risk-takers generally enjoy this programme and the facilitators make it clear to colleagues that not all ideas work.

It is rare that participants do not engage in some research idea development; however, it is always a possibility. This usually happens when a colleague arrives with a fully-formed idea and is looking for people to join that idea. However, most people enjoy the process of creating entirely new ideas, and the facilitators are experienced in supporting individuals to experience different types of benefits from the programme.

The other key challenge in terms of output is capturing the unintended consequences. Not only research projects are developed; participants also

write papers together, develop interdisciplinary teaching modules, and create new and lasting networks.

#### Conclusions

An evaluator hired by one of the Circle U. partner universities (King's College London) is working to assess the effectiveness and impact of the Sandpits, in order to further strengthen similar activities delivered under the new Circle U. 2030 strategy. The evaluation of the 2023 Sandpits will be combined with the one of the 2022 Sandpits, and it will consist of event observations, an online feedback survey with participants, and an indepth focus group with participants. These activities will allow participants to share their views on the potential of the activity to strengthen interdisciplinarity and explore what worked well and what could be improved. The findings of the evaluation will be available in the form of a public deliverable.

Furthermore, the Horizons Institute published an article in January 2024 which reflected upon the Sandpits sessions and methodology, along with the innovative ways in which participants were encouraged to initiate interdisciplinary and international collaboration. The lessons learnt from the success of the first two editions of the Sandpits will be carried on through the work of Circle U. 2030 WP4 "Fostering Collaboration and Building Capacity in Research" led by the University of Vienna, the details of which will be defined prior to Circle U. ERIA's conclusion in 2024.

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## 2.3 EC2U/RI4C2 – Supporting Researchers and Research Activities

#### **SUMMARY**

The RI4C2 project has developed several tools to support researchers' career and research activities in WP3 "EC2U People empowerment" and WP4 "EC2U R&I platforms", respectively. The tools developed by WP3 are mostly related to the creation of a more resilient and empowered scientific community via the design of masterclasses for Gender Equality in research and of a toolkit for researchers' career development. Within WP4, the EC2U Knowledge Hub is an advanced digital tool which integrates and harmonises various datasets related to academic life, research, skills, courses and local events across the partner universities. It addresses the challenge of fragmented data across diverse sources, enabling efficient data sharing and analysis. It also includes a platform collecting the Open Science best practices developed by the partners of the Alliance and an Open Access repository of the EC2U consortium.

#### **DESCRIPTION**

#### Context

The instruments developed by WP3 and WP4 are intended to help researchers and the academic community and be a vehicle for facilitating information and transmitting good practices. Specifically, the tools developed for researchers aim to strengthen solid and worthy careers in research. Moreover, the databases (i.e., on research facilities, local knowledge ecosystems, literature on researchers' careers) developed

within the EC2U Knowledge Hub consolidate vast data from research activities.

#### **Objectives**

The objectives of those resources are, on the one hand, to implement strategies and disseminate guidelines to support researchers in their career management as well as to consider crucial topics such as Gender Equality in research. On the other hand, the goal of the EC2U Knowledge Hub is to create a central, scalable and sustainable knowledge-sharing platform to simplify the process of accessing and utilising data to conduct research activities.

#### **Implementation**

The tools developed for researchers are available online on the EC2U Alliance website and/or have been disseminated among the EC2U research community.

#### Successes

- The masterclasses for Gender Equality are widely disseminated and used as official training resources in some universities of the EC2U Alliance. For example, the University of Pavia uses the "Masterclasses for Gender Equality" as a study tool in the course "Ethics of research and research communication for researchers" taught to doctoral students.
- The EC2U Knowledge Hub successfully reduced data integration and application development costs. It facilitated the Alliance's ability to implement a knowledge-

sharing strategy that supports multilingual content and provides advanced semantic search capabilities.

#### Challenges

- It is challenging to disseminate the researchers' career tools widely so that more researchers in the EC2U community use it as training and career management tools.
- Regarding the databases, the primary challenge was the fragmentation of data across numerous databases and websites with varying access protocols and formats. Additionally, ensuring interoperability and consistency across datasets presented significant hurdles.

#### Conclusions

These tools aim to contribute to a more robust scientific community equipped with additional resources which facilitate career progression as well as greater collaboration and efficiency.

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## 2.4 EELISA Connect Call for Workshops

#### **SUMMARY**

EELISA Connect workshops are an initiative put in place by EELISA InnoCORE with the aim of boosting connections among EELISA researchers using a bottom-up approach. During the workshops, EELISA researchers have the opportunity to meet in person at one of the EELISA partner institutions to discuss and develop joint research ideas. The selection of the workshops funded has been done via two open calls. A total of 11 workshops are to be funded.

#### **DESCRIPTION**

#### Context

The EELISA InnoCORE budget included EUR 170,000 set aside for launching open calls. EELISA partners decided to implement this budget via a joint open call for workshops.

#### **Objectives**

The aim of this call is to spur discussions among EELISA researchers and academics on specialised research topics aligned with the <u>EELISA InnoCORE Strategic Research Areas</u>. Particularly, workshops should have the potential to trigger new research proposals under Horizon Europe and other international calls.

#### **Implementation**

Onsite and hybrid workshops can receive up to EUR 17,000 of funding for travel and accommodation expenses of participants, as well

as other eligible costs. The workshop organisation must involve at least three researchers from three EELISA partners. There have been two calls for workshops.

#### Successes

A total of 11 workshops will be funded focusing on different research areas. The calls and the workshops met their aims of triggering new connections among EELISA researchers and spur research collaborations, including proposals under Horizon Europe.

#### Challenges

The main challenges have been the uneven distribution of applications for hosting the workshops and the heavy administrative burden for the organiser. Lastly, despite the success of the initiative, the continuation of the calls is not clear, due to InnoCORE coming to an end in May 2024.

#### Conclusions

The EELISA Connect call met its aims and it is considered a successful initiative, not only for generating bottom-up collaborations among EELISA researchers but as a way of testing ways of institutional collaboration among EELISA partners.

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D5.3 EELISA connect meetings report



## 2.5 EELISA Networking Platform for Researchers

#### **SUMMARY**

The aim of the <u>EELISA InnoCORE Networking</u> <u>Platform</u> (EINP) is to reach the creation of EELISA clusters, connecting researchers with similar interests and complementary expertise based on their research project ideas and research interests.

#### **DESCRIPTION**

#### **Objectives**

The objective of the EINP is to facilitate connections between EELISA researchers and academics, and boost collaborations and joint research projects.

#### **Implementation**

EELISA researchers and academics can log into the platform and enter their research ideas. Every researcher can upload detailed information about his or her research field and interests considering a list of input variables, some with prefixed labels and some with free text. The EINP establishes connections between potential cooperation partners by a matching algorithm.

#### Successes

Fully operational since September 2023, the use of the EINP is gathering speed little by little, and the platform currently contains over 90 research ideas.

#### Challenges

The EINP login function is done via EduGain on the EELISA Communities platform. Solving the IT and technical problems of these connections (EINP with the EELISA Communities platform) took quite some efforts. Ultimately, once the tool was up and running, the biggest challenge was building critical mass and ensuring that researchers and academics use the platform.

#### **Conclusions**

The use of the EINP is gathering speed little by little, and it is proving a useful tool to establish connections. FELISA 2.0 will take over the tool.

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D5.3 EELISA connect meetings report

## 2.6 ENGAGE.EU R&I - Digital Support Infrastructure

#### **SUMMARY**

ENGAGE.EU1 is an innovative alliance of leading European universities that embodies a pioneering vision for societal transformation. Launched with the ambitious goal of equipping a new generation of European citizens to address grand societal challenges, the ENGAGE.EU R&I project builds solid bridges across education, research and innovation (R&I), and societal outreach, enlarging the scope of the ENGAGE.EU Erasmus+ project. To realise this, the Alliance is constantly leveraging the power of digital support infrastructure (DSI). DSI platforms stand as a pivotal achievement in ENGAGE.EU's evolution, creating an inclusive environment where researchers and stakeholders share resources and collaboratively address pressing issues, ensuring research outcomes are socially beneficial. This unique approach distinguishes ENGAGE.EU as a forerunner in integrating academic efforts with societal aspirations, setting new standards for socially engaged R&I.

#### **DESCRIPTION**

#### Context

Since its launch, ENGAGE.EU has been mainly oriented towards further developing and uniting the educational activities of the partners. The aim has been to serve the common goal – to empower a new generation of European citizens by equipping them with the set of skills and competencies needed to tackle the grand societal

The Horizon 2020 Science with and for Society (SwafS) funding allowed the ENGAGE.EU Alliance and its members to deepen the transformations needed to achieve their R&I ambitions in business, economics, and social sciences research conducted by researchers and innovators in a continuous interplay with peers and stakeholders, addressing societal challenges, locally and internationally. Foundations for more engaged and more effective research and innovation ecosystems at partner and alliance level have been set, taking a holistic, inter-sectoral and interdisciplinary perspective. This is where DSI plays an integral role.

#### Objectives

The main objective is to enhance ENGAGE.EU R&I capabilities by further utilizing the potential within the Alliance through pooling and sharing research resources based on DSI. Sub-objectives include:

social sciences and the perspective to grow. Currently there are nine ENGAGE.EU partners and there still is a clear perspective to further expand.

challenges. Being engaged in societal change has always been at the heart of the Alliance's mission. However, that ambition cannot be reached without improving R&I standards. Within this context, the 'Building Engaged Research and Innovation Ecosystems' (ENGAGE.EU R&I) project has been successfully developed and implemented to enlarge the scope of the ENGAGE.EU Erasmus+ project.

ENGAGE.EU was launched in 2020 and selected for funding under ERASMUS+ with seven leading European universities in business, economics, and

- optimising access and use of individual and shared R&I digital infrastructures across the Alliance.
- providing tools for various communities the academic R&I inter-university community and the actors from the Alliance partner ecosystem – to interact, gain knowledge and co-design sustainable solutions to societal challenges.
- supporting and facilitating the sharing of knowledge and skills, research methods, tools and techniques in particular for PhDs and early-stage researchers using emerging technologies.

#### Implementation

The development of the ENGAGE.EU DSI started during the first ERASMUS+ funding period. ERASMUS+ funding has been used to build the foundations of the ENGAGE.EU Research Community Platform and the ENGAGE.EU Publication Platform as well as to develop the Virtual Spaces (currently integrated into the ENGAGE.EU Co-Science Platform).

ENGAGE.EU R&I built upon the foundations by introducing specific opportunities for sharing resources, supporting collaboration and helping to facilitate interaction among researchers and stakeholders from R&I ecosystems reflecting the key thematic areas as identified in the common ENGAGE.EU R&I Strategy and Thematic Agenda. Horizon 2020 funding has been used further to develop the ENGAGE.EU Research Community Platform and to use it for supporting and intensifying research collaboration within the ENGAGE.EU R&I project. It has also been used to upgrade the ENGAGE.EU Publication Platform as well as to develop the Collaborative R&I section

and the Open Urbania segment (currently integrated into the ENGAGE.EU Co-Science Platform). As a result of ENGAGE.EU R&I, the Alliance strongly built up its DSI.

The ENGAGE.EU Research Community Platform is a user-generated platform that has been developed in collaboration with researchers from various universities and disciplines (see Fig. 2.6.1). The platform is designed to foster collaboration among researchers and professionals by enabling the creation of collaboration opportunities and groups. Users can initiate opportunities for various purposes, such as project partnerships, brainstorming sessions, coding assistance, or draft paper editing. The platform is structured around eight research topics, allowing users with specific interests to connect. They receive personalised relevant notifications within chosen themes, a comprehensive view of related people, events, inspirational blogs, and news. Since the start of the platform, only a year ago, it currently has over 400 members, 14 collaboration groups, and lots of user-generated content.

The ENGAGE.EU Co-Science Platform takes a complementary approach, by looking at the 'demand-side' of research in three distinctive but interrelated pathways (see Fig. 2.6.2). Embedded into the ENGAGE.EU website, the platform is designed to empower knowledge-creating teams to address societal challenges with innovative start-up ideas within the Virtual Spaces. They can further enhance their ideas through scientific rigor in the Collaborative R&I section (currently available as a beta) and utilise specific aggregators to find relevant funding opportunities. The search for funding is simplified via an innovative web-scraper that aggregates opportunities from multiple sources, making

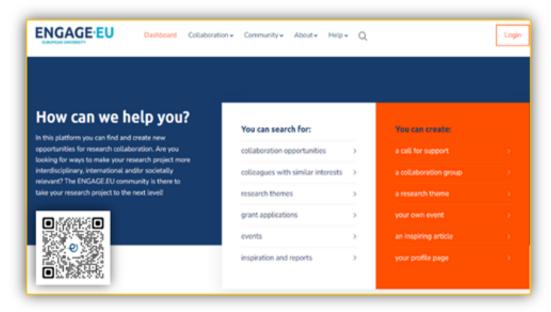


Figure 2.6.1: ENGAGE.EU Research Community Platform – A Dashboard View

them accessible in one location. Finally, the Open Urbania segment (currently available as a beta) enables the realisation of these ideas outside the university's walls – in the local inno-preneurial ecosystem. These three pathways of the platform contribute to achieving the ENGAGE.EU 'Inno-preneurship Cycle': they reach a wider audience and digitally enable all the stakeholders to codesign solutions and develop them in an integrative and collaborative way.

The <u>ENGAGE.EU Publication Platform</u> gathers all available publications from partner universities (see Fig. 2.6.3). Additionally, it lists the research resources available among the partners with the aim of facilitating research collaborations. It also provides key information regarding collaborations and topics covered in the publications.

#### Successes

The ENGAGE.EU Alliance today continues to strengthen its uniqueness by pooling and sharing research resources amongst the nine partner universities and the other stakeholders within the R&I ecosystem. All partners are well aware that working solely behind the high walls of academia will not give much added value to society. In taking down these walls the Alliance is striving to include society as an integral partner of all R&I activities.

DSI is that unique set of tools that supports this inclusion by providing an easily accessible bridge between R&I and societal outreach initiatives. Designed in an integrative way DSI provides the context and tools for research collaboration among scholars across universities to flourish

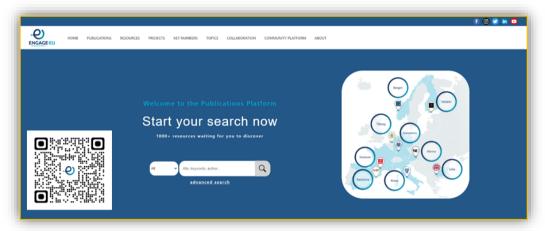


Figure 2.6.2: ENGAGE.EU Co-Science Platform – An Entry Point View



Figure 2.6.3: ENGAGE.EU Publication Platform – A Dashboard View

as well as unique opportunities for multistakeholder engagement in sustainable R&I, co-governance, co-creation and value-sharing. Although the bottom-up fashion of research collaboration takes time for the natural emergence of research groups and knowledgecreating teams, the well-established Research Community Platform has attracted more than 400 users only for one year, while the other ENGAGE.EU DSI platforms are getting more and more users.

#### Challenges

Furthering DSI is a never-ending process of removing the barriers and improving the platforms' functionalities. Here are some of the biggest challenges that lie ahead:

- National legislations and internal regulations may affect the extent of the data that can be shared via DSI and the precautions that should be taken.
- Different local IT solutions pose problems with DSI platforms interoperability.
- Duplication of functions requires additional optimisation efforts and resources.
- The need for continuous technological and operational improvement is essential.

