Una. Resin, R&I Strategy Benchmarking

Summarising report of the Una. Resin Task 1.2

WP1, Elina Tonteri 24th January 2024

1. Methodology

1.1.1. Sources

As part of the Una Europa R&I strategy preparation, WP1 conducted a benchmarking of Una Europa universities' R&I strategies and policies. The analysis included both strategic research areas as well as policies and practices of each university. The aim was to identify areas of convergence, complementary strengths as well as common strategic aims. The results have provided a deeper understanding of the policies of the eight partners universities and will serve as a foundation for the future Una.Resin strategy process, including the design of pilot actions.

Three sources were consulted for the analysis:

- 1. Benchmarking questionnaire (see Annex A)
- 2. Una.Resin GA Annex 1 Description of Action (part B): Descriptions of the consortium partners
- 3. Publicly available information on the institutions' websites (see Annex B)

WP1 designed the questionnaire jointly with Una.Resin WP2 (Sharing of Infrastructures) in order to align the mapping of research policies with that of policies on research infrastructures. As both questionnaires were potentially targeted at the same research service professionals of all eight Una Europa partners, the alignment avoided parallel inquiries and facilitated a lean process.

In the preparation stage, a first draft questionnaire in English was presented to Una.Resin PSC members for feedback. Subsequently, the questionnaire was sent to the members of the Una.Resin Research Coordination Cluster (RCC) and the Research Infrastructure cluster (RIC), who were briefed about the aims of the benchmarking exercise in an on-line session. The process of collecting the data for the questionnaire was left to the individual institutions. The final WP2 questionnaire consisted of the following sections:

- Part 1: R&I strategies and strategic initiatives (WP1)
- Part 2: Research infrastructure and resources (RIRs) (WP2)

While all universities returned the questionnaire, the answers varied greatly in scope, detail, and focus. Reasons for this could be the openness of the questions, the limited capacities of university administrations to gather more information, the unclear responsibilities and/or the need to consult across administrative units, as well as language barriers. Consequently, in addition to the questionnaire, we extended our analysis to the Una.Resin grant agreement as well as to the universities' websites in order to identify research priorities on an institutional level.¹

We limited the scope to strategies formulated at the main university level. Strategies of individual faculties, departments, or units, if existing, were not considered in this analysis.

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¹ Initial plans to analyse additional data such as strategies of individual departments or bibliometrics could not be completed due to capacity constraints within WP1. The complexity of carrying out benchmarking exercises at eight institutions and the required preparation and work load need to be considered in the future.

1.1.2. Analysis

This report analyses "Part 1: R&I strategies and strategic initiatives (WP1)" of the questionnaire which contained ten questions with sub-questions addressing following topics: R&I strategies, research themes, funding, fields of excellence, multidisciplinary structures, multidisciplinary research, partnerships, regional focus areas, collaboration with Una partners, and research ethics (Annex A). In analysis we prioritised those questions relevant for the strategic choices to be made by the Una Europa general assembly in June 2022.

None of the Una Europa universities had strategy documents on hand which exclusively concerned research and innovation. However, seven of the eight universities had mapped out strategies that included strategic goals for research or had communications that conveyed research policies, guiding principles and/or institutional values. In order to map these values and put them in relation to one another, we analysed the strategic aims and values described in the questionnaire (question 1 on existing or planned multi-annual research strategies) as well as the documents provided on the university web pages with Atlas.ti, a research analysis software for qualitative data analysis and mixed methods. After an initial screening of the data, we devised three guiding questions according to our project goals (for the Atlas.si outcomes, see Annex C):

- 1. What kind of intentions can be derived from the responses the partners provided?
- 2. What values and strategic choices are reflected in already existing strategies?
- 3. What is their relation to each other?

