Una Europa R&I Strategy Workshop

Task 1.4. Defining priority challenges

Summary of the workshop methodology and outcomes; WP1; 20th January 2024

1. Methodology

Due to the Covid-19 pandemic, the originally planned physical workshop to define the priority grand challenges for Una Europa research could not be organized. In addition, the focus areas up to year 2030 were defined in the Una Europa 2030 strategy. As a results of these conditions, we developed a concept for an online co-creation workshop that both could advise the Una Europa R&I strategy development and pilot such concept in out alliance.

The three-hour workshop took place 22nd September 2021. The aim of the workshop was 1) to identify research themes the Una Europa community deems as important in the future to solve the grand challenges and 2) to identify enablers and barriers to international research collaboration. The workshop was facilitated by the think tank Demos Helsinki. The co-facilitators were University of Helsinki research professionals and Una.Resin project managers.

Una.Resin WP1 invited six researchers per institution to participate the workshop. The Una.Resin project managers kindly supported us with appointing the participants. We emphasized that ideally the participants would represent different disciplines and career stages. In the end, most participants were senior academics who also fulfilled roles as dean or head of departments.

Two weeks ahead the workshop, the participants were asked to conclude a pre-assignment using the online platform Flinga. The aim of the pre-assignment was to provide the participants a briefing to grand challenges and to set they minds to the workshop themes. As inspiration, we have collected to the Flinga board information about Una Europa focus, Horizon Europe strategic planning, grand challenges (from OECD, Demos Helsinki, Sitra). We also shared with them the Sitra megatrend cards presenting future scenarios:

https://media.sitra.fi/2020/03/04130112/2021544megatrendikortit2020enverkko.pdf

Both workshop and pre-assignment aimed to collect ideas about formats and areas of future research within a shared Una Europa environment. The results of the workshop were not treated as final decisions but as insights to inform decision making (Una Europa vice rectors of research and the General Assembly). They also informed the ongoing process of developing a joint Una Europa research and innovation strategy and a Una Europa strategic narrative. The contributions were treated confidentially on an individual level, and no ideas or comments made in the pre-assignment or workshop will be traceable back to the participants.

We aimed to identify a common understanding of how collaboration within Una Europa can look like, rather than come up with project ideas at this stage. We encouraged the participants to be visionary and creative in this exercise and treat it as an opportunity to think big about the potentials of Una Europa as a research community without borders. For the discussion, participants were divided into multidisciplinary and multi-institutional groups.

In addition, the workshop commenced with three keynote speeches which introduced the concept of grand challenges.

Note that in this document the term « multidisciplinary » is used as a general term to refer to multi-, trans- and interdisciplinary research. In later stage, Una Europa agreed to use « interdisciplinary » as suh umbrella term in its strategic documents.

2. Workshop Program

Pre-Assignment using Flinga On-line Canvas

Enablers and good practices of international collaboration

Thinking of your own experiences, please describe shortly enablers and good practices that could serve as an inspiration when considering international research collaboration in terms of infrastructures, multidisciplinary research, ecosystems, research lifecycle (ex: sharing, management, support, training personnel, opening collaboration to non-academic organizational partners and citizens).

Link to the Flinga board: Flinga - Pre-task 1, Enablers and best practices

Wild cards of research themes

Considering the current common excellence and focus areas of the Una Europa universities, the existing Una Europa focus areas, Horizon Europe key strategic orientations and clusters, and the grand challenges presented on the Flinga Whiteboard as inspiration, which multidisciplinary research themes can you see emerging? What should be considered relevant towards 2030 and beyond? Please add your ideas of research themes and link them to the relevant Una Europa strengths and grand challenges. You may also suggest additional research themes or grand challenges that you consider important towards 2030 and beyond.

Link to the Flinga board: https://edu.flinga.fi/s/EQXTJBE

Keynotes

- Welcoming Words, Prof. James Smith, Una.Resin Project Coordinator, Chair of the Una Europa Research Strategy Group, Vice Principal International University of Edinburgh
- An Introduction to Grand Challenges, Aleksi Neuvonen, Demos Helsinki
- The EU's Approach to International R&I Collaboration in a Changing World, Nienke Buisman, Head of Unit, Directorate-General for Research and Innovation, Global Approach & International Partnerships, International Cooperation

Group Discussion

An identical set of on-line working canvases were provided to each discussion group. The canvases included directions and guiding time allocated for each canvas. The set of canvases included ones with the questions described below and one summarising the discussions (fig.1) A facilitator, appointed to each group, was supporting the groups with the use of the canvases and time keeping, if needed.