#### Conclusions

ENGAGE.EU as an alliance and ENGAGE.EU R&I stand out as prime examples of how academic R&I can be meaningfully integrated with societal needs, showcasing an ongoing journey towards impactful collaboration. Fundamental to its

mission is the Alliance's recognition that the true value of research is not realised by keeping it confined behind the walls of academia. Instead, ENGAGE.EU is dedicated to breaking down these barriers, bringing society into the heart of its R&I agenda as a co-creator and a partner. This unique integrative approach is cultivated through the DSI – a set of pioneering tools that bridge the gap between researchers and stakeholders, fostering a dynamic exchange of solutions to real-world challenges.

As ENGAGE.EU continues to evolve, the sustainability and further development of its DSI platforms are recognised as pivotal for driving the digital transition in the EU. Future support for R&I is considered essential and represents an investment in a greener, more digital Europe. This investment underpins the vision for a future where European citizens can lead society towards a more equal, sustainable, and inclusive as well as prosperous world, demonstrating ENGAGE.EU's commitment to a lasting societal impact through collaborative R&I engagement.

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#### REFERENCES

All ENGAGE.EU DSI platforms can be retrieved from <a href="https://www.engageuniversity.eu/">https://www.engageuniversity.eu/</a>.

# 2.7 ENHANCE (ENHANCERIA project) – Webinar Series for the Network of Researchers in 'Sustainable Entrepreneurship and Innovation'

#### **SUMMARY**

A network of researchers in 'sustainable entrepreneurship and innovation' (SEI) has been established. We have opted for monthly knowledge-sharing webinars to be the immediate set of activities for the network. The aim is to create a platform for SEI researchers at ENHANCE universities to share their expertise, present their research findings, and discuss trends and best practices in SEI. These webinars are open to both network members and the wider academic community.

#### **DESCRIPTION**

#### Context

We have launched the ENHANCE SEI researchers' network via a series of monthly webinars focused on topics related to the intersection of sustainability, entrepreneurship, and innovation. Each webinar lasts around 45-60 minutes, which includes a presentation and discussion.

#### **Objectives**

We aim for exchanging expertise, knowledge, best practices, experiences, and perspectives amongst researchers in the partner universities of the alliance. Our hope is that this webinar series creates a platform that opens doors for new collaboration. Furthermore, we aim to reach a broad audience, not only researchers, but also students and industry practitioners to allow for engagement with a diverse community.

#### **Implementation**

The organising committee of the webinar series sent an invitation to all the SEI researchers of the network to offer presentations. To facilitate the first steps, several potential topics were proposed, but other suggestions were welcome. The organising committee coordinated with researchers who expressed interest in presenting their research and findings, and a preliminary schedule for the webinar series was drawn up.

#### Successes

The organising committee received a lot of positive feedback from researchers who wanted to participate in the webinars with a good variety of topics. So far, four webinars have been planned (8 March, 2 April, 13 May, and 4 June 2024). The first webinar has already been held and a total of 35 participants attended. The audience included researchers from ENHANCE universities and other universities worldwide, as well as students and practitioners.

#### Challenges

Coordination might be the key challenge, as it requires time and effort from the organisers to schedule the webinars and announce them. However, coordinating webinars is significantly easier than coordinating in-person knowledge-sharing events.

#### Conclusions

Webinars have the advantage that they can be implemented and organised quickly, can be carried out online and reach a wide audience. It is an effective platform for researchers to disseminate their findings and expertise.

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#### Website:

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# 2.8 ENHANCE (ENHANCERIA project) – Walk & Talk Series Format for Focus Area 'Sustainable Development Through Transdisciplinary Research'

#### **SUMMARY**

The Walk & Talk format has been designed and further developed to help researchers and other relevant staff get to know local research projects that facilitate knowledge exchange between science and society, as well as better understand the strategies and structures established at the ENHANCE member universities that support these projects. Participants are invited to exchange experiences and best practices and take the knowledge gained back to their home university.

#### **DESCRIPTION**

#### Context

In WP3 'Sustainable development through transdisciplinary research', the Walk & Talk format has been developed as a workshop series to complement and reflect on the mapping and analysis of transdisciplinary initiatives within ENHANCE and ongoing inter-university knowledge exchange on this topic.

#### **Objectives**

The main goal of the Walk & Talk is for ENHANCE member universities to get to know local transdisciplinary research projects that facilitate knowledge exchange between science and society, as well as better understand the strategies and structures supporting transdisciplinary research. It offers an opportunity to build networks with relevant

colleagues in other ENHANCE member universities as well as directly with local projects. The format also aims to make integrated knowledge more tangible and to create a mutual learning environment that includes discussions at both a higher strategic level as well as at the project level regarding implementation. It also shapes transdisciplinary research approaches within the Alliance.

#### **Implementation**

The Walk & Talk format covers topics such as mobility, energy, sustainability, design, climate change and urban development. In addition, it may offer insight into the status of the institutionalisation of transdisciplinarity beyond specific topics. Projects or strategies to be included in the programme will largely be based on those that have been identified in the scope of WP3 mapping activities but do not exclusively need to be taken from this list. This could include specialist units at the university, projects led by the local municipality, living labs, citizen science projects, and other cooperation formats between science and society. The recommended programme duration is 1-1,5 days. Each programme should include a combination of informative presentations and discussion with relevant teams at the hosting university as well as excursions and sessions with local projects and initiatives. Where possible, these meetings with local projects should take place on site to allow participants to understand the local context and see projects in action.

#### Successes

The Walk & Talk format serves as a knowledge platform for the sharing of good practice, for interested colleagues to see transdisciplinary initiatives in action in the local environment and hopefully be inspired by the ideas being developed at other universities and build networks. In the ENHANCERIA funding period we will have conducted 7 Walks & Talks; one at each ENHANCE member university.

#### Challenges

A challenge is the organisation and to get suitable contributors for the local transdisciplinary initiatives and projects. It is also challenging to have two representatives from each ENHANCE university participating in the Walk & Talk (depending on their travel budget). Most important is that this person is well positioned to take the results of the visit and local exchanges back to their university and apply lessons learned in their own institution.

#### Conclusions

Further ENHANCE Walk and Talks will take place during the remaining project period. It has been shown that these on-site visits, where many of the local stakeholders can be personally interviewed, bring even more noteworthy projects to light and offer valuable opportunities for shared learning. It is also a format for making shared knowledge tangible. We believe that combining a common conceptual understanding, our mapping efforts and site visits such as these will allow for even more informed and systematic recommendations to be made. Based on the Walk & Talk format, the next step is to strengthen the further development of methods for implementing the shared knowledge at the ENHANCE member universities.

#### **CONTACT POINT**

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#### **REFERENCES**

#### Website:

https://enhanceuniversity.eu/sustainable-development/



## 2.9 ENHANCE (ENHANCERIA project) as a Path Towards a Community of Research Infrastructures

#### **SUMMARY**

In the framework of the ENHANCERIA work package "Building up a community of users for strengthening research infrastructures", a wide set of actions was geared towards increasing sustainability of research infrastructures (RIs) across the ENHANCE Alliance:

- Design and implementation of a Series of Workshops: to gather needs and ideas from the community around RIs, map and exchange practices in the management of RIs, share funding and mobility opportunities.
- Setting up an ENHANCE RIs Catalogue: to increase visibility and reciprocal utilisation of Alliance facilities.
- Design of Reconnaissance Events format: to open the catalogue of infrastructures and share it among researchers through in person visits to laboratories and networking activities.
- Drafting of Guiding principles and Recommendations on sharing RIs across the Alliance.

#### **DESCRIPTION**

#### Context

ENHANCERIA aims to promote the sustainability of research infrastructures. RIs and large facilities play a strategic role due to the large investments required for their start-up and maintenance. Return on investment is measurable in economic terms as well as in terms of scientific, educational and societal impact of the facilities. This is accomplished through development of a common understanding

of their potential among the researchers and staff, in terms of novel research and innovation as well as new skills that can arise from their utilisation by students and young researchers and new and more efficient services thanks to stronger connections with industry and local ecosystems.

#### Objectives

Share best practices on management of research infrastructures between universities; increase visibility of existing RIs in ENHANCE; and increase reciprocal utilisation of RIs.

#### **Implementation**

To achieve overall and specific objectives, a suite of actions was implemented to cover the different dimensions related to facilities' sustainability:

- Series of workshops: gathering needs/ideas
  from the research community; mapping
  practices in the RIs management; sharing data
  and resources among the facilities; training
  about EU opportunities for RIs; exploring
  interest in cooperation among research groups.
  Main target: managers and directors of the
  infrastructures, researchers, research
  administrators.
- Designing an online RIs catalogue: to showcase technical capacities and capabilities for internal and external users. Based on the main findings of a preliminary mapping activity, information was collected from the partners of ENHANCERIA and an online platform was designed, based on the sample of similar catalogues.

- Piloting Reconnaissance events: where groups
  of researchers visited selected facilities and
  were involved in networking activities to
  explore ways for future cooperation. The
  researchers involved were identified based on
  their scientific profile and involvement in RIs,
  corresponding to the main scientific area of the
  infrastructures to be visited.
- Drafting Guiding principles and Recommendations on sharing RIs across the Alliance, gathering the main lessons learnt and based on a common agreement on how to share RIs.

#### Successes

Mapping the status of the Alliance's infrastructures is a first milestone on the way to a community of Research Infrastructures: it enabled the recognition of common parameters to distinguish research infrastructures among the huge number of laboratories across the Alliance. This led to the identification of a set of quantitative indicators and to the agreement on common criteria to define a "Research Infrastructure" useful to select the facilities to be included in the catalogue. The whole process was clustered in a quideline tool for identifying RIs at a consortium level, then spread among research administrators to gather relevant data via an ad-hoc survey. This process offered valuable added value when analysing the several dimensions and aspects of university facilities that can create impact. It paved the way for the creation of a community of ENHANCE RIs.

#### Challenges

As a follow-up, with a view to creating a community of users of Alliance facilities, it may be possible to expand the scope of the catalogue by including new RIs and adding new information. The mapping

activity and the implementation of the catalogue showed that many of the reported RIs cover several different scientific fields: this could be a strength but also a challenge when it comes to creating a sensible and searchable catalogue. Finally, the design of the RIs platform followed the samples of other similar catalogues that do not have extensive information in the catalogue itself but contain hyperlinks to the various facility websites. This is a way to guarantee the sustainability and relevance of the catalogue. Besides this, testing and quality assurance should be carried out and the data should be updated at regular intervals in a coordinated procedure, even after the end of the project.

#### Conclusions

Considering the growing significance of research infrastructures, also within the ERA strategy and in the Open Science paradigm, ENHANCERIA offers unique opportunities to identify common challenges and explore novel ways to share their RIs and discover up-coming scientific fields of common interest. These opportunities need to be further developed and exploited.

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#### **REFERENCES**

<u>Strengthening research infs – ENHANCE Alliance</u> (enhanceuniversity.eu)

## 2.10 ENLIGHT – ENLIGHT Research & Innovation Observatory

#### **SUMMARY**

The ENLIGHT R&I Observatory is an online onestop-shop portal serving as a resource centre for all ENLIGHT researchers, partners and external stakeholders seeking research synergies/collaboration with the alliance. Connected to the main ENLIGHT website, it was designed to identify the R&I capacity of each of the nine university partners and pinpoint the strongest research synergies to maximise the ENLIGHT alliance's competitive advantage, guiding the building of a common R&I agenda. The observatory hosts the main results of the work conducted to map the scientific and technological profile of the ENLIGHT alliance and its members, as well as a search tool to browse among all research units of all ENLIGHT partner universities. The observatory acts as a showcase for ENLIGHT partners, research teams, external collaborators, and funding institutions, providing an in-depth view of the scientific profiles of partners and their expertise.

#### **DESCRIPTION**

#### Context

Acquiring a precise vision of the various domains of expertise and excellence, along with their comparative significance and intensity, both from bilateral and multilateral perspectives between universities, was a crucial step in the process of

establishing a robust long-term Research and Innovation (R&I) strategy for the ENLIGHT Alliance. In the context of developing a unified Research and Innovation (R&I) agenda aimed at guiding the collaborative efforts of ENLIGHT universities and aligning them with other R&I stakeholders within the quadruple helix framework, an entire work package (WP) was dedicated to analysing the Science and Technology (S&T) profiles of partner universities. The task was to focus on developing methods for identifying strategic areas for creating a macroscopic map of R&I capacities, notably establishing a transversal R&I Observatory. This benchmarking of profiles at the level of the 9 institutions will assist the ENLIGHT governance to identify which R&I synergies need to be strengthened and in which areas the alliance could be most internationally competitive.

#### **Objectives**

The main goal was to establish the R&I Observatory as a showcase platform facilitating access to strategic information about the Alliance's Science & Technology profile. Specifically, its aim is to identify expertise among partners and global synergies in flagship areas², observe and make visible the evolution of collaborations among ENLIGHT researchers and external stakeholders, and disseminate the results of work packages. Additionally, it should

<sup>&</sup>lt;sup>2</sup> The five flagship areas of the ENLIGHT alliance are: health and well-being, digitalization, climate change, energy and circular economy, equity.

facilitate collaboration among ENLIGHT partners and external stakeholders while effectively catering to the information needs of the three main identified targets: ENLIGHT researchers, Alliance partners, and random visitors.

#### **Implementation**

For the development of ad hoc methods to identify strategic areas for the R&I agenda, we relied on the expertise of VIAINNO, a research platform in technology intelligence at the University of Bordeaux which worked with the documentation offices of the 9 partners. A steering committee (COPIL) was created to follow the development of the tool, provide content, and guarantee the proper development and implementation of the R&I Observatory on time with the subcontractor chosen to set up the website. This committee was composed of one representative of each task co-leader (University of Bordeaux, University of Gent and University of Basque country), one IT representative and one representative of the ENLIGHT Communication Group. Considering the workload for the launch of the observatory, we adopted a step-by-step approach. In the initial pilot phase, we included data of just four universities from the alliance to test the tool and render it fully operational. In a second phase, the data from the five remaining partner universities were gradually integrated into the tool.

The ENLIGHT RISE R&I Observatory consists of four sections:

 Home page with general introduction of what the R&I observatory is, the aim and the content of the online tool. The users have the possibility to contact the ENLIGHT R&I Observatory teams through a generic email

- address. From this page users can access the different sections of the online tool.
- 2. ENLIGHT Scientific profile: This page highlights the scientific and technological profile of the entire ENLIGHT Alliance. The S&T profile of each university is accessible separately. Visitors can see the statistical part of the analysis mapping while each partner has received the dataset in an interactive PowerBI format enabling them to conduct their own cross-searches within the data. A vast campaign of data collection and processing made it possible to gather S&T data related to the 9 members of the alliance to help understand R&I activities at the ENLIGHT scale and identify similarities between its members. We have chosen to only use open access data. Two precise points of similarity were targeted: (1) similarities related to R&I topics existing in each university using the Sustainable Development Goals (SDGs) grid and (2) similarities related to the existing network of partners of each university. To observe these points of similarities, three types of data were selected for cross-analysis: family patents, scientific publications, and research projects funded by the EU. The approach consisted of first producing scientific and technological profiles of each partner university and then cross-checking these profiles to detect similarities in terms of innovation and research at the macroscopic scale of ENLIGHT. For the collection data, the LENS.ORG and CORDIS databases were used. A total of 3057 patent families, 210 043 scientific articles (from 2016 to 2021) and 3003 EU-funded research projects were collected to feed the dataset.

#### 3. ENLIGHT Research & Innovation expertise:

This page allows searches for the R&I capacities of ENLIGHT universities using different filter options (keywords, universities, ERC expertise, flagship areas). This section aims at making the R&I observatory a central resource for all key ENLIGHT actors and external stakeholders seeking research synergies/collaboration with(in) the alliance. The section allows users to browse all research units of all ENLIGHT partner universities. It is possible to identify a precise research team or laboratory with a particular expertise area for partner search. We then collected data of all ENLIGHT research units (name, description, expertise, sub-themes, key words, and ENLIGHT flagship domains) and created a search tool with various filter options.