Other topics in the questionnaire, namely questions 2, 4, 5, 7, 8 and 9, were processed in MS Excel and arranged into categorized tables. For questions 2, 4 and 5 referring to research areas, themes or fields) two different analyses were conducted:

- Categorisation according to 1Europe focus areas: We assumed that a connection between education and research
 within Una Europa activities was strategically relevant. Responses were thus grouped within a category of a
 1Europe focus area if suitable. The remaining content was arranged into other research area-, theme-, or fieldrelated categories.
- 2. <u>Analysis without defined categorization</u>: For all other questions, we derived the categorization from the responses given.

In the following, we present key outcomes and remarks. The analysis is not comprehensive and provides a snapshot of dynamic and complex institutional frameworks. The raw data presented as analysis excels will be available for future use on the Una Europa common data storage platform once such is in place. In the later stages of the project, we will re-visit the questionnaire outcomes as needed and share the data with other Una Europa strategy development teams. For instance, the benchmarking questionnaire asked for strategies with a geographical focus as well as international partnerships. This data can provide insights for the Una International Strategy development.

2. Results

1.2.1. Strategic Goals at a University Level

Una Europa partners are large universities of high research activity which partially differ in scope. Some institutions for example, include a school of engineering, whereas others are more strongly orientated towards social sciences and humanities. Yet, all Una Europa universities host multiple disciplines and operate under the premise of academic freedom. They build on practices that aim to nurture excellence and competitive bottom-up funding. Individual faculties, departments and chairs are responsible for research and defining priorities. Depending on the institution, faculty choices can be aligned with those of the university's leadership.

Excellence was undeniably a prime goal of all universities, even though the exact meaning of this term remains elusive. Generally, it was stressed that excellence in research allows impact on a global scale. Excellence was also linked to innovative research and high standards in education and thus directly linked to the reputation of the institution depicted as an attractive and desirable place to research and study. Some of the universities declared to be future-orientated, brave and radical by virtue of investing in emerging research fields.

As expected, most universities stated that they did not formulate strategic or thematic priorities. Rather, research priorities were bottom-up and excellence driven. Indeed, all Una Europa members highlighted a **bottom-up curiosity-based approach to research**. All universities express their commitment to enhance **interdisciplinarity**, a goal often stated as a way to increase excellence. Some institutions regarded interdisciplinary structures as foundational building blocks for fields of excellence.

Unsurprisingly, Una Europa universities were all guided by similar values and principles. All universities articulated a strong commitment to **academic freedom**, **ethics**, **truth**, **integrity**, **and inclusivity**. Definitions of these terms were mostly not provided but assumed to be universally understood.

Openness, in general, was associated with science communication, supporting democracy through research, citizen science involving the local community, and interactions with policy makers. Interactions with non-academic partners was not seen as unidirectional—a university catalysing society—but rather as potential source of inspiration for research initiatives relevant to society. Openness was also seen as a catalyst for business and industry collaboration, offers in continuous learning as another way to engage broader society. (Note: A detailed analysis of open science policies was conducted separately within Una.Resin).

All universities aimed to **innovate**, but what kind of innovations were pursued were often not explained further. Three of the Una universities were more explicitly directed towards technological innovation, technology transfers and commercialization (KU Leuven, UNIBO and UEDIN) than the others.

All universities emphasized the importance of **international collaboration** in their strategies or principles. Measures advocated to increase collaboration, encourage researchers to participate in international networks and mobility schemes, provide funding and promote international regulatory frameworks for scientific research. Five of the universities also declared **collaboration on a local level** as a strategic goal or describe collaboration with local actors as essential.

Most Una Europa universities also included **work culture and professional development** of academics and professional staff in their strategic goals as well as the quality of the governance and management. Some universities also considered improving management processes as an essential tool for increasing excellence and the impact of education and research.

Sustainability and the United Nations 2030 Agenda were widely accepted strategic aims for all Una Europa universities and all universities aimed to solve big societal challenges.