• Part 1: Which multidisciplinary research themes can you see emerging? What should be considered relevant towards 2030 and beyond?

Participants were asked to suggest research themes which they consider to be of high relevance in the next decade and beyond. The two sub questions were:

- 1. A theme that you're familiar with and that is impactful and important for the future.
- 2. A theme that is important and impactful for the future, but not so familiar to you and you want to learn more about. After this the groups discussed the ideas of each group member.

The keynote speeches, pre-distributed materials (list of societal challenges, Horizon Europe priorities, Una Europa focus areas and Una Europa strengths) and a pre-assignment served as inspiration.

Part 2: Enablers and barriers of the international research collaboration

Participants were asked to conceive a shared imaginary research project using the outcomes of part 1 and then discuss enablers and barriers clustered around four themes: research infrastructures, ecosystems, multidisciplinary opportunities and research lifecycle. They were asked to consider following parameters: sharing, management, support, training personnel, diversity and inclusion, opening collaboration to non-academic partners and citizens (Fig 1).

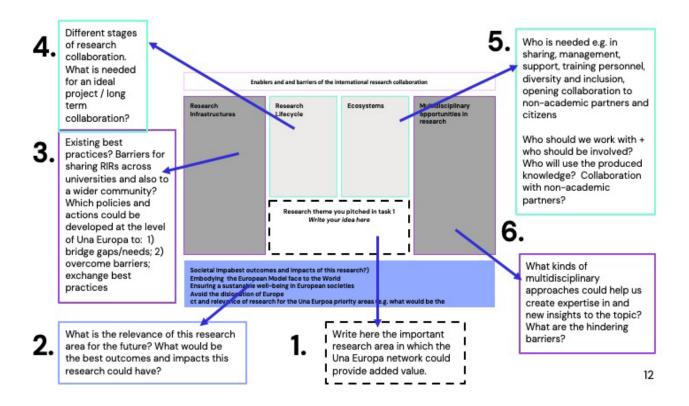


Fig. 1. Working deck of the group discussions. The deck was shared on-line to each group to support the discussion and was filled in during the workshop.

3. Synthesis of the Discussions

Part 1: Which multidisciplinary research themes can you see emerging? What should be considered relevant towards 2030 and beyond?

Many themes connected to the current Una Europa focus areas and crosscut with each other as well as with the grand challenges. Key themes that correspond directly to existing Una Europa focus areas included data science and AI, health and wellbeing, cultural heritage & identity, and sustainable and inclusive transitions, globally and in societies. Other themes were democracy and governance, European public policies (NEB, Green Deal, SDGs), inclusive societies/ societal inclusion and social cohesion as well as the indirect impact and economic and social spill over, future of food, urban

studies, migration and mobility as well as neurosciences. Future materials emerged as a topic already prior to the workshop and was subsequently incorporated as an additional focus area in the 2022 Una.Futura proposal.

Part 2: Enablers and barriers of the international research collaboration

Research Infrastructures

Participants regarded research infrastructures and resources as pivotal enablers for collaborative research and community building. Knowing what kind of infrastructures (including data sets) are available at partner institutions was deemed important, for example via catalogues of equipment. Networks of research laboratories can be formed by enhancing the mobility of researchers, staff, and students (possible formats: research retreats, job shadowing, Erasmus+ staff exchange). Infrastructures should also incorporate the broader civil society, among others with the aim of knowledge dissemination.

Data Infrastructures

Sharing of data and data infrastructures was a topic that was discussed in terms of both "enablers" and "obstacles" from many points of view: Infrastructures, ecosystems and multidisciplinary research. Researchers highlighted an urgent need for enhancing processes of storing, sharing and accessing data. Existing platforms are not working efficiently. Particularly health and clinical data is hard if not impossible to share at this point. European data regulations (data protection etc.) lead to a competitive disadvantage if compared to e.g., U.S. and Chinese researchers. Furthermore, there is a lack of harmonization between national, EU and international regulations.

Una Europa provides an opportunity to multiply the scale of data access, but in order to achieve this, barriers in the form of regulations, finances and incompatible systems need to be removed. Una Europa could, for example, develop trans-national standardized ways and facilitate (virtual) RIRs to collect, store and share data. The added value of the systems for science must remain at the centre of the endeavor. Exchange across disciplines and research ecosystems should be enabled. The overhead needs to be kept as simple as possible and the disruption of data owners at a minimum. In case of data being restricted to a certain location, people can also move under the condition that agreements are in place to share data. Una Europa researchers could, for example, be affiliated with other teams or institutes at partner universities.