 ENLIGHT outputs: This page centralises the main results and deliverables, benchmarks, and evidence-based policy recommendations emerging from the ENLIGHT RISE project.

#### Successes

Among the 17 Sustainable Development Goals (SDGs), our analysis reveals that the ENLIGHT alliance's most significant contributions lie in SDG 3 (Good health and well-being) and SDG 9 (Industry, innovation, and infrastructure), drawing from data encompassing scientific publications and research projects. Notably, SDG 10 (Reduced inequalities) emerges as the primary thematic focus of the alliance's scientific publications in terms of volume. Conversely, research projects predominantly concentrate on SDG 4 (Quality education), SDG 7 (Affordable and clean energy), SDG 8 (Decent work and economic growth), and SDG 13 (Climate action). Through analysis of

direct collaboration among ENLIGHT members, we have identified significant thematic clusters characterised by higher collaboration intensity. We now possess insights into the Sustainable Development Goals (SDGs) most frequently addressed by each university and those not addressed at all. Furthermore, we can pinpoint the SDGs most commonly addressed in partnerships between specific universities. All this gave the governance body of the project a clearer view of the ENLIGHT alliance profile and potential for synergies.

To this day, the Observatory remains the sole macroscopic tool at alliance level gathering crucial information on R&I expertise. One notable outcome of the Observatory is the search tool that already enabled researchers and alliance partners to look for potential partnerships. While the platform will undergo an evaluation process within the next month to better assess its impact on fostering collaboration, initial insights suggest that it has been the decisive information provider for several project setups.

#### Challenges

One particular challenge arises from the tendency for tools and databases to be developed primarily at the institutional level within individual university contexts, each with its own cultural perspective. Consequently, the challenge lies in creating a tool that is both complementary to existing institutional tools and sufficiently flexible to accommodate evolving data needs or even an extension of the alliance.

Harmonising data among the nine universities posed serious challenges due to its sheer volume and the varying organisational structures of research units, featuring diverse sizes, organisational levels and tutelage. VIAINNO and

the ENLIGHT team collaboratively worked on addressing challenges related to data collection and usage, adaptation of analysis frameworks, handling multi-source data, and addressing data heterogeneity across universities. A solution was to use the ERC panels list (for ERC calls 2021 & 2022) as a common reference point for the search tool or to use the grid provided by the 17 Sustainable Development Goals (SDGs) to characterise synergy topics, for instance. This allowed us to connect differently organised but thematically linked research labs, groups, and departments across ENLIGHT universities with ERC panels and ENLIGHT flagship domains.

The most significant challenge lies in ensuring the sustained viability of the platform, which demands a commitment of human resources which are often hard to predict, and a dedication to communication, promotion, and maintenance. The relevance of the tools hinges on its continual update of the database with new S&T inputs and the follow up of KPI to assess the impact.

#### Conclusions

The web-based tool of the ENLIGHT R&I observatory was published on December 14th, 2022. While initially conceived as a straightforward informational tool, we are exploring several possibilities to potentially

transform the tool into a more comprehensive matchmaking platform. However, this endeavour will necessitate delving deeper into our partner universities to, for example, gather contact details of researchers to increase transversality, all the while making sure to respect the internal processes in each university. Considerable effort has been devoted to anticipating future uses and needs. Future improvements should focus on developing strategies to efficiently manage rising contact demands, thereby facilitating smoother interactions and improving the relevance of matchmaking.

#### CONTACT POINT

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#### **REFERENCES**

Website of the observatory: https://observatory.enlight-eu.org/

ENLIGHT RISE - Deliverable 2.1 – Map of S&T domains + common skills:

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## 2.11 ERUA – R&I via Engagement, Open Science, and Infrastructures: Platforms and Services for Researchers in Re:ERUA

#### **SUMMARY**

With its research component Re:ERUA, European Reform University Alliance (ERUA) focuses on Responsible Research and Innovation (RRI) across various work packages (WP). WP2 aims at developing an engagement strategy, WP3 develops research-based recommendations and tools to support RRI, WP5 focuses on Open Science, and WP6 emphasises sharing infrastructures. The Research Support Network initiated by Paris 8 University (UP8) facilitates collaboration and skills acquisition between research managers. Open Science initiatives under WP5 include online courses, meet-ups, and ambassador programmes. WP3, led by Roskilde University (RUC), produced a handbook and e-learning platform to enhance collaborative research practice. Additionally, a research portal developed jointly by New Bulgarian University (NBU) and Paris 8 University (UP8) aims to engage the research community and facilitate collaboration. Despite challenges such as sustainability and dissemination, these initiatives have seen successes in fostering collaboration and advancing RRI within the alliance.

#### **DESCRIPTION**

#### Context

Re:ERUA, the research component of the European Reform University Alliance (ERUA), is dedicated to formulating an engagement strategy and critically examining societal engagement through the perspective of Responsible Research and Innovation (RRI). Across various work packages, we strive to offer a range of services to researchers. While projects funded by the SwafS do not directly support research activities, extensive efforts are made to ensure that we provide the most conducive environment for the research community to engage in collaborative endeavours in the framework of RRI. Over the past years, in alignment with the work plans of different work packages, we have developed a suite of activities and tools and platforms aimed at facilitating collaborative research within ERUA and its respective member universities, collectively strengthening the alliance.

#### Objectives

WP2, led by Paris 8 University (UP8), aims to develop an engagement strategy for research and innovation areas, along with creating tools to enhance the engagement of the research community in the framework of RRI.

WP3, led by Roskilde University (RUC), develops research-based recommendations and tools to support RRI and engaged research practices across various sectors.

WP5, led by the University of Konstanz (UKON), follows the objectives outlined in the work package titled "Open Science for Transparent Research and Public Engagement." These objectives include promoting the concept of

Open Science, establishing supportive structures, identifying researchers' needs, and developing services and tools accordingly.

WP6, led by New Bulgarian University (NBU), concentrates on "Sharing infrastructures and resources and developing common structures" within the Alliance. The primary aim is to stimulate collaboration and resource sharing among the 375 research units within the Alliance, including laboratories, institutes, and research departments.

Collectively, we have chosen for the present study case, examples of tools/ services that collectively participate in the engagement of our research community.

#### **Implementation**

#### 1. ERUA Network of research support

In 2022, UP8 inaugurated the Research Support Network within ERUA, which includes at least one research manager/university. The network utilises a mailing list, Padlet, and Nextcloud dossier. Governance includes annual meetings hosted by partner universities where the coordinator for the next year is appointed: The network has organised one meeting in 2023 and one is planned in late May 2024. The objectives of the network include fostering a supportive research environment, facilitating collaborative projects and enhancing the internationalisation of research. It aims to enable skill acquisition of research managers, share best practices, and multiply chances to secure funding opportunities for the ERUA research community. The network's input helps shape the annual roadmap, support collaboration among researchers, PhD students, and administrative staff. Activities include organising an annual staff week, inviting

members to various events, and sharing information sessions on EU funding opportunities. Training sessions are offered for researchers and research managers to enhance their skills, including opportunities for EU funding. Moreover, "job shadowing" actions are encouraged within the Erasmus+ scheme. The network facilitates the emergence of collaborative projects by identifying contacts or laboratories within the partner universities. It complements the Re:ERUA objectives, paving the way for joint initiatives and fostering a culture of collaboration within the alliance.

#### 2. Open science tools and courses

Under WP5, several initiatives have been undertaken. First, the work package has produced two openly available and reusable Open Science online courses, a basic and an advanced course. The basic course consists of modules such as Research Data Management, FAIR Data and Open Educational Resources, while the advanced course consists of modules such as Open Access Models, Citizen Science, and Alternative Measures of Research Impact. Each module consists of a screencast, slides, a script and test questions. Second, the work package has implemented monthly, mostly virtual Open Science Meet-Ups. Each Meet-Up centres around one specific Open Science topic and mostly involves expert input followed by a discussion. Third, the work package has established a network of four Open Science Ambassadors who promote Open Science among their peers. Fourth, the work package conducted an institutional research data repository evaluation to assess whether sharing or merging these repositories would be feasible.

### 3. Handbook and e-learning tool to enhance collaborative research

WP3 Innovation and Societal Engagement, led by Roskilde University, generated a handbook and elearning platform to enhance caring and engaged collaborative research. It draws on two WP research activities: a report on and recommendations for responsible research and innovation within the European Reform University Alliance, and three collaborative research experiments, each involving researchers from different disciplines and at least two Re:ERUA member institutions and one civil society partner each.

The handbook and e-learning platform on collaborative research are centred around 11 dilemmas that can arise in inter- and transdisciplinary research endeavours. The focus is on dilemmas rather than best practices, as each collaboration is situated in the institutional, disciplinary and personal context of those involved. Adhering to a key concept that underlies all deliverables in this WP, namely the ethics of care, the handbook and learning tool help users to develop their own best practices by offering a selection of reflective questions and exercises for each dilemma. The intent is to enhance research collaborations with the aim of societal engagement and innovation by providing tools for reflection of complex matters affected by relations throughout all stages of the collaborative process, infused by dimensions of responsibility and care in cross-sectoral and transdisciplinary collaborations.

Like all other activities in Re:ERUA, the <a href="handbook">hand e-learning tool</a> were developed by the research team in charge of the WP, while undergoing regular feedback loops by the

members of the WP board and expert group (a total of 13 researchers from the Alliance, representing different academic backgrounds). The handbook and tool were published at the end of March 2024 and will go through a series of testing and further development until the end of Re:ERUA in September 2024. The WP team is developing workshops for different audiences (researchers, teachers, PhDs and ECRs), which will run at the ERUA summit in June 2024 and at two or three member universities before writing short "train the trainers" instructions.

#### 4. Research portal

To engage the research community and support collaborative projects, a research portal was developed under WP6 and WP2, jointly by NBU and UP8. This portal showcases alliance research units and their research areas/keywords, it displays infrastructures, and partner organisations. The researchers of the alliance have a profile, accessible via the university login via the system "shibboleth" where they can utilise a collaboration search tool and personalise profiles with keywords, research areas, and links to websites and publications. Technically speaking, the research portal has been developed via the open-source platform VIVO. The system is hosted by NBU, which developed the database, while UP8 developed the interface. Meetings were held with the rest of the IT departments of the alliance to provide guidance for the injection of research data. The system enables the individual universities in the consortium to be in control of their own data and to change or delete it at any time. This type of project requires comprehensive coordination, extensive IT resources and solid collaboration between universities and within individual universities. Coordinating the distribution of relevant

information across diverse research units, ensuring the platform's development, and addressing related topics such as GDPR compliance have posed considerable challenges. The complexity arises from the need to seamlessly integrate various university systems and data management protocols and ensure data privacy and security measures are in place. Additionally, coordinating the efforts of multiple stakeholders with varying technical expertise and priorities adds another layer of complexity to the project. Despite all efforts, the portal did not reach the level of quality required for widespread dissemination within the ERUA research community. Nevertheless, we are now in the process of developing a new research portal with the support of an external provider in order to overcome previous limitations and assure its sustainability in the long term.

#### 5. Sharing of research infrastructures

Under WP6, extensive endeavours were made to share research infrastructures such as equipment or datasets. Overall, success was limited. The main obstacle has been institutional resistance and lack of engagement with the practical side of sharing and co-building of research resources. Although our assessment of sharing capacities indicated significant areas of convergence in terms of research areas, and although our survey of research unit leaders (which had a modest response rate) suggested that no barriers should stand in the way of sharing and cooperation, in practice, sharing research resources has proven to be difficult. In short, sharing research resources is currently a matter of a case-by-case decision by the research units that host specific resources and infrastructure, and ultimately it is

about creating a connection between fellow researchers with common interests. There is low interest in creating a centralised protocol at the alliance level that might streamline the procedures involved in order to gain access to a specific resource or establish a connection. Collaboration between researchers is further hampered by mutual lack of awareness about the research activities and resources available in the different universities within the Alliance.

However, NBU has developed an <u>ad board</u> that allows the Alliance's researchers to post announcements for potential research collaborations. This tool will be integrated in the new version of the research portal that we are currently working on.

#### Successes

The research support network has been successful, serving as a reference point for all research managers at our partner universities. This year, we have exchanged significant information and actively identified potential collaborations, supporting activities such as mock interviews for ERC applicants. The initiatives under WP5 have been notably successful. The basic course has been viewed 819 times and downloaded 536 times, while the advanced course has been viewed 329 times and downloaded 403 times<sup>3</sup>. The course was disseminated at all ERUA universities. Furthermore, the Open Science Meet-Ups, which are open beyond ERUA, reach a growing and more diverse audience and foster discussion and collaboration. For instance, at the ERUA Summit in 2023, WP5 organised a live Meet-Up about "Reaching the Researchers", which was attended

<sup>&</sup>lt;sup>3</sup> Data from February 29, 2024.

by many researchers. In addition, the Open Science Ambassador Programme is not only a platform for the ambassadors but can also bring researchers from different universities who, for example, share the same Open Science issue, into contact with each other. The handbook and etools are nearing completion and encapsulate the hard work of the WP3 team in advancing a culture of Responsible Research and Innovation (RRI) within the Alliance and its partner universities, providing concrete tools for progress.

#### Challenges

#### 1. General considerations

In the long-term, a key challenge for these activities is finding their sustainable place beyond the completion of Re:ERUA in September 2024. To address this, the Re:ERUA team is actively engaged in a handover process with the newly funded project under the Erasmus+ pillar of the Alliance. Dissemination poses another significant challenge. While many of the tools, such as open science courses and the collaborative dilemmas handbook, have been successful, their long-term viability depends on institutions and individual researchers integrating them into their practices.

#### 2. Challenges linked to the different initiatives

A challenge regarding the tools developed by WP3 (the handbook and e-tool on collaborative research) is to test them with practitioners as participants in collaborative transdisciplinary research during the project period. Our hope – and objective for presenting the tools at partner institutions – is that researchers will make good use of them as part of their collaborations and to adapt them to particular circumstances. Currently they are available in English and accessible via

Moodle, a teaching platform used by most universities. Colleagues might require the handbook and e-learning tools in other languages in order to use them efficiently. The ERUA research support network requires careful coordination with other research-related activities of the Alliance and must adapt to evolving needs. It is essential for Re:ERUA to ensure that the network remains active and constructive, balancing the interests of the Alliance with those of individual universities. Challenges also involve expanding the reach of Open Science initiatives, such as increasing participation in Open Science Meet-Ups and improving the findability of research data in repositories. Regarding the ERUA Research portal, as mentioned above, we are in the process of changing the initial solution based on the VIVO system with the support of an external provider. There are many challenges associated with the ERUA Research portal. Firstly, we need to ensure cautious maintenance of the technical aspects of the research portal to ensure regular updates of the information injected into the research portal concerning research units (and the mapping activities that require such action), as well as regular updates of the researchers' information that may change over time. Another challenge is the dissemination of information to researchers within the institutions.

As for sharing infrastructure, as described in the implementation section, it has proven to be very difficult. However, on a positive note, the ERUA Network of Research Support Services within ERUA as well as the forthcoming ERUA research portal should be of considerable help in overcoming the lack of awareness in dealing with the practicalities involved in sharing resources for research and innovation.

#### Conclusions

In conclusion, the journey through Re:ERUA's various project tools and platforms has shed light on both successes and challenges in advancing Responsible Research and Innovation principles within the Alliance. While successes have been evident in initiatives like the Research Support Network, Open Science courses, and collaborative research dilemmas handbook, challenges persist, particularly in the creation of IT tools such as the research portal. The development of IT tools demands extensive coordination, time, and robust collaboration efforts. Re:ERUA teams remain dedicated to the successful completion of these projects and are taking all necessary measures to ensure that all tools and services created within the framework of Re:ERUA are integrated by all partners at both institutional and individual researcher levels. Additionally, efforts are being made to facilitate a smooth handover process to the new partners of ERUA under the Erasmus+ pillar.