1.2.2. Strategic Research Areas

In the questionnaire, we asked for defined strategic research themes or areas on all-university levels. In general, Una Europa universities were bottom-up, excellence driven and did not hierarchically rank their strategic areas. Instead, academic freedom as well as success in competitive funding calls defined the directions of research.

The analysis of the representation on the institutional websites as well as the responses to the WP1 questionnaire reveal that certain priorities do exist. Six out of eight universities listed several university-wide strategic themes or key areas. These strategic or key areas were mainly broad multidisciplinary themes and considered as "inspirational". The main purposes of such defined areas were to:

- · Communicate the strengths of the university
- Foster cross-departmental interdisciplinarity
- Enhance research excellence, inspire new directions in research and teaching, also in connection to major societal challenges
- Position the universities well in competitive national and international funding calls

While Una Europa universities did not dedicate specific funding to strategic areas (unless indirectly via RIRs) the areas often served to showcase excellence or the existence of multidisciplinary approaches vis-a-vis certain initiatives or funding agencies. In some cases, the reverse was true: research initiatives on national level motivated the articulation and funding of certain strategic or multidisciplinary research areas. National or internal funding instruments helped build strategic capacities such as areas of excellence, multidisciplinary units for emerging areas, local specialization, and research transfer. Nonetheless, Una Europa universities emphasized that national or regional policies did not impact their agenda setting in any major way.

We also asked to provide information on how the strategic areas were chosen: methods used to identify strategic areas varied and included tools such as systematic SWOT analyses, collaborative workshops with various stakeholders, and discussions among researchers. Other criteria that guided the selection was the existence of a high number of researchers working in these areas as well as priorities articulated by funding agencies. Strategic collaborations including Una Europa were also mentioned as a criterion.

Below we have provided a list of the strategic research areas indicated in the questionnaire. Due to the different levels on which these areas are formulated, we have listed them according to university rather than theme. However, grouped into clusters, it is evident that existing Una Europa focus areas overlap with the research commitment of many Una Europa partners. Seven out of eight universities named research areas linked to One Health, seven universities named sustainability or related concepts as a key area, five universities listed cultural heritage as well as AI. Areas related to society and the economy were also named by five institutions. Only two universities named areas linked to the emerging focus area that deals with new materials.

Research Areas listed by the Una Europa universities as strategic or as key areas:

- UEDIN: Five university-level themes aim to foster cross-faculty interdisciplinarity research: culture & creativity; this digital life; One Health; the future of health & care; future proofing societies & the planet.
- **UH**: During the UH strategy period 2021-2030, research and teaching will draw inspiration from four themes that will spur collaboration between different disciplines and inspire research and teaching that seek solutions to major global problems: a meaningful life, human wellbeing, and a healthy environment; a humane and fair world; a sustainable and viable future for our globe; a universe of ideas and opportunities
- UNIBO's Strategic Plan underlines 8 strategic areas. These areas are broad, highly interdisciplinary, and strictly related to the SDGs: industry 4.0, health and wellness, agro-food, big data and AI, art and human sciences in the digital age, interculturality, inclusion and social security, climate change, sustainability and circular economy.
- **UCM** has no specific strategic areas or research themes. However, there are four major areas distributed across the 26 faculties: **experimental**, **health**, **humanities**, **and social sciences**.
- **FUB** does not have any current strategic focus areas. During the so-called Excellence Initiative (2007-2019), FUB maintained five so-called Focus Areas. Of these, only the **Dahlem Humanities Center** has continued as a permanent institution.
- KU Leuven: Key areas are an overview of the current potentialities and know-how at KU Leuven, all of them being highly multidisciplinary: medical technologies; bio-sciences & environment; matter, materials & energy; nature unlimited; manufacturing & ICT; arts, religion & culture; economy, law and society; human behaviour.
- UJ has seven priority research areas: Heritage (identity of individuals and entire societies, language, civilizational challenges of modern world), FutureSoc (interdisciplinary research on social changes caused by the development of new technologies and the cognitive sciences, BioS (Structural and translational biology); qLIFE (better research for better quality of life, translational research: civilization diseases, reproductive health, regenerative medicine; drug development: mechanisms, targets, clinical trials; SciMat (design of advanced materials from models and theoretical tools via synthesis and characterization to applications; DigiWorld (digital world and cyber space); Anthropocene (the causes, paths and consequences of global environmental changes).
- UP1: UP1 is currently preparing a roadmap of research. Thematic alignment with Horizon Europe priorities and Cluster's Intervention Domains is a key priority. Una Europa's current and future focus areas (one health, sustainable development, artificial intelligence, European Studies, Cultural Heritage) are largely promoted, at the institutional level, including through our annual call for proposals. More specific research themes are defined at faculty and research unit levels, in concordance with the University and partner research organizations (such as CNRS) main priorities. Examples of research topics investigated and supported by either faculties or research units include: war studies; democracy & social cohesion; liberties; Europe as a whole; environment & environmental vulnerability, sustainable transports; heritage studies; new forms of work; HSS at the interface with cognitive sciences; Al; transversal approaches to health; design and creative industry.