Ecosystems

The discussions evolved around two kinds of ecosystems, those consisting only of researchers and research institutions and those including non-academic partners, since we did not define ecosystems in the task. This created some confusion and highlighted the need to define the term if used in the Una Europa R&I strategy.

Participants pointed out that ecosystems work under the premise of a common language and open-mindedness. Sharing of data is another crucial enabler. In research ecosystems, the circulation of researchers enables the cross-fertilization of research groups. Also, technical and administrative staff (and with them their knowledge) should be shared. Institutions need management staff who can map available resources on an ongoing basis and exchange listings with their counterparts at partner institutions. Una Europa could build joint information tools on R&I ecosystems in key areas (in common format for all institutions, including description of ecosystems open to all Una Europa members). Also, support in identifying funding opportunities and grant writing was seen as important.

Functioning ecosystems are using existing capacities and make them sustainable. Building an ecosystem should be facilitated by identification of promising themes/topics and appropriate levels for networking. Una Europa should also invest in networks with non-academic partners, not only

companies, and create novel ways to engage with citizens for example by organizing research retreats which include policy makers or offer training sessions to citizens on specific concepts. During projects, bridges should be built between different projects to widen the community and connect to the business environment and policy makers.

Multidisciplinary Opportunities in Research

Researchers recognized the high value of multidisciplinary research despite the multiple barriers that need time and effort to overcome (differences in languages, institutions, evaluation traditions, priorities, difficulty to publish interdisciplinary work, risky career pursuit esp. for young scholars, etc.). Institutions have to acknowledge that these projects cannot always be fitted into departmental structures and need to create incentives. Multidisciplinary provides new approaches in science such as open science and citizen science and enables the embedding of external stakeholders, research beyond academia, and citizens.

Participants suggested a variety of measures how multidisciplinary research can be incentivized, among others by thematic networks that are headquartered at one partner institution, the creation of meeting spaces, mapping of expertise of Una Europa researchers and the existing ecosystems, enhanced mobility among researchers and students also across disciplines, decoupling of certain funding from publication outputs, the introduction of interdisciplinary approaches at the universities and national evaluation processes.

Research Lifecycle: What is Needed for an Ideal Project / Long-term Collaboration?

Researchers noted that sufficient incentives are required from the outset. While seed funding is a typical incentive, long-term funding and the procurement of resources, time, and effective project management tools are more important. An ideal collaboration would allow full/easier access to the facilities and infrastructures of the other universities. Furthermore, Una Europa should promote collaborations that go beyond the life of single projects or grants.

General Remarks on Una Europa Collaboration

A consensus emerged that Una Europa should provide support in particular to early career scholars. Sustainability and inclusivity were seen as common values in most discussions. These need to be taken seriously and be embedded in all activities and strategies of Una Europa. The organisational and hierarchical distinction between academic and professional staff for example should be overcome with the aim to work together as team. Researchers desire long-term support for their projects as well as for funding and pre-award assistance.

The feedback from attendees was positive and facilitated co-creation was found inspirational. Some groups asked for continuation and some changed contact details to continue the discussions, even that was not the aim of the workshop in the first place. However, some participants found that they lacked skills and traditions for this kind of multi-/interdisciplinary workshop approach and wished for better introduction to this kind of working method. Additionally, Una Europa is not yet very well-known at the member universities, thus the motivation to look for future orientation for this collaboration was not always clear.

We found that research themes raised in this workshop were often crosscutting several grand challenges reflecting that these challenges are interlinked, cannot be treated as separate phenomena and require complex solutions. Furthermore, we found that research interests and questions formulated by researchers do not neatly fit the frameworks as formulated by political decision-makers. Terminologies and approaches such as "grand challenges" are hence not always the most fruitful way to engage researchers in a workshop like this one. Researchers formulate their interests within the terminology and culture of their discipline.

As lessons learned about organizing workshop

It is labor intensive and takes time to organize such co-creative workshop. Planning and facilitating one is a skill that must be learned by experience and should be considered as a professional skill of the research professionals. Una Europa should take advantage of the format created in this pilot. Working in the future oriented, co-creative and interdisciplinary manner is still new to many academics in the alliance, but concept could be fruitful for the self-steering committees of the focus areas and when preparing for funding calls. There always have to be a purpose for co-creation in mind when organizing one.

We also learned that there needs to be enough technical facilitators as there are surprises on the way. Five participants and a facilitator a good group size, but it is important to prepare to that in this operational environment participants may disappear during the three-hour workshop and the groups may be left small and thus reorganized. The groups should be given freedom for discussions to evolve, but the facilitator is essential to encourage the discussion and keep time, when needed. The groups may have different needs and wishes, and it is important to have the discussion in the beginning to have a common understanding about the facilitator's role.