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Research portal: Valeria Manzione, UP8 - valeria.manzione02@univ-paris8.fr

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## 2.12 REUNICE – Expertise Exchange Platform Powered by Catalyst Platform

#### **SUMMARY**

One of the IT solutions created during the REUNICE project is the development of the Expertise Exchange Platform (EEP) powered by Catalyst, which is a digital platform connecting universities with other societal actors on a "virtual marketplace." The main goal of the platform is to support and initiate collaboration between EUNICE Universities and expand cooperation with industry in joint R&D projects. Different representatives of society (companies, individuals) can provide real life problems and challenges through the platform. University research staff and students can then suggest their inputs to solve those challenges.

#### **DESCRIPTION**

#### Context

Universities should serve society and respond to its real needs. They are intended to offer innovative solutions to regional stakeholders. A collaborative platform facilitates crossdisciplinary problem solving by presenting industry challenges to the research teams from each university. It allows academic research to meet the needs of industry, support innovation, and at the same time enhance the process of commercialisation of research.

#### Objectives

The main objective of the platform is to increase the impact of research carried out by EUNICE partners, increase innovation, competitiveness, and develop best practices for the implementation of research projects. It also serves the implementation of a clustered partnership model to facilitate effective cooperation between universities and other sectors in scale.

Based on an analysis of European research networks, three main areas of cooperation were established to answer to the Horizon 2020 transformation module titled "Strengthening research and innovation cooperation with other sectors, especially academia and business".

- Involvement of the EUNICE alliance in specific tasks within projects currently underway at various centres.
- Joint development of new projects by the EUNICE alliance and stakeholders from other sectors, with a joint application for funding under European programmes.
- Implementation of off-the-shelf products by the EUNICE alliance to meet customer needs.

The creation of an EEP should ultimately increase the level of commercialisation of research, which is a challenge for all research centres worldwide.

#### Implementation

The initially developed version of the EEP platform included the basic functionalities identified as crucial to the platform's operation. The solution was built on a website with a local university database. In the process of analysing demand and best practices at EUNICE Partner

Universities resulting from interviews and surveys (through discussions with representatives of all EUNICE Partner Universities), the main applications of the platform, which is a combination of the EEP platform and Catalyst, were developed.

The platform is aimed at three target groups:

- FUNICE Alliance Universities
- Universities and research centres outside of the EUNICE Alliance
- Industrial Partners

Within the platform, it is possible to perform several important activities such as:

- Adding Campaigns their purpose is to pose problems to be solved, open competitions for ideas and products and solutions, create projects and collaborations in various areas
- Adding Ideas presentation of solutions, suggestions, proposals and requests for new areas of activity
- Conducting discussions about campaigns and ideas
- Inviting guests to participate in the campaigns - internal and external
- Carrying out the full process from Submission, Discussion, Evaluation of submitted proposals, and support in the implementation of solutions.

Users need to create an account to be able to get full access to the platform. Users of the platform able to easily find relevant campaigns and submit ideas within the system. Each submitted idea will be appropriately categorised and maintained in the system in order to be available to relevant EUNICE staff. This will allow the best matching of

subject areas with specialists, which will significantly reduce the time required to present an offer to potential partners.

The campaigns published on the platform are seen as challenges that can be solved together and can lead to joint activities. The platform supports the teams in their incubation process. It works not only locally, between EUNICE partners, but can also be visible to others European Universities

The piloted platform is available on the market and an existing solution was purchased to meet all the requirements regarding the functionalities.

#### Successes

The flexibility to constantly redesign the platform is a huge advantage. There is a possible connection to other existing platforms. The established platform is the first implementation of the solution, which will be subject to constant modifications to improve its operational capacity and adapt it to the needs of the EUNICE alliance. The platform's performance is continuously monitored and partners' suggestions are taken into consideration in the development process.

In addition, as part of the first of the campaigns for joint projects within EUNICE Universities, the idea of a project to support the incubation of scientific cooperation, teaching and student scientific club was presented, and the project was then submitted to the National Agency for Academic Exchange in Poland in a consortium consisting of representatives from Poznan University of Technology (Leader), University of Mons, University of Cantabria, Université Polytechnique Hauts-de- France and Politecnico de Viseu.



Figure 2.12.1: Screenshot from the view of the Interface for campaigns management from Expertise Exchange Platform powered by Catalyst platform (source: https://catalyst.uwasa.fi)

#### Challenges

Currently, the primary challenge in developing the EEP Powered by Catalyst platform is to engage representatives of EUNICE partner universities in actively using the pilot version. The goal is to verify its functionality and gather valuable insights into potential improvements. Through active testing and utilising the platform by creating and participating in campaigns, we can significantly enhance its adaptation to EUNICE's specific needs.

The next step will be to attract industrial partners and representatives from other universities and convince them to actively use the platform.

#### Conclusions

The Expertise Exchange Platform powered by Catalyst is a step towards establishing cooperation in the field of research and the acquisition of joint projects between universities

that are part of the EUNICE alliance, as well as attracting brand new cooperation from universities and industrial companies. At the same time, it is a response to the challenges of the Horizon 2020 transformation module "Strengthening research and innovation collaboration with other sectors, especially academia and business." Thanks to the developed tool, stakeholders interested in cooperation with the EUNICE alliance can easily add their project ideas and requests for help with specific tasks on the platform.

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#### REFERENCES

https://catalyst.uwasa.fi/

https://eunice-university.eu/research/

## 2.13 EUt+ (EUt EXTRAS project) – From Technical to Social: The Use of Tools to Support the Creation and Actions of Communities

#### **SUMMARY**

One key achievement of EUt EXTRAS is to create collective awareness and commitment through a better understanding, analysis and support of research collaborations that will lead to an improved strategic steering of research and enhanced research support management. These outputs are i) tools developed for comprehensive in-depth analyses of research expertise and fostering for internal and external collaboration potential of the EUt+ researchers and ii) a Citizen Lab for open innovation and value co-creation. The periodic report evaluation has underlined the achievements made, for instance in terms of scientific impact: "the new methods developed for topic modelling and topic models visualisation via Graphs, is a scientific innovation per se". The developed tools are publicly available and free to use and can also be useful for industrial partners and society. The aim is to find the right contacts and counterparts in EUt+ working in specific areas and domain fields. This open use is expected to enhance the 'science with and for society' aspects as will the Citizen Lab activities, whose impact and methodology are being iteratively evaluated through case studies.

#### **DESCRIPTION**

#### Context

This work to support research communities has been triggered by the observation that research of the EUt+ alliance takes place across a wide

spectrum of disciplines and issues, ranging from energy and health to nanotechnology and sustainability sciences. The Universities of Technology distinguish themselves by a large number of external partnerships with a wide variety of public and, above all, private partners. However, these partnerships are in many cases the result of numerous individual initiatives that are often not globally structured and that would greatly benefit from being interlinked and supported. A better understanding and analysis, nourished by cross-fertilisation of skills between training, research, technology transfer, etc., greatly contribute to a better structuration of a relevant vision for research and their corollary, which is consistent informed steering and management. On the one hand, value creation implies educating professionals with the relevant skills towards transformation through ethical, responsible, and human-centred innovation. On the other hand, value creation means partnering with societal stakeholders and organisations to collaboratively create and implement innovative solutions, e.g., sustainability-advancing knowledge, tools, and societal transformations. Europe's industrial renewal requires transitioning towards a more sustainable industrial system where companies seek to be profitable and purpose-driven, aiming at having a positive impact in economic, social, and environmental terms. The challenges posed by the twin green and digital transition (priority area n° 2 of the ERA) and Europe's industrial renewal in turn also

raise new challenges for universities in their missions and perception. The commonality between education and research is the need for collaboration with external stakeholders. Citizen labs provide such space in a participatory approach in a meaningful way that allows this coming together and joining of forces.

#### **Objectives**

Aiming at improving this global structuration of research and aiming at societal impact, the objective for the development of these EUt+ tools has been to maximise informed decision-making, research potential and enable our alliance to address challenges. This has been achieved by pinpointing the current pitfalls and priorities of the research that is carried out at the level of each member institution as well as in the consortium. Indeed, EUt+'s impact on the economy would be more effective if it were better understood and organised; EUt+'s societal impact would be greater if the innovation approach were socially embedded.

Therefore, EUt EXTRAS's hypotheses have been: Conducting a comprehensive mapping and foresight of our research capacity would enable us to, on the one hand, consolidate research activities from within and between our institutions, and on the other hand, to create more links between partners and improve coherence with all the activities (training, transfer...) within the same area of research. Most importantly, the identification of research trends, partners and infrastructures at both the local and European levels help to get a better understanding of the research ecosystem and facilitate the implementation of our strategic objectives. Concerning societal impact, the hypothesis has been that formalising

stakeholders' participation through citizen labs would allow EUt+ to adopt a truly socially embedded approach to innovation.

#### **Implementation**

These hypotheses have resulted in concrete tools developed for in-depth analyses of research collaborations: both internally among the EUt+ alliance members and for external partners focused on socio-economic developments, leading to a common dashboard (under current finalisation). The common dashboard would be useful for everyone, within or outside the EUt+ alliance, mining all EU funded projects, to find partners with experience in applying for research grants on the basis of (1) institution, (2) field of study, and (3) funding schemes. As for the "EUt+ R&I mapping toolkit", as an internal analysis tool, it can support decision-making, prioritisation and matchmaking, and the mapping of internal research and innovation portfolios, competencies as well as external opportunities and demands. Its aim is to analyse and highlight the distinctive capacities of the partners and their existing collaboration potential among them. With additional analysis, this will also help to understand how EUt+ R&I is thematically related to global societal challenges and the priorities of the territories. A dynamic version of the internal analysis tool is envisaged. EUt+ participants are being trained to use the tools through in-person masterclasses, which will be iteratively improved based on users' feedback. Figure 2.13.1 shows the user interface.

In this same spirit of participation and user-driven innovation, as well as alignment with societal challenges, the methodology of Action Design Research adopted for the Citizen Lab is currently being tested with external stakeholders



Figure 2.13.1: EUt+ Research and Innovation Analysis Tool

(companies, social innovators) as part of pilot studies. Based on the achievements and insights gained, the Citizen Lab emerges as a demonstrator of successful participation and involvement of local ecosystems towards reinforcing the role of universities as key actors in the ERA. It can centralise good practices – on value-co-creation, open innovation and societal impact – that can be scaled up to many more topics. In line with this dissemination potential, the EUt+ Citizen Lab is participating in the SEFI Ethics Spring School (TU Berlin, 10 – 12 April 2024) and Conference (EPFL Lausanne, 02-05 Sept 2024) as well as additional conferences.

#### Successes

The periodic report evaluation from the experts has underlined the achievements made as part of EUt EXTRAS, including reference to scientific impact. Several published conference proceedings and a live demonstration paper

describe the analysis tools. One of them analyses the Citizen Lab in line with SDGs (see References section).

#### Challenges

Beyond the inherent issues of tool development and setting up a Citizen Lab, a key issue is the acceptability of data that does not directly correlate with traditional metrics. The appropriation of new data requires new reflection within a framework that often remains explicitly or implicitly shaped for an individual's career progression. This requires guidance at all levels, both in terms of appropriating the potential of the tools and integrating their results into strategic reflection.

#### **Conclusions**

EUt EXTRAS's objective is to transform the piloting of research so that research will be moving towards a more collaborative and open

way for increased impact – economic and societal apart from scientific – questioning the role of universities and their missions in today's ERA. In line with this objective, EUt EXTRAS's approach aimed at i) maximising research potential by analyses allowing the creation of enlarged communities (research and beyond) and ii) partnering with societal stakeholders and organisations to collaboratively create value.

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Link to R&I toolkit:

https://researchinformation.univ-tech.eu/



## 2.14 FilmEU – The Design and Development of the Filmeu Community Platform

#### **SUMMARY**

The FilmEU CommUNITY platform concerns the implementation of a dedicated digital platform for researchers to the enactment of one of the main transformation modules of the FilmEU Alliance, "Developing a common R&I Agenda". The platform supports research collaboration and the implementation of our joint research agenda. The case describes the core objectives and context of this tangible outcome and the challenges it entails, along with the lessons learned. We regard community building as a core facet of FilmEU. With the implementation of the FilmEU CommUNITY, we also contribute to the "Sharing research infrastructures" transformation module.

#### **DESCRIPTION**

#### Context

The web-based collaborative platform targets researchers, teachers, staff and graduate students. It follows our capacitation efforts, namely the mapping of existing resources to highlight expertise and identify potential areas of collaboration between members. The process was informed by our R&I agenda and benchmarked against the state-of-the-art in view of highlighting priorities and challenges. These activities resulted in specific deliverables and knowledge-sharing processes that informed the later development of the platform. The exchange of experiences and knowledge with the Engage Alliance that had previously developed a similar platform has also been highly relevant. We are

convinced that the high degree of collaboration and exchange of knowledge attests to the relevance of the European Universities initiative.

#### Objectives

For the digital collaboration platform FilmEU CommUNITY, several objectives, functionalities and features have been identified in view of ensuring that the platform provides a set of tools and functionalities. They allow target users to collaborate and exchange information and the leaders and managers across the different teams within the alliance to publicise and promote new collaboration opportunities.

#### **Implementation**

The implementation of the platform was done following an agile methodology with strong involvement of all stakeholders through successive focus groups that evaluated the degree of adequacy of the platform for the needs of different target audiences. Beta versions were made available for testing and use in view of a truly collaborative development.

#### Challenges

Three main challenges can be highlighted: 1) the need to accommodate different local structures, profiles and setups of R&I activities across the Alliance; 2) the need to ensure the allocation of a full-time "community manager" to the project in view of ensuring its success; and 3) the overall management of a complex procurement process that includes not only the platform development but also its future sustainability and upscale.

#### **Conclusions**

The development of the FilmEU CommUNITY platform proved to be instrumental for the R&I capacitation of FilmEU. It supports the implementation of a joint research agenda module since it enables the setup of an easy-to-use solution that fully supports the collaboration mechanisms and the institutional structures and initiatives.

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#### **REFERENCES**

http://community.filmeu.eu



#### 2.15 NeurotechRI – Research and Innovation Infrastructures

#### **SUMMARY**

NeurotechRI – Research and Innovation – aims to support NeurotechEU, the European University Alliance of Brain and Technology. The Alliance aims to complement NeurotechEU by providing RI Infrastructures and learning benches to support (the education provided in) NeurotechEU. The investment in RI Infrastructures is believed to serve as a solid base for increased and strengthened collaboration amongst Alliance partners, especially in the longer term. Although it proves to be challenging to come up with a concise strategy for sharing RI Infrastructures throughout the Alliance, the Alliance is currently putting in much effort to overcome this.

#### **DESCRIPTION**

#### Context

NeurotechRI brings together seven researchintensive universities in Europe to transform
cooperation in research and innovation in
NeurotechEU, the European University for Brain
and Technology (eight partners in total).
NeurotechRI (Research & Innovation) is the
complementary SwafS project of the Alliance,
aiming to support NeurotechEU by providing the
Research & Innovation infrastructures and
learning benches to support (the education in)
NeurotechEU.

#### **Objectives**

NeurotechRI proposes an actionable and sustainable plan to develop a pan-European, inter-institutional, and intersectoral strategy to help Europe realise its full potential in the global

knowledge economy. Pushing the boundaries of fundamental research and applied science will mobilise innovation ecosystems, including the NeurotechEU ecosystem currently being formed, while actively engaging citizens to transform how to innovate, educate, and impact society. The Alliance set a total of ten goals to reach this potential.