In addition to strategic research areas, we also asked universities to identify their five to ten top research areas and explain how they were selected. Selection criteria mentioned included international and national evaluations (partially internationally peer-reviewed) and different types of external funding including ERC. For the analysis, we grouped the research fields in larger thematic areas, partially guided by already existing Una Europa focus areas, such as AI, One Health, sustainability, culture and creativity, European studies, science, industry, society, economy and social sciences, languages, regional studies, environment, etc. Several entries per thematic areas were possible.

Due to the spread of data, this exercise was of limited meaningfulness for identifying potential new Una Europa focus areas. However, the exercise does reveal that Una Europa focus areas largely reflect the strengths of the member institutions. Six out of eight universities regard research related to One Health (health 5/8, medicine 5/8) as well as sustainability as a strength. Seven out of eight named fields or disciplines related to cultural heritage. All was listed by three institutions. Only one institution saw European Studies as a research strength. However, this Una Europa area has an education focus and as such is not a clearly defined field of research. Contributing disciplines such as the social sciences are rated excellent by six out of eight universities. We could identify potential clusters of strength in the fields of universe, matter and energy; biosciences & environment; health and medicine; ancient history; public policy, societies and democracy; climate; languages, and arts.

1.2.3. 2. 3 Multidisciplinary Practices and Structures

In the benchmarking questionnaire, we asked universities to identify multidisciplinary structures with varying degrees of institutionalization, such as centres, institutes, research initiatives, and graduate schools dedicated to a specific theme or geographical region. The premise of this question was based on the observation that many universities do not formulate top-down strategic research areas. In most cases, it was also unclear how defined strategic aims are implemented. Analysing existing structures thus served here as a proxy to identify resource priorities of universities as well as research strengths. Furthermore, we assume that collaborations between these structures could be an added value of Una Europa.

The analysis showed that universities maintain various types of multidisciplinary structures and support them in different ways. Support can entail the allocation of specific support services, funding, or increasing visibility. The founding of multidisciplinary centres or initiatives often originates in national and regional competitive funding. These were either bottom-up calls or top-down funding schemes aiming at profiling, interdisciplinary research or the building of ecosystems with non-academic partners.

- Interdepartmental centres are interdisciplinary hubs and research communities between departments and faculties and interdepartmental industrial research centres. The departments or units are members of the centres. The centres provide services and share strategic goals. In some cases, these are built upon strategic initiatives. Researchers may have dual positions in both a department and the centre. This often leads to parallel structures which are problematic to manage.
- Units or department can also share interdepartmental initiatives that aim to build or strengthen strategic areas of multidisciplinary research. Support for these initiatives is provided as part of other organizational structures.
- **Independent research institutes located on university campuses** support research groups and individual researchers in networking. These research institutes mainly have independent management and research agendas.
- **Central research institutes** combine different disciplines and expertise under one organization and often aim to interdisciplinary research and may have a specific strategic research theme.
- The management practices and ways of organising vary, but this type of central research institutes often provides organizational structures for networking, research support services and provide grants.
- All universities offer **graduate schools** with inter- or multidisciplinary orientation.