NeurotechRI focuses on four fundamental pillars, which are regarded as the pillars by which NeurotechRI complements the NeurotechEU Alliance. One of these pillars is *Platforms and Infrastructures* and is especially interesting in the context of this topic for implementing R&I long-term strategies. There is a large focus on this pillar in the Neurotech Alliance, with the overarching objective to have a portfolio of RI Infrastructures by the end of the project that can be used by the Neurotech Alliance partners.

#### **Implementation**

Using NeurotechRI, the Neurotech Alliance has invested in multiple Research and Innovation (RI) infrastructures distributed amongst the different Alliance partners. These RI infrastructures have a broad range of applications and can be linked to the eight dimensions of neurotechnology, as defined by the Neurotech Alliance (see more information here). Examples include:

a) A catalogue of digital twin infrastructures obtained throughout the Neurotech Alliance. This will allow students and learners to be trained remotely in virtual laboratories, acquiring the skills to conduct scientific research before setting foot in the laboratory.

- b) A High-Performance-Computing (HPC) Cluster to train students, scientific staff, and nonscientific staff in Artificial Intelligence methods.
- c) Access to and expansion of specific setups/laboratories related to the eight dimensions of neurotechnology, for instance, electron microscopy and brain-machine interfaces.

#### Successes

The Neurotech Alliance has demonstrated a solid base with sophisticated RI Infrastructures that are (to be) shared with the Alliance partners.

The different RI Infrastructures are in different stages of completion and deployment at the different partners. The Alliance is convinced that prioritising RI Infrastructures is a good way to strengthen the collaboration between the partners. Furthermore, having RI Infrastructures from different partners available for usage is expected to positively affect the brain drain between partners or from outside the Alliance.

#### Challenges

The challenge the Alliance is currently facing is how the different RI Infrastructures can be scaled to pave the way for utilisation by all partners. For some infrastructures, this is more difficult to implement than for others. To overcome this challenge, the Alliance is currently mapping the states of the different RI Infrastructures that are included in the project, suggesting selection procedures that can be set in place, determining the interest of partners, and determining the possibilities/shortcomings for scaling. Based on this mapping exercise, the Alliance will move forward.

#### Conclusions

To conclude, NeurotechRI plays a vital role in providing the Research and Innovation Infrastructures for the Neurotech Alliance. This form of infrastructural support ensures a closer and stronger collaboration between the partners within the Alliance, thus contributing to a long-term and expanded collaboration involving a broader set of stakeholders within the Alliance. Although it is challenging to develop a concrete strategy to scale the RI Infrastructures to the level of Alliance, a big effort is being put into mapping shortcomings and finding ways of counteracting them.

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#### **REFERENCES**

NeurotechEU – https://theneurotech.eu

NeurotechRI - https://theneurotech.tech

#### 2.16 RUN-EU PLUS Cloud of Knowledge Portal

#### **SUMMARY**

The RUN-EU PLUS project has developed a digital knowledge hub portal which showcases the research expertise and facilities of RUN-EU research institutes, centres, and groups as well as individual researchers. The portal acts as a collaborative research space, research repository and portfolio of data, results, progress, and publications as well as showcasing the potential for societal added-value and contributions to knowledge and practice.

#### **DESCRIPTION**

#### Context

The RUN-EU PLUS research and innovation strategy fundamentally reinforces our cooperation in research and innovation with other sectors, particularly in academia-business cooperation in a quadruple helix approach. Developed by the Polytechnic Institute of Cávado and Ave, Portugal, the portal includes a variety of resources including publications, policy documents, informative training materials and videos focusing on a variety of research career development topics such as resilience and independent working, communication skills, networking and influencing skills, prizes and recognitions, education, areas of interest, expertise project management, personal development, strategic career planning, time management, writing and publishing skills. All public project results and best practices developed during the RUN-EU PLUS project will be published for peer review and the results,

datasets, presentations, and theses will be made available through this RUN-EU PLUS developed open access repository.

#### **Objectives**

- To facilitate international collaboration through common approaches to research skills development, intellectual property, ethics, open science, research integrity and impact assessment.
- To develop a tool to showcase excellent and impactful research of the RUN European University.
- To act as a repository for training materials which equip RUN-EU researchers with a combination of pedagogical and research skills.

#### **Implementation**

The "Cloud of Knowledge" platform serves as a central hub for resources, collaboration, and information dissemination among the network's members. The platform features a web interface for all functionalities related to the research information described above, ensuring accessibility through a standard web browser. A login system compatible with institutions within the RUN-EU network accommodates diverse authentication mechanisms to ensure seamless access for all users. The platform's dynamic structure enables back-office configuration for the standardised creation of new elements. This includes three levels of information management and three transversal levels. The platform design supports future scalability, allowing for the addition of new

sections, categories, and content types as the network evolves. Attention is paid to user experience (UX) design to ensure intuitive navigation and accessibility across all platform levels. Security protocols, especially concerning login and user data, adhere to the highest standards to protect sensitive information and intellectual property.

#### Successes

In the Cloud of Knowledge Portal, each researcher in the RUN-EU project will have access to training materials which support career development, and their work may be displayed on this portal. The portal serves as a place where researchers can collaborate, share their progress, and highlight the impact of their work on society. This portal offers various resources like publications, training materials, and videos on topics important for researchers' careers. Besides helping researchers progress their research careers, the portal also encourages collaboration between different sectors and promotes networking for innovation. It aims to strengthen partnerships between academia and industry, and it facilitates international cooperation on research practices and ethics. Moreover, the Cloud of Knowledge Portal will showcase the excellent research done by the RUN European University.

#### Challenges

The process of populating the platform and gathering information from various partners for the different sections of the portal posed a considerable challenge. However, through collective effort and determination a foundational model was established, namely a scalable and adaptable platform equipped with a

back-office that allows for the configuration of the platform's entire scope. This ensures that the portal can evolve in response to future demands and opportunities.

#### Conclusions

The development of this Knowledge Platform represents a landmark achievement within the scope of our European project, embodying the spirit of collaborative effort and innovation that characterises the RUN-EU alliance. This initiative has successfully forged connections between institutions at various levels, with a particular emphasis on research and innovation. What began as a requirement gathering exercise for a scientific training repository quickly evolved into a comprehensive portal, far exceeding our initial ambitions. This transformation has resulted in a platform that not only showcases the research and innovation endeavours of each RUN-EU member but also fosters potential synergies with alliance partners and industrial stakeholders across different regions.

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#### **REFERENCES**

https://run-eu.eu/run-eu-plus/

## 2.17 The Ulysseus Territorial and Digital Innovation Ecosystem

#### **SUMMARY**

The Ulysseus Ecosystem rests on two solid foundations: the Ulysseus Community, representing the helix and including the 8 Alliance partners and 152 associated partners; and the Ulysseus Campus, with three new and innovative joint structures: the Central Management Office, the Digital Platform, and eight Innovation Hubs (one at each university) aligned with the overarching EU twin green and digital transitions and societal wellbeing challenges, and landed into eight R&I regional and local challenges. The Ulysseus European University gives Higher Education, Research and Innovation a crucial role in supporting social cohesion, economic growth and global competitiveness of our cities and Regions.

#### **DESCRIPTION**

The Ulysseus Campus, emerging from a new community based on the quintuple helix model, brings together 8 higher education institutions and 152 partners who are unified by a commitment to environmental protection. This collaboration has spawned shared facilities and three new joint structures: Innovation Hubs, the Central Management Office, and the Ulysseus Digital Platform. These initiatives aim to merge territorial and digital links, promoting the growth of knowledge, skills, technologies, and collaboration, all geared towards boosting regional and local development.

The overarching objective of the Ulysseus Campus is to establish an inclusive and open European University framework that is not only poised for growth beyond 2023 but also maintains a unique, adaptable, and enduring structure. A key aim is to develop a specific legal structure that would ensure the University's uniqueness and sustainability. The campus is committed to enhancing transdisciplinary and challenge-driven education, interconnected with research, knowledge transfer, and the promotion of active community and citizen engagement, upholding European values.

Central to the Ulysseus initiative are the Innovation Hubs, which act as focal points for collaborative endeavours among partners. These hubs facilitate the co-creation process, focusing on education that transcends disciplinary boundaries and is driven by real-world challenges. The hubs are equipped with Joint Research Centres, Incubators, Living Labs, and Open Classes, all designed to support interaction, connection, and collective design efforts. The unique feature of Ulysseus is its portrayal as an Innovation Ecosystem, developing tailored solutions for specific R&D challenges identified within the hubs, thereby translating ideas into practical outcomes.

The Ulysseus Campus aims to achieve significant milestones through its emphasis on institutionalised collaboration within the Innovation Hubs. By aligning its challenges with

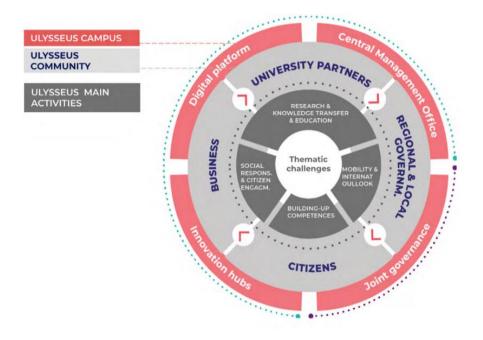


Figure 2.17.1: The Ulysseus territorial and digital Innovation Ecosystem, a university for the future

regional priorities and significant agendas like the UN SDGs and the European Green Deal, Ulysseus plays a pivotal role in advancing the twin green and digital transitions, contributing to the construction of a cohesive and robust technology ecosystem.

Navigating the integration and alignment of the Campus's diverse initiatives with the strategic priorities of regional and local governments presents ongoing challenges. Moreover, establishing a collaborative and democratic governance structure that fully engages the vast and varied Ulysseus community demands continuous effort and innovation. The Ulysseus Campus serves as a model of collaborative innovation and shared ambition, guiding the

future of European education and research. It establishes a path towards a flexible, sustainable, and inclusive European University through its foundational structures and focus on R&D challenges. The ongoing evolution of its governance, expansion of networks, and alignment with societal objectives are essential for achieving its maximum potential and impact.

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#### **REFERENCES**

Ulysseus Innovation Hubs

### 2.18 UNIC4ER – The UNIC Seed Research Fund and the UNIC Virtual Campus

To lower the barriers for entry into engaged research, UNIC4ER is proud to present two specific cases: the UNIC seed research fund for engaged researchers and the UNIC Virtual Campus. The first one is providing small-scale support for engaged research collaboration and project development across all disciplines. The second one, the UNIC Virtual Campus, is the research pillar developed for the scientific research community. Building upon the network of the Seed fund researchers and on the overall network of the consortium, the UNIC virtual campus research pillar is created to support easier connection between researchers through the formation of joint research groups and the sharing of publications, projects and other scientific works. Both initiatives represent pillars currently embedded in the new phase of UNIC.

#### The UNIC Seed Fund for Engaged Research

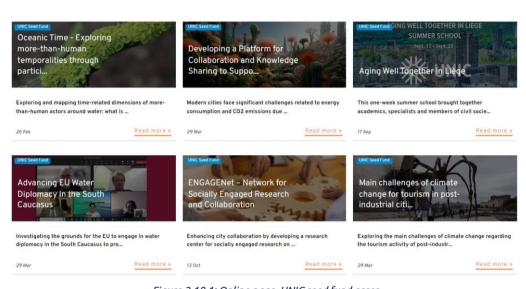
In order to increase collaborative engaged research initiatives within the UNIC consortium while providing support to researchers to run those initiatives, a Seed Fund Mechanism was put in place by the Alliance in 2023.

This collaborative UNIC Engaged Research initiative focuses on the societal challenges faced by the post-industrial cities in transition partners of the Alliance. It reflects the related Local Engaged Research Roadmaps co-designed with them.

Via the UNIC4ER research support officers, the Seed Fund initiative represents a remarkable collaborative platform to promote engaged research cooperation between UNIC universities together with their social and economic communities. Focused on the challenges of post-industrial cities and built together with the city stakeholders, the platform is a further step in the Alliance's commitment to build effective society-academia partnerships. Moreover, it facilitates the dialogue between researchers from different institutions and disciplines and creates awareness of the need to involve society in research processes from the design phase aiming at a transformative impact.

By providing small-scale support for engaged research collaboration and project development across all disciplines, this mechanism has been a complementary resource to set up a collaborative project/initiative (such as an application for external funding for research, development, or innovation project), and/or an initial resource to establish a new collaborative partnership among UNIC partner universities helping to develop a novel and solid research path, which could also be supported by an external grant afterwards.

This fund has allowed the creation of several new collaborations resulting in project proposals, joint workshops and publications or summer schools for a total of more than 35 different faculties engaged within the UNIC network.



Engaged Research Projects Supported by UNIC:

Figure 2.18.1: Online page. UNIC seed fund cases

Figure 2.18.1 depicts the online page for collecting the cases. In April 2024 there are currently 20 uploaded initiatives.

### The UNIC Seed Fund, Project Engaged Student for Inclusive Cities, an example

The Project Engaged student for Inclusive Cities aimed to bring together engaged student researchers from Erasmus University of Rotterdam (EUR), the University of Liège and societal stakeholders such as the municipality of Rotterdam and antidiscrimination agency RADAR.

The project offered possibilities of networking for all the participants, educated students about the concept of engaged research and shared findings of the thesis projects of EUR alumni with the policy makers. The workshop was video-

recorded and the three videos showcasing the event, the discussion on engaged research, and the engaged research projects were produced as a result.

The workshop took place on 12 December 2023 and was led by Dr. Asya Pisarevskaya, who was assisted by Eline Teunissen.

Present on the day of the workshop were senior researchers, students, alumni, representatives of the municipality of Rotterdam and the antidiscrimination agency RADAR as well as engaged research officers from the University of Liège. During the workshop, the presentations by alumni highlighted challenges and recommendations related to migrant integration and antidiscrimination efforts in Rotterdam. Based on these presentations, a roundtable

discussion was held with a focus on students who had not yet written their theses. They obtained valuable information on what it means to perform engaged research. For example, the students got recommendations on how to access state actors and grassroot organisations to collect data for their research projects.

#### **Conclusions**

The workshop has received much praise from the participants and is a starting point for a longer-term co-creation to connect students, policy makers, and social organisations and society. The videos resulting from the workshop showcasing the event were disseminated via multiple platforms (here and here) and offered inspiration to other researchers of the UNIC consortium. The objectives of the workshop were to facilitate multidisciplinary dialogue between academia, municipal bodies and social organisations to identify challenges in inclusive policy making. Additionally, the role of student-researchers was discussed in bridging the gap between local knowledge and academic knowledge.

For more information, please reach out to pisarevskaya@essb.eur.nl.

#### The UNIC Virtual Campus

#### **SUMMARY**

The UNIC Virtual Campus is a part of the UNIC Open Science Campus intended for the scientific research community. Broadly, the main goals of the UNIC Virtual campus are to enable virtual mobility of students by implementing the process of course selection and enrolment, to enable the issue and verification of a UNIC European Student Card, to enable interaction with a UNIC website,

and finally to enable the virtual networking of researchers.

The UNIC virtual Campus research pillar specifically creates the IT support for easier connection between researchers enabling the virtual networking of researchers navigating the catalogue of publications, projects and other scientific works, while forming joint research groups based on specific topics.

#### **DESCRIPTION**

The UNIC Virtual Campus provides a publicly available research outputs catalogue that relates to universities of the UNIC alliance. These research outputs are harvested from the OpenAIRE Graph Dataset, which harvests the data from local universities' repositories. Importantly, these research data can only be changed in source systems, i.e., in local universities' repositories. The catalogue contains information such as: Original Title, Creators, Date of acceptance, Publisher and Type of work (currently it holds only publications but, in the future, the catalogue will contain all science and professional papers that are connected to UNIC alliance universities).

Researchers can currently register on the Virtual Campus with the identity assigned by their home institution. The registration form is pre-filled with data fetched from the Identity Provider (IdP), which can be modified/added if necessary. By selecting the home institution and the role (e.g. Researcher), the ORCID widget appears, with which the researcher connects his or her ORCID profile with the one in the Virtual Campus. After submitting the registration, the UNIC admin receives an email notification for confirmation. Each researcher can see publicly available data retrieved from ORCID, such as keywords,

| O These research outputs are harvested from OpenAIRE Graph Dataset, which harvests the data from local universities' repositories. If any of the data presented is not correct, please make sure it is corrected in your local university repository, and the correct entry will propagated to OpenAIRE and consequently to UNIC Virtual Compus. |  |                    |             |  |            |
|--|--|--------------------|-------------|--|------------|
| Research outputs   |  |                    |             |  | Q III =    |
| Original title   | Creators   | Date of acceptance | Туре        | Publisher  | Details    |
| Utjecaj parodontološke teraplje na C-reaktivni protein i parodontne patogene kod pacijenata s parodontopatijom   | Ana Pejčić; Ljiljana Kesić; Jelena Milašin; Zoran<br>Pešić; Dimitrije Mirković | 01 Jan 2011        | publication | University of Zagreb. School of Dental Medicine                                | <b>①</b>   |
| Hranjiva vrijednost ribe   | N. Fijan   | 01 Jan 1969        | publication | Faculty of Agriculture, University of Zagreb                                   | <b></b>    |
| Pokrstenje Hrvata prema najnovljim znanstvenim rezultatima: (prikaz pitanja)   | Antun Ivandija   | 01 Jan 1967        | publication | Catholic Faculty of Theology, University of Zagreb                             | <b></b>    |
| The relationship between biodiversity and the blomass of grasslands in the Zagreb area (NW Creatia)  | Sven Jelaska; Marta Justić   | 20 May 2022        | publication | Division of Biology, Faculty of Science, University of Zagreb                  | +          |
| Konferencija: Kvaliteta socijalnih usluga - zajednička EU načela i standardi   | Lidija Japec   | 23 Jul 2012        | publication | Pravni Fakultet Sveucilista u Zagrobu (Law School of the University of Zagreb) | +          |
| Quantifying the challenges associated with poor electricity supply in Nigeria and the role of a<br>hybrid FV system in addressing them   | Otówósejéjé, Samuel  | 01 Jul 2020        | publication | University College Cork  | <b>(+)</b> |
| Big data in Finnish financial services   | Laurila, M. (Mikko)  | 24 Nov 2017        | publication | University of Oulu   | +          |
| SURADNIČKI SOCIJALNI RAD U ZAJEDNICI S OBITELJIMA S VIŠESTRUKIM IZAZOVIMA  | Nina Mesi  | 01 Jan 2018        | publication | Faculty of Law, University of Zagreb, Department of Social Work                | +          |
| Riječ urednika   | Siniša Zrinščak  | 01 Jan 2008        | publication | University of Zagreb, faculty of Law, Study centre for Social Work             | +          |
| Mistä on pienet piiskat tehty?:selittävä näkökulma Friedrich Nietzschen naiseuskäsitykseen   | Hyyrönmäki, S. (Sauli)   | 28 May 2014        | publication | University of Oulu   | +          |
|  |  |                    |             | 111-120 of 604   | 3 < >      |

Figure 2.18.2: The UNIC Virtual Campus – research outputs page

websites & social links, etc., on their portal. Also, there is an option to share this data with other researchers within the Virtual Campus.

Currently, the implementation of new functionalities for the active networking of researchers is underway. Researchers will be able to choose keywords from seven themes aligned with the new phase of UNIC according to their interests. Macro and mezzo keywords (Web of Science keywords) will be offered for disciplines and fields of research. ISCED Fields of Education and Training keywords will be offered for teaching. Also, researchers will be able to choose preferred modes of cooperation. Based on these chosen keywords, a matchmaking tool for networking researchers will be implemented.

#### Conclusions

The UNIC Virtual Campus serves as a public catalogue of researchers and research results. In order to keep the data flow as simple as possible, aligned with the principle of Open Science, the system uses two well-known open-access platforms to collect the data – ORCID and OpenAIRE.

More details about the UNIC virtual campus are provided in the submitted deliverable D5.2 "UNIC4ER Open Science Campus Research pillar embedded in UNIC Virtual Campus".

#### **CONTACT POINT**

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#### 2.19 UNITA – Shared Infrastructures Network

#### **SUMMARY**

In the Re-UNITA SwafS project, the UNITA Alliance has created a shared infrastructures network, and implemented the conditions of the effective mutualisation of our R&I capacities, thanks to a common agreement and an adapted funding for mutual uses and technician trainings.

Based on a rich and publicly accessible online platform, this network has enabled the first steps to be taken towards pooling the research capacities of our universities, so that our researchers can benefit from the cutting-edge equipment housed in our different universities.

#### **DESCRIPTION**

#### Context

Planned in the Re-UNITA project, the creation of a network of shared research infrastructures has been identified as a key tool to build a UNITA research community, identifying our research capacities and expertise, and making them available within this community.

#### **Objectives**

This network has three main objectives:

- Mapping and highlighting the research infrastructures hosted by UNITA universities
- Ensuring an effective access to UNITA research infrastructures for our researchers and technicians
- Funding mutual use of research facilities and technical trainings for our research technicians.

#### **Implementation**

The implementation of this network involved 4 steps:

- 1. Common agreement signed by UNITA rectors: April 2022
- 2. Launching of the online platform with the infrastructures catalogue: September 2022
- 3. Funding scientific experiments within this network: September 2022 August 2024
- 4. Funding technical trainings and job-shadowing: From September 2023

#### Successes

- A public and accessible online platform
- Mutual uses of research infrastructures ongoing – more than 20 up to now
- Technical trainings and job-shadowing ongoing – more than 10 up to now

#### Challenges

- Sharing research infrastructures given the local agreements: in some of our universities, the research infrastructures can be owned or co-owned by other local or national institutions. This was an issue for the possibility of sharing these infrastructures in a common UNITA network.
- Communicating this network to our local researchers: this challenge was, from the beginning, identified as a risk. It remains difficult to disseminate the existence of this network in our communities and multiply the uses of other UNITA university infrastructures.

#### Conclusions

The main mechanisms for pooling our research infrastructures are in place. Communication and dissemination actions are beginning to bear fruit, showing a significant increase in the number of users of the platform after more than a year and a half of existence.

In order to strengthen, broaden and intensify these exchanges, this activity has been made a priority of the UNITA Alliance, as shown by the work planned in the consolidation phase of the UNITA Alliance (2023-2027).

#### **CONTACT POINT**

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#### **REFERENCES**

https://www.research.univ-unita.eu/en/supportfor-researchers/shared-researchinfrastructures.html



#### 2.20 Beyond UNIVERSEH

#### **SUMMARY**

Beyond UNIVERSEH is the research arm of the UNIVERSEH alliance. In addition to all the training aspects, it aims to develop cooperative research activities, notably through the creation of a community of researchers and a single lab. Various tools, documents and events have been defined to list the material and human resources available in the partnership that could be organised, coordinated and made consistent to achieve these objectives. Their descriptions and implementation are presented below.

#### **DESCRIPTION**

#### Context

Beyond UNIVERSEH is developing the research and innovation dimension of the UNIVERSEH European University, an alliance of five partners: University of Toulouse (France), AGH University of Science and Technology (Poland), Heinrich Heine University Düsseldorf (Germany) and University of Luxembourg (Luxembourg). Beyond UNIVERSEH is expanding the teaching, learning and know-how of the alliance into a UNIVERSEH European Research University focusing on "Space" in all its dimensions: Science and Engineering; Economy, Business and Finance; Medicine and Health: Social and Human Sciences: Art and Culture; Innovation and Entrepreneurship. It brings together researchers and stakeholders from multiple backgrounds, promoting a highly multi-disciplinary and cross sectorial network to address the societal challenges of Space and New Space. Beyond

UNIVERSEH's main ambitions are to develop and propose a research policy roadmap for 2035 and a vision for 2050 within the space, to create a sustainable, integrated research and innovation network, and to create a shared and collaborative virtual single lab for research.

#### **Objectives**

In the Erasmus-funded UNIVERSEH project, the concept of "single class" has been introduced to create a common classroom for all students of the University, meaning that a specific course could be attended by students from any university in any place. The proposal here is to extend the concept to research platforms, infrastructures or facilities, to make them accessible, and even controlled remotely, for researchers in any university. This concept is called "UNIVERSEH single lab", and consists of a joint effort in the pooling of our resources. A specific organisation will take care of this "UNIVERSEH single lab" project. For the longterm vision of a common strategy, the consortium will study the possibility of a common virtual lab (lab without walls) with its own identity and integrating all academic disciplines.

#### **Implementation**

The questionnaire to identify research topics for teacher-researchers was launched in mid-February 2023. The survey had two objectives: (1) to identify the researchers and their skill sets in the Higher Education Institution members of UNIVERSEH, and (2) to put forward the idea of cooperation, particularly interdisciplinary cooperation, and identify the researchers

interested in carrying out this type of project. To date, 90 complete responses have been collected. The nomenclature of scientific fields for calls for projects issued by the European Research Council was chosen to name the fields, disciplines and research subjects presented in the questionnaire.

An analysis of the responses to this questionnaire is intended to provide an overall picture of the researchers affiliated to UNIVERSEH member HEIs who have shown an interest in the project and its aims. If we look at the disciplines targeted, it is logical to note that for a project dealing with space, researchers from the Physical Sciences and Engineering would like to collaborate even more with researchers specialising in the Universe sciences (14 respondents). In relation to Life Sciences, we can note the desired link between engineering and medicine (physiology and biotechnology). With the Social Sciences and Humanities, the interests lie in geography and sociology. The links between Social Sciences and Humanities and Physical Sciences and Engineering could be established around information processing via IT.

Two partners, the University of Toulouse and AGH, have jointly organised a pioneering interdisciplinary workshop in Krakow, setting a standard of quality and synergy that will serve as a cornerstone for all future events. Before the workshop the participants were provided with some inputs to better understand the context of the current and future space research: 2019 Global Exploration Roadmap (GER) Tech Portfolio, ESA Agenda 2025 in English and French, ESA Tech strategy, ESPI Public Report 69 EUrope India Cooperation, GER 2018 and 2020, as well as the Beyond UNIVERSEH deliverables: D3.1 listing the research facilities that could be used by the outcoming research projects and D2.2 listing and

describing the process of selection of the space research topics for the theme galley activity.

Among the list of the facilities, some will be selected in order to contribute to the creation of our "single lab". Some selection criteria have already been discussed, such as:

- support for identified joint projects,
- willingness to operate according to a written cooperation agreement availability and accessibility and cost of use,
- IP protection agreement,
- willingness to share some results in the framework of any Open science programme,
- remote access.

#### Successes

The researcher identification questionnaire identified 90 people, covering different sectors and coming from all establishments. Even if science and technology are the most represented, the affirmation of scientific openness ("I'm ready to work with a field different from mine...") is strong and deserves to be emphasised.

The Krakow seminar enabled researchers to meet face-to-face, present their research activities, identify common areas of interest and define possible areas for collaborative research. The two Marie Curie projects are the preliminary result.

A list of the platforms identified among the partnership was cross-referenced with the list of potential projects from the Krakow seminar in order to open all possible doors.

A questionnaire ("What is a lab in your university?") has been launched and completed. The results are being analysed in order to list the characteristics of a joint lab, identify

commonalities and lay the foundations for a single "network of resources" (material and human resources).

The Beyond UNIVERSEH partnership is well aware that there will be no new funding dedicated to alliances for European universities in the short term, such as the SwafS programme. The Marie Curie projects currently being drafted will therefore play a central role in the development of the alliance's research projects.

The University of Toulouse is also applying for COFUND projects to co-finance theses and post-docs. Beyond UNIVERSEH partners are naturally called upon to show their support for these applications and participate in the supervision of the theses and post-docs that these projects will co-finance.

Joint research within a partnership can be carried out at multiple scales, between two researchers from two different institutions of two different countries, or involving several partners. Programmes for funding large-scale cooperation tend to be European projects, such as Erasmus+ or Horizon Europe, while programmes for funding bilateral cooperation are often funded by national agencies and may differ according to the priorities and operating methods of individual countries. Faced with these different solutions, we decided to support every idea and the proposal was made to bring together as many bilateral funding programmes as possible in a single document which has been widely circulated. The idea is to give researchers the opportunity to apply for funding for small, bilateral projects faster and easier than with a MSCA project.

Finally, a project currently under discussion within the alliance includes a communication and

networking platform to put researchers and staff in touch with each other for the purpose of creating a community of practice, finding research partners, locating facilities for carrying out experiments, finding reviewers, thesis jury members, etc. The overall aim is to create a common spirit of collaboration. The platform will include:

- a list of facilities, their characteristics, and the contact details of their pilots,
- the names, contact details and keywords of laboratories and teams working in space or related sectors,
- the names and contact details of researchers who are interested in the project
- information on possible bilateral funding schemes.
- agreements for sharing the facilities, different templates for PhD cotutelles, a table of the characteristics of the PhDs in all the Universities of the partnership, a list of the student clubs
- ... plus, a search engine.

#### Challenges

Even though the Bologna process has been validated by European countries, there are still many regulatory obstacles to smooth exchanges at Master's and PhD level. The definition of a "laboratory" varies from country to country. The most important differences are size, research strategies, recruitment policies and budgets. Solutions to overcome these differences in the degree of mutualisation will be suggested in phase 2 of our project.

The universities involved in the partnership knew little or nothing about each other before drawing up the UNIVERSEH project. A long period of mutual discovery was therefore necessary. A new

challenge is the arrival of two new partners as part of the enlargement.

Despite the commitment of the players involved, there are still a few points of imbalance between disciplines (more hard sciences and not enough human sciences) or between the genders of the people involved.

SwafS budgets have been much smaller than Erasmus budgets, and the budget supplements provided by national research agencies vary greatly from country to country. These differences have created imbalances in partner investments. We therefore need to work together to achieve a better balance in our contributions.

#### Conclusions

We are considering how to maintain this dynamic within the UNIVERSEH 2.0 project. A sub-working group has been set up to focus on the links between training and research. It will work in conjunction with the sub-group dedicated to PhD programmes and with the UNIVERSEH 2.0 "Space crew".

Various tools have been developed and are currently being tested. They are the building blocks of our "single lab" project which will be launched in the second phase of the project. The initial UNIVERSEH project focused on training, multilingualism and mobility, entrepreneurship and innovation, open science and inclusion, while the SwafS-funded Beyond UNIVERSEH project was devoted to research. A bright prospect for these initial projects is their integration into Phase 2 activities.

#### **CONTACT POINT**

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#### **REFERENCES**

https://universeh.eu/research/



# 3.

# OTHER RELEVANT GOOD PRACTICES

#### 3.1 Aurora RI – Aurora Research Support Platform

#### **SUMMARY**

The Aurora Research Support Platform is designed for Research Managers and/or Administrators (RMAs) to facilitate knowledge sharing and collaboration between grants offices and research support staff in Aurora universities. Ultimately, this contributes to three of the seven transformation modules launched by the European Commission in 2020 (A strategic European Research and Innovation agenda): i) supporting the central role of universities and research actors; ii) fostering increased knowledge transfer and collaboration between academia and non-academic sectors: iii) optimising universities' role in research infrastructures. The platform is intended to succeed the project lifecycle and to continue to facilitate and encourage collaboration between RMAs for years to come.