We organized the multidisciplinary structures, many of them serving both SSH and STEM fields, according to Una Europa focus areas and also identified clusters of themes that are not yet represented by a focus area, such as urban studies and cognitive sciences. The clustering was not straightforward. For focus areas with a clearly defined focus, such as Al and data science, the matching was obvious, for focus areas that are still developing, such as One Health, less so. Many structures fitted with several focus areas, such as digital health. In addition, sustainability, which is also an individual Una Europa focus area, is reflected in the work of many structures.

We also listed institutes and centres aiming at stimulation of transdisciplinary research especially between SSH-STEM fields. Una Europa could use the learnings from these in future. We do not provide a full list of the many multidisciplinary structures in the social sciences and humanities, represented at all universities. Neither do we list structures in engineering and industry research, which are present at only some universities. The listing below is thus not comprehensive and should be considered only as an initial starting point for providing direction. The original listings will be available for future use on the Una Europa common data repository.

Sharing knowledge about multidisciplinary structures and initiatives could facilitate collaboration across focus areas and inspire bottom-up creation of new research questions. As Una Europa research collaboration is dynamically developing, this should ideally be a continuous process.

Focus Area Sustainability (Incl. Sustainable Development and Global Change)

Sustainability is a broad concept that brings together a variety of disciplinary perspectives, ranging from the bio sciences to the social sciences, from engineering to environmental humanities. The benchmarking questionnaire provided no specific definition of the term and did not specifically link to Una Europa activities or definitions. Given the openness of the term, many structures could be linked to this focus areas. Below are those listed with a primary focus on sustainability.

- KU Leuven: KU Leuven Institute for Mobility
- **UCM**: The Complutense Institute of Sociology Contemporary Social Transformations; Institute of Geosciences (IGEO); Environmental Science (IUCA)
- **UH:** Helsinki Institute of Sustainability Science (Helsus); Institute for Atmospheric and Earth System Research (INAR); Thriving Nature--Towards Future Healthy Ecosystems; Helsinki Institute of Urban and Regional Studies (Urbaria)
- **UNIBO:** Alma Mater Institute on Healthy Planet (Alma Healthy Planet); Alma Mater Research Institute on Global Challenges and Climate Change (Alma Climate); Interdepartmental Research Centre for Environmental Sciences (CIRSA); Interdepartmental Centre for Industrial Research in Renewable Resources, Environment, Sea and Energy (CIRI); Renewable Resources, Environment, Sea and Energy (FRAME)
- **UP1:** LabEc DynamiTe (spatial and territorial dynamics); ArChal (global challenges in the light of the past); Sorbonne Sustainable Development association

Focus Area One Health

All universities have multidisciplinary structures in the fields of biomedicine, agriculture, food pharmaceuticals, or global change that can support research in the focus area One Health. With Helsinki One Health (HoH), only UH has an institutional network with a focus specifically on One Health.

Focus Area Al and Data Sciences

Six out of the eight universities maintain multidisciplinary structures in the fields of AI and data science. As AI and Data Sciences provide tools for solving problems in many research areas, these structures link to a variety of disciplines. Areas of application include among other digital humanities, biostatistics and bioinformatics, as well as engineering and industry related initiatives. Structures fitting into the focus area AI and Data Sciences also link to cognitive sciences, a field we listed separately below.