#### **DESCRIPTION**

#### **Context and Objectives**

The overarching objective of this part of the work is to develop a shared plan and actions on supporting and fostering excellent R&I within Aurora RI and the Aurora Universities Network in line with Aurora's mission statement and vision. The plan advances EC priorities identified in the new European Research Area communication, the Horizon Europe Missions, the European digital transformation, and the EU Green Deal by strengthening support for researchers. It focuses on how best to support

research within the four priority domains of the project.

The creation of a platform for research support is a key factor in defining and implementing a shared plan and actions, enabling the participants to collaborate further, share successful case studies, quickly solve problems together, brainstorm opportunities for joint projects, put forward ideas for consideration, and quickly link researchers from similar fields.

#### **Implementation**

To achieve our objective, we developed a holistic platform for research services, based on the project lifecycle from idea to impact. The platform allows the research support officers of the Aurora universities to share the knowledge and expertise of support services.

The platform has two main components:

- An open part hosted on the Aurora corporate website, containing information on the teams and services they provide, tools they have access to, professional networks they are a part of, as well as news on successful Aurora partnership projects.
- A closed part hosted on University of Iceland's SharePoint environment that only Aurora RMAs are given access to. This part contains self-developed resources by Aurora RMAs, such as best practices, tips & tricks, annotated templates, and previously awarded proposals for which we have obtained consent to share within the group.

#### Successes

- The platform was designed and developed through regular and extensive discussions within the work package team. As such, it is a prime example of collaborative work.
- The ambition of sharing previously awarded proposals led us to create a consent form to be signed by researchers, which was a new experience for Aurora RMAs, required collaboration with our legal teams, and was finalised after a few corrections.
- The platform is a living structure used by all Aurora RI members and all partners keep contributing their own resources.
- 4. We have generated a Standard Operating Procedure document to describe how the platform is designed to make sure everyone can upload valuable resources that are not readily available online, in the correct location and with a self-descriptive file name.

#### Challenges

- Coordinating the implementation with the Aurora Alliance communications and development team.
- Developing the habit of actively using the platform by uploading new resources and using the existing resources among several other tools and resources Aurora RMAs have access to and are already in the habit of using.

#### Conclusions

The Aurora Research Support platform perfectly complements the Aurora Resources and will further establish excellence in R&I support at the universities. This will be done by openly sharing the research support expertise and infrastructure of each institution as well as their available tools and points of contact, in order to simultaneously increase trust and transparency between the institutions and facilitate collaboration. The information allows all those interested in exploring ideas, partnerships, or looking for support, to find information about the institutions, their specialisations, and contact persons. The Aurora Research Platform is a living product that will be continuously updated by a small team tasked with:

- Managing access rights
- Promoting the use of the platform among colleagues
- Engaging with the Aurora communications team to share news and announcements on the website
- Implementing new ideas to expand the platform, for instance a blog site.

#### **CONTACT POINT**

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#### **REFERENCES**

Website on Aurora partner universities: <a href="https://aurora-universities.eu/partner-universities/">https://aurora-universities.eu/partner-universities/</a>

Website on the Aurora RMA network: https://aurora-universities.eu/rma-networks/

#### 3.2 Aurora RI – Aurora 'In Conversation With' Sessions

#### **SUMMARY**

Aurora RI has created a series of one hour, informal 'In conversation with' style sessions aimed at Aurora colleagues and their networks interested in the exchange on current topics of innovation promotion and technology and knowledge transfer.

#### **DESCRIPTION**

#### **Context and Objectives**

Aurora RI has the exchange of knowledge, experiences, and cooperation as its primary purpose. Work Package (WP) 4 within the project deals with strengthening cooperation on entrepreneurial activity. Its goal is to enhance the impact of R&I activities within each member institution. The WP is tasked with identifying best practices in entrepreneurial engagement, pinpointing areas for collaboration and increasing the visibility of entrepreneurial activities within Aurora and beyond.

The new series of one hour, informal 'Aurora In conversation with' style sessions is aimed at Aurora colleagues and their networks interested in the exchange on current topics of innovation promotion and technology transfer.

#### **Implementation**

The sessions are Aurora branded in a consistent way and are 'in conversation' style events. They last for one hour, with speakers from a range of Aurora institutions and their regional ecosystems (including on occasion international external speakers) briefly showcasing their expertise,

challenges, and activities, talking about their own experiences in a certain innovation area, and ending with a Q&A. The sessions are mainly virtual but also physical or hybrid on occasion, e.g., during an on-site meeting (biannual Aurora conference or physical get-together).

The sessions align with the themes of the priority areas identified in a prior mapping of expertise, best practices, and capacity building areas. The initial sessions were on themes such as 'Incentivising innovation activity amongst researchers', 'Identifying Innovation Potentials' with the help of an Innovation Search Engine and 'The role of University Holdings in boosting science-based start-ups'.

#### Successes

- The sessions were designed and developed through regular and extensive discussions within the WP team. As such, it is a prime example of collaborative work.
- All Aurora universities participated with suggestions for themes as part of a prior mapping of expertise, best practices and capacity building areas.
- The sessions allowed us to also reach interested participants from outside Aurora including other European Universities alliances.

#### Challenges

 Coordinating a regular date as a distinguishing feature that considers the numerous commitments of the core participants, national holidays, etc.  Developing the habit of actively participating and engaging in the sessions and discussion, considering the number of other events and activities the innovation community has access to.

#### Conclusions

The Aurora 'In conversation with'-style sessions are a low-threshold occasion to bring together Aurora colleagues and their networks interested in the exchange on current topics of innovation promotion and technology/knowledge transfer. Based on this, new contacts within Aurora and beyond are made and existing collaborations are intensified.

#### **CONTACT POINT**

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#### **REFERENCES**

https://aurora-universities.eu/partneruniversities/



#### 3.3 EC2U/RI4C2 – Engaging the EC2U Community

#### **SUMMARY**

Within the RI4C2 project, several activities have been conducted to foster the engagement of the whole EC2U community, from innovators and other experts to citizens. The main objective has been to connect these local stakeholders at the Alliance level via different kinds of activities:

- Enablers of innovation and entrepreneurship the so-called Lighthouses of Innovation – were brought together and produced the "Recipes of Innovation", which compile insights and best practices drawn from the experience and expertise of these Lighthouses.
- Academia and citizens have gathered around common activities via the creation of Livings Labs for Citizen Science, which involve collaboration between research organisations, industry partners and citizens, with the goal of creating solutions that are responsive to the needs of the community.
- A culture of Open Science within the EC2U
   Alliance has been fostered with the creation of support and training materials.

#### **DESCRIPTION**

#### Context

- The publication "Recipes of Innovation: An EC2U Cookbook" serves as a resource showcasing best practices and reflections directly collected from the innovation stakeholders of the EC2U/RI4C2 knowledge ecosystem.
- Three Living Labs for Citizen Science empower citizens from the cities of EC2U partner

- universities to directly participate in the R&I process. These Living Labs are a platform for scientific dialogue between citizens, researchers and innovators.
- The implemented process to foster Open Science within EC2U has been able to reveal already established and emerging Open Science practices and to create support and training materials that increase the capabilities of the Alliance to make Open Science practices a core part of its system.

#### **Objectives**

- The "Recipes of Innovation" aim to support university bodies as well as students, researchers and other university actors to become innovators themselves and to bridge scientific concepts with practical applications, fostering collaboration with non-academic actors. The "Recipes of Innovation" also seek to increase visibility of innovation support structures themselves.
- The EC2U Living Labs for Citizen Science aim at developing specific activities in three SDGrelated areas: Good Health & Well-being, Quality Education, and Sustainable Cities and Communities.
- To foster a culture of Open Science and accelerate the transition to Open Science within the EC2U Alliance.

#### **Implementation**

- The implementation of the Recipes entailed two parts: the organisation of four workshops and a best-practices collection.
- 2. To formulate a framework for the creation and

- development of the first three pilot Living Labs, a thematic conference was organised in September 2023.
- The Open Science activities were pursued via three steps: (1) a mapping of the Alliance partners' current capacities related to Open Science; (2) the development of resources and tools to facilitate the adoption of Open Science practices; and (3) by disseminating these Open Science practices and resources throughout the Alliance.

#### Successes

- The "Recipes of Innovation" publication has received positive feedback, serving as a tangible outcome for showcasing innovative methods.
- The pilot Living Labs for Citizen Science were officially launched in February 2024 and the first Citizen Science projects were submitted for funding.
- The Open Science activities of the project have supported the local development of Open Science practices within EC2U and have advanced the creation of joint incentives and opportunities for researchers and administrative staff to increase their involvement in both established and emerging Open Science practices.

#### Challenges

- Ensuring comprehensive representatives of best practices and synthesising insights effectively was challenging. Formulating a concrete "recipe" required to take a step back from the immediate work context towards a more general approach. This helped to make the Recipes more accessible and broadly applicable, across disciplines and cities.
- 2. Ensuring future funding for the development

- of the Living Labs activities.
- 3. There is variation between the national contexts in terms of national coordination and requirements, which sets universities at somewhat different stages of the transition. One effective way of ensuring that best practices of Open Science are followed is to include Open Science practices as a part of the reward system for scientists and scholars. However, what the adoption of Open Science means for the universities particularly in terms of research assessment practices is yet to be determined.

#### Conclusions

The activities presented here showcase the engagement of the RI4C2 project in ensuring effective collaborations between all actors of its ecosystem. It contributes to advancing R&I objectives while also addressing societal challenges and adopting specific relevant practices such as Open Science. Moving forward, continued support and collaboration are vital to sustain and expand the impact of the EC2U's Pan-European Knowledge Ecosystem in shaping the future of European research and innovation.

#### CONTACT POINT

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#### **REFERENCES**

The "Recipes of Innovation" are available on Zenodo

D6.4 Selection of relevant R&I topics for Citizen Science

D6.5 Pilot Living Labs for Citizen Science
Living Labs Launch Conference
https://ec2u.eu/ri4c2/work-package-6-knowledge-ecosystem/

https://ec2u.eu/ri4c2/work-package-7-open-ec2u/

#### 3.4 EELISA Policy Liaisons Board

#### **SUMMARY**

In 2022, EELISA partners set up the **Policy Liaisons Board (PLB)**, a group made of experts in EU projects and EU affairs, and high-level research managers, from each EELISA institution. The PLB tasks include identifying opportunities for discussion at EU level, sharing opportunities to continue or to further increase the collaboration of EELISA partners in research and innovation, and jointly analysing R&I policy developments.

#### **DESCRIPTION**

#### Context and objectives

The creation of the PLB responded to several objectives of the grant agreement, including contributing to the future Commission policy initiatives in Research and Innovation and increasing the internationalisation of our R&I structures.

#### **Implementation**

The policy liaisons board is made of one member per partner institution. It will be led by UPM until 31 May 2024 and it meets around twice per year.

#### Successes

The PLB has been a very useful group for EELISA both for tightening links and reinforcing the EELISA sense of ownership, as well as for creating

an EELISA voice at EU level. As examples of the work carried out, the PLB produced an EELISA position paper on Horizon Europe mid-term review and it dedicated its last meeting to analysing action 17 "Research Management Initiative". As an output of synergies created, some PLB members sent an application to create ERMI (EELISA Research Managers Initiative).

#### Challenges

Expert groups need a very strong facilitation to keep moving. Finding common ground and topics of joint interest has been difficult at times.

#### Conclusions

The PLB (under different names) seems to be a structure created by other Alliances as well. It can be concluded that creating working groups of experts in EU affairs is a natural way for Alliances to strengthen ties both at the institutional level and between researchers.

#### **CONTACT POINT**

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#### **REFERENCES**

https://eelisa.eu/eu-policy-making-eelisas-voice-in-ri-policies/

https://eelisa.eu/eelisa-position-paper-onhorizon-europe-mid-term-review/

# 3.5 RE-EURECA-PRO – Development and Implementation of a Strategy for Increasing Citizen Engagement (Science Communication)

#### **SUMMARY**

Within the framework of WP2 (Citizen Engagement and Societal Knowledge) of RE-EURECA-PRO, common guidelines for the conception and implementation of science communication formats are being developed. This is done by piloting formats on the HSMW campus (Mittweida, Germany) and subsequently implementing the formats at the partner universities.

#### **DESCRIPTION**

#### **Context and Objectives**

Common guidelines for the conception and implementation of science communication formats (such as science slams, project weeks and pupils'/citizens' universities) are being developed. Good practices will be consolidated and adapted to the resources and needs of the partners and their target groups.

#### **Implementation**

So far, all formats have been implemented by our partner universities. The implementation of the formats was documented and feedback surveys were analysed. All findings resulting from the implementation process have been recorded and evaluated and will be incorporated into a joint/common guidelines document.

#### Successes

One particular success was the creation of an

individually adaptable design which was based on the given framework conditions and the resulting individual format variations. Another success was the publication of an article about the development of adaptable science communication concepts and formats (see reference below).

#### Challenges

The implementation in given time periods proved to be challenging due to the different academic calendars and other circumstances, such as competing events at the partner universities, lack of staff, or unforeseen short-term changes in the academic schedules. The different definitions of various concepts, including a common interpretation of the term 'science communication', also had to be considered and dealt with in particular.

#### **Conclusions**

The results that can be drawn from the conception and implementation of joint strategies are diverse and multifaceted. For example, an adaptable design of the guidelines with a modular character has proven to be useful and helpful. In this way, the basic structures of the specified formats can be implemented and sustained, while other aspects of science communication formats can be adapted to the respective target groups and to the given conditions of the respective university context. In addition, this approach has also

proven to be helpful when collecting feedback and evaluating the events. The close and direct contact with the partners helped to clarify individual challenges/ questions and was experienced as positive.

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Coordinators: Vanessa Juliane Herrmann (herrman6@hs-mittweida.de) and Annabell Heimer References (articles, deliverables, website, etc...)

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### 3.6 BoostEuroTeQ – Define the EuroTeQ Learning Professional

#### **SUMMARY**

EuroTeQ, formed by eight technical European universities, aims to revolutionise engineering education and innovation. BoostEuroTeQ's focus is on fostering responsible research and innovation through institutional changes. Challenges include aligning diverse perspectives, balancing theory and practice, and meeting industry demands. Overcoming these hurdles necessitated meticulous planning and continuous assessment. Despite challenges, the success of the participant acquisition strategy highlights broad appeal. Learning professionals are crucial in bridging academia and industry, tailoring programmes for stakeholders, and collaborating with industry to align academic offerings with job market demands. Efforts are underway to establish training programmes emphasising competences, reflecting the project's commitment to bridging academiaindustry gaps.

#### **DESCRIPTION**

#### Context

EuroTeQ unites top European universities to revolutionise engineering education, funded by Horizon 2020 and Erasmus+. BoostEuroTeQ promotes institutional change and responsible practices through tailored training programmes and new roles like the EuroTeQ Learning Professional. These initiatives aim to transform engineering education, emphasising collaboration, responsibility, and diversity,

shaping a future with ethical leadership and societal impact.

#### **Objectives**

The BoostEuroTeQ project seeks to advance responsible research and innovation through institutional transformation. It encompasses activities such as analysing current learning professionals, establishing a qualification framework, designing training concepts, and executing pilot activities. These initiatives aim to empower learning professionals to facilitate knowledge transfer and enhance the skills of engineers within the EuroTeQ network, fostering a culture of responsible research and innovation.

#### **Implementation**

The BoostEuroTeQ project utilises learning professionals to facilitate knowledge exchange and tailor training programmes for various stakeholders. They collaborate with industry to align academic offerings with job market demands, acting as translators. Efforts include establishing training programmes and enhancing education, emphasising competences. Implementation involved a training programme integrating online learning with on-site sessions.

#### Successes

The project's participant acquisition strategy resulted in nine individuals from four partner universities joining the pilot programme. They

brought diverse backgrounds, sharing involvement in adult pedagogy and representing various engineering domains and management roles. The programme successfully fostered synergies among participants, harmonising learning and professional development approaches across partner universities.