- **KU Leuven:** KU Leuven Digital Society Institute; Leuven.Al Institute for Artificial Intelligence; KU Leuven Institute of Physics-based Modeling for In Silico Health (ISI Health)
- UCM: Institute for Knowledge Technology; Department of Methodology of Behavioural Sciences
- **UEDIN:** The Edinburgh Futures Institute (EFI)
- UH: Helsinki Centre for Data Science (HiDATA); Finnish Center for Artificial Intelligence (FCAI)
- UNIBO: Ercole De Castro Advanced Research Center on Electonic System (ARCES); Interdepartmental Centre for Industrial ICT Research (CIRI ICT); Biostatistics: Statistical Sciences and Medical Departments; Precision Farming: Electrical, Electronic, and Information Engineering Department, the Agricultural and Food Sciences Department; Alma Mater Research Institute for Human-Centred Artificial Intelligence (Alma Human AI)
- UP1: History of Knowledge, Technology and Beliefs (HaStec)

Focus Area Cultural Heritage

Only four out of eight Una universities answered that they feature multidisciplinary structures linked to cultural heritage. Note: A more in more in-depth analysis on resources in the culture and creative industries has been conducted as preparation for the CCI-KIC bid, the results of which are not included here.

- UNIBO: Research Center for interaction with Cultural and Creative Industries (CRICC)
- UCM: The Complutense Institute of Musical Sciences (ICCMU)
- **KU Leuven:** Institute for Cultural Heritage; Institute for the Study of the Transmission of Texts, Ideas and Images in Antiquity, the Middle Ages and the Renaissance
- **UP1:** The Time Machine Organisation (TMO); École des arts de la Sorbonne

Focus Area Europe and the World

- **FUB:** The John-F.-Kennedy Institute for North American Studies; The Institute for East European Studies; The Institute for Latin America Studies, The Berlin Graduate School of Muslim Cultures and Societies; The Graduate School for North American Studies; The Graduate School for East Asian Studies
- UH: Centre for European Studies; Aleksanteri Institute: Finnish Centre for Russian and Eastern European Studies
- UCM: The Complutense Institute for International Studies (ICEI)Cognitive Studies

The substantial number of multidisciplinary structures focused on cognitive sciences and studies could be leveraged in a new Una Europa focus area.

- FUB: Center for Cognitive Neuroscience Berlin
- **UH:** Mind and Matter Foundations of Information, Intelligence and Consciousness; UHealth Interdisciplinary Research for Health and Well-being strengthens the UH research ecosystem to generate viable solutions for future health challenges.
- **UCM:** The University Institute of Religious Sciences; The Multidisciplinary Institute (IP): three units "Brain Mapping Unit", "Fluid Unit" and "Lasers and Molecular Beams Unit"; Institute for Knowledge Technology
- KU Leuven: Institute for Micro- and Nano-scale Integration; Brain Institute
- JU: Copernicus Center
- UP1: The Matrice Memory Equipment of Excellence

Urban Development

Several universities had multidisciplinary structures with aims supporting urban development area. Many of them also interlink with sustainability.

- UH: Helsinki Institute of Urban and Regional Studies (Urbaria)
- UCM: The Complutense Institute of Management Science (ICCA);
- KU Leuven: Urban Studies Institute; KU Leuven Institute for Mobility
- UNIBO: Advanced School of Studies on the City and Territory (SSCT)
- **UP1:** Dynamite (spatial and territorial dynamics projects)

Structures with Focus on Enhancing Transdisciplinary SSH-STEM Research

These structures could play a pivotal role in the development of inter-, trans-, and multidisciplinary research in Una Europa.

- KU Leuven: Leuven Institute for the Future (research incubator supporting transdisciplinary research)
- **UEDIN:** The Edinburgh Futures Institute (EFI) (the navigation of complex futures; arts, humanities, the social sciences, data science, engineering, the natural sciences, medicine)
- **UH:** Helsinki Institute for Social Sciences and Humanities (HSSH)
- **UJ:** Copernicus Center (advanced interdisciplinary studies at intersections of natural sciences, humanities and social sciences)
- **UP1:** Sorbonne Art Gallery (art-science research programme)

1.2.4. 2. 4. Strategic Partnerships and Existing Collaborations within Una Europa

The questionnaire also surveyed existing collaborations (pilots, initiatives or strategic partnerships on R&I or research support development) on multi- and bilateral level as well as existing collaboration between Una Europa universities. The benchmarking did not entail a systematic analysis of, for example, joint Horizon projects. There are, however, many Horizon Europe and Erasmus+ funded projects with several Una Europa partners that could straight support Una Europa collaboration development like Ritrain+ in the field of human capital and research infrastructures. Evaluate project aims to developing the assessment of strategic partnerships, which systematises quality management practices.

The responses provided in the questionnaire exemplify first the various forms of collaborations which differ in geographical scope (local, regional, national, European and global), in terms of partner (individual institutions, associations, initiatives, cities) and in terms of purpose and theme: Innovation, thematic, values, academic purposes).

Collaborations among Una Europa partners exist both directly (joint Horizon research projects, joint seed funding, strategic partnerships) as well as on multilateral level within larger consortia such as Unica, The Guild, LERU etc. According to information provided on websites and the questionnaire, following bilateral strategic partnerships exist between Una Europa partners: KU Leuven with UH, UEDIN, JU and LEI; UCM with UH and FUB; UEDIN with UH, KU Leuven and LEI; UH with UEDIN and KU Leuven, JU with UEDIN, UNIBO and KU Leuven; KU Leuven with UH, UEDIN, JU and LEI. 2

Association	FUB	KU L	LEI ²	UCM	UEDIN	UH	UJ	UNIBO	UP1
EASSH									via EUROPAUM
<u>EUA</u>		ı	ı				indirect		
EUROPAEUM									
EVALUATE					ı				
<u>LERU</u>									
<u>OpenU</u>									
The Coimbra Group									
The Guild									
<u>TMO</u>									
UNICA									

Table 1. Memberships in other Higher Education Alliances

3. 3. Key Outcomes for the Una Europa R&I Strategy

The analysis provided evidence that the strategies and policies of the Una Europa universities reflect the values of Una Europa as a European University Initiative of large research universities, values that are formulated in the Una Europa manifesto. The analysis also showed that values are consistent across Una Europa universities and no outliers exist. These values should be reflected also in the Una Europa R&I strategy.

The benchmarking did not provide a conclusive picture which research areas or fields would lend themselves as new focus areas for Una Europa but confirms that existing Una Europa focus areas, developed as part of the 1Europe project, mostly reflect both strategic choices and areas of research strengths. Additional areas of excellence that are shared among a critical number of Una Europa partners are: universe, matter and energy; biosciences & environment; health and medicine; ancient history; public policy, societies and democracy; climate; languages, and arts.

In certain field such as cognitive science and urban studies, most Una Europa partners possess multidisciplinary structures that could be leveraged towards new Una Europa research collaborations. Several universities maintain institutes that are already focused on interdisciplinary research. Their expertise should be utilized in future Una Europa work.

The multitude of partnerships Una Europa members maintain on various levels is both a challenge and an opportunity for Una Europa as a consortium. On the one hand, Una Europa is just one of many partnerships our universities are part of. On the other hand, Una Europa provides opportunities to link to these existing ecosystems and potentially allow members to profit from existing collaborations. A first example is the 2021 call EIT KIC Cultural and Creative Sector Industries, for which Una Europa joined the bid of the consortium Innovation by Creative Economy (ICE) coordinated by the Fraunhofer Institute. Going beyond this, the challenge for Una Europa will be to develop signature added value for the universities to ensure sufficient resources and attention of the leadership. Strategic thematic partnerships that provide robust structures of collaboration and can possibly be leveraged within Una Europa will be explored further in Una.Resin.

² University of Leiden joined Una Europa in 2022 and was hence not included in the benchmarking. Information provided in this table is based on the institutional websites.