#### Challenges

BoostEuroTeQ faced challenges in aligning perspectives, balancing theory with practice, and meeting industry demands. Meticulous planning integrated academic and industry insights, with continuous assessment ensuring responsiveness. Equitable resource access across universities demonstrated commitment to empowering Learning Professionals.

#### Conclusions

In the EuroTeQ project, Learning Professionals foster knowledge exchange among universities, industries, and stakeholders. Skilled in communication, they customise training, leading to successful participant acquisition.

Participants' diverse backgrounds enrich the programme, reflecting a broad interest in bridging academia and industry. Learning Professionals collaborate with industry to align academic offerings with job market demands, emphasising specialised competences. The training programme, derived from a qualification framework, adopts a hybrid

learning approach. Pilot activities emphasise methodological competences in adult pedagogy, aligning with the project's aim to bridge academia-industry gaps.

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https://www.edu.sot.tum.de/en/td/home/

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# 3.7 FilmEU – The Design and Implementation of the Innovation Vision Action Plan (IVAP)

#### **SUMMARY**

FilmEU is committed to providing a transformative learning experience in the domain of the arts that fosters artistic research, innovation, and entrepreneurship across society. It includes several activities in its planning, intended to act as drivers of innovation across the Alliance, summarised in the "Innovation Vision Action Plan (IVAP)." The plan draws strategically from the Organisation for Economic Co-operation and Development Observatory (OECD) of public sector innovation, which developed the "Innovation facets" framework. The specific focus on educational innovations and entrepreneurship education builds on the IVAP framework developed by the European Institute of Technology (EIT).

#### **DESCRIPTION**

#### Context

The OECD background provides us with a strategic framework to better understand and manage multi-faceted innovation in a scenario of uncertainty like the one we face in FilmEU. The EIT's IVAP model allows us to assess the level of innovation and entrepreneurial capacity across our HEIs. The EIT defines innovation as a process with an outcome by which new ideas respond to societal or economic needs and demands, generating new products, services, or business and organisational models that are successfully introduced into an existing market or that can create new markets and provide value to society.

This definition provides us with a clear starting point for understanding innovation as a key competitive feature for organisations in a knowledge economy that rely on creativity as a core aspect of their activity.

#### **Objectives**

We devise strategies and processes that feed innovation across different layers, at an individual level but also allowing for the development of a conceptual and organisational framework that supports the envisioned change process of transforming this network of HEIs into a collaborative European University that operates as a hub of innovation aka the FIHUB. Innovation should be regarded as a catalyst for change to build up FilmEU as an innovation ecosystem that resorts to creativity and entrepreneurship as the main drivers of this change. The FilmEU Innovation Hub ('FIHUB') is a virtual pilot incubation structure to support project-based innovation, providing a 'safety net' for talented former students to incubate and develop their projects further through the FIHUB factory to the marketplace and society in some meaningful way.

#### **Implementation**

IVAP entails a methodology to assess the level of innovation in each institution and in the Alliance and considers very different areas of intervention. These are essential to boost an institution's entrepreneurial capacity. Once all these areas of intervention/impact have been defined, we can verify that all of them ensure the

different domains of impact are addressed by activities we design that fit the remit of these different domains and areas.

#### Challenges

In FilmEU, innovation takes place within complex national, international, and regional systems demarcated after the different national and regional contexts of Alliance members. The innovation, institutional change, and capacity-building intervention we propose, must be elaborated with clearly articulated statements of intended impact while also accommodating multiple external influences that can influence delivery.

#### Conclusions

FilmEU does not regard its IVAP as static nor definitive. It will evolve and transform itself in the future as we move forward with the implementation of our University of Film and Media Arts – process that will transform all participating HEIs and contribute to the emergence of the Universities of the future. The IVAP process clearly addresses the transformative module on "Impact and Engagement" by focusing on the capacitation of the Alliance members innovation and entrepreneurship and consequently their ability to engage and impact across society.

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#### 3.8 FilmEU\_RIT Pilots and the Joint Research Agenda

#### **SUMMARY**

FilmEU RIT Pilots is an initiative via which FilmEU further capacitates its researchers and the R&I capability in the partner HEIs. FilmEU creates matchmaking events to allow for initial networking of researchers, provides funding schemes for the pilot projects, and organises excellence-based research competitions to select the most potent pilot projects. The objectives of the pilots are to consolidate teams inside the clusters and to support the definition of the research agenda. This strategic endeavour aims to identify key areas crucial for advancing artistic research capacitation within FilmEU. Through collective action and strategic alignment, the framework aims to drive sustainable progress and unlock the full potential of artistic research in FilmEU.

#### **DESCRIPTION**

#### **Objectives**

The objective of the FilmEU\_RIT pilots is to support the R&I capacity of FilmEU by fostering opportunities for researchers to collaborate around a common research interest. Most pilots explore their area of interest via the means of artistic research – methodologies that FilmEU greatly supports in its aim to move towards a more inclusive academia and a broader understanding of research. The objectives consist of aligned and supported research training and bottom-up driven research collaboration opportunities structurally supported and monitored by FilmEU research officers.

PhD students receive training in three annual DOCTUS seminars, present and discuss their research in front of peers in the subsequent annual PhD Spring/Summer Seminar and are supported by seminal funding for collaborative efforts in artistic research dissemination at the FilmEU Summits (dedicated Artistic Research Exhibition called ARE).

#### Implementation

The implementation includes funding, mapping of researchers' key interests, clustering these interests into thematic or multidisciplinary focus areas, organising networking events around these areas, aiding the researchers in filling in the funding application (including at least 3 partner HEIs), and facilitating different network events after a successful funding. The partner HEIs provide additional funding in the form of salaries and covering mobility costs for the successful research pilot groups.

#### Successes

FilmEU\_RIT has successfully launched five pilot projects and research networks, out of which four have the opportunity to continue development under the FilmEU's Centres of Excellence measure. FilmEU has also provided seed funding for another five artistic research projects and has currently mapped over 250 researchers from the now eight HEIs forming the FilmEU.

#### Challenges

There are several challenges regarding the status of artistic research that currently exist in the European higher education and research

landscape. These are related to the difficulties of achieving recognition for artistic research in research community, having no indication of such a discipline/methodology in the Frascati Manual and alternative classification systems (CERCS, etc.), which considerably complicates funding opportunities. Artistic research also often falls between science and culture ministries in the member states, further complicating the recognition of research outputs and limiting funding opportunities. Bringing together researchers from 8 different cultural, sociopolitical and economic conditions and onboarding collaborative pilot projects and dynamic clusters is another major challenge.

#### Conclusions

FilmEU has contributed greatly to expanding its and its partner HEIs' R&I capabilities via developing pilots and the joint research agenda. This is key in the context of the transformative module "Joint research agenda". These initiatives have yielded considerable successes by mapping over 250 researchers and concluding 5 pilots and having launched another 5 and setting up for the launch of additional 5 dynamic research clusters, all of which are key aspects of our joint research agenda.

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# 3.9 RUN-EU PLUS Development of Joint PhD in Digitalisation Engineering

#### **SUMMARY**

A PhD programme in Digitalisation Engineering has been jointly developed by the Polytechnic University of Leiria (Portugal), Polytechnic University of Cávado and Ave (Portugal) and the Technological University of the Shannon (Ireland), 3 partners of the Regional University Network European University (RUN-EU). The PhD programme has been submitted for approval of the Portuguese Education Agency A3ES. The application has been supported by 30 regional companies and researchers registered on the programme will be able to carry out their study, research, and autonomous work activities at any of the partner institutions (HEIs), as well as obtain credits from Short Advanced Programmes (SAPs) or other types of training provided within the framework of the RUN European University. The research will take place at the associated units, Instituto de Telecomunicações (IT) and Applied Artificial Intelligence Laboratory (2Ai), TUS and in partnering companies.

#### DESCRIPTION

#### Context

The three institutions involved in the development of this degree programme have been collaborating closely since 2019 and will continue to do so in a systematic and transnational cooperation in teaching and research activities, including joint research projects and SAPs, within the framework of the RUN European University (EU). This joint PhD

programme at doctoral level within RUN-EU will contribute to consolidating the European University's research and innovation strategy, in line with Europe's priorities in terms of the digital transition, innovation and advanced training of human resources. The joint creation of joint PhD programme also aims to multiply research activities and boost the impact of scientific and technological results, through their transfer, valorisation and capitalisation in the three European regions directly concerned, with a multiplier effect also expected at national and international level.

The new digital technologies applied to the automation of processes and services, such as cyber-physical systems, automation, artificial intelligence, Cloud and IoT, 5G technology (connectivity), sustainable and intelligent energy systems, are, as a whole, the foundations of the digital transition in industry and services, particularly in the strategic industrial sectors for Portugal and Ireland, where innovation is crucial for sustainability and global competitiveness. In this way, the PhD degree programme aims to enable industry and public bodies with responsibility for land management to take advantage of these emerging digital technologies, promoting innovation and facilitating their development.

In order to achieve these objectives, this PhD programme has letters of support from more than 30 companies.

#### Objectives of the joint PhD programme

The joint PhD in Digitalisation Engineering is a strategic addition to the educational portfolio of the three institutions, aiming to contribute to common objectives, namely the development and consolidation of competitiveness and innovation hubs in digital technologies, aligning the programme with the smart specialisation areas of the regions where the institutions are located. Its key objectives include:

- To train highly qualified human resources at the forefront of the specific scientific fields of Digitalisation Engineering, capable of contributing to economic and industrial development in different regions of the European area, based on the creation of knowledge through international cooperation integrated into the RUN European University.
- To provide adequate training to carry out technical scientific activities, integrating knowledge and developing innovation in multidisciplinary professional environments, with high levels of ethics, environmental awareness and high demand and competitiveness.

#### Implementation

The cycle of studies (CS) will be taught at the Polytechnic University of Leiria (IPLeiria), in Leiria, Portugal, at the Polytechnic University of Cávado and Ave (IPCA), in Barcelos, Portugal, and at the Technological University of the Shannon (TUS), in Limerick, Republic of Ireland. The pedagogical dimension offered by the doctoral programme in Digitalisation Engineering can be carried out at any of the institutions in person and online. The curricular units will be taught by one or more institutions. Researchers on the programme will

be able to carry out their study, research and autonomous work activities at any of the partner institutions (HEIs), as well as obtain credits from Advanced Short Courses or other types of training provided within the framework of the RUN European University. The research will take place at the associated units, Instituto de Telecomunicações (IT) and Applied Artificial Intelligence Laboratory (2Ai), TUS and in companies.

In this PhD programme, each candidate defines an individual plan with the curriculum unit that best suits their research objectives. Whenever possible, the research will be based on an immersion experience in an industrial environment. In this way, solutions to new challenges that require the creation of knowledge will be investigated in a logic of strong interaction with national and international industry. The involvement of industry will provide candidates for the doctoral programme, contribute to doctoral themes, as well as hosting students, and eventually, their financial support.

#### Successes

The collaboration between IPLeiria, IPCA and TUS on this new joint PhD programme stems from the recognition and external accreditation of the quality of the institutions' training offer in the area of the study cycle, namely the degrees in Electrical and Computer Engineering, Computer Engineering, the master's degrees in Electronic and Computer Engineering, Electrical Engineering, Applied Artificial Intelligence, Cybersecurity and Computer Forensics, Data Science, Computer Engineering-Mobile Computing, Master in Digitalisation of Manufacturing (TUS).

#### Challenges

The biggest challenge faced in the development of this programme was in the identification of a strategic framework to address legal and administrative challenges in designing, registering, funding (different fee structures) and approving the research degree structural requirements following the European Credit Transfer and Accumulation System (ECTS) satisfactory to all members and their state legislative requirements.

An EU mechanism which would allow alliances to navigate more quickly through these potential roadblocks would be very progressive towards the streamlined establishment of joint RUN-EU European research degree programmes.

Collaborative degrees and the legal status of European Universities to overcome regional problems (like no PhD awarding competences at Universities of Applied Sciences/Polytechnic Institutes) are crucial. It must be ensured that a degree of a European University is equally accepted by industry and academia.

#### Conclusions

This joint PhD programme will focus on training individuals with advanced qualifications to operate in the technological field of the digital transformation of companies and institutions, namely by studying, developing and

implementing innovative solutions with digital technologies. Students are expected to develop the following knowledge, skills and competences:

- Mastery of state-of-the-art digital technologies applied to the automation of processes and services;
- Ability to analyse and investigate complex challenges, and propose new solutions incorporating knowledge of digital technologies;
- Ability to conceive, design and develop innovative products and/or processes for industrial and service digitalisation;
- Ability to lead and collaborate in interdisciplinary and international projects, as well as organise, synthesise, communicate, and disseminate the generated scientific knowledge, respecting the ethics and methods of scientific research.

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https://run-eu.eu/run-eu-plus/

#### 3.10 UNITA – Improving Research HR Environment

#### **SUMMARY**

Improving the environment for human resources in research is a priority for the UNITA Alliance and has been launched as part of the Re-UNITA project. The aim here is to create, within the framework of the UNITA Alliance, working conditions conducive to excellence in research, including the recruitment, support and training of young researchers, as well as the efforts to tackle gender inequalities in research careers. These challenges have also been brought together in our joint work to ensure that all UNITA universities include their practices in an HRS4R label in the near future.

#### **DESCRIPTION**

#### Objectives

- Sharing good practices to pave the way for each university to access the HRS4R label
- Implementing a mentorship programme, aiming at improving the young female researchers' careers development
- Developing a common training catalogue for early-stage researchers

#### **Implementation**

 HRSR Label: Two universities already beneficiary of this label (UNIZAR and UPPA) have worked to share their good practices and supporting the other UNITA universities in their work towards the HRS4R Label. Several UNITA universities, thanks to this dialogue and work, has applied for HRS4R during Re-UNITA project lifetime. Mentorship programme: each university has established a local programme, recruiting local mentors (experimented female researchers) and mentees (early-stage female researchers). Mentors and mentees meet frequently, in a non-formal way, in order to tackle the challenges imposed to female researchers in their career development. Several collective meetings are organised in order to establish reports and measure the impact of this programme on mentees and mentors.

#### Successes

- Mentoring programme: More than 40 researchers are participating in this programme, allowing rich discussions and interdisciplinary exchanges on how the careers are guided in our universities, tackling barriers and obstacles to reach gender equity in research.
- Trainings for early-stage researchers:
   6 trainings have been held at the UNITA level,
   dedicated to Open-science issues in R&I, and
   especially designed for early-stage
   researchers.

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# CONCLUSIONS ON ALLIANCES' PROGRESS IN IMPLEMENTING LONG-TERM R&I STRATEGIES

Over the course of their SwafS projects, Pilot II Alliances have implemented a large variety of activities to strengthen their R&I long-term strategies. While such activities occur at a policy or operational level, they each contribute to outlining the steps to build a relevant and sustainable R&I dimension for alliances.

It seems evident from the examples provided in this joint report that the SwafS projects have accelerated the process of including a broad R&I perspective into their alliance. All are already building on the outputs of the SwafS projects to continue part of their activities in the new E+ funding phase. However, it is also clear from the case studies that the main challenge is to obtain more targeted R&I funding to further develop these activities within the alliances.

Thus, the momentum built throughout the SwafS projects must be nurtured and pursued with new/different funding instruments to ensure that what was established over the course of these three-year projects is maintained and developed further. The case studies prove that a wide range of activities have been successfully implemented and that there is a real need and motivation to pursue additional R&I activities within the alliances.

To conclude, Pilot II Alliances have made rapid progress in implementing long-term R&I strategies, thanks to the SwafS projects. Some of the activities and strategies put in place will continue to take shape as part of the activities of the E+ funding, but it remains crucial to obtain specific R&I funding to continue the work begun to develop long-term R&I strategies in the alliances.























